

OKLAHOMA MONTHLY CLIMATE SUMMARY

APRIL 2005



Concern turned to alarm for parts of the state as significant precipitation deficits continued for the second consecutive month. A swath extending from south central through north central Oklahoma received only 20 percent of normal April precipitation, with less severe deficits radiating outward from that area. The dry weather contributed to the 6th driest April on record for the state. The statewide-averaged temperature provided the state with more pleasant news, finishing exactly normal for the month. The lack of precipitation provided one pleasant side effect: a paucity of severe weather. Preliminary records indicate six tornadoes touched down during April, although all were of the weak (F0-F1) category. Otherwise, thunderstorm activity was spotty at best, with only a few instances of widespread hail and high winds reported.

Precipitation

While nearly all areas of the state experienced dry conditions, central Oklahoma fared the worst. At nearly three inches below normal for the month, April ranked as the 3rd driest such period on record for that region, where the average precipitation narrowly exceeded one-half of an inch. South central Oklahoma was also particularly hard hit with a deficit of over three inches; the 6th driest April on record for that area. Ironically, the Panhandle – normally the driest region in Oklahoma – approached closest to normal rainfall for the month with a deficit of just over one-half of an inch. Other than the Panhandle, no area of Oklahoma ranked better than the 17th driest April on record. The rainfall deficits worsen when combined with the dry weather of March. South central Oklahoma experienced its driest March-April period on record, dating back to 1895. Similarly, the central region finished with the 2nd driest such period on record. The statewide-averaged precipitation for March-April reflects those arid readings, it ranking as the 5th driest on record.

Temperature

Fortunately, the lack of precipitation was not accompanied by extreme heat. Accordingly, all areas of the state were relatively close to normal. The January-April statewide-averaged temperature remained on the warm side at just over two degrees above normal, the 18th warmest such period on record.

April 2005 Statewide Extremes

Description	Extreme	Station	Date
High Temperature	91°F	Beaver, Slapout/ (Buffalo, Slapout)	April 4th/ (April 20th)
Low Temperature	25°F	Boise City	April 1st
High Precipitation	3.60 in.	Miami	
Low Precipitation	0.11 in.	Pauls Valley	

April Daily Highlights

April 1-4: A bit of rain generated from an upper-level storm started the month off on the right foot. Eastern Oklahoma was the main target of these wayward showers in a month that ended so dry. Even so, the precipitation totals failed to reach three-quarters of an inch. Pleasant weather was in store throughout this period otherwise, if not a bit windy. By the 4th, surface low pressure in the Panhandle kicked up winds from the south with gusts of over 30 mph. Dangerous fire conditions were exacerbated by unusually high temperatures. The Mesonet sites at Beaver and Slapout recorded the month's high temperature of 91 degrees.

April 5-6: Rain and cooler weather descended on the state for the next two days, in addition to some fairly stout severe weather. Showers and storms formed along a dryline in east central Oklahoma on the 5th, with some of those storms quickly becoming severe. Three weak tornadoes touched down in Latimer and Sequoyah counties, with no official reports of damage. Teacup size hail was reported in Tulsa, and winds of over 80 mph damaged out buildings in the Kinta area. The cold front associated with the dryline moved across the state on the 6th. Winds gusted from the northwest at over 30 mph behind the front, and highs reached only the mid-50s. Winds increased to over 40 mph in the afternoon.

April 7-11: A ridge of high pressure built in after the previous cold front's passage, bringing northerly winds gusting to over 30 mph on the 7th. Temperatures remained seasonable, however, with highs in the 70s. The weather remained nice through the 10th, when an upper-level storm returned winds from the south, ushering in abundant moisture from the Gulf of Mexico. With added fuel, thunderstorms fired along a dryline in central Oklahoma that evening. A weak tornado touched down briefly four miles southwest of Harrah in Oklahoma County, damaging utility lines. Most other severe weather reports from that night concerned strong winds and dime-nickel size hail. The storms continued into the 11th in the east, while skies cleared in the west and central areas of the state. Following a cold front passage, highs ranged from the mid-50s in the northwest to low-70s in the southeast. Winds were gusting from the northwest at over 40 mph in western sections of the state.

