

NWS FORM E-5 (11-88) (PRES. by NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA)	
		Tulsa, Oklahoma (TSA)	
MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS		REPORT FOR:	
		MONTH May	YEAR 2016
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		SIGNATURE Steven F. Piltz (Meteorologist-in-Charge)	
		DATE June 6, 2016	

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

An "X" in the box indicates no flood stages were reached in this Hydrologic Service Area (HSA) during the month above.

What a difference a year makes – from record breaking rainfall in May 2015 to below normal rainfall for much of eastern OK and northwest AR in May 2016. Normal precipitation values climatologically rank May as the wettest month of the year. These averages range from 5.0 - 5.5 inches across northeast Oklahoma to 5.5 - 6.0 inches across southeast Oklahoma. The Ozark region of northwest Arkansas averages 5.8 inches for the month. This report, past E-5 reports, and monthly hydrology and climatology summaries can be found at <http://www.srh.noaa.gov/tsa/?n=hydro-monthly-summary>.

Monthly Summary

Using the radar-derived estimated observed precipitation from the RFCs (Fig. 1a), rainfall totals for May 2016 ranged from around 2" to around 12". A large portion of the HSA received 3"-6" of rain this month, with isolated areas receiving 10"-12". This corresponds to 50%-110% of the normal May rain across most of eastern OK and northwest AR (Fig. 1b). Portions of Osage, Washington (OK and AR), Creek, Pushmataha, Cherokee, Adair, and Crawford Counties received 150%-200% of the normal May rain, while portions of Pawnee, Osage, McIntosh, Muskogee, Haskell, Latimer, and Le Flore Counties only ended up with 25%-50% of the normal May rain.

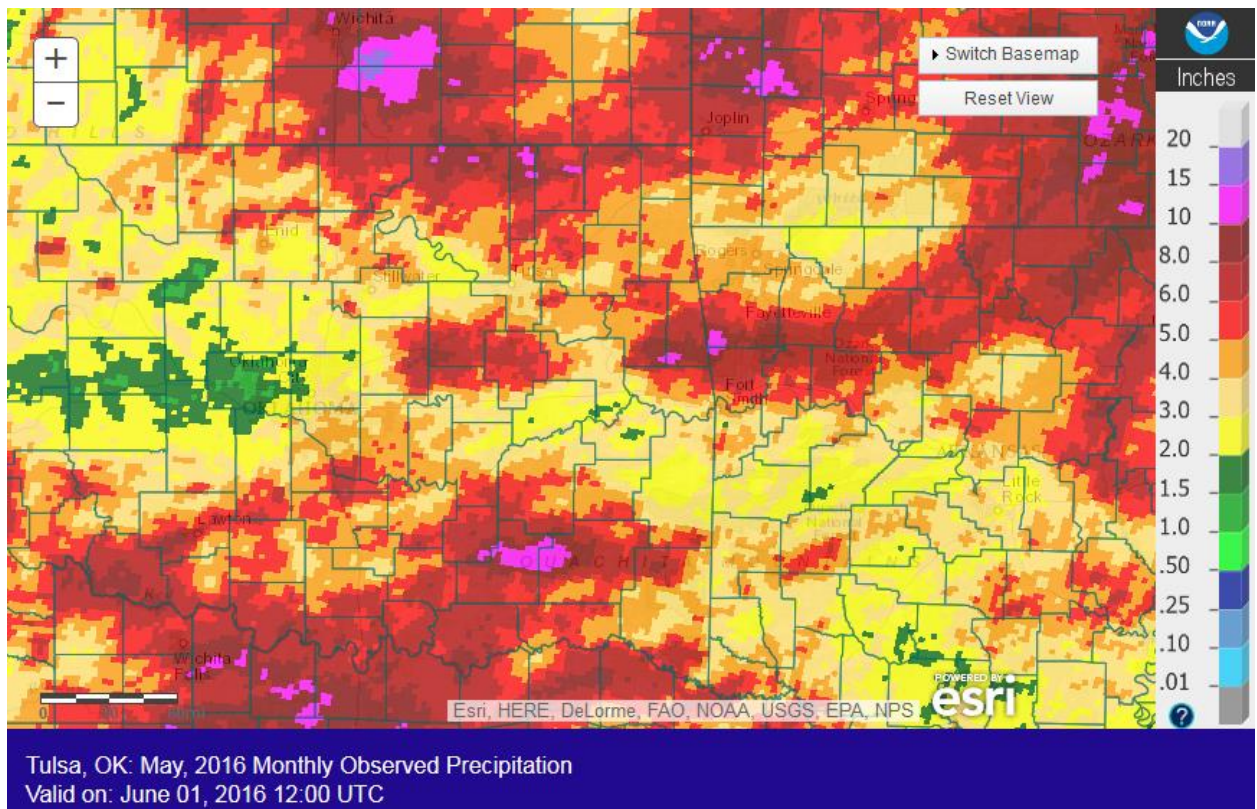


Fig. 1a. Estimated Observed Rainfall for May 2016

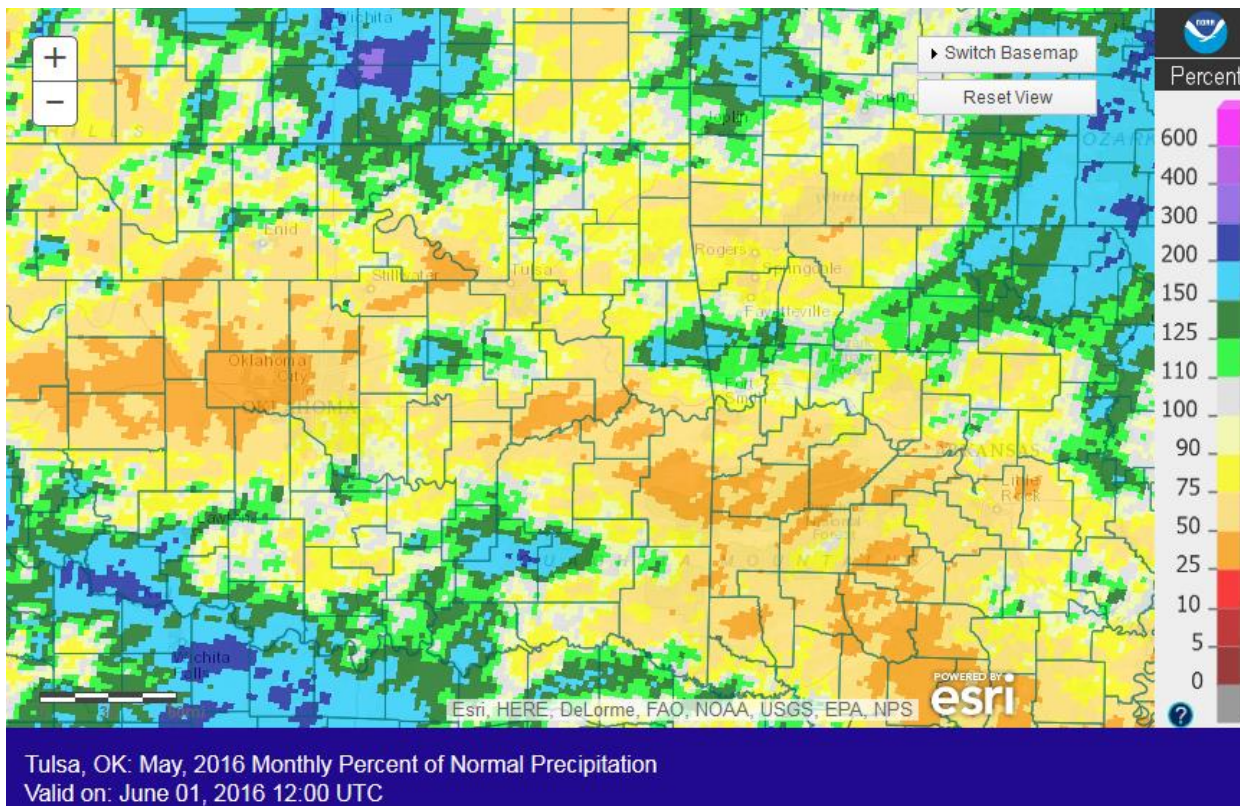


Fig. 1b. Estimated % of Normal Rainfall for May 2016

In Tulsa, OK, May 2016 ranked as the 39th coldest May (67.9°F, tied 2015, 1972, 1923; since records began in 1905) and the 45th driest May (3.91", tied 1965, 1936; since records began in 1888). Fort Smith, AR had the 42nd coldest May (68.3°F, tied 1966; since records began in 1883) and the 48th driest May (3.70", tied 1884; since records began in 1883). Fayetteville, AR had the 6th coldest (62.1°F) and the 32nd wettest (5.53") May since records began in 1950.

In Tulsa, OK, Spring 2016 ranked as the 14th warmest Spring (62.5°F, tied 1982; since records began in 1905) and the 56th wettest Spring (12.66"; since records began in 1888). Fort Smith, AR had the 27th warmest Spring (62.8°F; since records began in 1883) and the 33rd wettest Spring (15.06"; since records began in 1883). Fayetteville, AR had the 29th warmest (57.1°F) and the 33rd driest (13.11") Spring since records began in 1950.

Some of the larger precipitation reports (in inches) for May 2016 included:

Cookson, OK (meso)	12.39	Copan, OK (meso)	10.92	Bunch 0.8N, OK (coco)	10.84
Elkins 10.6SSE, AR (coco)	10.29	Winslow 7NE, AR (coop)	10.19	Mountainburg 2NE, AR (coop)	7.72
Pryor 6.9ESE, OK (coco)	7.20	Foraker, OK (meso)	7.10	Bartlesville, OK (ASOS)	7.01

Some of the lowest precipitation reports (in inches) for May 2016 included:

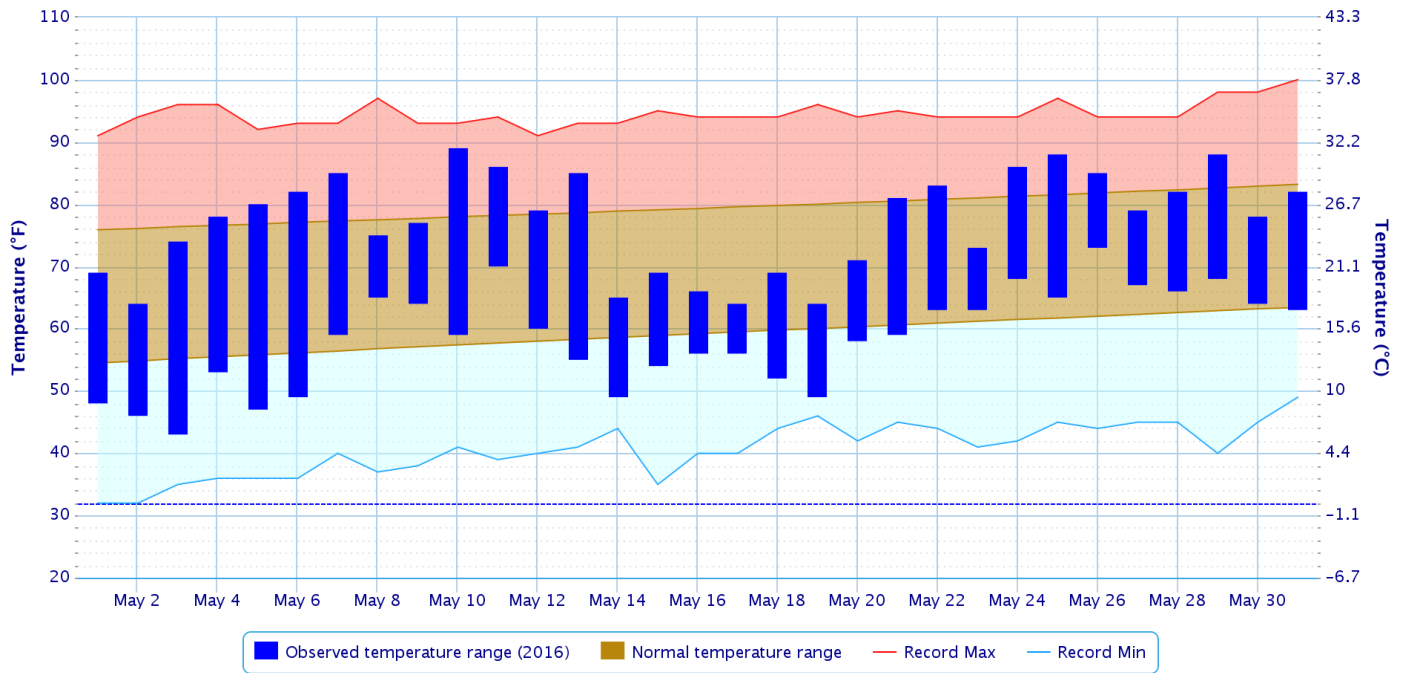
Eufaula, OK (meso)	2.32	Holiday Island 1.3SSW, AR (coco)	2.41	Wister, OK (meso)	2.51
Webbers Falls, OK (meso)	2.69	Ralston, OK (coop)	2.84	Pawnee, OK (meso)	3.06
Stigler, OK (meso)	3.44	Charleston 1.7E, AR (coco)	3.49	Wilburton 9.4N, OK (coco)	3.51

According to statistics from the [Oklahoma Climatological Survey](#) (OCS) Mesonet:

Rank since 1921	Last 30 Days (May 2-31)	Last 60 Days (Apr 2 – May 31)	Spring (Mar 1 – May 31)	Last 120 Days (Feb 2 – May 31)	Year-to-Date (Jan 1 – May 31)	Last 180 Days (Dec 4 – May 31)	Water Year-to-Date (Oct 1 – May 31)	Last 365 Days (Jun 2, 2015-May 31, 2016)
Northeast OK	40 th wettest	22 nd wettest	35 th wettest	45 th wettest	44 th driest	14 th wettest	12 th wettest	12 th wettest
East Central OK	42 nd driest	33 rd wettest	30 th wettest	40 th wettest	41 st driest	8th wettest	4th wettest	2nd wettest
Southeast OK	42 nd driest	15 th wettest	15 th wettest	14 th wettest	26 th wettest	6th wettest	1st wettest	5th wettest
Statewide	41 st driest	15 th wettest	21 st wettest	33 rd wettest	40 th wettest	12 th wettest	7th wettest	5th wettest

Daily Temperature Data – Tulsa Area, OK (ThreadEx)

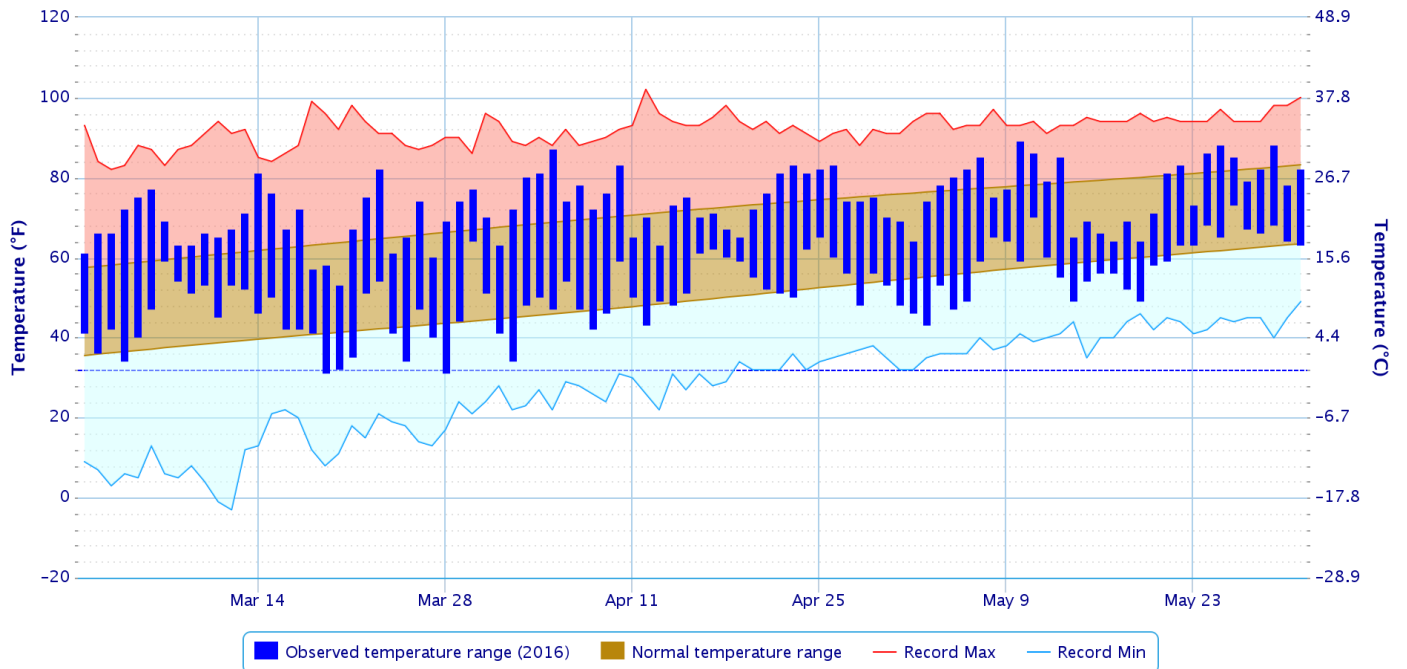
Period of Record – 1905-01-06 to 2016-06-02. Normals period: 1981-2010. Click and drag to zoom chart.



