

January 24-25, 2012 Severe Storms and Flood Event

A severe storm and flood event, more typical for early spring, occurred from midday on January 24 until midday on January 25, 2012. There were three confirmed tornadoes, widespread minor wind damage (especially east of the I-35 corridor, more than a dozen hail reports (up to golf ball in size), and widespread 2-5 inches of rain east of U.S. 281, including a bull's-eye of 5-10 inches of rain over eastern Hays, Caldwell and Bastrop counties, resulting in major flooding along a number of creeks and rivers.

The primary ingredients producing the event included an upper level trough that moved from northern Mexico across Texas. Meanwhile, a cold front that had moved into South Texas on Monday stalled and began moving back north as a warm front, which allowed moist Gulf air (dew points in the 60s) to return across the area. The general lifting of air from the approaching trough and increasing instability of cool, dry air aloft over warm, moist air near the ground was enough for thunderstorms to develop. Moderate to strong wind shear then increased the severity of the storms and brought the potential for hail, damaging straight-line winds, and tornadoes. A few severe storms developed Tuesday afternoon and produced hail over portions of the Austin Metro area. The more significant storms with damaging winds and tornadoes were part of a Mesoscale Convective System (MCS), and swept across the entire area, mainly from 10 pm to 8 am.

In addition to the severe storms, the amount of water vapor (i.e., precipitable water) measured by weather balloon at Corpus Christi Tuesday evening was 1.57 inches, which is slightly more than two standard deviations above the mean value for January. This strongly indicates the potential for heavy rain and flash flooding, assuming thunderstorms develop. The resulting rainfall amounts were heavy along and east of the I-35 Corridor, including peak amounts of 9.35 inches 2.4 miles west-northwest of Bastrop and 9.29 inches 4.4 miles southeast of Umland. New daily records for January 25th were set at Austin Camp Mabry (3.14 inches) and Austin Bergstrom (5.66 inches), and San Antonio (2.94 inches).

The following pages contain selected graphics, pictures, and tables from the event.

