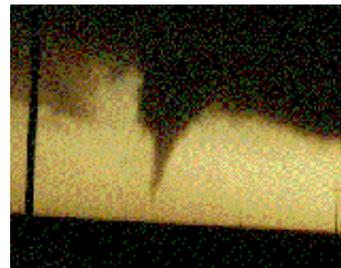




The West Texas

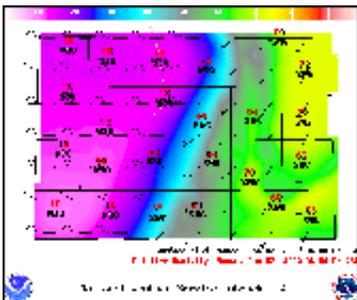
TWISTER



Spring 2002

NATIONAL WEATHER SERVICE FORECAST OFFICE LUBBOCK TEXAS

New Forecasting Technology Coming to the Lubbock NWS Office



Example (above) of a graphical forecast produced by forecasters at WFO Lubbock from the GFE. This image represents a dryline bisecting the South Plains.

During the spring of 2002, the Weather Forecast Office (WFO) in Lubbock will implement a revolutionary new forecasting technology called the Graphical Forecast Editor (GFE). Government forecasters have produced public, marine, hydrologic, fire weather and aviation forecasts for the American public for over a century, but technological deficiencies limited the dissemination of these critical forecasts to a text format. These limitations were overcome during the late 1990s with the final deployment of the Advanced Weather Interactive Processing System (AWIPS) at all National Weather Service (NWS) WFO's across the country and at the National Centers for Environmental Prediction (NCEP). The implementation of AWIPS was one of many fruits of a 15 year multibillion dollar modernization initiative, which first began in the 1980s.

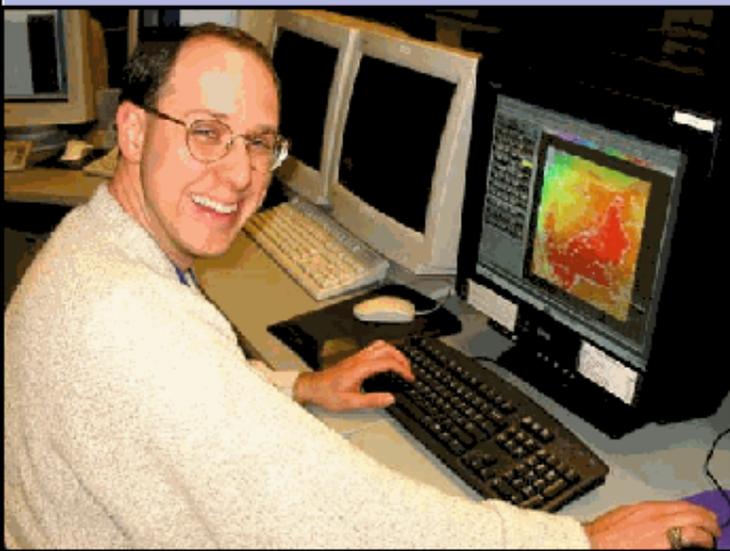
The GFE is only one of many forecasting components of AWIPS and will allow NWS forecasters at all 121 WFO's across the United States, Guam and Puerto Rico to produce forecasts in several formats including graphics, text and grids. This will give all users of NWS products more flexibility in how they use and manipulate the information to best suite their needs. By 2003, the NWS will fully implement the National Digital Forecast Database (NDFD). The NDFD will be a conglomerate of all future gridded forecasts produced by WFO's and NCEP. In addition to representing the official NWS forecast, it will allow users to adapt the NDFD to their own external needs, thus supplementing NWS graphical, gridded and text forecasts.

What's In This Edition...

- ◆ West Texas Mesonet
- ◆ Co-operative Program News
- ◆ Severe Weather Awareness Week
- ◆ 2002 Skywarn Schedule
- ◆ 90 Day Outlook
- ◆ ...and more

The United States' National Weather Service is the world's premier government weather forecasting agency. Its highly trained forecasters produce timely severe weather warnings and accurate forecasts to support a wide range of users including other federal agencies and the private sector. The implementation of the GFE and its capability to produce forecasts in a wide variety of formats will help ensure that the NWS continues to provide its users the service that they expect well into the future.
By Steven Taylor--Forecaster

Robert Barritt (below), a Lead Forecaster in Lubbock, practices on the GFE to produce gridded forecasts.