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Daily Temperature Data – Tulsa Area, OK (ThreadEx)

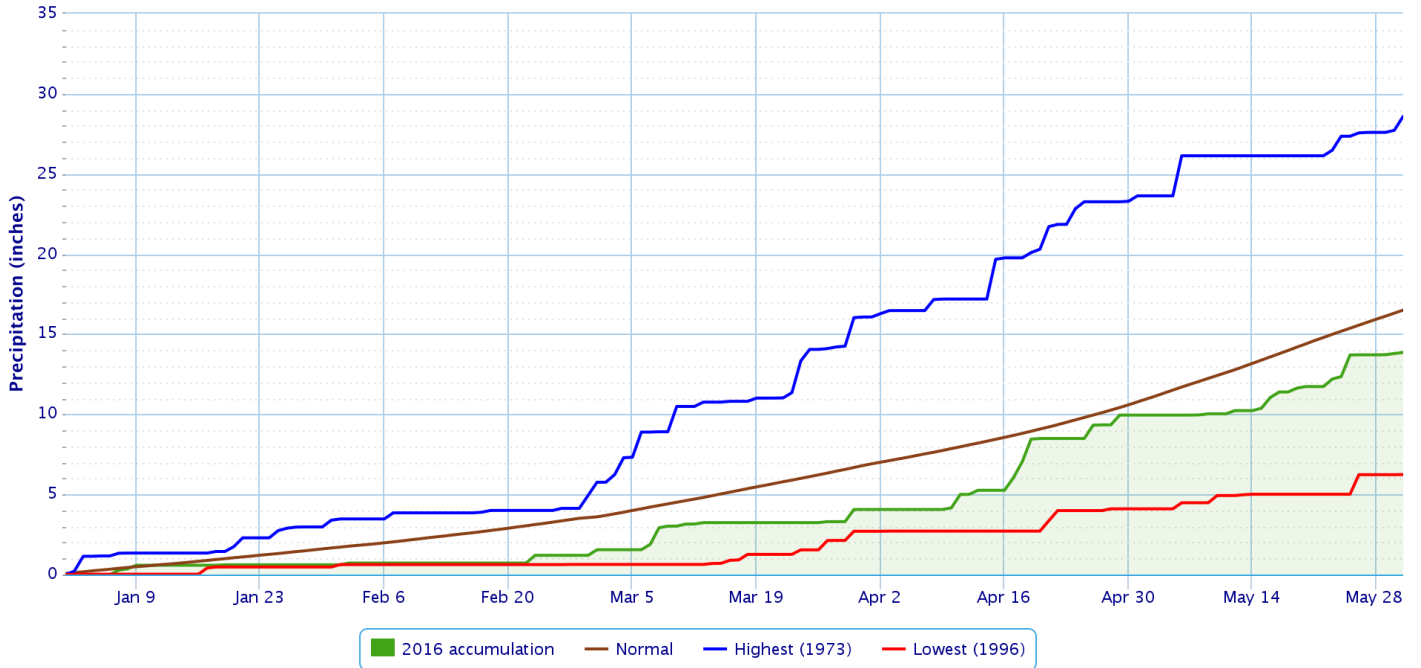
Period of Record – 1905-01-06 to 2016-06-02. Normals period: 1981-2010. Click and drag to zoom chart.



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Accumulated Precipitation – Tulsa Area, OK (ThreadEx)

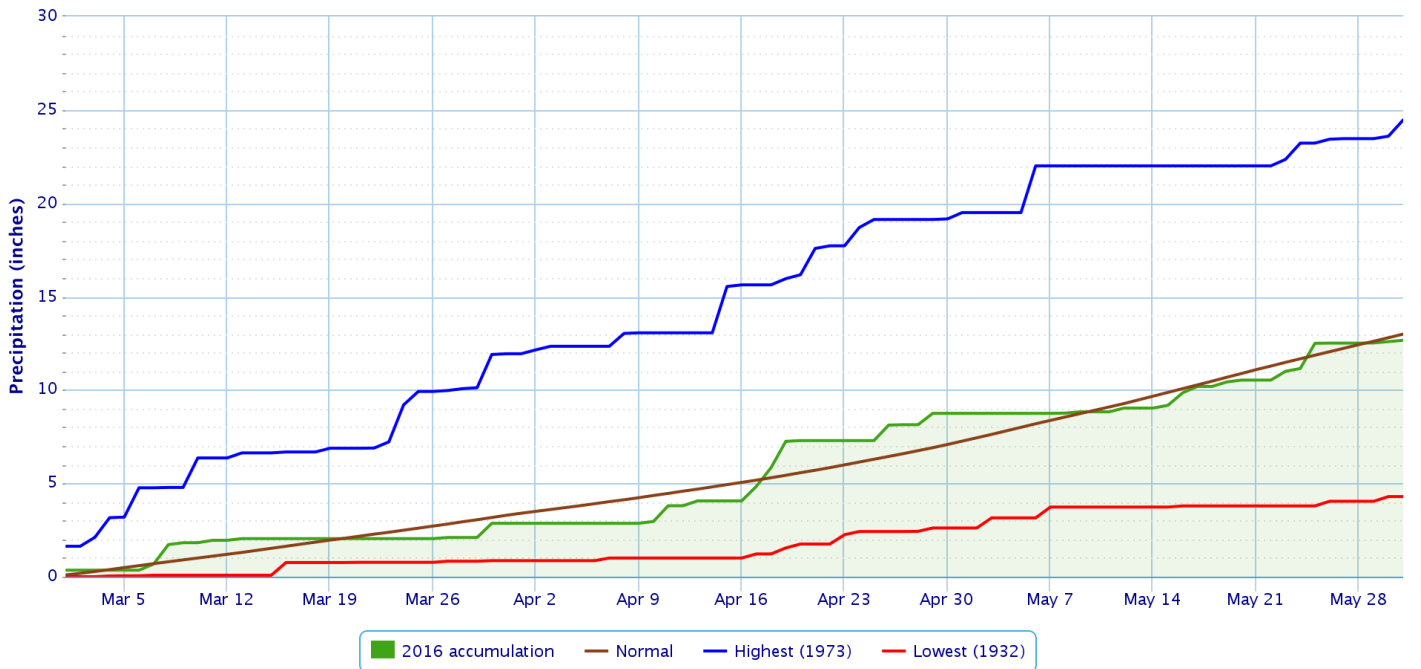
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Accumulated Precipitation – Tulsa Area, OK (ThreadEx)

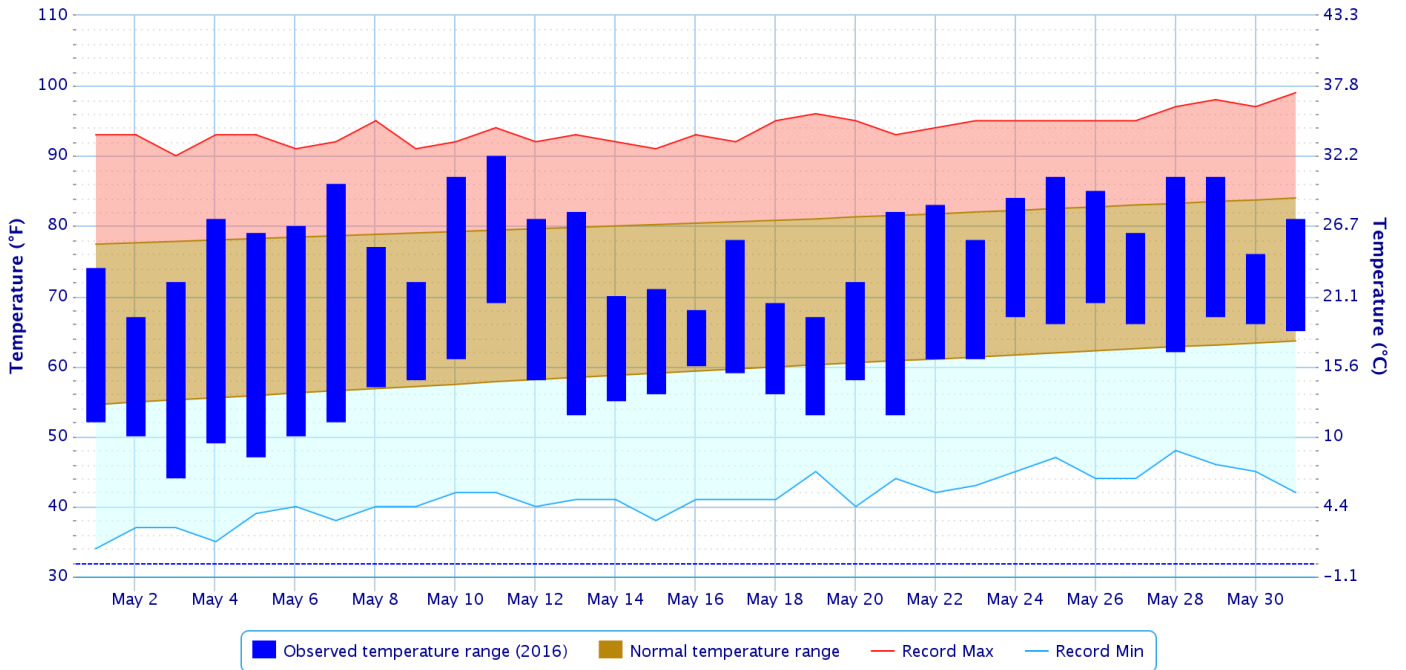
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Daily Temperature Data – Fort Smith Area, AR (ThreadEx)

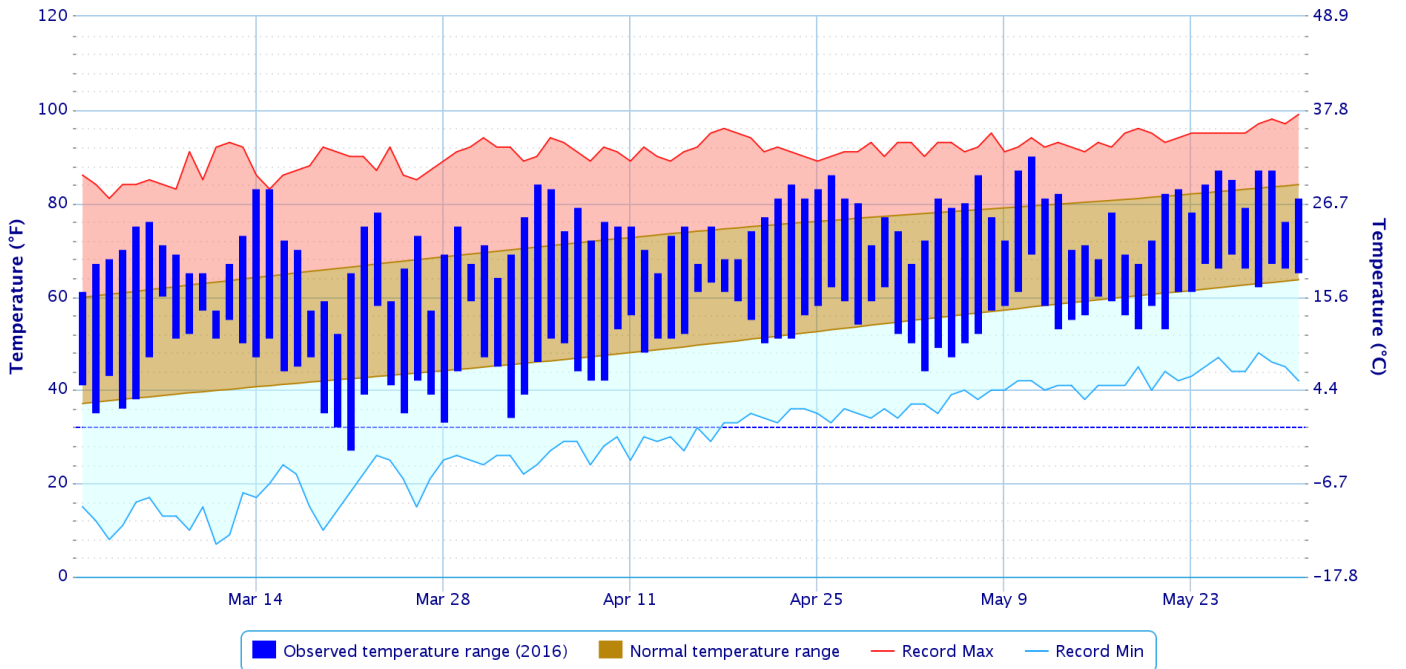
Period of Record – 1882-06-01 to 2016-06-02. Normals period: 1981-2010. Click and drag to zoom chart.



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Daily Temperature Data – Fort Smith Area, AR (ThreadEx)

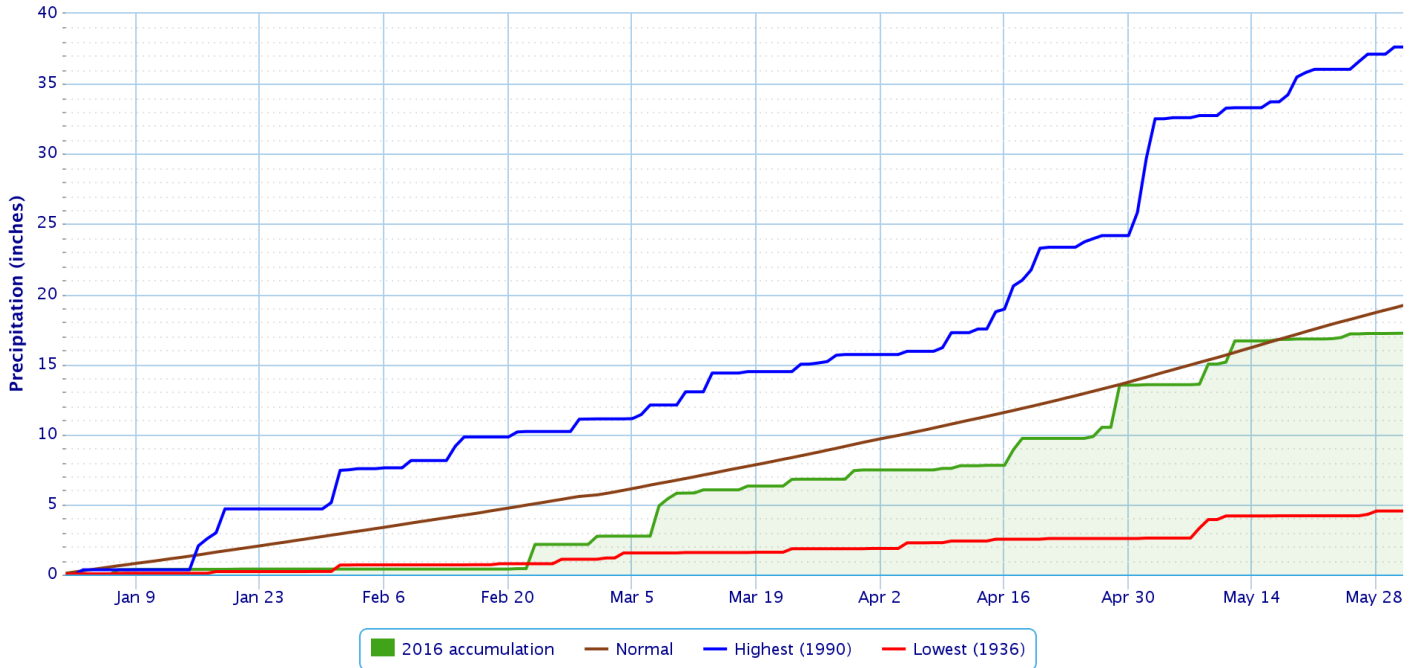
Period of Record – 1882-06-01 to 2016-06-02. Normals period: 1981-2010. Click and drag to zoom chart.