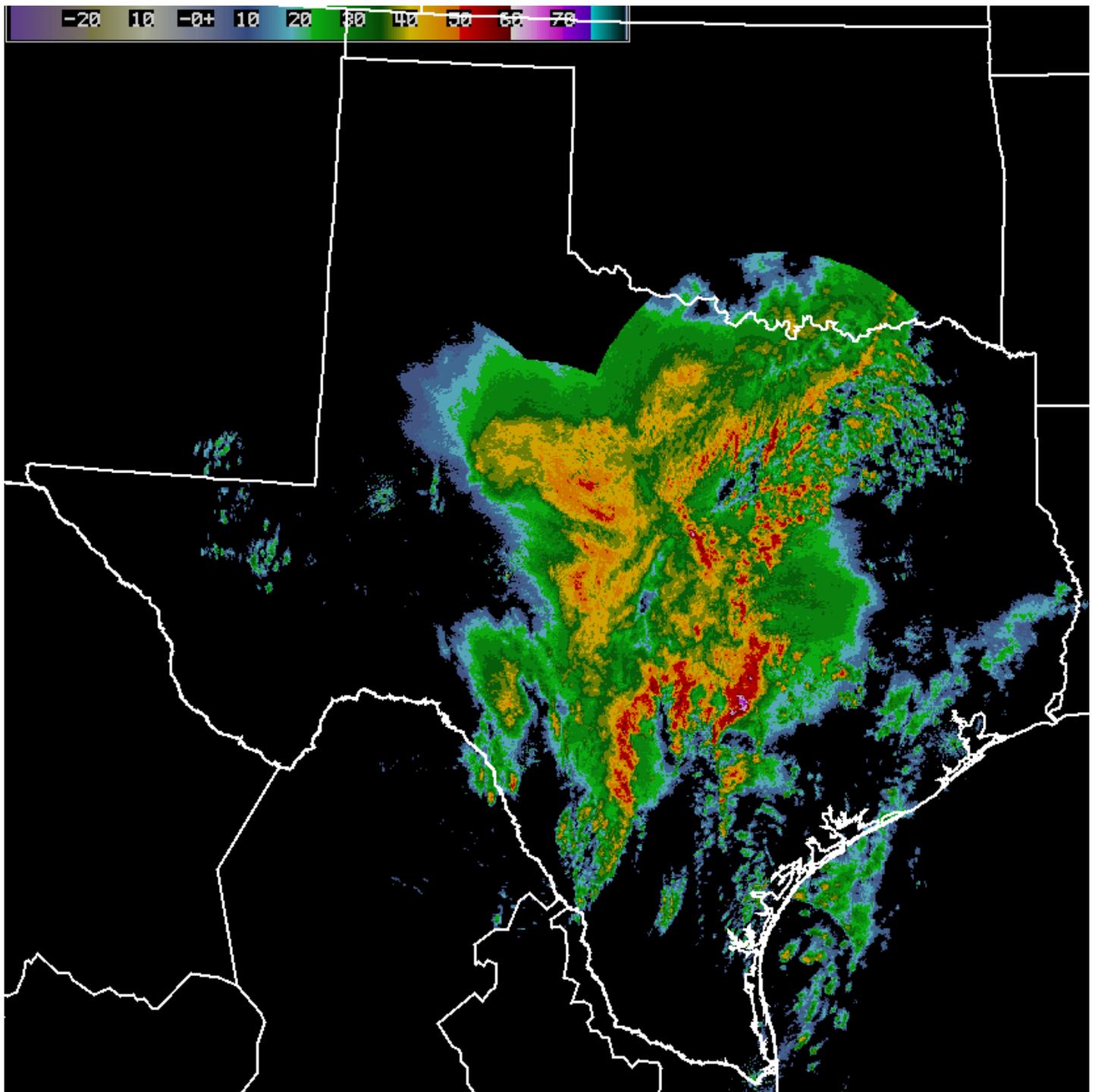


Figure 1. Radar Composite Reflectivity, 1 km resolution, at 3:30 am CST January 25, 2012.

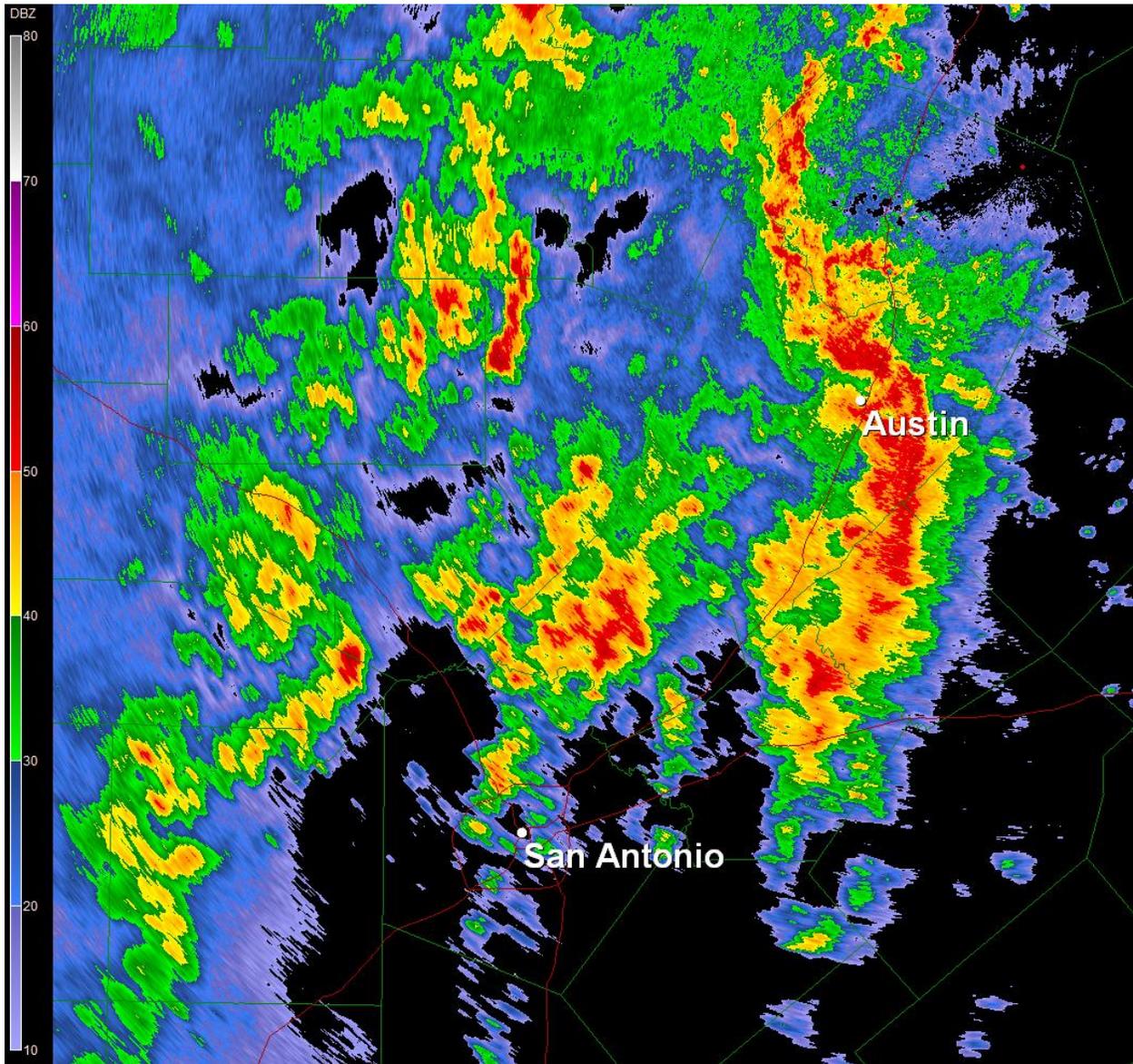


Figure 2. Radar Base Reflectivity, 1/4 km resolution, at 3:00 am CST January 25, 2012.

PUBLIC INFORMATION STATEMENT

NATIONAL WEATHER SERVICE AUSTIN/SAN ANTONIO TX
338 PM CST THU JAN 26 2012

...STORM DAMAGE SURVEYS FOR STORMS YESTERDAY JANUARY 25...