The West Texas Mesonet

by Wes Burgett, Texas Tech University

The West Texas Mesonet will consist of approximately 38 weather stations covering the South Plains region of West Texas. There are currently 29 stations complete in the network. The remaining nine stations in the network will be completed by the end of 2002. Stations will collect data every 5 and 15 minutes (depending on the sensor) and transmit the data back to our base station at Reese Center. The West Texas Mesonet is currently launching weather balloons from Reese Center during interesting or significant weather events. Sondes attached to the balloons transmit temperature, relative humidity, and barometric pressure back to Reese Center every 1.5 seconds. The LORAN system is used to derive estimates of wind speed and direction from the sonde.

One radar profiler and one acoustic profiler will be installed at Reese Center in March. These units will give estimates of wind speed and direction with height (up to approximately ten kilometers).

All of these data are posted on the Internet for everyone to use free of charge at the West Texas Mesonet homepage:

<http://www.mesonet.ttu.edu>

Data Collection

The following data will be collected at each mesonet station every 5 minutes:

- 10-meter wind speed and direction
- 9-meter temperature
- 2-meter wind speed and temperature
- 1.5-meter temperature and relative humidity
- barometric pressure
- rainfall

The following data will be collected at each mesonet station every 15 minutes:

- Soil Temperature at 2 inches, 4 inches, and 8 inches under sod-covered ground
- Soil Temperature at 2 inches and 8 inches for bare ground
- Soil Moisture at 2 inches, 8 inches, 24 inches, and 30 inches for sod-covered ground
- Leaf Wetness
- 2-meter solar radiation

NWS Lubbock Gets New MIC



Larry Vannozzi has been appointed as Meteorologist-in-Charge (MIC) of our office. Larry will replace Rusty Billingsley, who was selected as the NWS Fire Weather Program Manager for the National Interagency Fire Center in Boise, Idaho. Many of you already know Larry as he spent seven years as our Warning Coordination Meteorologist before moving to Fort Worth in the fall of 2000. We look forward to Larry's return to West Texas.

Who Needs NOAA Weather Radio?

Public safety experts agree: *the receivers should be standard equipment in every home.* They are especially valuable in places that are entrusted with public safety, including hospitals, schools, places of worship, nursing homes, restaurants, grocery stores, recreation centers, office buildings, sports facilities, theaters, retail stores, bus and train stations, airports, marinas and other public-gathering places.

Severe Weather Awareness Week

Governor Rick Perry has proclaimed the week of March 3rd through the 9th as Severe Weather Awareness Week in Texas. During this week, the National Weather Service in coordination with the Texas Division of Emergency Management will highlight various aspects of severe weather and discuss safety rules in an attempt to focus public attention on severe weather preparedness. Severe Weather Awareness Week is a perfect time to review and fine tune your severe weather safety plans. Every Texan should know where to go and what to do when severe weather threatens. The NWS in Lubbock will staff a booth in the South Plains Mall March 7-9, from which we will provide free material on all aspects of severe weather safety. Stop by and see us!

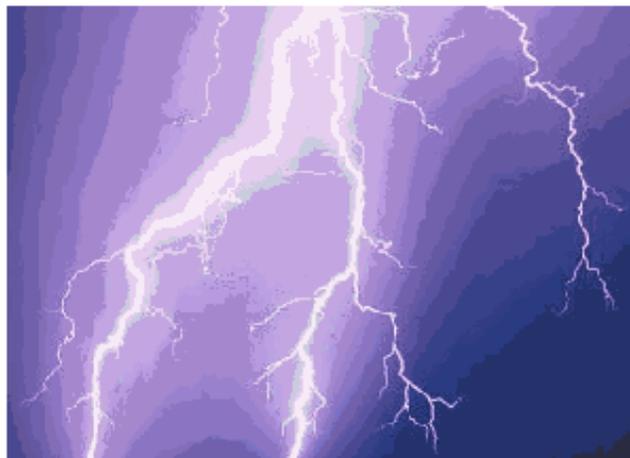
Severe Weather Safety Tips

Before the storm...

- Have a plan for you and your family
- Know what to do and where to go
- Practice your plan
- Own a Weather Radio with battery backup power and a warning alarm
- Listen to radio, TV, or Weather Radio for storm information and updates

If a warning is issued for your area, or if threatening weather approaches...