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Accumulated Precipitation – Fort Smith Area, AR (ThreadEx)

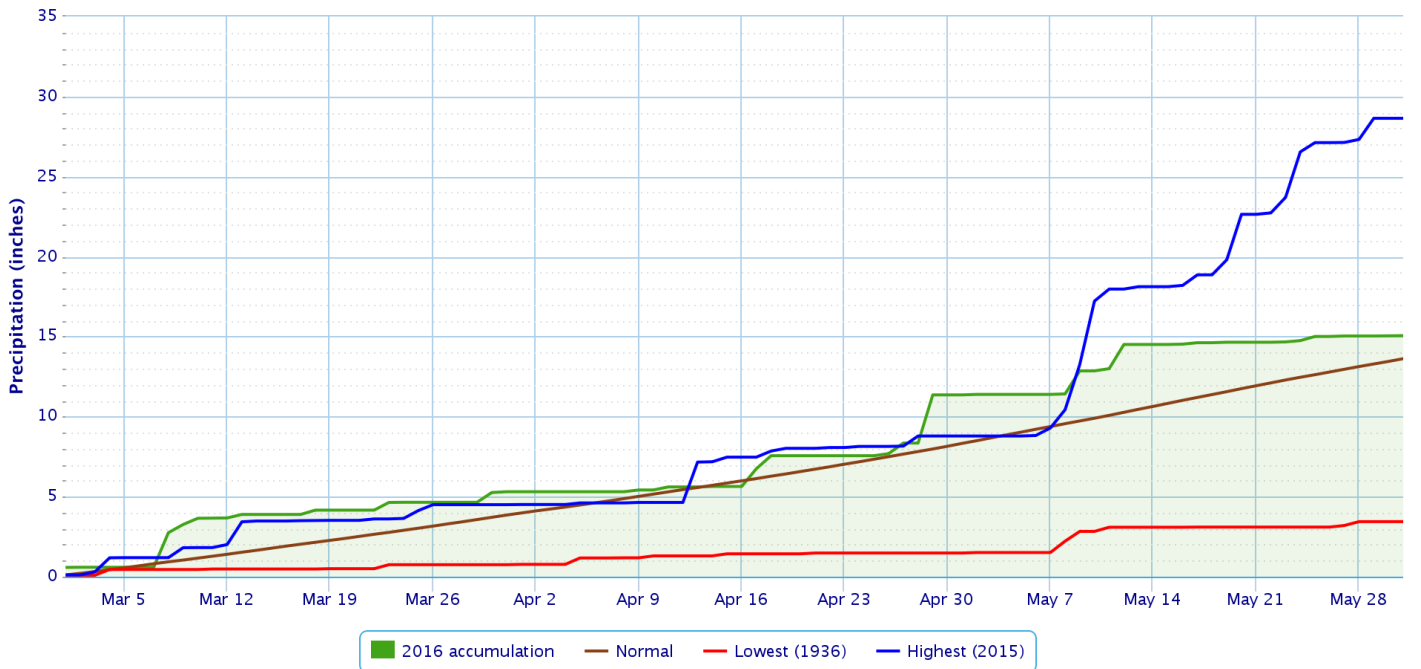
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Accumulated Precipitation – Fort Smith Area, AR (ThreadEx)

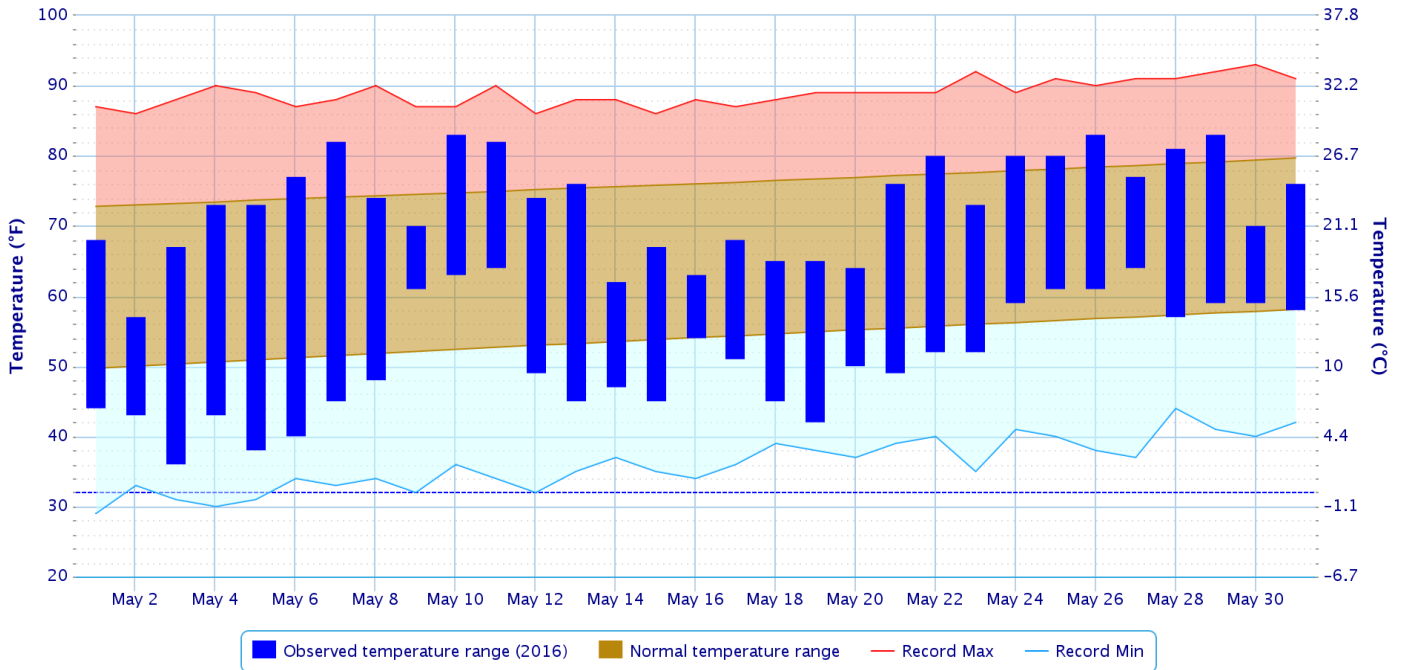
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Daily Temperature Data – FAYETTEVILLE DRAKE FLD, AR

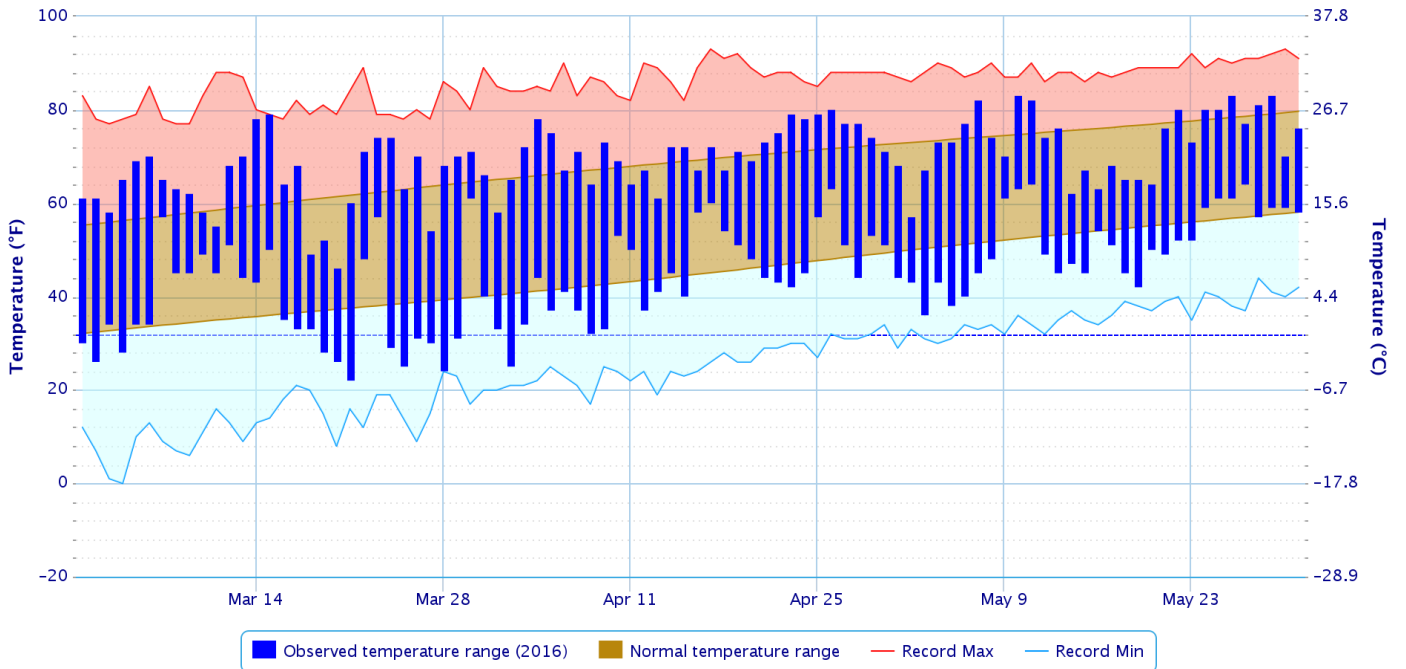
Period of Record – 1949-07-14 to 2016-06-02. Normals period: 1981-2010. Click and drag to zoom chart.



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Daily Temperature Data – FAYETTEVILLE DRAKE FLD, AR

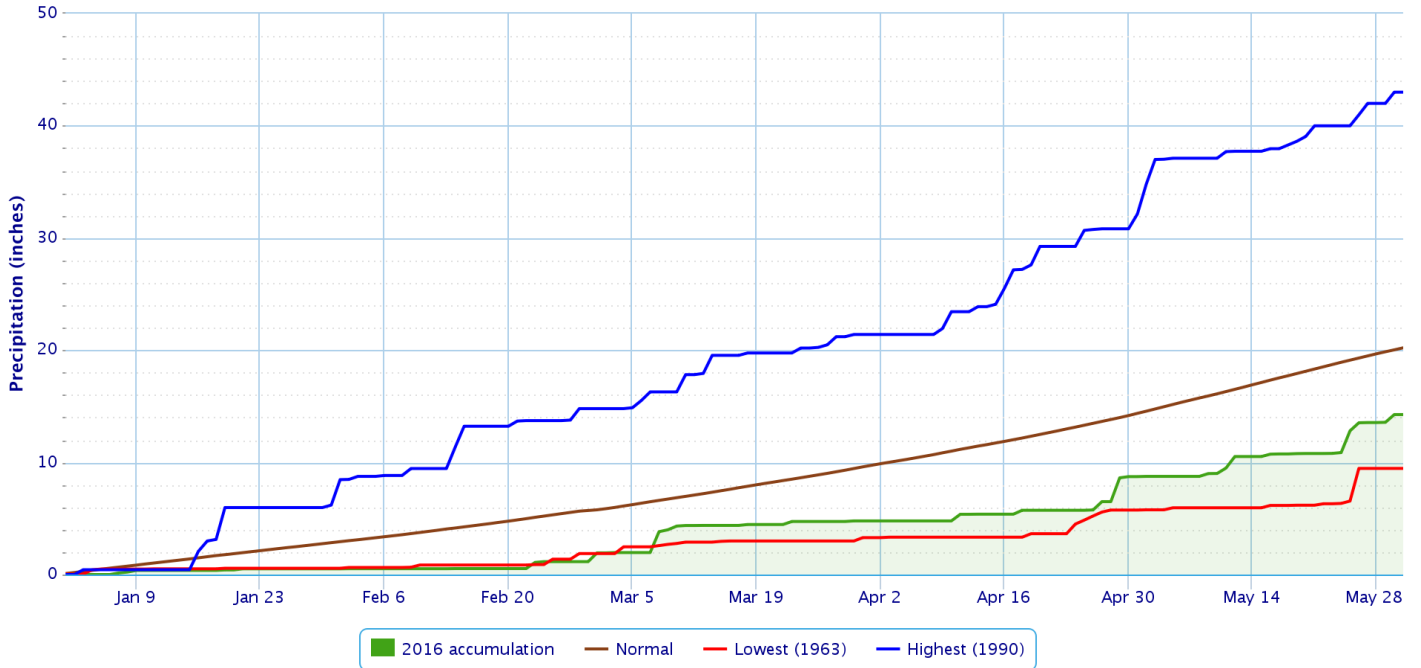
Period of Record – 1949-07-14 to 2016-06-02. Normals period: 1981-2010. Click and drag to zoom chart.



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Accumulated Precipitation – FAYETTEVILLE DRAKE FLD, AR

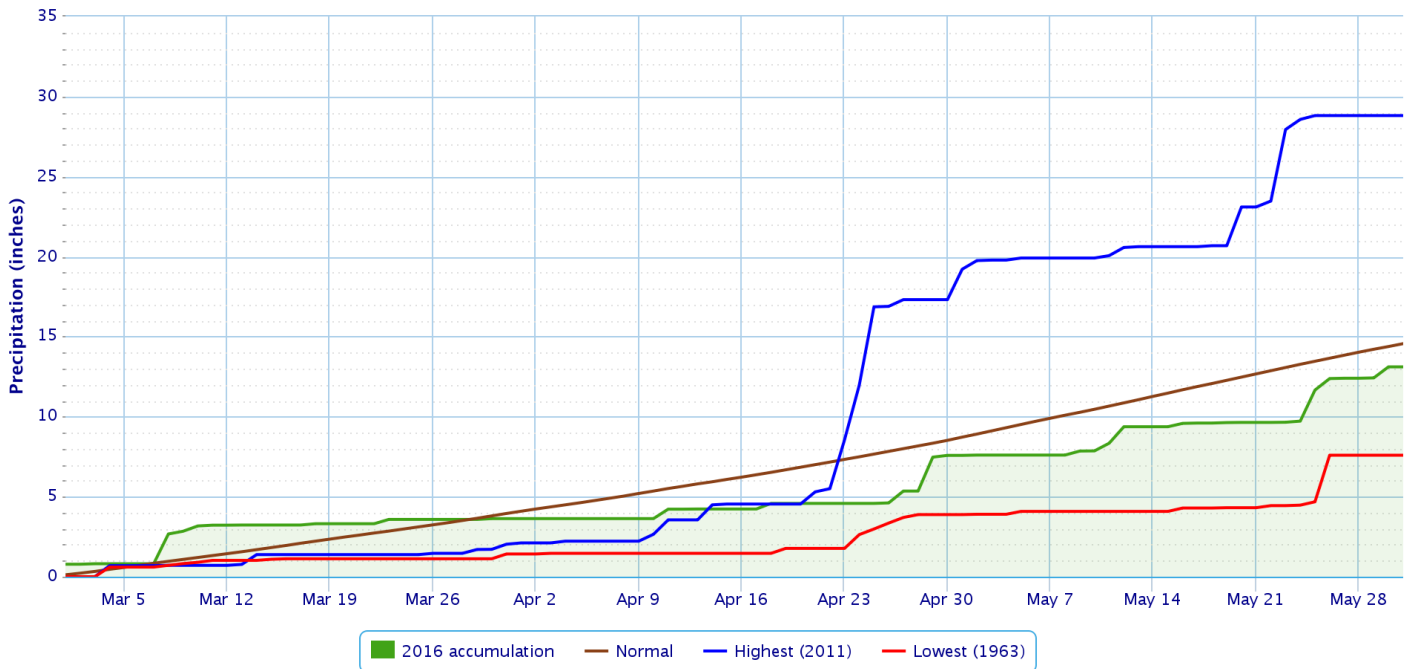
Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



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Accumulated Precipitation – FAYETTEVILLE DRAKE FLD, AR

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



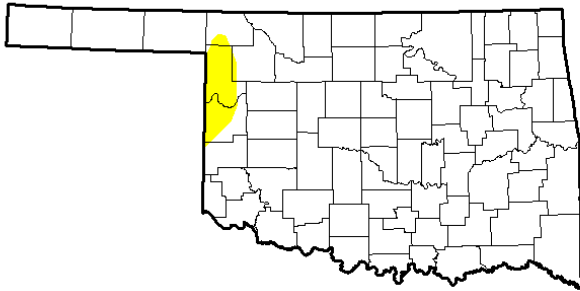
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Drought

According to the [U.S. Drought Monitor](#) (USDM) from May 31, 2016 (Figs. 2, 3), there were no drought conditions present in eastern OK and northwest AR. However, abnormally dry conditions were present across portions of Washington, Benton, Carroll, and Madison Counties in Arkansas.

U.S. Drought Monitor Oklahoma

May 31, 2016
(Released Thursday, Jun. 2, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	97.18	2.82	0.00	0.00	0.00	0.00
Last Week 5/24/2016	97.16	2.84	0.00	0.00	0.00	0.00
3 Months Ago 3/1/2016	78.72	21.28	0.00	0.00	0.00	0.00
Start of Calendar Year 12/29/2015	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 9/29/2015	52.60	47.40	16.79	6.37	0.97	0.00
One Year Ago 6/2/2015	88.91	11.09	0.00	0.00	0.00	0.00

Intensity:
■ D0 Abnormally Dry ■ D3 Extreme Drought
■ D1 Moderate Drought ■ D4 Exceptional Drought
■ D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Mark Svoboda
National Drought Mitigation Center

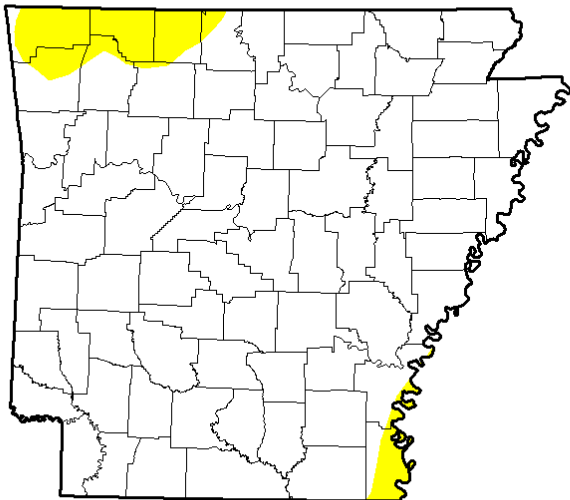


<http://droughtmonitor.unl.edu/>

Fig. 2. Drought Monitor for Oklahoma

U.S. Drought Monitor Arkansas

May 31, 2016
(Released Thursday, Jun. 2, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	94.01	5.99	0.00	0.00	0.00	0.00
Last Week 5/24/2016	94.01	5.99	0.00	0.00	0.00	0.00
3 Months Ago 3/1/2016	94.99	5.01	0.00	0.00	0.00	0.00
Start of Calendar Year 12/29/2015	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 9/29/2015	39.30	60.70	42.41	16.89	4.64	0.00
One Year Ago 6/2/2015	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:
■ D0 Abnormally Dry ■ D3 Extreme Drought
■ D1 Moderate Drought ■ D4 Exceptional Drought
■ D2 Severe Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Mark Svoboda
National Drought Mitigation Center