THE NATIONAL WEATHER SERVICE IS STILL INVESTIGATING SEVERAL AREAS OF DAMAGE ACROSS SOUTH CENTRAL TEXAS. ON THE GROUND SURVEYS WERE CONDUCTED IN NORTHEAST AUSTIN...PFLUGERVILLE...AND SAN ANTONIO YESTERDAY WEDNESDAY JANUARY 25. BELOW IS INFORMATION CONCERNING THE DAMAGE IN THESE LOCATIONS. NEW TO THIS INFORMATION IS THE TORNADO RATING AND ESTIMATED MAX WIND SPEEDS. THE NWS IS STILL RECEIVING DAMAGE REPORTS AND ADDITION STORM SURVEYS MAY STILL TAKE PLACE OVER THE COMING DAYS ACROSS OTHER AREAS OF SOUTH CENTRAL TEXAS.

EVENT: SAN ANTONIO TORNADO...TARA SUBDIVISION

EVENT DATE: JANUARY 25 2012

EVENT RATING: EFO WITH PEAK WINDS 70 MPH

INJURIES/FATALITIES: 0

EVENT START TIME/LOCATION COORDINATES:29.4556/-98.6645 AT 415 AM

EVENT END TIME/LOCATION COORDINATES: 29.4545/-98.6603 AT 416 AM

DAMAGE PATH LENGTH (IN MILES): 0.27 MILES

DAMAGE PATH WIDTH (IN YARDS): 30 YARDS

THE TORNADO PATH LIKELY BEGAN AT THE INTERSECTION OF DEER PARK AND RICHLAND HILLS DRIVE...AND CONTINUED ALONG DEER PARK TO THE INTERSECTION OF DEER PARK AND LEANDER. THE PRIMARY DAMAGE WAS A CARPORT BEING THROWN INTO A HOME AND CAUSING SUBSTANTIAL DAMAGE. OTHER DAMAGE CONSISTED OF SHINGLES BEING BLOWN OFF ROOFS...TREE DAMAGE AND LOOSE ITEMS BEING THROWN.

EVENT: AUSTIN TORNADO...NEAR SPRINGDALE AND HIGHWAY 290

EVENT DATE: JANUARY 25 2012

EVENT RATING: EF1 WITH MAX WINDS NEAR 100 MPH

INJURIES/FATALITIES: 0

EVENT START TIME/LOCATION COORDINATES:30.3221/-97.6536 AT 258 AM

EVENT END TIME/LOCATION COORDINATES: 33.3381/-97.6551 AT 305 AM

DAMAGE PATH LENGTH (IN MILES): 1.14 MILES

DAMAGE PATH WIDTH (IN YARDS): 50 YARDS

THE TORNADO PATH BEGAN NEAR THE INTERSECTION OF COMMERCIAL PARK DRIVE AND OLD MANOR ROAD...WITH RADAR INDICATING A TOUCHDOWN TIME NEAR 2:58 AM. DAMAGE CONTINUED NORTH THROUGH AN INDUSTRIAL PARK WHERE A BUSINESS WAS DESTROYED AND SEVERAL OTHERS HAD ROOF DAMAGE. THE TORNADO THEN CROSSED U.S. 290...BEFORE ENTERING THE WALNUT PLACE SUBDIVISION. FURTHER DAMAGE TO TREES AND HOMES OCCURRED ALONG SPRINGDALE AND HAPPY TRAIL. ONE HOME ON HAPPY TRAIL HAD MOST OF ITS ROOF LIFTED OFF. DEBRIS WAS NOTED IN A LARGE FIELD JUST SOUTH OF FERGUSON LANE...WITH THE TORNADO PATH ENDING JUST WEST OF THE INTERSECTION OF FERGUSON LANE AND SANSOM ROAD.

THE NWS ALSO INVESTIGATED THE DAMAGE TO SEVERAL BUSINESSES AND WAREHOUSE BUILDINGS NEAR THE PFLUGERVILLE ISD BUS BARN. THIS IS NEAR CRYSTAL BEND DRIVE AND IMMANUEL ROAD IN PFLUGERVILLE. IT WAS CONCLUDED THAT THIS DAMAGE WAS DUE TO STRONG STRAIGHT LINE THUNDERSTORM WINDS IN EXCESS OF 60 MPH.

PRELIMINARY LOCAL STORM REPORT...SUMMARY

NATIONAL WEATHER SERVICE AUSTIN/SAN ANTONIO TX
134 PM CST THU JAN 26 2012

..TIME... ..EVENT... ..CITY LOCATION... ..LAT.LON...
..DATE... ..MAG.... ..COUNTY LOCATION..ST.. ..SOURCE....
..REMARKS..

1040 AM HAIL 2 WNW AUSTIN 30.32N 97.78W
01/24/2012 E0.25 INCH TRAVIS TX TRAINED SPOTTER

ON MOPAC BLVD. PEA SIZE HAIL.

1040 AM HAIL 3 N AUSTIN 30.35N 97.75W
01/24/2012 E0.70 INCH TRAVIS TX COCORAHS

MARBLE SIZE HAIL AND SLIGHTLY LARGER.

1042 AM HAIL 7 WNW AUSTIN 30.34N 97.86W
01/24/2012 E0.25 INCH TRAVIS TX TRAINED SPOTTER

PEA SIZE HAIL AT CAMP MABRY.