April 12-19: This eight-day period featured very little in the form of widespread precipitation, although a few frontal passages did provide some areas with decent precipitation amounts. The period started clear and cool. Lows on the 12th fell into the 30s and 40s, but clear skies and abundant sunshine during the afternoon allowed temperatures to climb into the 70s and 80s. The weather remained in that mode for the main body of the state, with a few bouts of storms occurring in the Oklahoma panhandle on the 15th and 17th. An upper-level storm traveled over the state on that day, triggering a round of showers and thunderstorms for southwestern Oklahoma. A heat-burst event occurred in that area during the early-morning hours of the 19th. The Oklahoma Mesonet site at Erick recorded a maximum non-thunderstorm related wind gust of 66 mph to mark the event.

April 20-21: A return of warm, humid air signaled a return of storminess to the area. Dewpoints climbed into the 50s and 60s on the 20th, reflecting the increased moisture. The storms began that afternoon in southwestern Oklahoma, with damaging winds and large hail. Jackson County was particularly hard hit, with winds of over 70 mph being reported, and hail to the size of golfballs. Storms struck the northeast corner of the state on the 21st as a cold front moved through the state. Once again, damaging winds and large hail were on tap. Most hail reports were in the golfball-sized range, although grapefruit-sized hail was reported near Tiawah. Two weak tornadoes were reported to have touched down in Rogers and Wagoner counties with no official reports of damage. Buffalo and Slapout reached 91 degrees on the 20th, tying Beaver for the state's highest temperature of the month.

April 22-24: With the cold front's arrival, cool and dry air replaced the humid airmass of the previous two days. A rainless period, temperatures remained below normal throughout the state. Lows on the 24th were in the 30s, and several locations experienced a late freeze. The Mesonet sites at Oilton and Jay reached a relatively bone-chilling 28 degrees. Highs on the 24th struggled to reach 60 degrees for much of the state.

April 25-30: The month's final six days were cool, with some moisture falling in parts of the state. Storms struck eastern Oklahoma on the 25th, and temperatures remained cool with lows in the 30s and 40s. Highs that day managed to climb into the 70s in central Oklahoma, but remained in the 50s and 60s in the northern sections of the state. Once again, large hail and strong winds were the main hazards associated with the storms. Reports of half-dollar size hail were made in McAlester, and wind damage was reported in LeFlore County. A brief reprieve for eastern Oklahoma on the 26th gave way to more severe weather on the 27th, although the activity was very localized, with dime-quarter size hail being reported in the far northeastern corner of the state. The month's final few days were cool and mostly cloudy. Highs in northern Oklahoma were unseasonably cool, some 15-25 degrees below normal. Many locations in the northern sections of the state experienced a freeze on the month's final two days.

April 2005 Statewide Statistics			
Temperature			
	Average	Depart.	Rank (1892-2005)
Month (April)	59.1°F	0.0°F	52nd Warmest
Season-to-date (Mar-Apr)	54.3°F	-0.3°F	49th Warmest
Year-to-Date (Jan-Apr)	49.0°F	2.2°F	18th Warmest

Precipitation			
	Total	Depart.	Rank (1892-2005)
Month (April)	1.26 in.	-2.10 in.	6th Driest
Season-to-Date (Mar-Apr)	2.41 in.	-4.06 in.	5th Driest
Year-to-Date (Jan-Apr)	7.55 in.	-2.13 in.	36th Driest

Depart. = Departure from 30-year normal

April 2005 Severe Weather

Significant Tornadoes (F2 or greater)

No significant tornadoes were reported in the state.

Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Date
4.25	Tiawah	Rogers	04/21/05
3.00	Tulsa	Tulsa	04/05/05
2.50	2 S of Gate	Beaver	04/20/05
2.50	3 N of Muskogee	Muskogee	04/05/05
2.50	Tulsa	Tulsa	04/05/05
2.00	Valliant	McCurtain	04/25/05

Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Date
80	Kinta	Haskell	04/05/05
70	Wetumka	Hughes	04/05/05
70	6 SW of Duke	Jackson	04/20/05

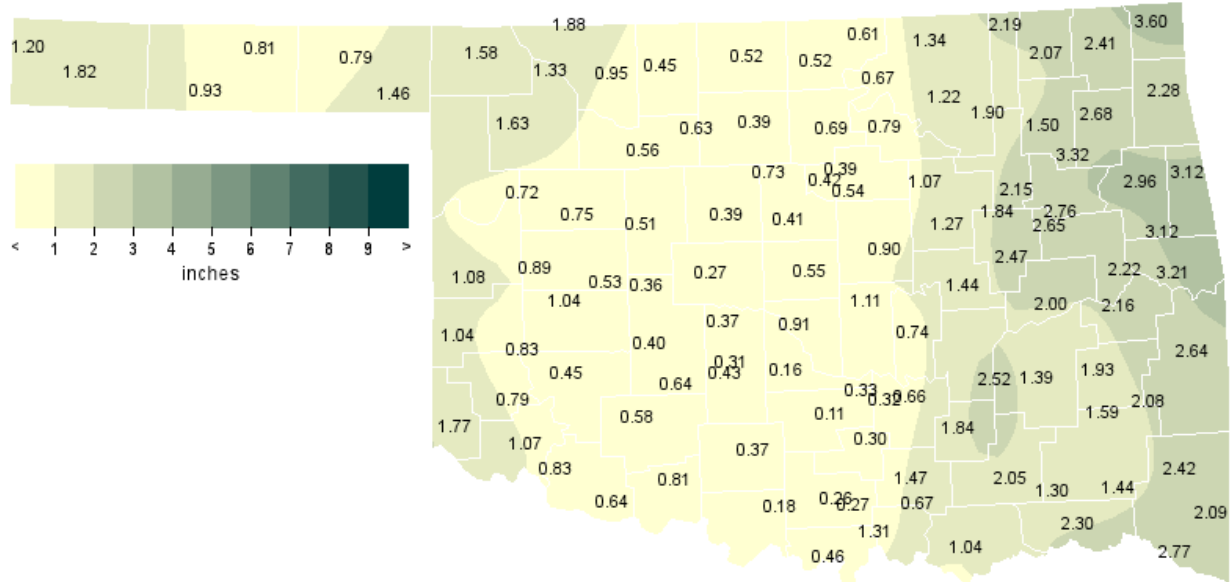
Flooding

No significant flooding reported in the state.