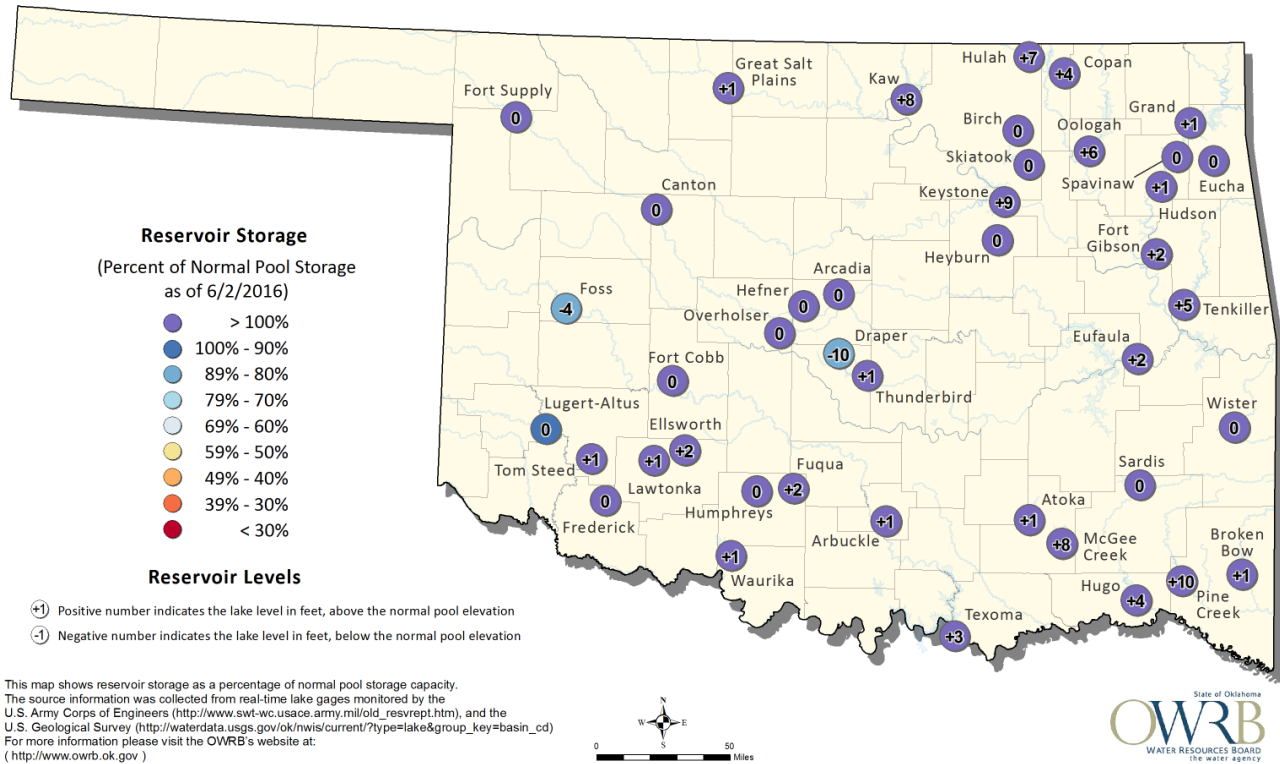


<http://droughtmonitor.unl.edu/>

Fig. 3. Drought Monitor for Arkansas

Oklahoma Surface Water Resources

Reservoir Levels and Storage as of 6/2/2016



Reservoirs

According to the USACE, all of the major reservoirs in the HSA were operating at or above their conservation pool levels as of 06/01/2016. Reservoirs operating above 5% of the top of their conservation level include: Oologah Lake 118%, Keystone Lake 118%, Kaw Lake 116%, Eufaula Lake 114%, Tenkiller Lake 112%, Hulah Lake 111%, Copan Lake 109%, Hugo Lake 108%, Grand Lake/Pensacola 106%, and Sardis 106%.

Outlooks

The [Climate Prediction Center](#) (CPC) outlook for June 2016 (issued May 31, 2016) indicates an enhanced chance of above median precipitation across far southeast OK and equal chances for above, near, or below median across the remainder of eastern OK and northwest AR. This outlook also calls an enhanced chance of below normal temperatures across eastern OK and northwest AR. This outlook is based on both short- and extended-range weather forecasts and climate linkages to current soil moisture conditions. The Madden-Julian Oscillation (MJO) and waning El Niño did not play a major role in the June outlook.

For the 3-month period June-July-August 2016, CPC is forecasting a slightly enhanced chance for above normal temperatures across southeast OK and west central AR, and an equal chance for above, near, and below normal temperatures elsewhere. This outlook also calls for a slightly enhanced chance for above median rainfall over northeast OK and far northwest AR, with equal chance for above, near, or below median rainfall elsewhere (outlook issued May 19, 2016). According to CPC, a rapid transition from El Niño conditions to ENSO-neutral conditions is well underway. The latest forecast indicates a 50% probability of La Nina for June-August, increasing to 75% by autumn and winter. Therefore, this outlook is based primarily on both statistical and dynamical forecast tools, soil moisture conditions, and statistical guidance from current tropical and extratropical sea-surface temperatures.

Summary of Precipitation Events Daily quality controlled rainfall maps can be found at: http://water.weather.gov/precip/index.php?location_type=wfo&location_name=tsa

May 1-14

During the late evening hours of the 1st through the early morning hours of the 2nd, a line of showers and isolated thunderstorms moved east across eastern OK and northwest AR as an upper-level shortwave moved over the region. Rainfall totals remained light, with around 0.10" or less. The exception was western Okfuskee Co., where around 0.25" of rain fell.

Elevated scattered showers and thunderstorms affected across eastern OK and northwest AR through the morning and afternoon on the 8th due to isentropic lift and an upper-level shortwave moving out of TX. Rainfall totals were light, with around 0.10" or less. More widespread showers and thunderstorms moved across southeast OK and west central AR late that night in association with a second vorticity lobe lifting out of AZ and into the OK/TX panhandles. Around 0.25" to around 0.75" of rain from this activity affected locations south of a McAlester to Poteau line.

As another shortwave associated with the mid-level low over western KS/NE moved into the area, leading to additional widespread showers and thunderstorms during the morning through early afternoon hours of the 9th. Severe thunderstorms developed and moved over portions of both northeast and southeast Oklahoma along and ahead of a dry line during the evening of May 9th. The strongest supercell storm moved across portions of Choctaw County in far southeast OK, producing 3 tornadoes, including an EF-3 near Boswell that was large, damaging, and injured 2 people. Storms in northeast Oklahoma produced hail up to the size of golf balls. More information on this event is at <http://arcg.is/1RNkyDs>. Heavy rain also occurred due to the two rounds of rainfall along and south of a McIntosh County to Crawford County line. Rainfall totals in this area generally ranged from 2"-6", with lesser amounts of around 0.10" to 1" to the north (Fig. 4).

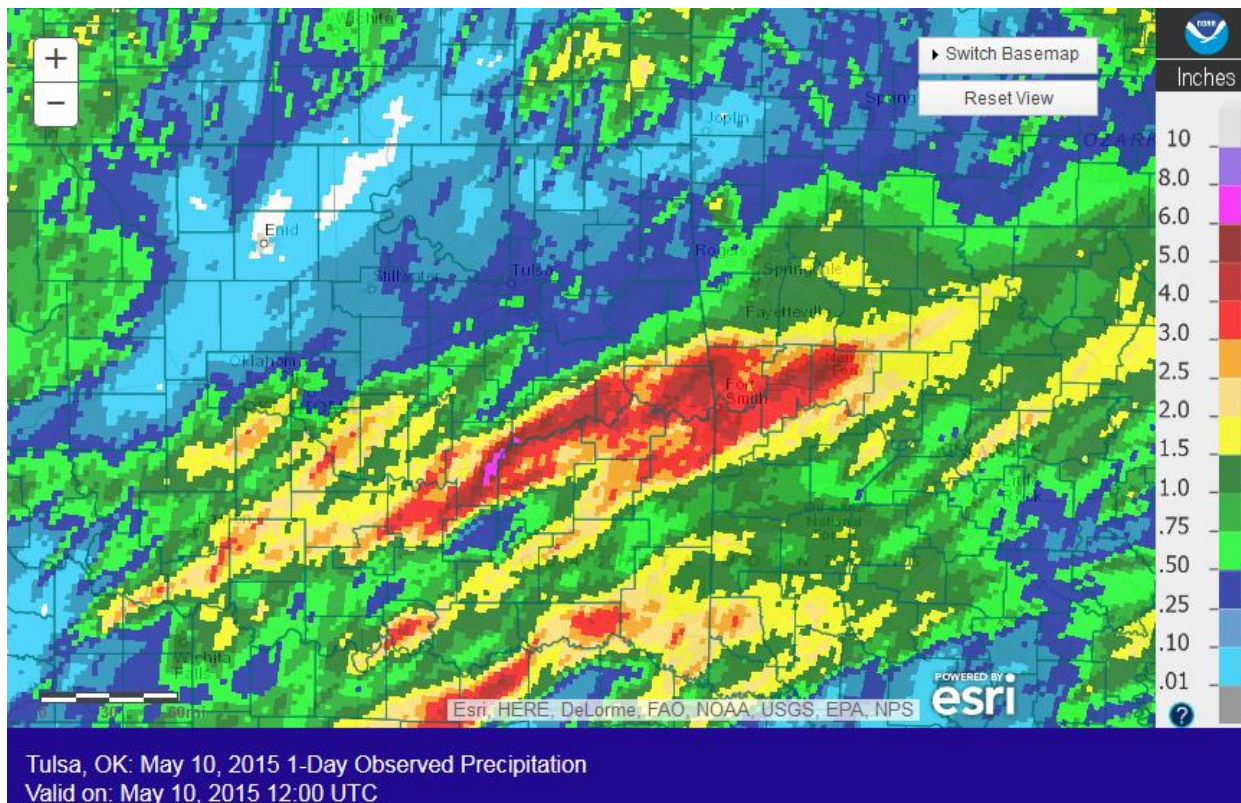


Fig. 4. 24-hour Estimated Observed Rainfall ending at 7am CDT 5/10/2016.

A cold front moved into the area on the 11th. A line of scattered showers and thunderstorms developed across eastern OK and northwest AR, along and east of an Okmulgee to Miami line, during the early afternoon hours

of the 11th. Thunderstorms then redeveloped over this same area during the late evening hours along and south of the front. Deep gulf moisture was in place, and combined with slow storm motions, heavy rainfall occurred. By midnight on the 12th, heavy rain was falling over the southern portions of Cherokee and Adair Counties, as well as portions of the surrounding counties. As storms increased in coverage across much of eastern OK and northwest AR, training storms continued to bring heavy rain to Cherokee and Adair Counties. Over 5"-7" of rain fell in about a 2.5 hour period, with a total of just over 8" (Figs. 5, 6), in this area by the time all of the storm activity had exited the region by mid-morning. The Cookson Mesonet site measured 8.31" in just a few hours (Figs. 6, 7), and flash flooding resulted in water rescues. Much of east central OK and west central AR received 1.5" to 2" of rain, with lesser amounts elsewhere (Figs. 5, 6). The heavy rain over northern Le Flore County led to brief minor flooding along the Poteau River near Panama (see preliminary hydrographs at the end of this report).

A line of thunderstorms developed along a cold front and moved south across northeast and east central OK and far northwest AR during the evening of the 13th. Due to the fast storm motion, rainfall amounts were generally around 0.25" or less.

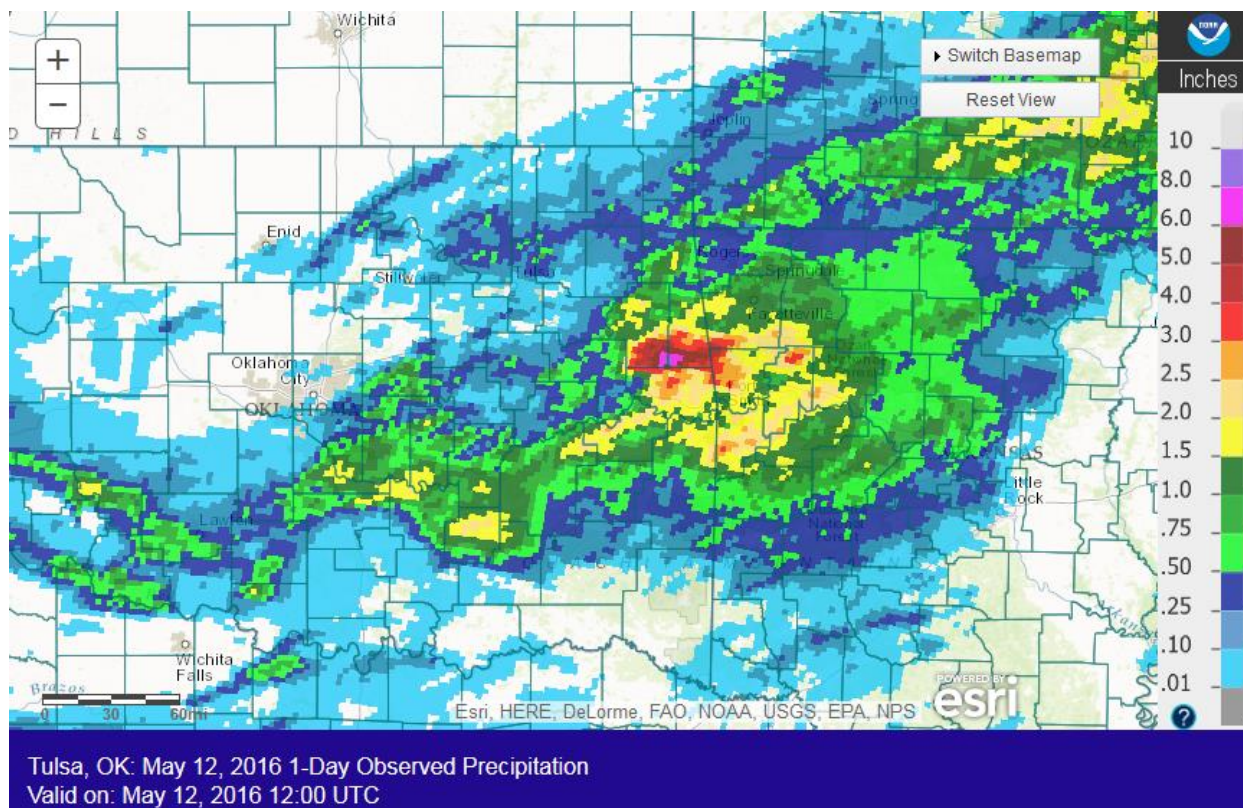
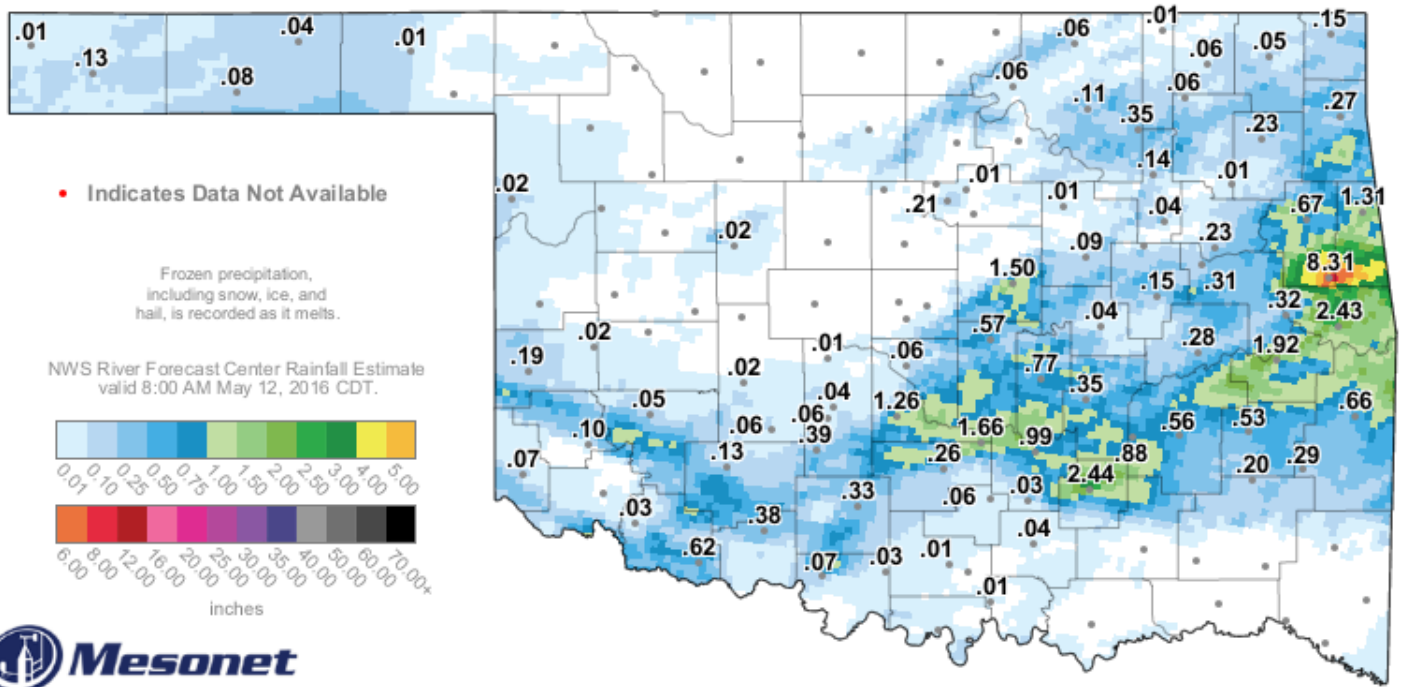


Fig. 5. 24-hour Estimated Observed Rainfall ending at 7am CDT 5/12/2016.



12-Hour Rainfall Accumulation (inches)

8:50 AM May 12, 2016 CDT

Created 8:54:22 AM May 12, 2016 CDT. © Copyright 2016

Fig. 6. 12-hr Estimated Observed Rainfall (image) and OK Mesonet measurements ending at 8:50am CDT 05/12/2016.