1045 AM HAIL 4 WNW AUSTIN 30.33N 97.81W
01/24/2012 E0.88 INCH TRAVIS TX TRAINED SPOTTER

NICKEL SIZE HAIL NEAR MOPAC AND MONTICELLO.

1054 AM HAIL 6 WNW AUSTIN 30.34N 97.84W
01/24/2012 E0.70 INCH TRAVIS TX TRAINED SPOTTER

MARBLE TO DIME SIZE HAIL NEAR MOPAC AND SPICEWOOD.

1105 AM HAIL 4 SSE JOLLYVILLE 30.39N 97.73W
01/24/2012 E1.75 INCH TRAVIS TX TRAINED SPOTTER

GOLFBALL SIZE HAIL NEAR MOPAC AND BRAKER.

1219 PM HAIL 6 NNE FAYETTEVILLE 29.98N 96.63W
01/24/2012 E0.50 INCH FAYETTE TX LAW ENFORCEMENT

MARBLE SIZE HAIL NEAR FAYETTEVILLE.

0130 PM HAIL 6 N DRIPPING SPRINGS 30.27N 98.11W
01/24/2012 E1.00 INCH HAYS TX PUBLIC

NEAR QUARTER SIZE HAIL.

1046 PM HAIL 8 NNW DEL RIO 29.48N 100.95W
01/24/2012 E0.25 INCH VAL VERDE TX PUBLIC

PEA SIZE HAIL AND WIND GUST OF 30 MPH NEAR LAKE
AMISTAD.

1130 PM TORNADO 12 WNW ROCKSPRINGS 30.08N 100.40W
01/24/2012 EDWARDS TX TRAINED SPOTTER

POSSIBLE TORNADO WEST OF ROCKSPRINGS NEAR STATE ROAD
55.

1200 AM HAIL 17 SW ROCKSPRINGS 29.84N 100.41W
01/25/2012 M0.25 INCH EDWARDS TX TRAINED SPOTTER

0129 AM HAIL SAN ANTONIO 29.46N 98.51W
01/25/2012 M0.25 INCH BEXAR TX ASOS

0200 AM FUNNEL CLOUD 1 E SELMA 29.59N 98.30W
01/25/2012 GUADALUPE TX PUBLIC

HIGH WINDS NEAR SELMA.

0212 AM FLASH FLOOD SAN ANTONIO 29.46N 98.51W
01/25/2012 BEXAR TX DEPT OF HIGHWAYS

MULTIPLE STREETS CLOSED DUE TO FLOODING IN SAN ANTONIO
VIA PUBLIC WORKS WEBSITE.

0224 AM HAIL 4 N AUSTIN 30.37N 97.74W
01/25/2012 E0.70 INCH TRAVIS TX BROADCAST MEDIA

0258 AM FLASH FLOOD 3 ESE SUNSET VALLEY 30.21N 97.77W
01/25/2012 TRAVIS TX EMERGENCY MNGR

WASSON LOW WATER CROSSING ON WILLIAMSON CREEK CLOSED.

0315 AM HAIL AUSTIN 30.31N 97.75W
01/25/2012 E1.25 INCH TRAVIS TX TRAINED SPOTTER

HALF DOLLAR HAIL... OVER 1.75 INCHES OF RAIN IN 30
MINS... AND SMALL TREE LIMBS BROKEN IN AUSTIN.

0333 AM FLASH FLOOD 2 WNW NEW BRAUNFELS 29.72N 98.15W
01/25/2012 COMAL TX NWS EMPLOYEE

COMMON STREET AND CLUB CROSSING IS FLOODED.

0400 AM TSTM WND DMG 2 W DEVINE 29.15N 98.94W
01/25/2012 MEDINA TX LAW ENFORCEMENT

SEVERAL BUILDING IN DEVINE WERE DAMAGED... TREES BLOWN
OVER.

0400 AM TSTM WND DMG 6 E COUPLAND 30.47N 97.28W
01/25/2012 WILLIAMSON TX PUBLIC

MINOR ROOF...BARN...AND CHICKEN COOP DAMAGE. CHICKEN
COOP WAS MOVED 150 YARDS THEN DESTROYED.

0420 AM FLASH FLOOD 2 W CEDAR CREEK 30.08N 97.53W
01/25/2012 BASTROP TX EMERGENCY MNGR

SEVERAL SUBDIVISIONS IN AND NEAR CEDAR CREEK ARE
FLOODING.

0524 AM FLASH FLOOD 5 N CEDAR CREEK 30.16N 97.50W
01/25/2012 BASTROP TX EMERGENCY MNGR

CAR SUBMERGED ON HIGHWAY 71. PERSONS BEING RESCUED.

0529 AM FLASH FLOOD 2 W ELGIN 30.35N 97.41W
01/25/2012 BASTROP TX EMERGENCY MNGR

WATER RESCUE FOR PERSONS ON HIGHWAY 290.