- Move to your building's pre-designated shelter (such as a basement)
- If underground shelter is unavailable, move to an interior room on the lowest floor
- Avoid windows and outer walls
- Get out of vehicles and mobile homes and into a sturdier shelter



August 1998 near Sudan. Photo by Ed Calianese.

Severe Thunderstorm and Tornado Watches

Conditions are favorable for the development of severe weather in your area. Remain alert for approaching or developing storms. Watches are issued for portions of states and are usually in effect for up to six hours.

Warnings

Severe weather has been observed or is imminent. Take action now! Warnings are issued on a county-by-county basis and are usually in effect for up to an hour.



F5 tornado near Norman, OK on May 3, 1999.



Some 90% of all presidentially declared disasters are weather related, leading to around 500 deaths per year and nearly \$14 billion in damage. To help Americans guard against the ravages of severe weather, the National Weather Service has designed the StormReady program aimed at arming America's communities with the communication and safety skills necessary to save lives and property. StormReady is being offered as a means of providing guidance and incentive to officials interested in improving their respective hazardous weather operations.

The StormReady pilot program began in northeastern Oklahoma in 1999 and has since been implemented by the Weather Forecast Office (WFO) in Lubbock, Texas, for its area of responsibility, which includes 24 counties of the Texas South Plains, extreme southern Panhandle, and Rolling Plains.

Any community that earns StormReady certification will be part of a press briefing and media event to announce their accomplishment. Also, the NWS will supply two StormReady road signs that the community can use to proudly show off their accomplishments. If you are interested, please contact Ed Calianese at 806-745-3916 ext. 223 for more details.

Coop - News by Johnny S. Wallace, DAPM

There have only been a few changes to the Coop-Observer program over the past few months. We have a new observer for 10 miles south of Paducah and we would like to take this time to welcome her to our ranks. We continue to be unsuccessful in locating a replacement observer for the City of Paducah but we will continue to try and find a new one.

Since our last newsletter several snowfall events have occurred. Snowfall is such a seasonable event it is difficult to remember, from year to year, just exactly how to measure and report them. Your daily reports on PCROSA and your monthly forms should contain a 24-hour water equivalent (the liquid amount of melted snow), snowfall (measured to the nearest 10th of an inch) and snow cover (the amount of snow on the ground at the time of the observation). I have sent out a few packages of information on reporting snowfall events to our new observers and we have other information packages for anyone that might need one or be interested in having the information. We also have videotapes on taking and reporting snowfall events. If you need new charts, etc. please give us a call and I'll get them right out to you.

I would also like to call attention to the back-up phone numbers for reporting daily on PCROSA. If you have trouble getting through to the main number in San Angelo, please feel free to use the back-up numbers; the procedures are the same. Sometimes the computer, on the main number, may fail or be temporarily be out of service. And please remember, we need the monthly forms mailed to our office no later than the 7th of each month. The mail system seems to have slowed some since the Sept. 11th events. After we receive your forms we have to check them and mail them to NCDC by the 12th of the month. It seems, even with today's technology, every month some of your forms either get lost or are late getting into our office. Washington is watching and waiting for this information and when it is late or missing it causes them to be late in publishing your data, or it just comes up missing in the publications.

Since the first of the year our staff has shrunk by one more person. John Jamison's retirement on the 12th of January forced some changes to our way of processing your monthly data. Robert Robledo has assumed John's duties of checking and processing your monthly forms and Fischer/Porter punch tapes. Robert is still in a learning process but is catching on fast. You can help him by getting those forms in quickly. You may hear from Robert or me if we are missing your forms at the end of the month.

Our Coop-Observers continue to serve our country in a daily effort and remain some of the best in the Nation. I can't say enough about the outstanding job you do. Thanks again.