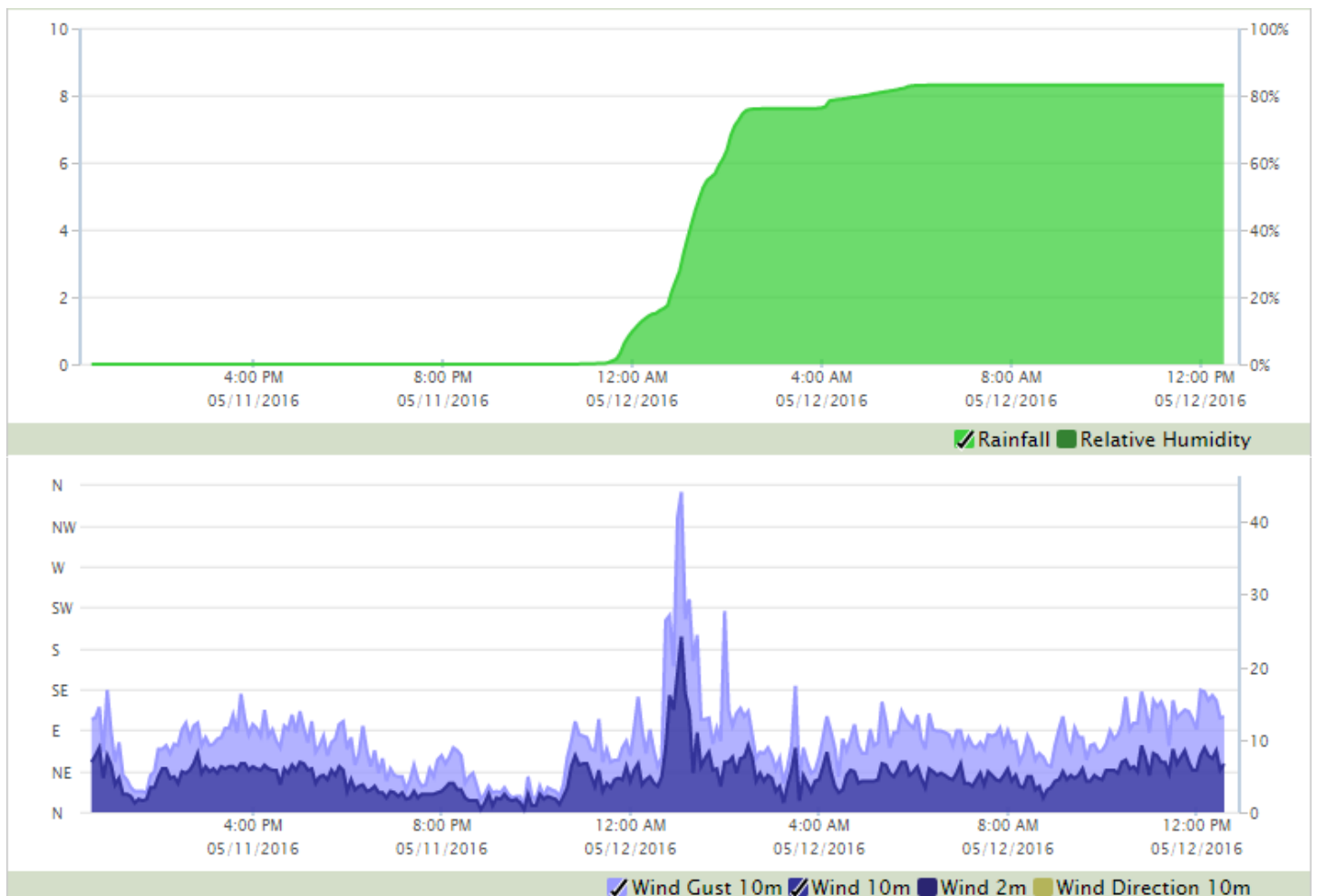


Fig. 7. OK Mesonet metogram showing the rapid rainfall accumulation (upper green graph) and winds (lower blue graph) for the Cookson site on 05/12/2016.

May 15-31

Showers and thunderstorms moved into northeast OK during the late evening hours of the 15th, and continued through the morning of the 16th. A second round of storms moved across northern OK and into northeast OK around noon. Meanwhile, widely scattered shower and thunderstorms developed over the remainder of eastern OK and northwest AR north of a warm front. Most of this activity came to an end by the early evening hours. Convection, near a triple point and approaching cold front, renewed over western OK during the late evening of the 16th, developing into a line of weakening storms that pushed east into eastern OK and western AR through the overnight and into the morning hours of the 17th. Most of the rain came to an end by late morning. In the 24 hours ending at 7am on the 17th, 1.5" to near 3.5" of rain fell across the counties that border KS (Fig. 8), with lesser amounts across the remainder of eastern OK and northwest AR. For the entire event, the OK/KS border counties received 2"-4" of rain (Fig. 9). The heavy rain over southeast KS and far northeast OK resulted in minor flooding along the Neosho River near Commerce (see preliminary hydrograph at the end of this report).

24-hr precipitation reports (in inches) ending at 7am CDT 5/17/2016:

Miami 2NE, OK	3.36	Vinita 10NNW, OK	3.03	Talala 4NW, OK	3.00
Quapaw 3SE, OK	2.73	Lenapah 3E, OK	2.62	Nowata 3NNE, OK	2.54
Childers 2SSE, OK	2.52	Ochelata 5.6N, OK	2.51	Copan 3ENE, OK	2.45

Scattered showers moved through the region from mid-morning on the 19th through the evening hours as an upper-level system moved northeast across the Plains. Additional scattered activity continued over northeast OK and far northwest AR through the overnight hours before coming to an end mid-morning on the 20th. Rainfall totals were around 0.50" or less.

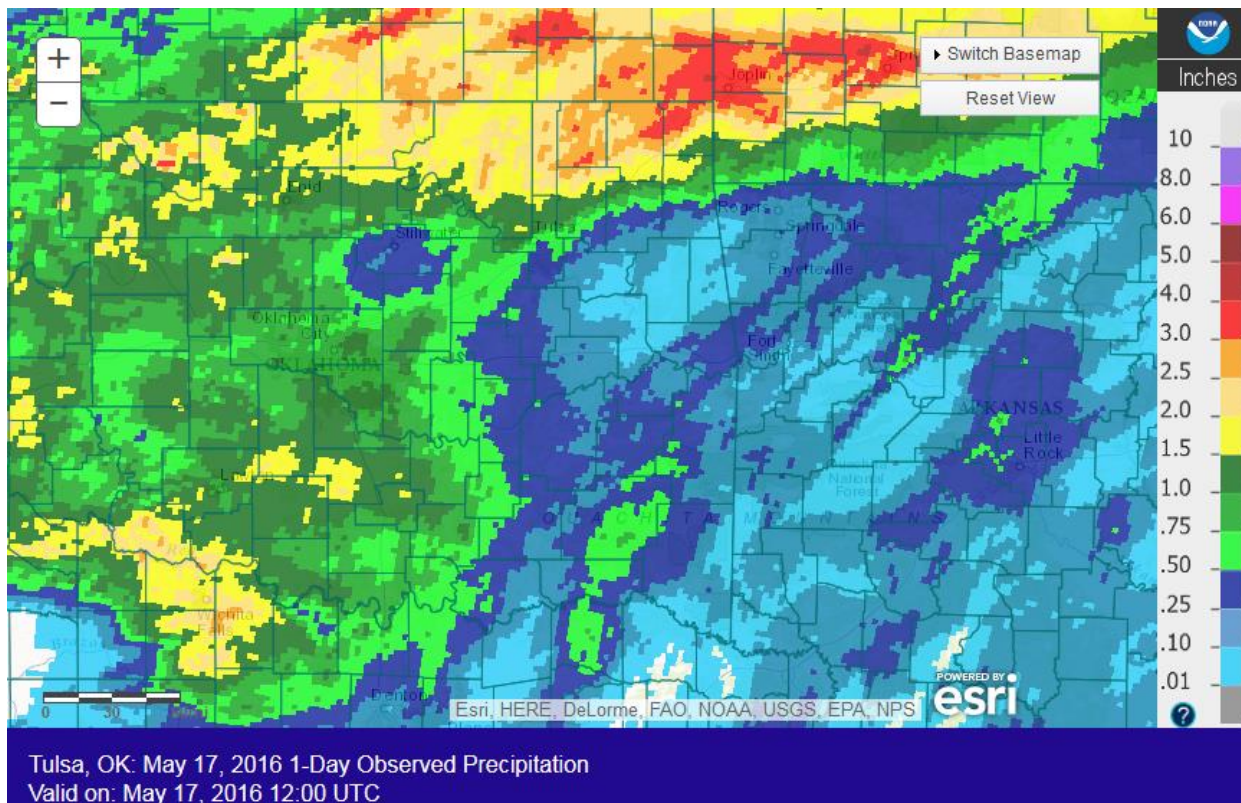


Fig. 8. 24-hour Estimated Observed Rainfall ending at 7am CDT 5/17/2016.

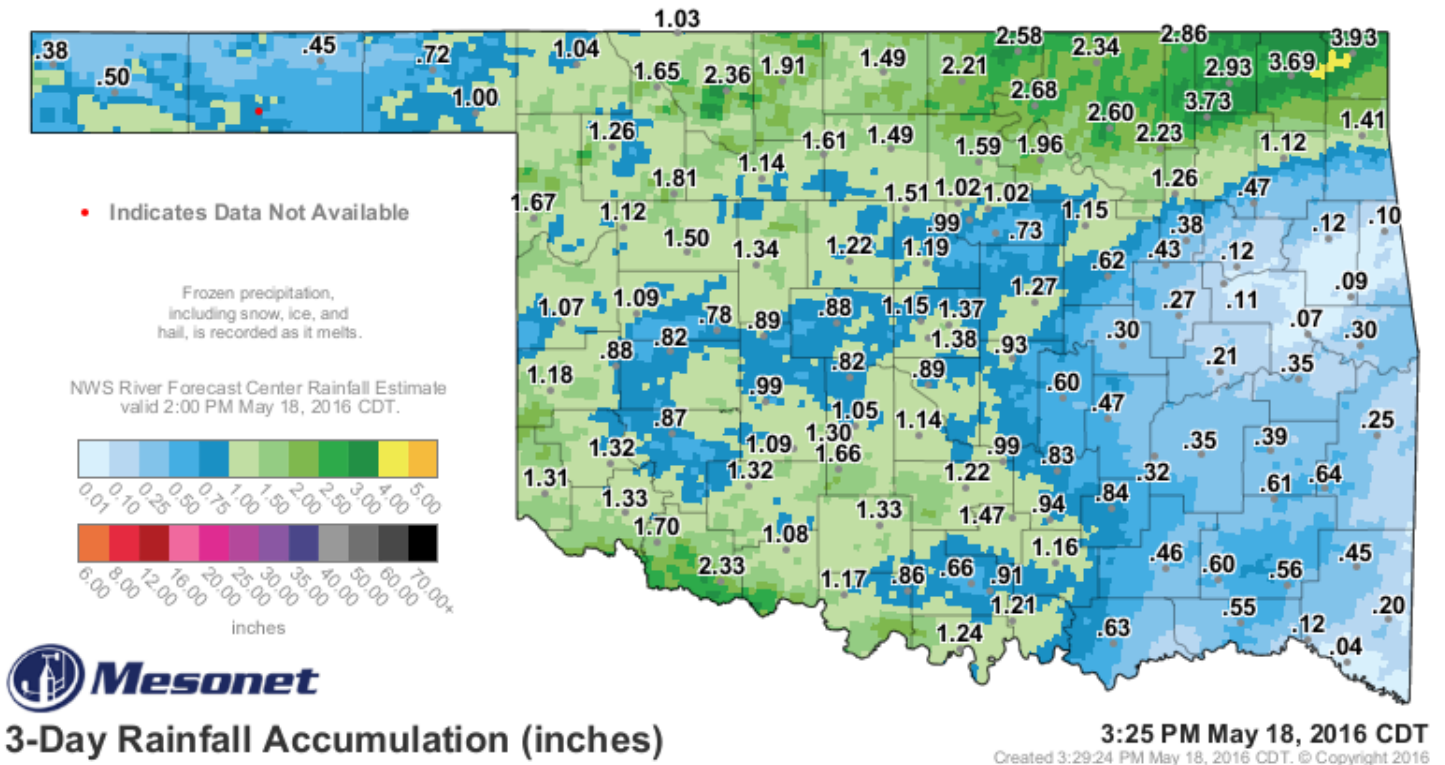


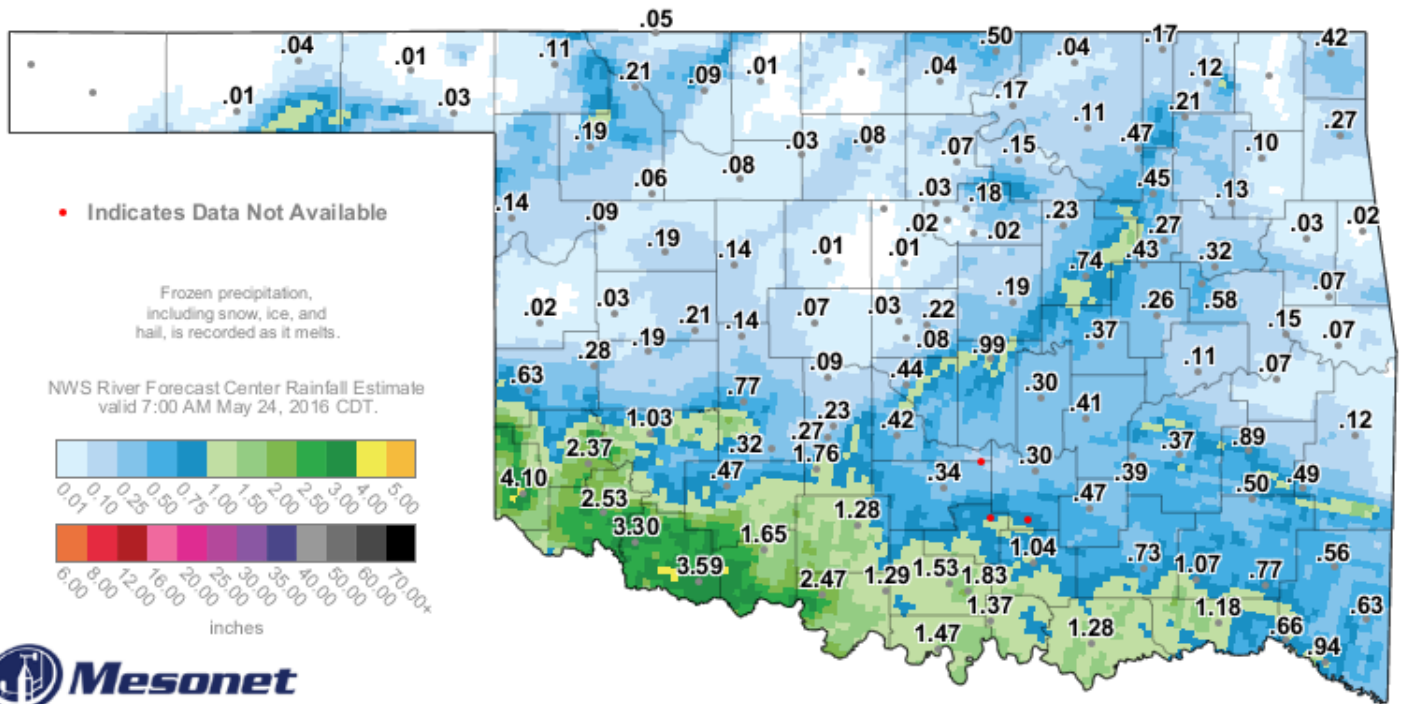
Fig. 9. 3-Day Estimated Observed Rainfall (image) and OK Mesonet measurements ending at 3:25pm CDT 05/18/2016.

Shortly after sunrise on the 23rd, a complex of thunderstorms moved out of central OK and into eastern OK. These storms weakened as they moved east into AR, and dissipated by early afternoon. Additional scattered convection developed across the region during the afternoon and evening hours, within a weakly capped and unstable airmass, coming to an end with the loss of daytime heating. While most of the area received less than 0.50", Creek, western Tulsa, Choctaw, southern Pushmataha, and southern Le Flore Counties saw 1"-1.5" of rain (Fig. 10).

Severe thunderstorms developed near a dryline over central OK during the late evening hours of the 24th, and moved into eastern OK during the early morning of the 25th. A high-precipitation supercell developed over Noble County in north central OK on the afternoon of the 24th. This storm then moved southeast along a boundary, affecting portions of Pawnee and Payne Counties before moving across Creek County. This storm produced a rain-wrapped tornado northwest of Bristow, OK in Creek County during the evening. Another storm produced a short-lived tornado northeast of Morris, OK in Okmulgee County during the early morning hours of May 25. (Information about the tornadoes can be found at <http://arcg.is/1RNkyDs>.) In addition to the tornadoes, heavy rain also occurred across the area from the evening of the 24th through the morning of the 25th. A slow moving severe thunderstorm produced prolific rainfall over Pushmataha County, with radar estimates of 5"-7" of rainfall in approximately 4 hours (Fig. 11). 6.49" was measured 4 miles east northeast of Daisy, OK. Widespread 2"-4" of rain also affected northeast Oklahoma and far northwest Arkansas from the storms (Figs. 12, 13). This rain led to flash flooding as well as river flooding along the Polecat Creek near Sapulpa, the Deep Fork River near Beggs, the Caney River near Collinsville, and the Kiamichi River near Antlers (see preliminary hydrographs at the end of this report).