0530 AM HEAVY RAIN 1 N THRALL 30.60N 97.30W
01/25/2012 M3.50 INCH WILLIAMSON TX PUBLIC

3.50 INCHES IN THRALL SINCE MIDNIGHT.

0535 AM FLASH FLOOD 5 S AUSTIN 30.23N 97.75W
01/25/2012 TRAVIS TX EMERGENCY MNGR

2 TO 3 FEET OF WATER OVER WILLIAM CANNON ROAD IN SOUTH
AUSTIN.

0700 AM TSTM WND DMG 5 N GIDDINGS 30.26N 96.93W
01/25/2012 LEE TX EMERGENCY MNGR

SEVERAL TREES BLOWN DOWN AND SOME BUILDINGS DESTROYED.

0350 AM TSTM WND GST 2 NNW MARTINDALE 29.87N 97.85W
01/25/2012 E65 MPH CALDWELL TX NWS EMPLOYEE

RETIRED NWS EMPLOYEE REPORTED GUSTS 50 TO 70 MPH.

24Hr Rainfall Ending 7AM Jan 25, 2012

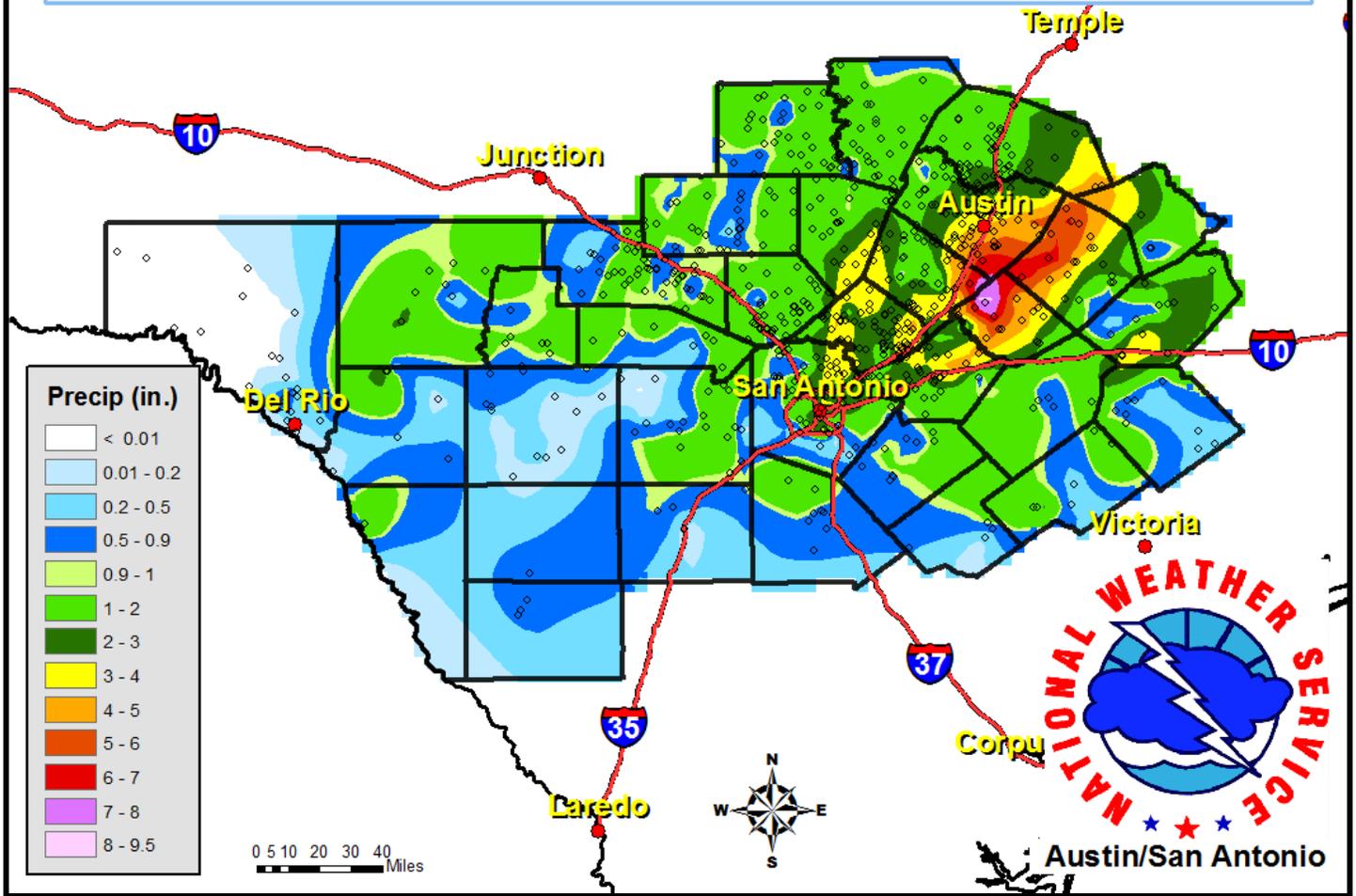


Figure 3. 24-hour rainfall amount from NWS, CoCoRaHS, and other cooperating agencies.