2002 SKYWARN Spotter Training Schedule

<u>DATE</u>	<u>GROUP</u>	<u>TIME</u>	<u>MEETING PLACE</u>
Feb 25	Aspermont	700 pm	Aspermont FD
Feb 28	Jayton	630 pm	Jayton Community Center
Mar 4	Post	700 pm	Post Railroad Depot
Mar 5	Brownfield	700 pm	TBD
Mar 7	Silverton/Quitaque	700 pm	Silverton Fire Hall
Mar 11	Memphis	700 pm	Memphis Community Building
Mar 12	Childress	700 pm	Childress FD
Mar 18	Matador	700 pm	Matador FD
Mar 19	Olton/Hart	700 pm	Olton FD
Mar 21	Paducah	630 pm	Paducah FD
Mar 25	Shallowater	700 pm	Shallowater FD
Mar 28	Springlake/Eathe/Sunnyside	700 pm	Springlake City Bank
Apr 1	Lubbock Fire Marshall	900 am	Lubbock Fire Admin. Bldg.
Apr 1	Dickens/Spur/Guthrie	700 pm	Dickens Community Center
Apr 2	Denver City	730 pm	Denver City FD
Apr 4	Parmer County	700 pm	TBD
Apr 8	Littlefield	700 pm	Littlefield FD
Apr 9	Lynn County	700 pm	TBD
Apr 10	Muleshoe	700 pm	Muleshoe FD
Apr 15	Morton	700 pm	Morton FD
Apr 16	Levelland	700 pm	Levelland PD
Apr 22	Floydada	700 pm	Floydada FD
Apr 24	Plainview	700 pm	TBD

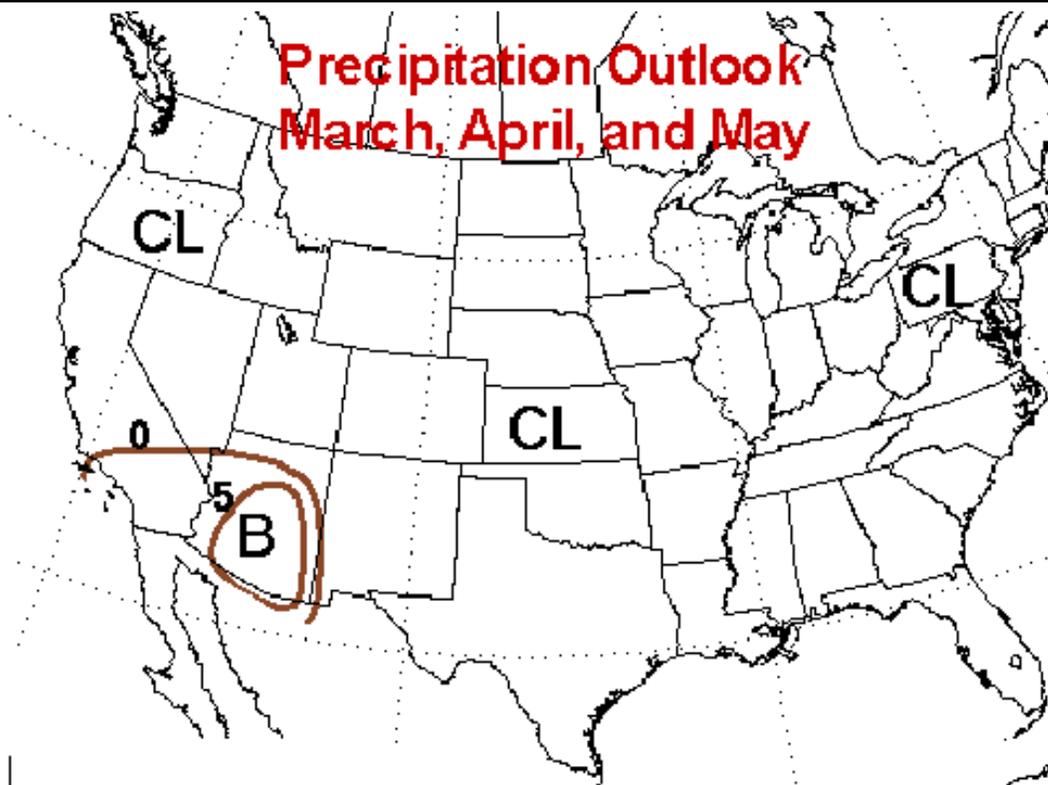
See <http://www.srh.noaa.gov/lub/safety/spotter.htm> for updates/additions



In This Issue...

New Forecasting Technology to be Used, West Texas Mesonet, Spring Weather Outlook, Coop News, Severe Weather Safety Tips, SKYWARN Spotter Training Schedule and more....

**Precipitation Outlook
March, April, and May**



Outlook for Precipitation for March, April, and May from the Climate Prediction Center: Wetter than normal conditions are most likely across the southern portions of Arizona and California during the period. There is no signal concerning the precipitation trends for the remainder of the country, including West Texas. The odds of experiencing near normal precipitation are the same as the odds of experiencing a drier than normal period and as those of experiencing a wetter than normal period.

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