24-hr precipitation reports (in inches) ending at 7am CDT 5/25/2016:

Daisy 4ENE, OK	6.49	Morris 2.4SW, OK	4.88	Okmulgee 5SE, OK	4.56
Beggs 5S, OK	4.53	Hectorville 4W, OK	4.01	Clayton 1SE, OK	3.30

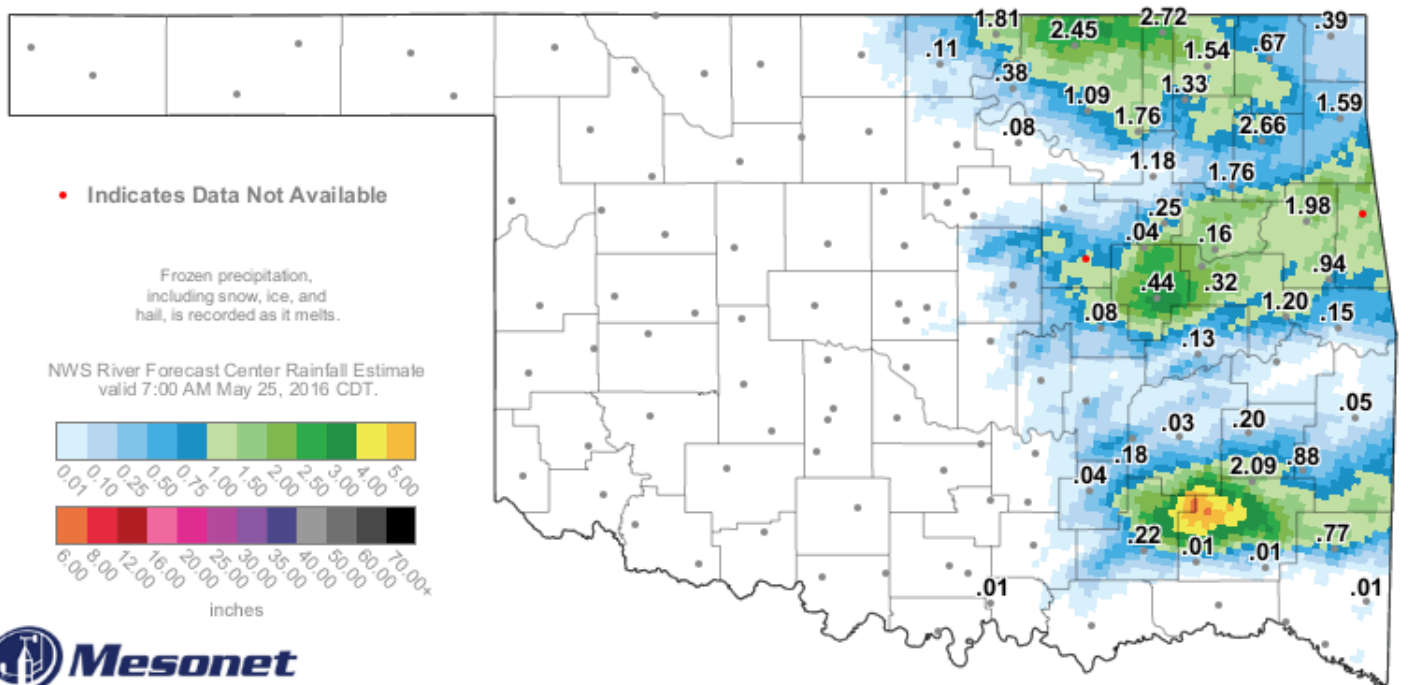


2-Day Rainfall Accumulation (inches)

8:05 AM May 24, 2016 CDT

Created 8:10:33 AM May 24, 2016 CDT. © Copyright 2016

Fig. 10. 2-Day Estimated Observed Rainfall (image) and OK Mesonet measurements ending at 8:05am CDT 05/24/2016.

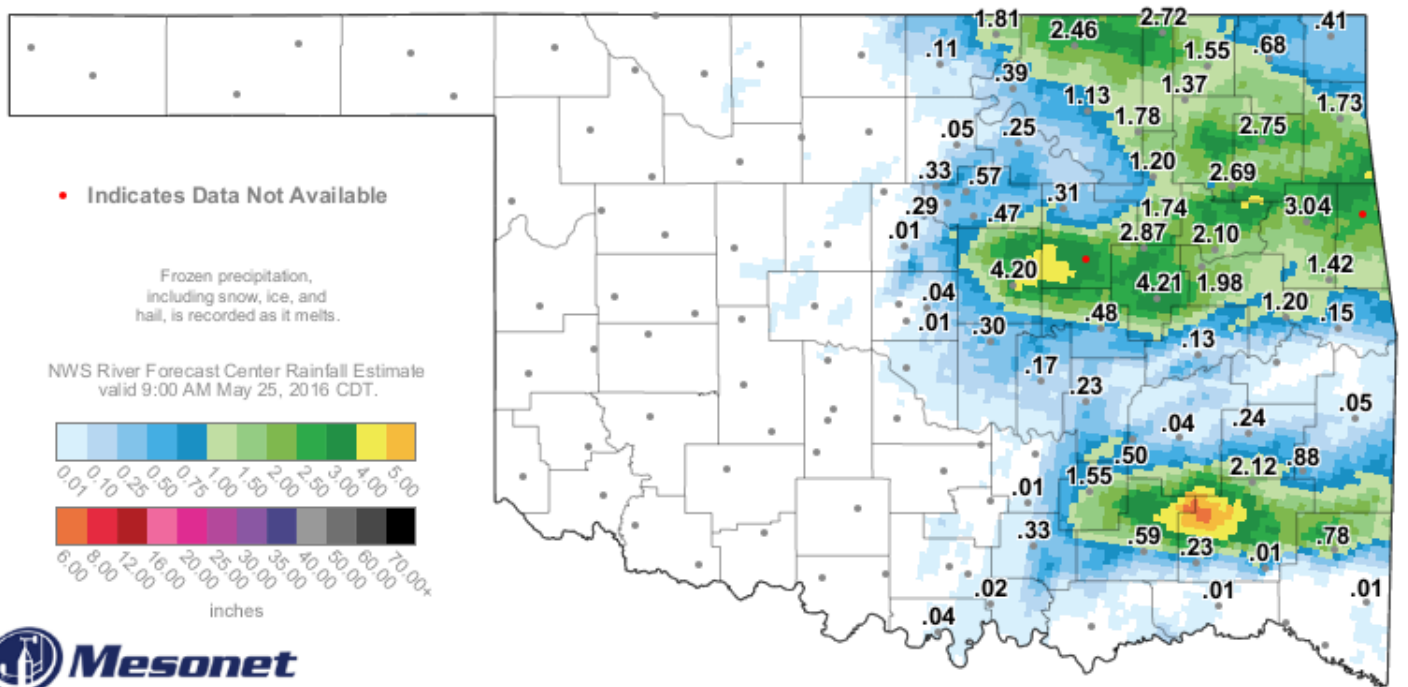


6-Hour Rainfall Accumulation (inches)

8:20 AM May 25, 2016 CDT

Created 8:25:22 AM May 25, 2016 CDT. © Copyright 2016

Fig. 11. 6-hr Estimated Observed Rainfall (image) and OK Mesonet measurements ending at 8:20am CDT 05/25/2016.



12-Hour Rainfall Accumulation (inches)

9:45 AM May 25, 2016 CDT

Created 9:49:28 AM May 25, 2016 CDT. © Copyright 2016

Fig. 12. 12-hr Estimated Observed Rainfall (image) and OK Mesonet measurements ending at 9:45am CDT 05/25/2016.

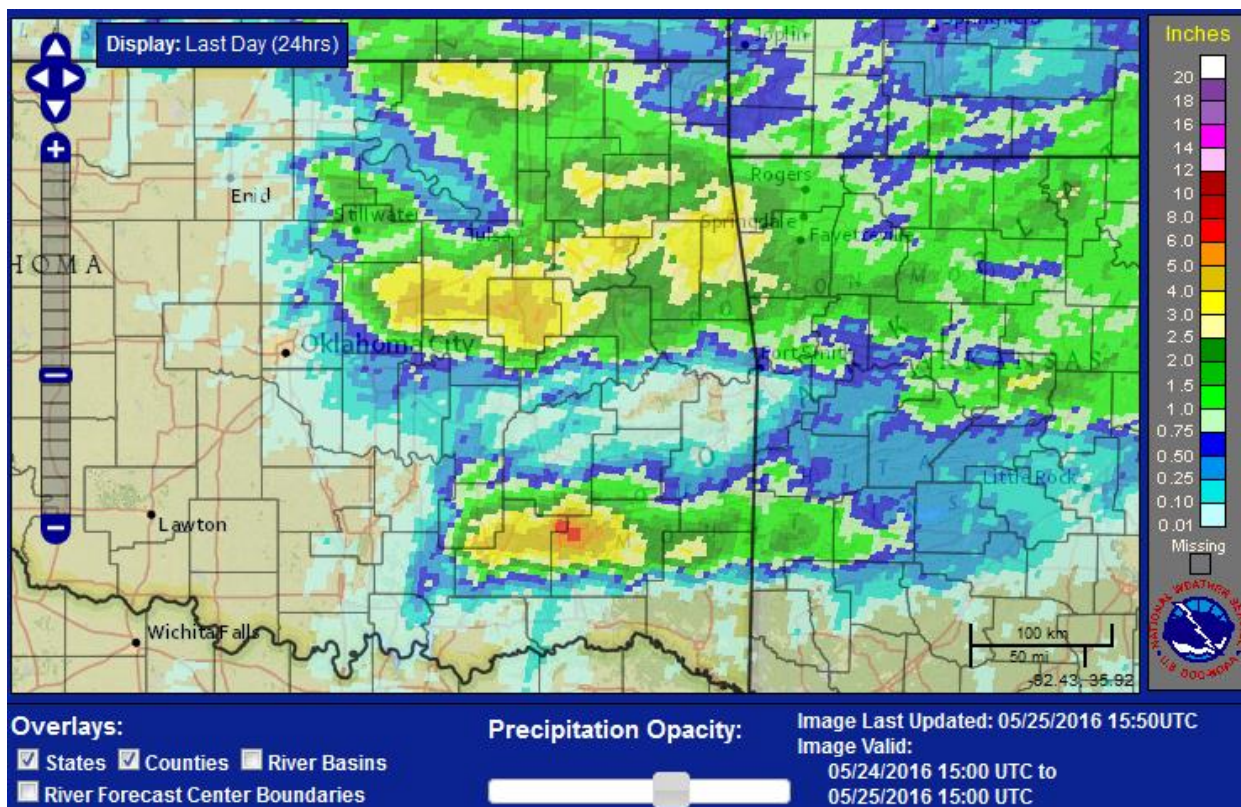


Fig. 13. 24-hour Estimated Observed Rainfall ending at 10am CDT 5/25/2016.

Thunderstorms developed along an outflow boundary over east central OK into northwest AR on the afternoon of the 26th, dissipating by mid-evening. The heaviest rain of 1.5" to near 2.5" fell over southern Washington (AR), northern Crawford, and southern Madison Counties (Fig. 14), with around 0.25" to near 1" across the remainder of the affected area.

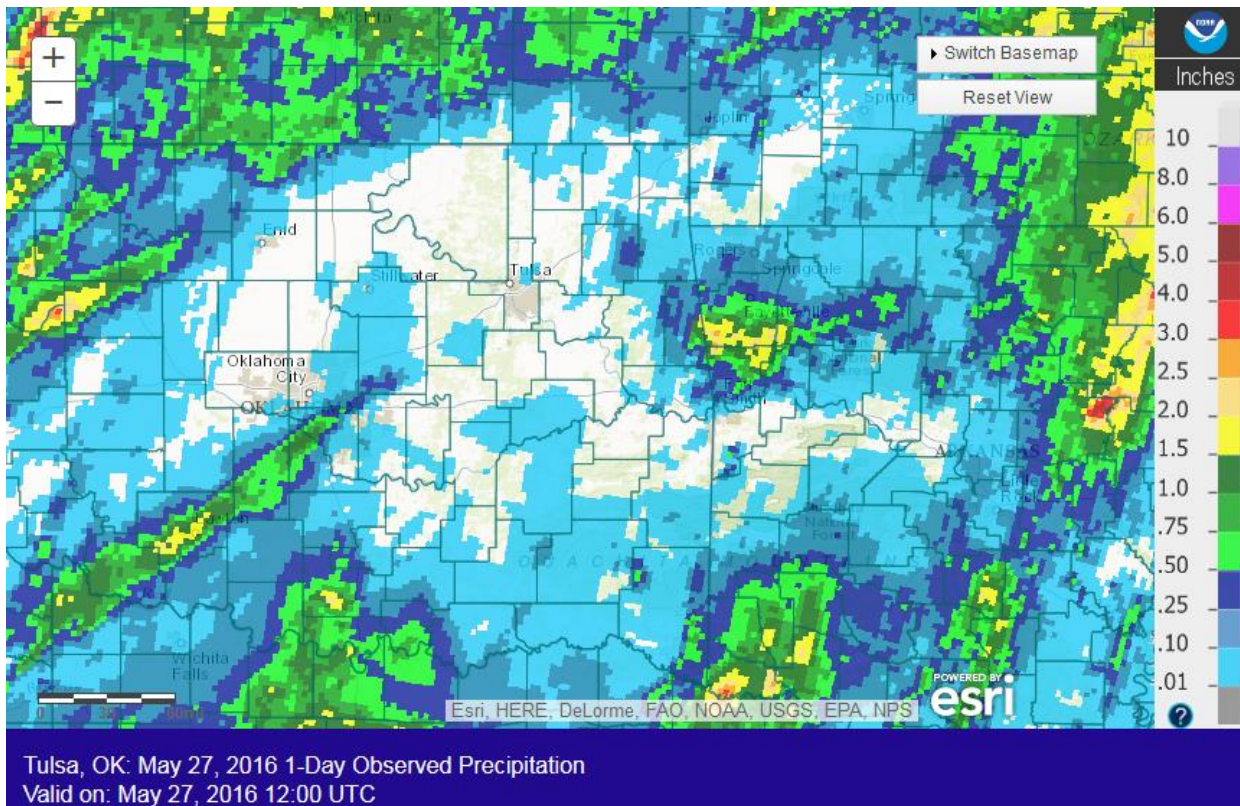
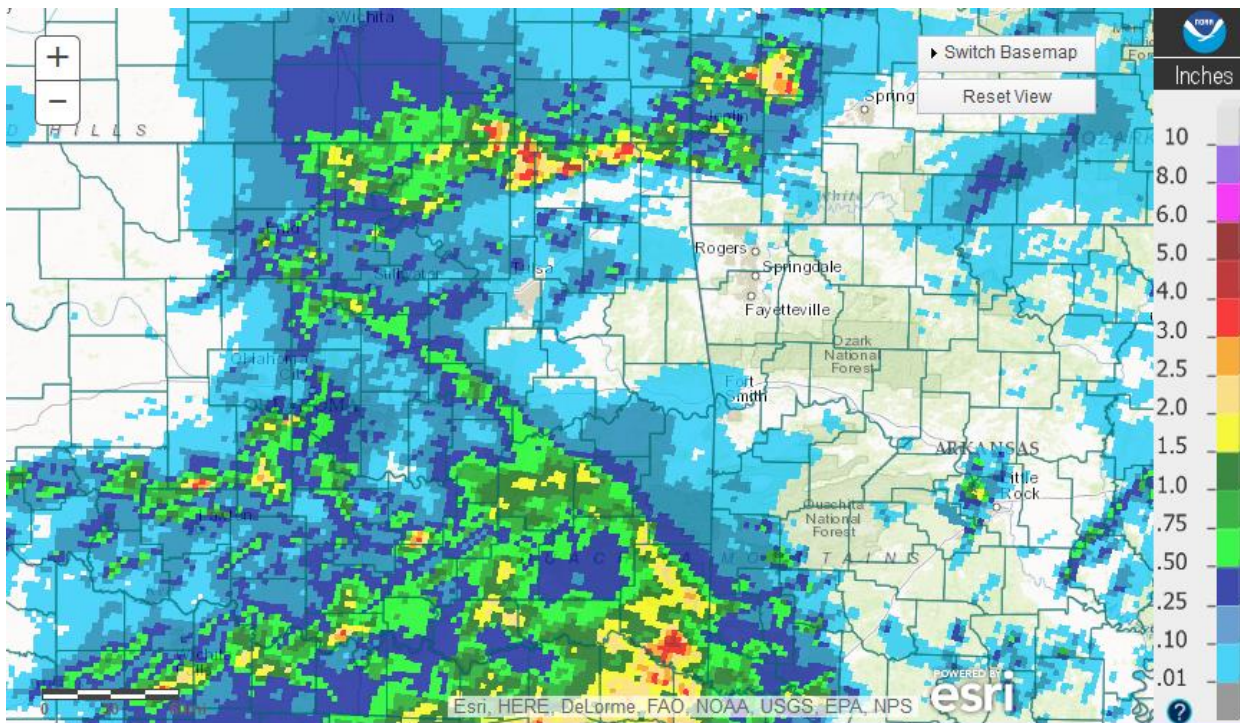


Fig. 14. 24-hour Estimated Observed Rainfall ending at 7am CDT 5/27/2016.

A pair of thunderstorm complexes moved across TX during the morning of the 27th, with the northern fringes of the complexes bringing widely scattered showers to southeast OK into northwest AR during the morning and early afternoon hours. This rain remained light, with around 0.10" or less occurring. Higher amounts of 0.25"-0.50" did occur over western Pittsburg County. Strong to severe thunderstorms then developed over north central OK during the afternoon within a moderately unstable airmass and moved into eastern Kay and northern Osage Counties during the evening hours. This activity brought 0.50" to near 1.5" of rain to that area.

Just before sunrise on the 29th, isolated thunderstorms from the north flank of a TX MCS moved into Okfuskee and Pittsburg Counties. The Pittsburg County storm then tracked east, from McAlester to south of Fort Smith, during the morning hours before dissipating. Rainfall totals were around 0.25" to around 1". Then, just before noon, widely scattered showers and thunderstorms developed over northeast OK, with isolated storms elsewhere through the remainder of the afternoon and evening due to strong heating and instability over the area. A complex of showers and thunderstorms then moved out of south central OK and northern TX into southeast OK during the early morning hours of the 30th. This activity spread northeast through all of eastern OK and northwest AR through the morning and afternoon. Widely scattered showers lingered over northwest AR through the evening hours. Rainfall totals ranged from around 0.10" to around 2" in isolated locations.