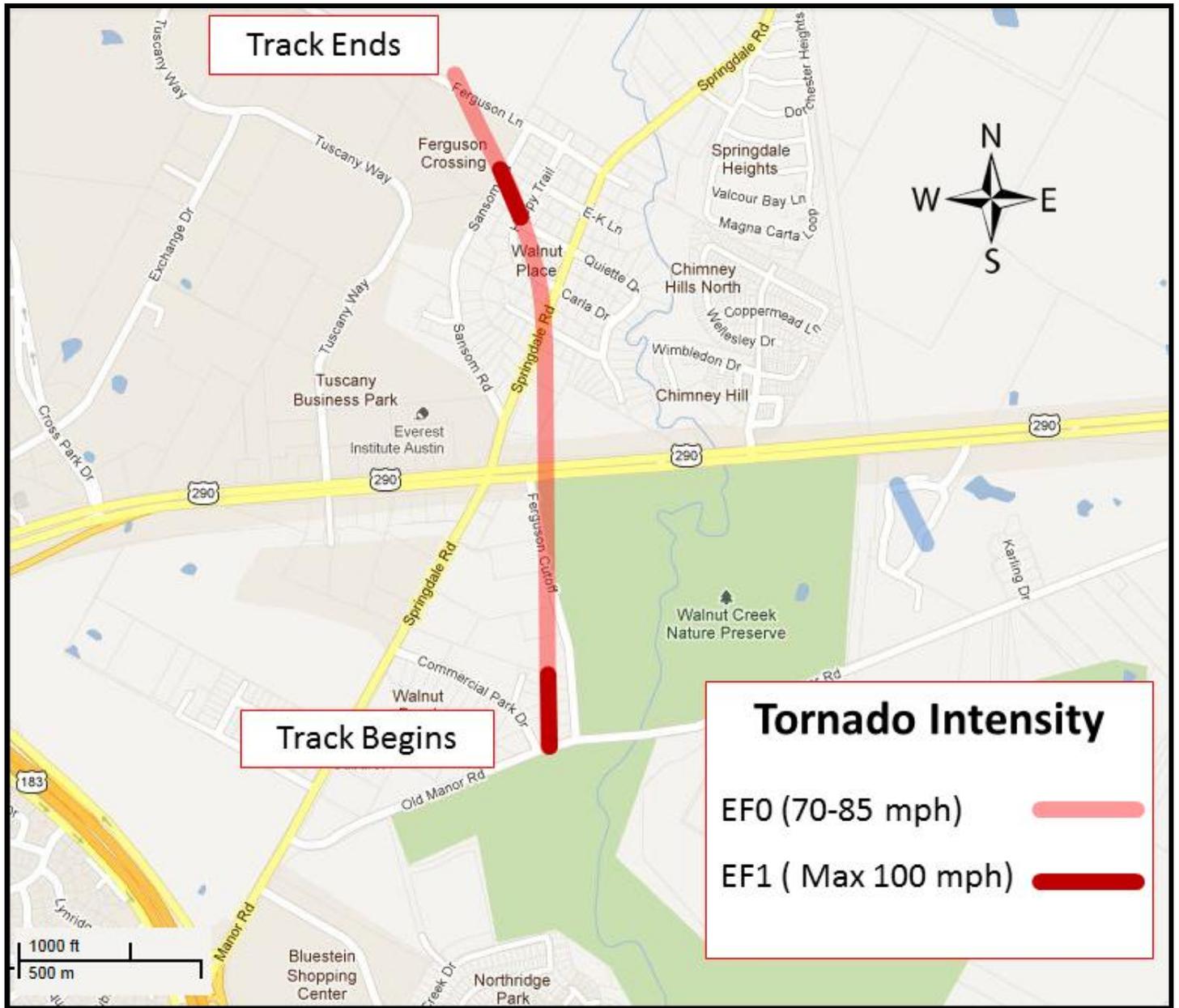


Figure 4. Tornado track and damage path in northeast Austin.



Figure 5. The roof was taken off this home on Happy Trail in northeast Austin.



Figure 6. Damage to an industrial building on Commercial Park Drive in northeast Austin.



Figure 7. Tornado track and damage path in southwest San Antonio.



Figure 8. Extensive roof damage to a home on Deer Park in southwest San Antonio.