An MCS moved out of KS and north central OK into northeast OK the morning of the 31st. This line of storms then weakened as it moved southeast across eastern OK through the morning. While the northern portion of the line dissipated, the southern portion saw renewed convection during the afternoon in the vicinity of the mid-level moisture plume, bringing more widespread showers and thunderstorms to southeast OK and west central AR. As this activity came to an end in the evening, new storms developed near the OK/KS state line during the heat of the day along a nearly stationary cold front. This activity remained primarily confined to locations along and north of a Ponca City to Miami line through the overnight hours. Due to the storms remaining over the same area for several hours, heavy rain occurred. Rainfall totals for Memorial Day ranged from around 0.25" to around 5" near the OK/KS state line (Fig. 15).



Tulsa, OK: June 01, 2016 1-Day Observed Precipitation
 Valid on: June 01, 2016 12:00 UTC

Fig. 15. 24-hour Estimated Observed Rainfall ending at 7am CDT 6/01/2016.

Written by:

Nicole McGavock
 Service Hydrologist
 WFO Tulsa

Products issued in May 2016:

*MLBA4 and OZGA4 transferred to NWS Tulsa HSA February 5, 2014

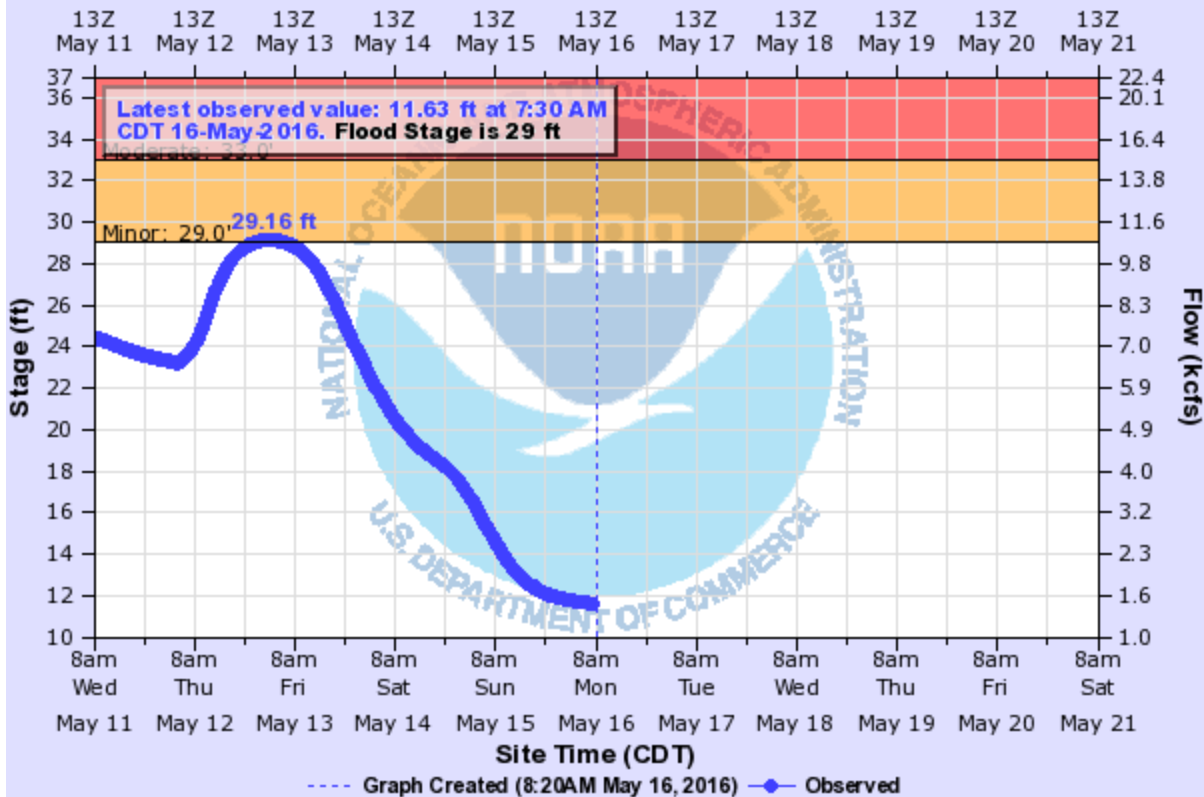
*Mixed case River Flood products began July 31, 2013

- 8 Flash Flood Warnings (FFW)
- 5 Flash Flood Statements (FFS)
- 0 Flash/Areal Flood Watches (FFA) (0 Watch FFA CON/EXT/EXA/EXB/CAN)
- 10 Urban and Small Stream Advisories (FLS)
- 8 Areal Flood Warnings (FLW)
- 0 Areal Flood Statements (FLS)
- 9 River Flood Warnings (FLW)
- 47 River Flood Statements (FLS)
- 3 River Flood Advisories (FLS) (5 Advisory FLS CON/EXT/CAN)
- 0 River Flood Watches (FFA) (0 Watch FFA CON/EXT/CAN)
- 0 River Statements (RVS)
- 0 Hydrologic Outlooks (ESF)
- 0 Drought Information Statements (DGT)

Preliminary Hydrographs:

POTEAU RIVER NEAR PANAMA

Universal Time (UTC)

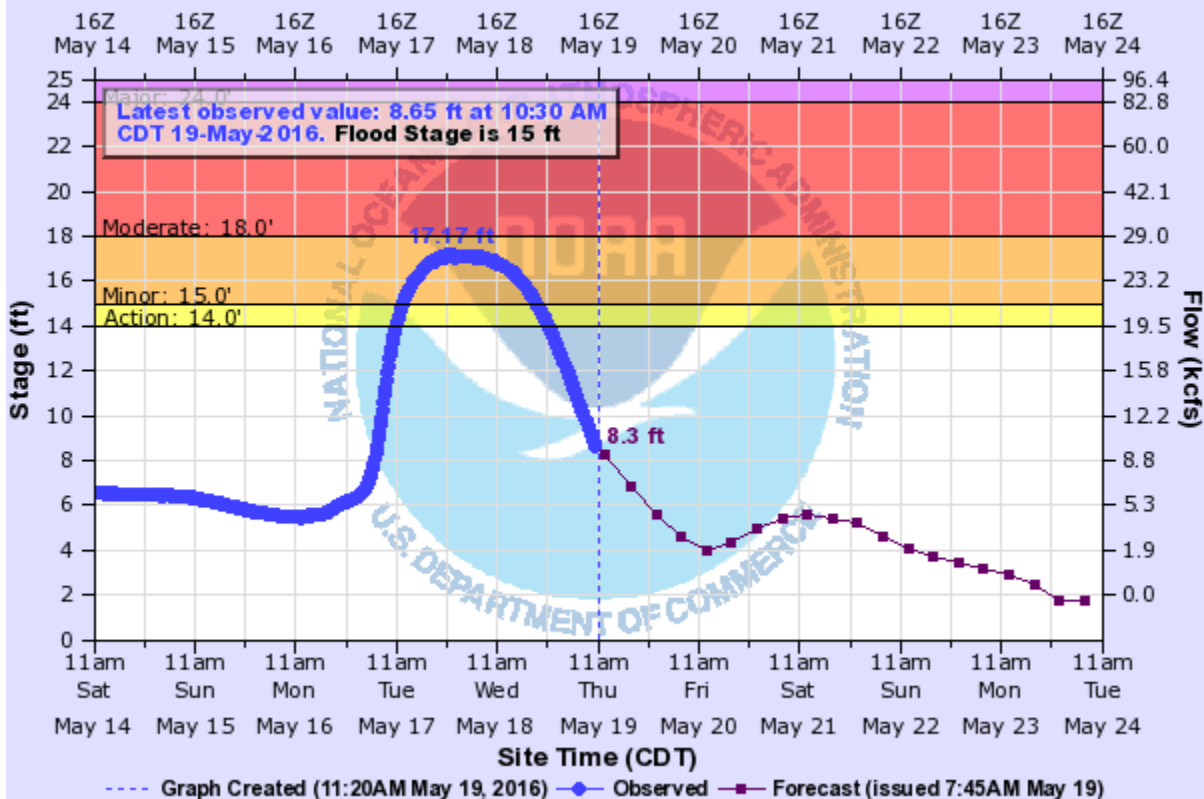


PANO2(plotting HGIRG) "Gage 0" Datum: 387.97'

Observations courtesy of US Geological Survey

NEOSHO RIVER NEAR COMMERCE

Universal Time (UTC)

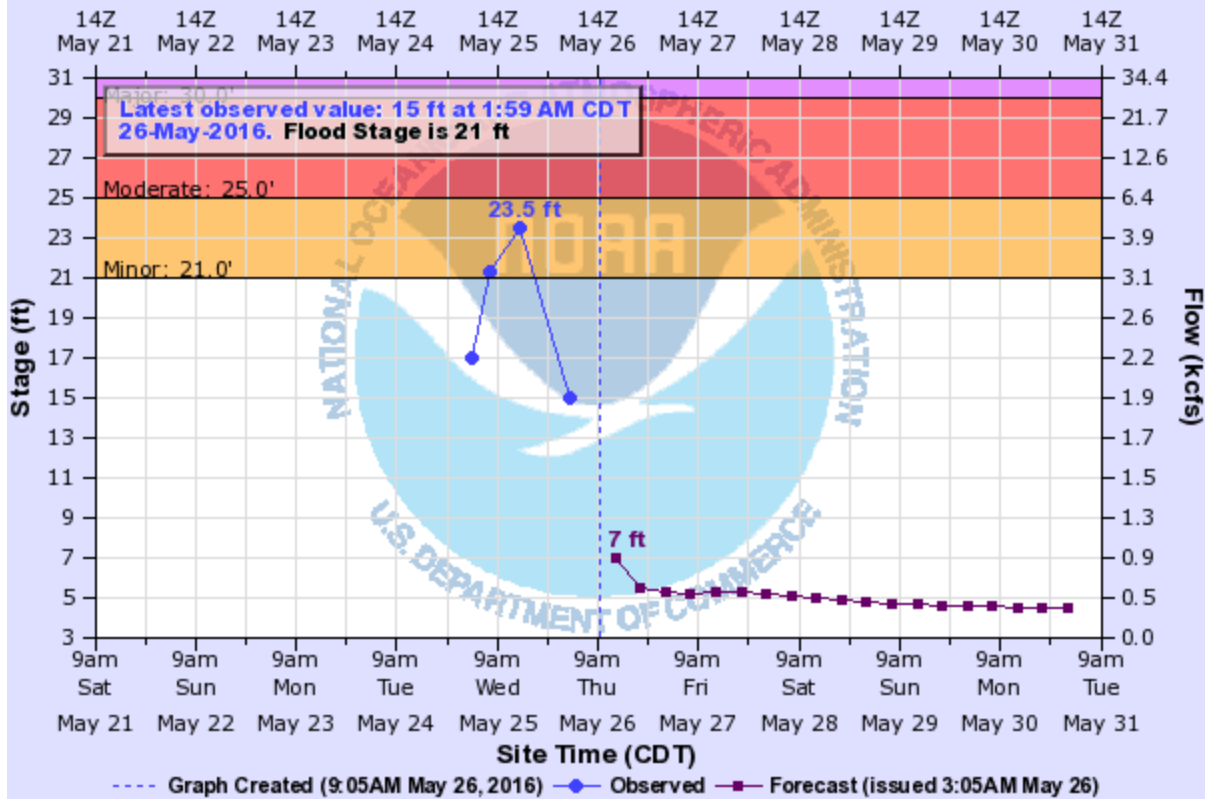


COMO2(plotting HGIRG) "Gage 0" Datum: 748.97'

Observations courtesy of US Geological Survey

POLECAT CREEK NEAR SAPULPA

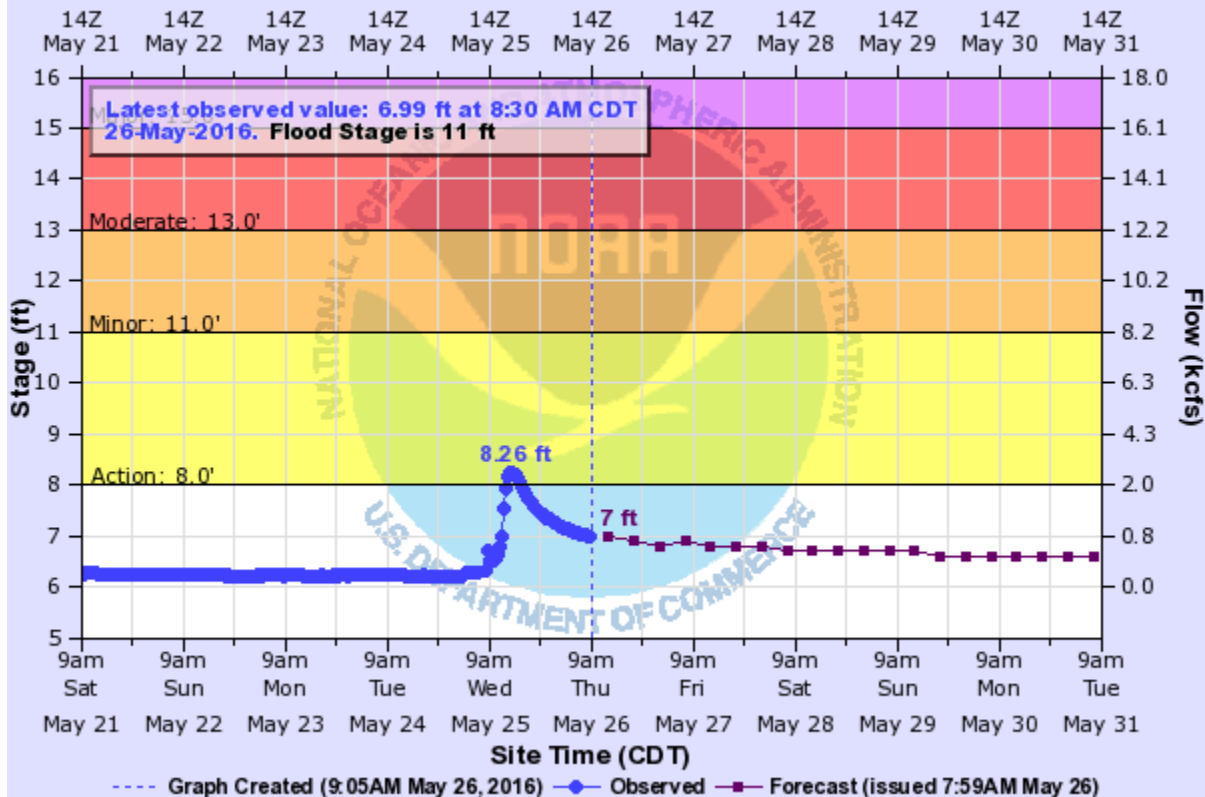
Universal Time (UTC)



SPCO2(plotting HGIRZ) "Gage 0" Datum: 626.2'

FLINT CREEK (OK) NEAR KANSAS

Universal Time (UTC)

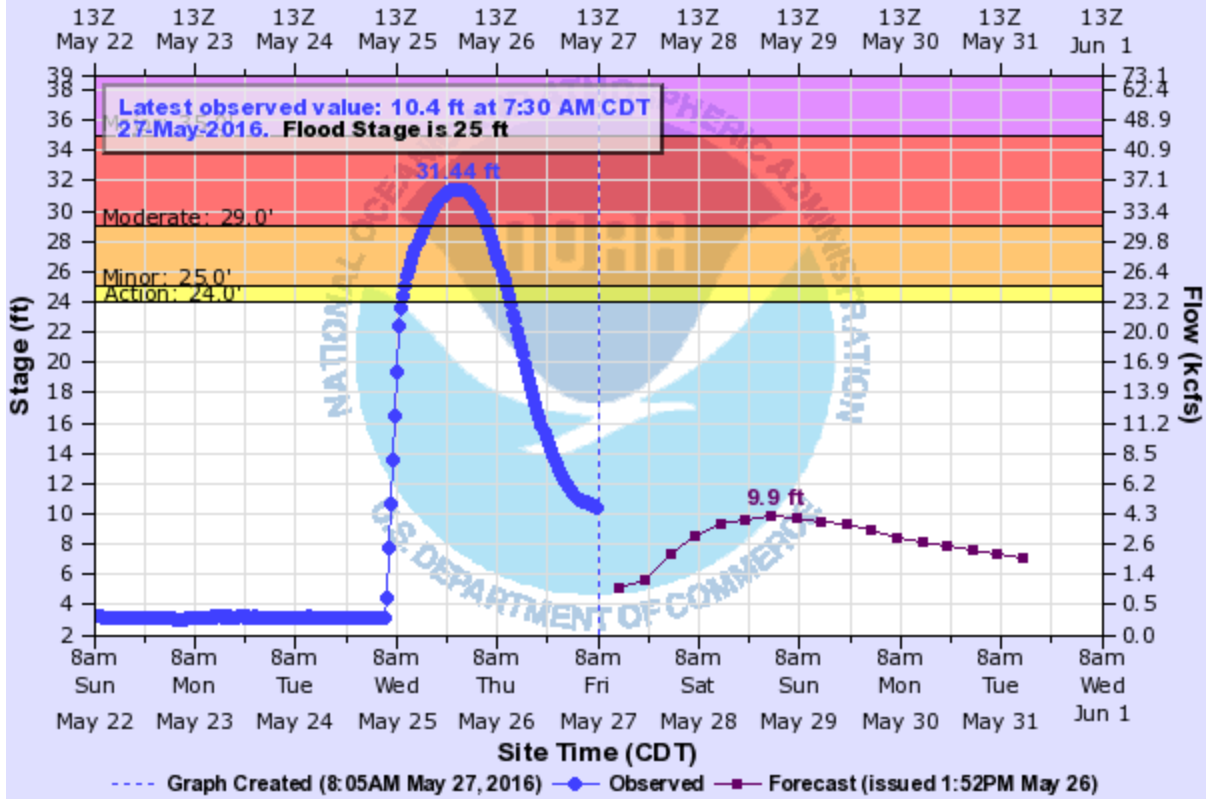


KNSO2(plotting HGIRG) "Gage 0" Datum: 854.59'