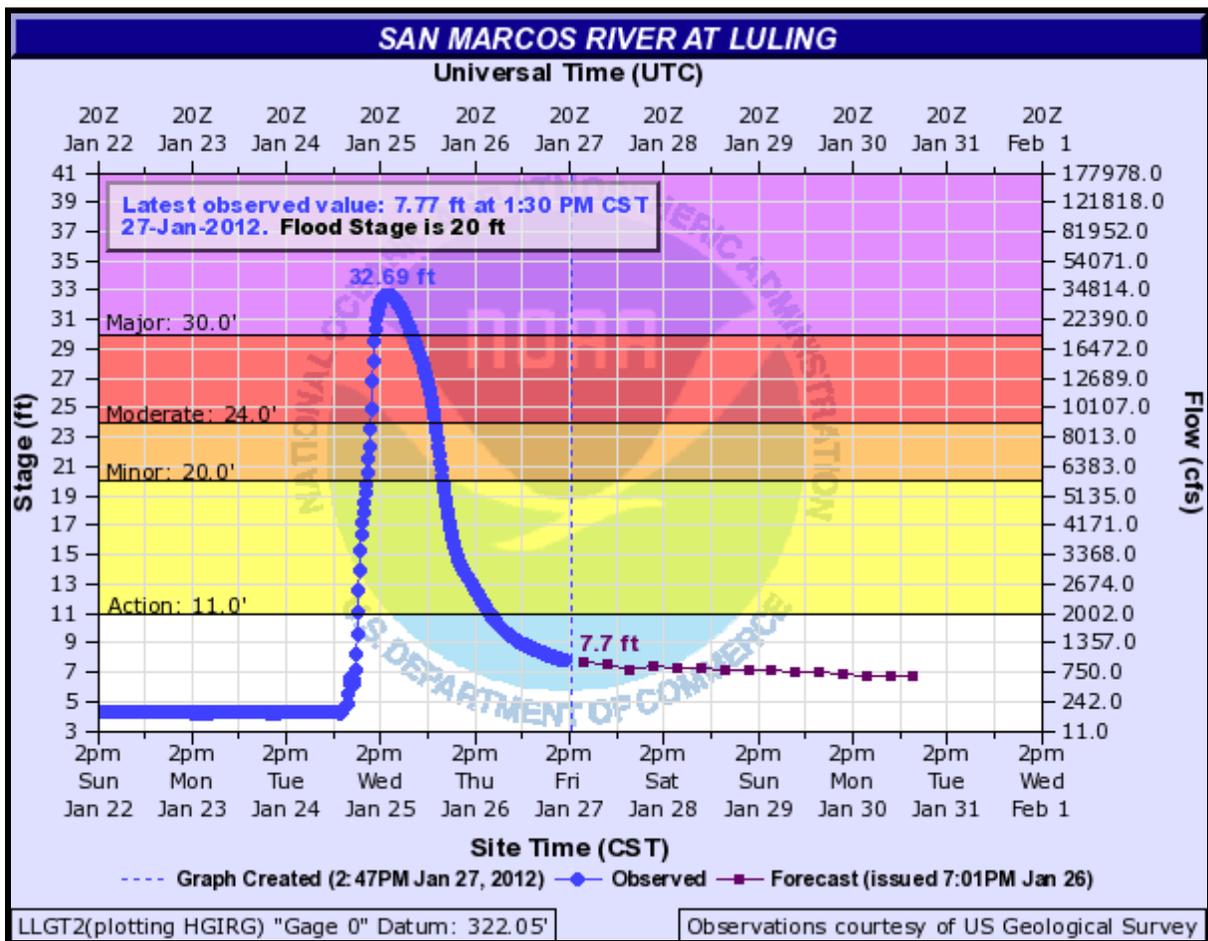


Figure 9. Hydrograph for the San Marcos River at Luling. Flood categories listed on the left side and shaded.