Observations courtesy of US Geological Survey

KIAMICHI RIVER NEAR ANTLERS

Universal Time (UTC)

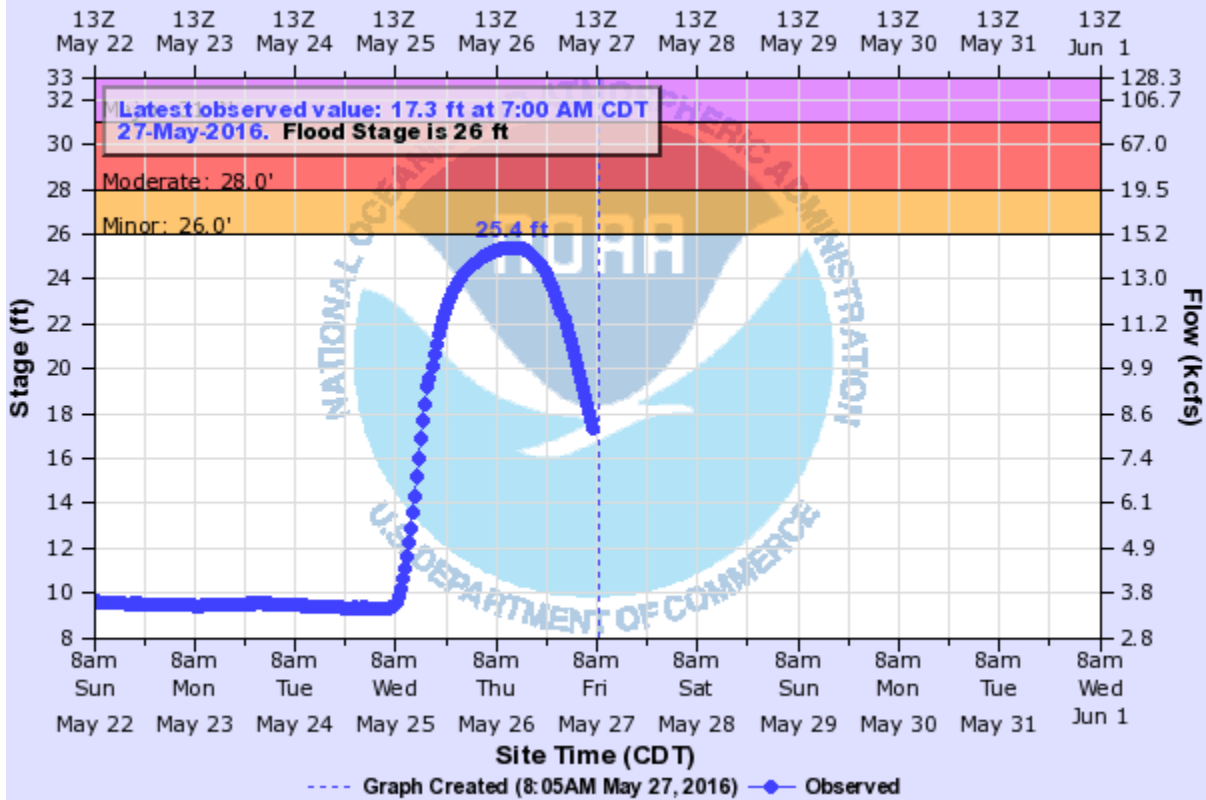


ANTO2(plotting HGIRG) "Gage 0" Datum: 419.82'

Observations courtesy of US Geological Survey

CANEY RIVER NEAR RAMONA

Universal Time (UTC)

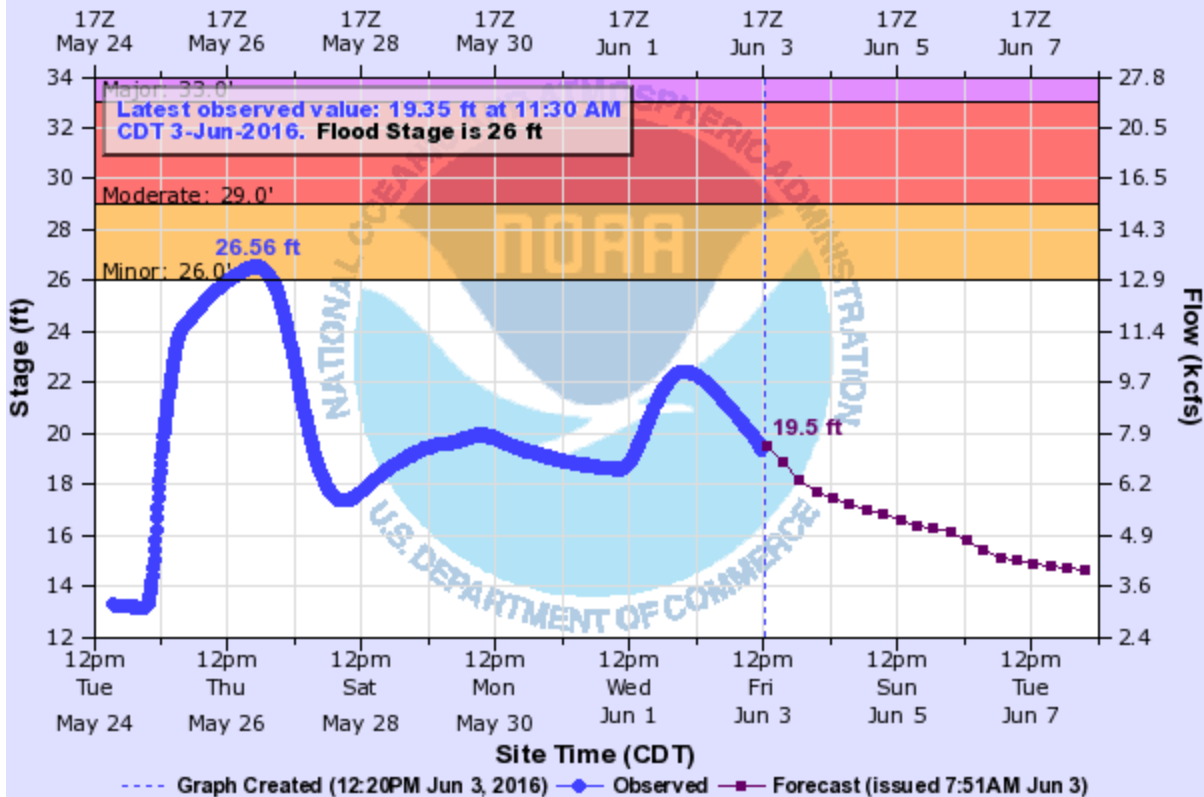


RAMO2(plotting HGIRG) "Gage 0" Datum: 586.43'

Observations courtesy of US Geological Survey

CANEY RIVER NEAR COLLINSVILLE

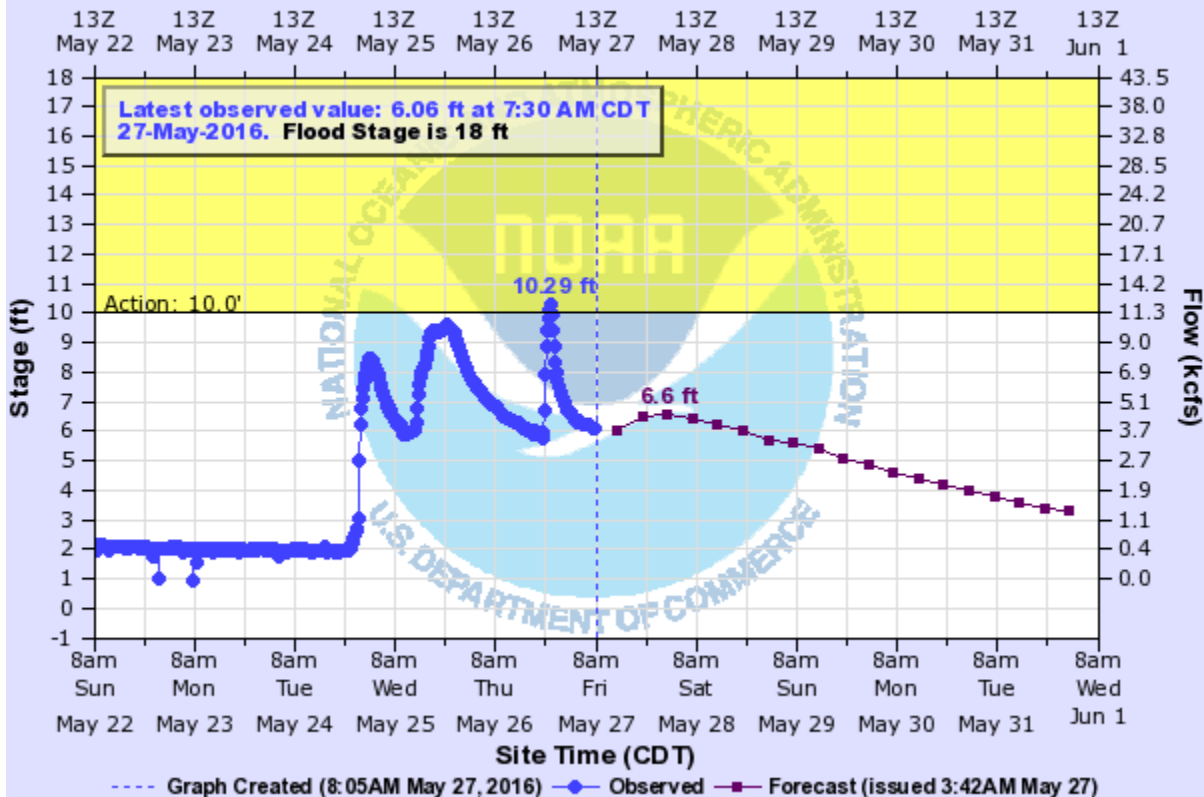
Universal Time (UTC)



CVL02(plotting HGIRG) "Gage 0" Datum: 565.72'

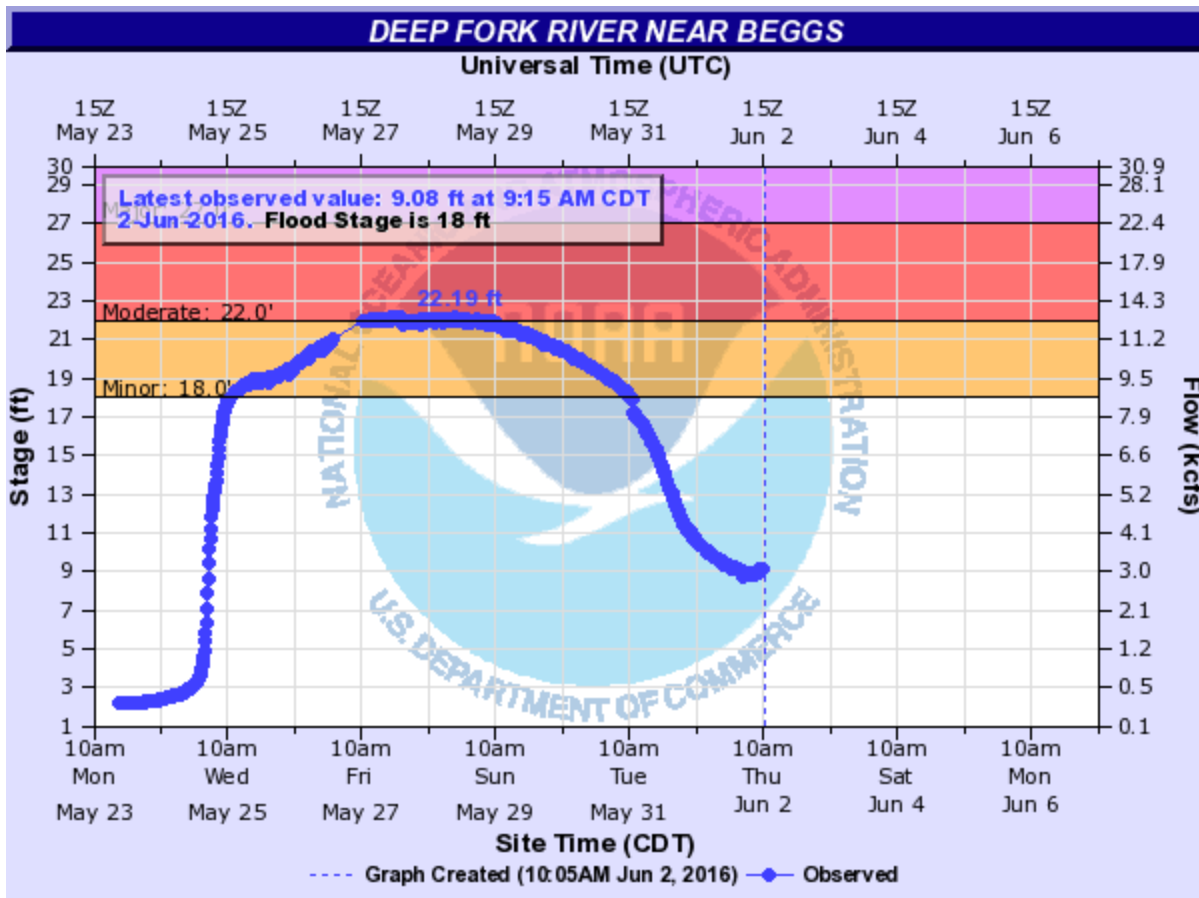
MULBERRY RIVER (AR) NEAR MULBERRY

Universal Time (UTC)



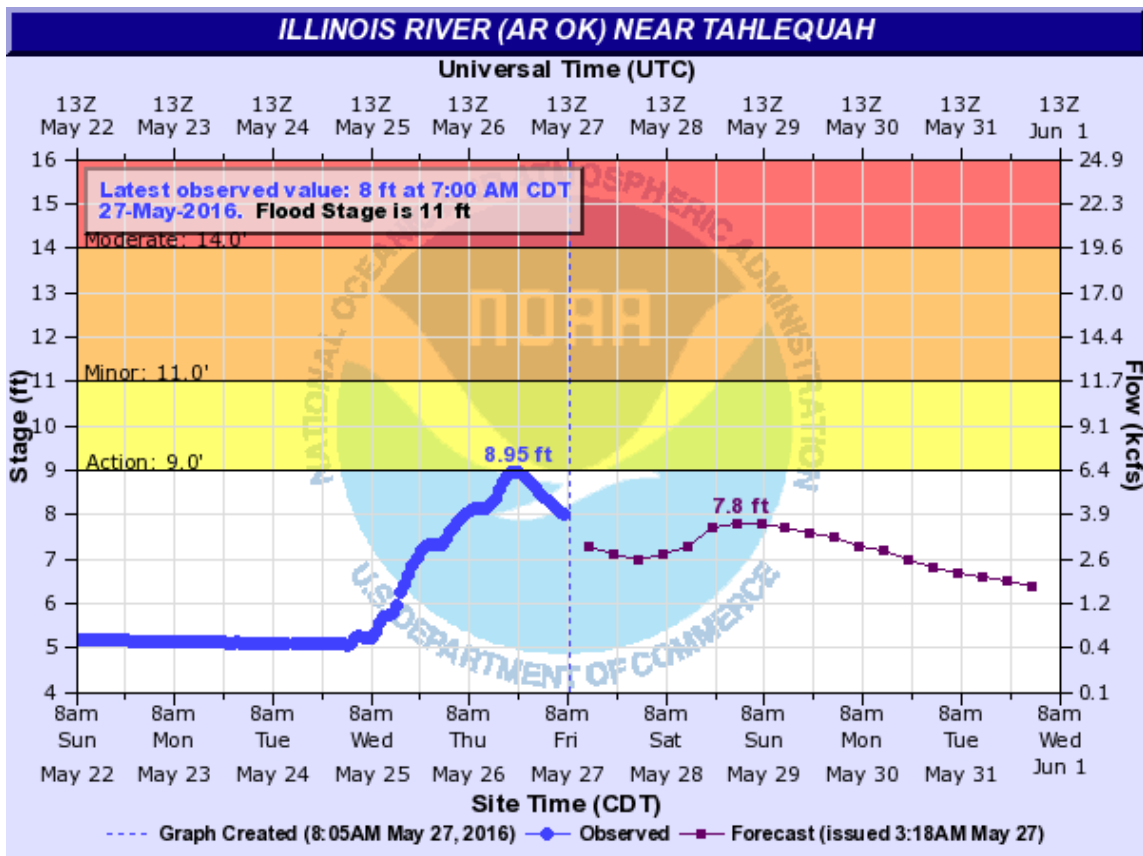
MLBA4(plotting HGIRG) "Gage 0" Datum: 432.75'

Observations courtesy of USGS/USACE/ADEQ



BGS02(plotting HGIRG) "Gage 0" Datum: 632.55' Observations courtesy of US Geological Survey

*NOTE: The river gage on the Deep Fork River near Beggs was ~0.75' too high according to the USGS Tulsa Field Office. Based on high water marks, the estimated crest was near 21.34'. The gage was repaired on May 31, 2016, resulting in a drop in the data points in the hydrograph above.



TAL02(plotting HGIRG) "Gage 0" Datum: 664.14' Observations courtesy of US Geological Survey