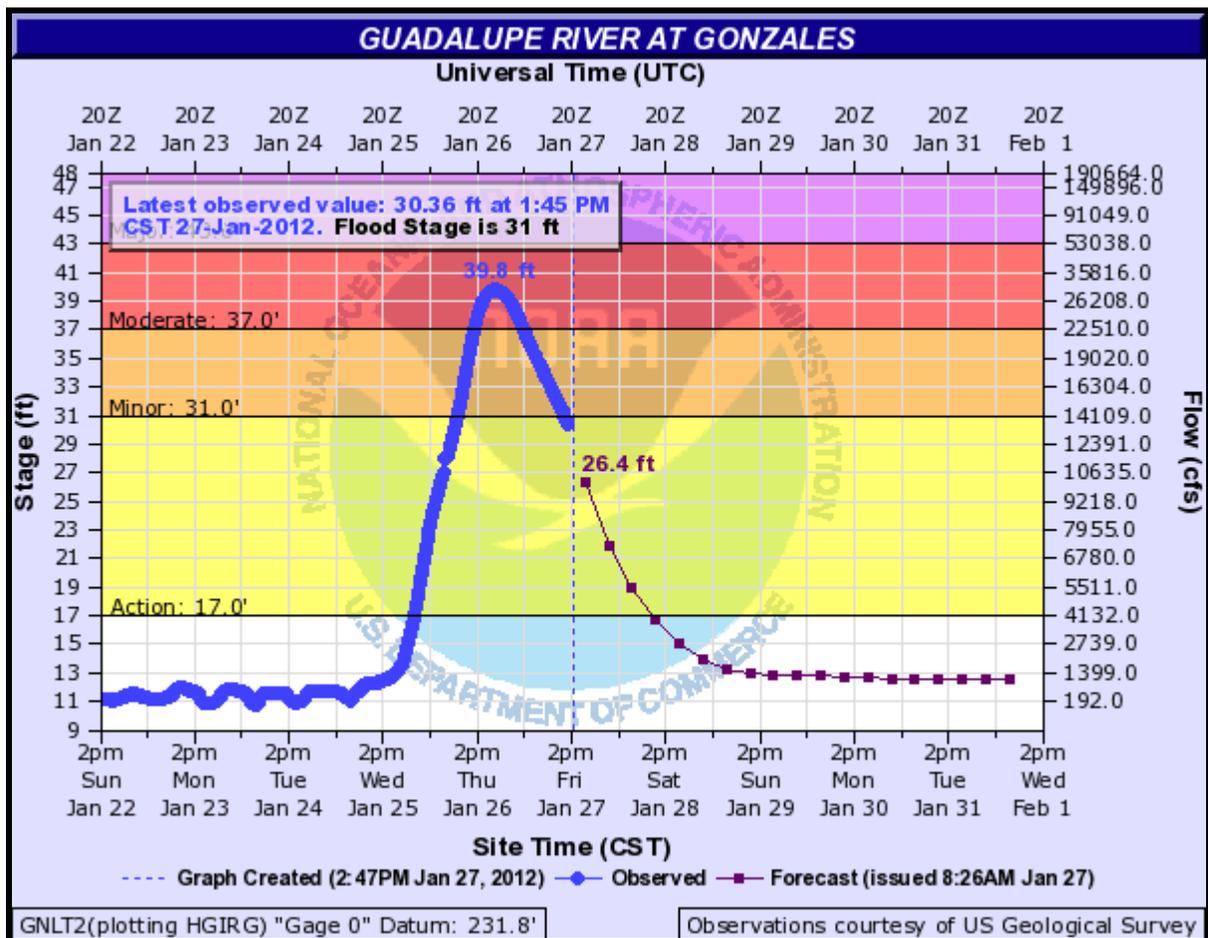


Figure 10. Hydrograph for the Guadalupe River at Gonzales. Flood categories listed on the left side and shaded.

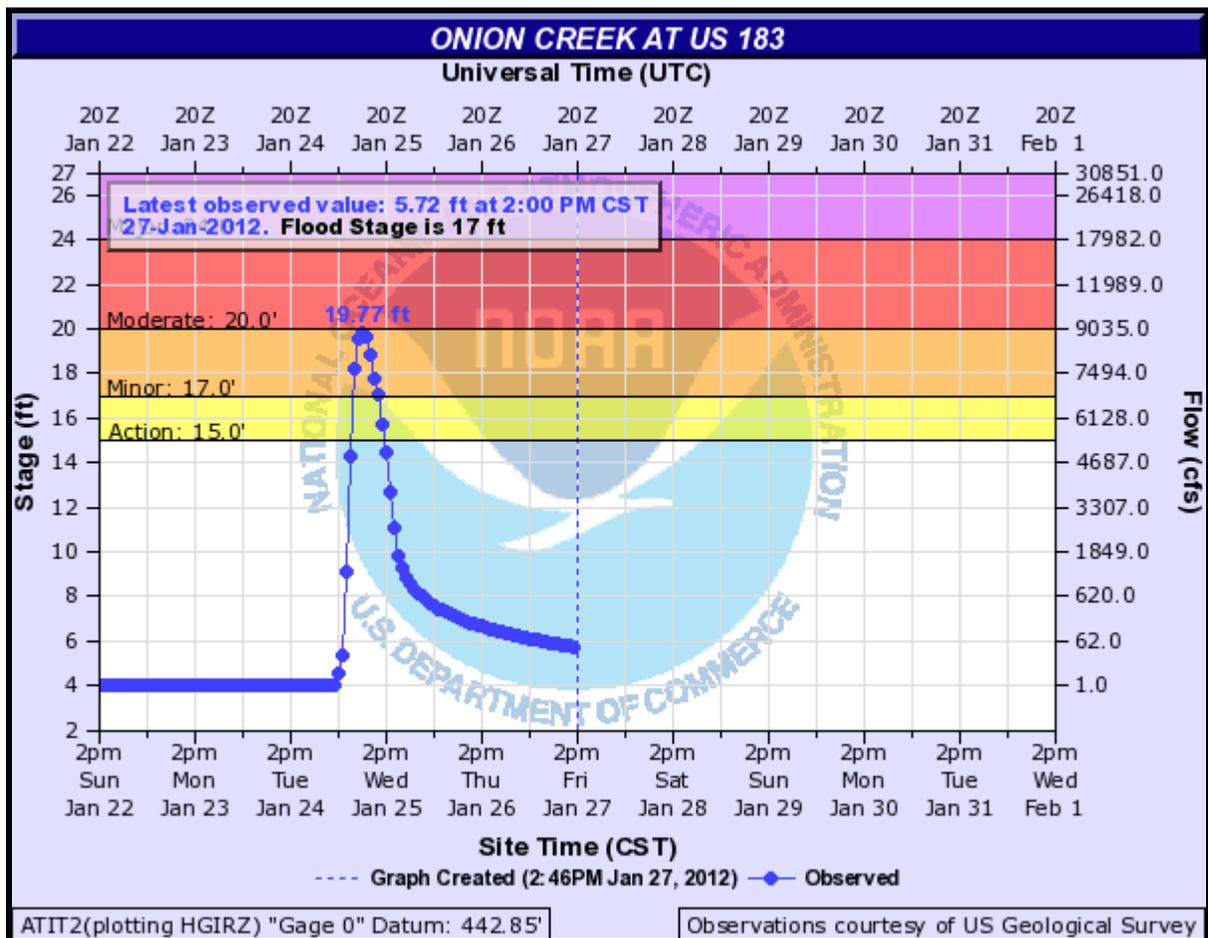


Figure 11. Hydrograph for Onion Creek at U.S. Highway 183. Flood categories listed on the left side and shaded.