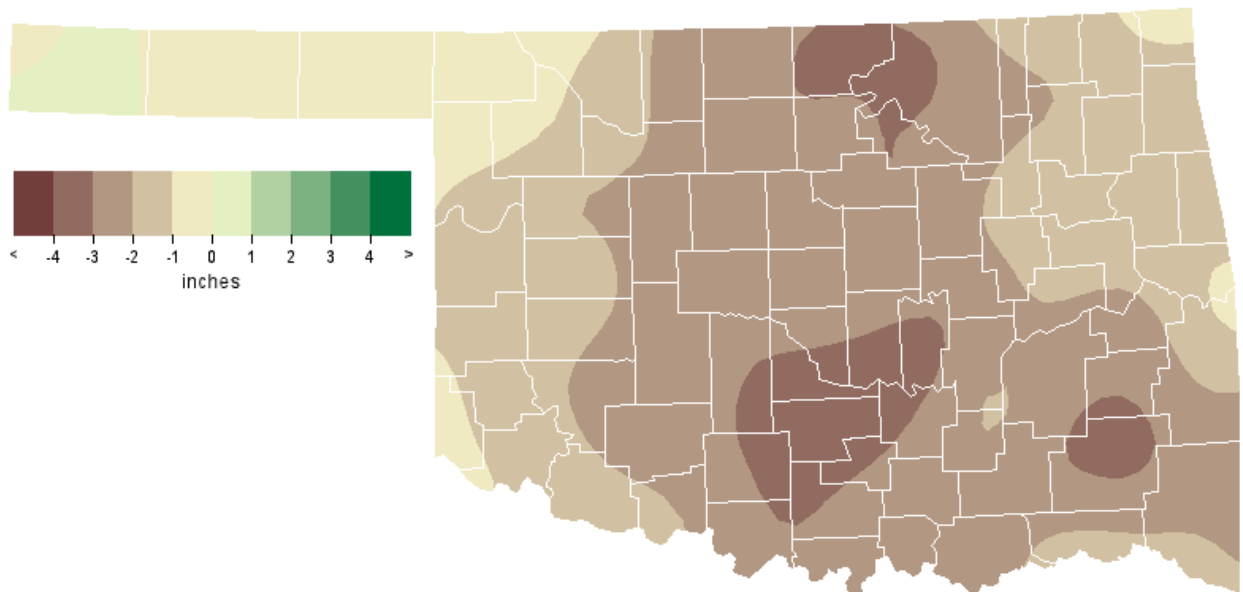
Record Event Reports

Description	Day	Location	Record	Previous Record	Year
Coollest Minimum Temperature (tie)	24	Tulsa	37	37	1909
Coollest Minimum Temperature	24	Lawton	37	38	1995
Coollest Minimum Temperature	24	Ponca City	31	34	1968
Coollest Minimum Temperature	24	Anadarko	31	32	1968
Coollest Minimum Temperature	24	Billings	28	35	1968
Coollest Minimum Temperature (tie)	24	Cushing	39	39	1967
Coollest Minimum Temperature	24	Jefferson	29	32	1968
Coollest Minimum Temperature (tie)	24	Kingfisher	34	34	1968
Coollest Minimum Temperature	24	Lindsay	32	35	1995
Coollest Minimum Temperature	24	Marietta	32	37	1995
Coollest Minimum Temperature	24	Meeker	31	37	1909
Coollest Minimum Temperature	24	Newkirk	32	34	1909
Coollest Minimum Temperature	24	Perry	34	36	1968
Coollest Minimum Temperature	24	Stillwater	31	35	1968
Coollest Minimum Temperature	24	Weatherford	36	37	1967

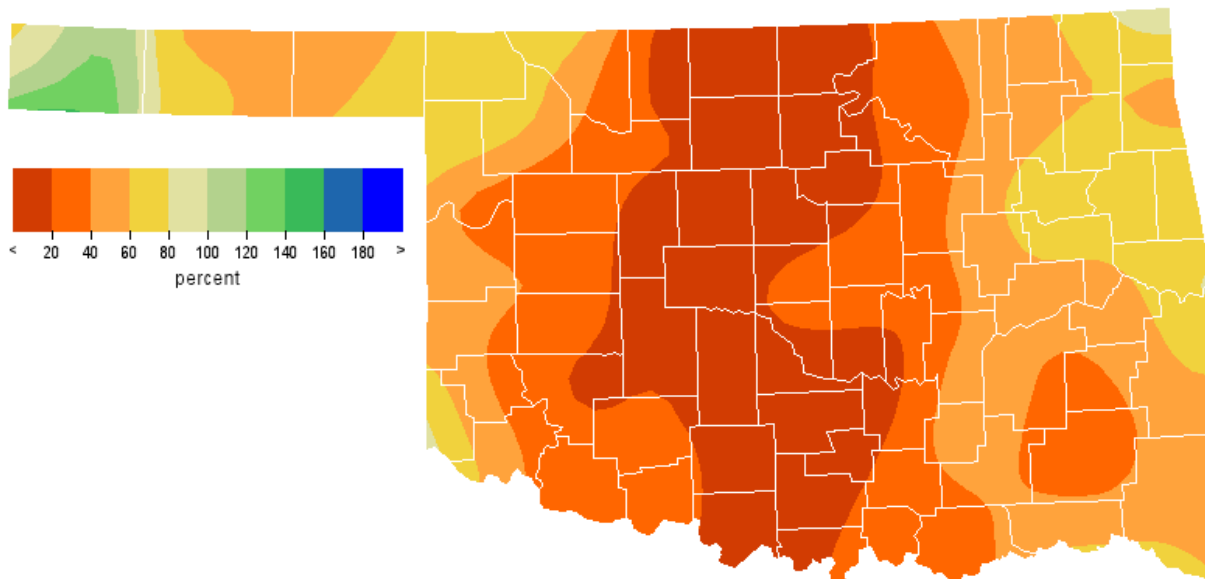
April 2005 Observed Precipitation



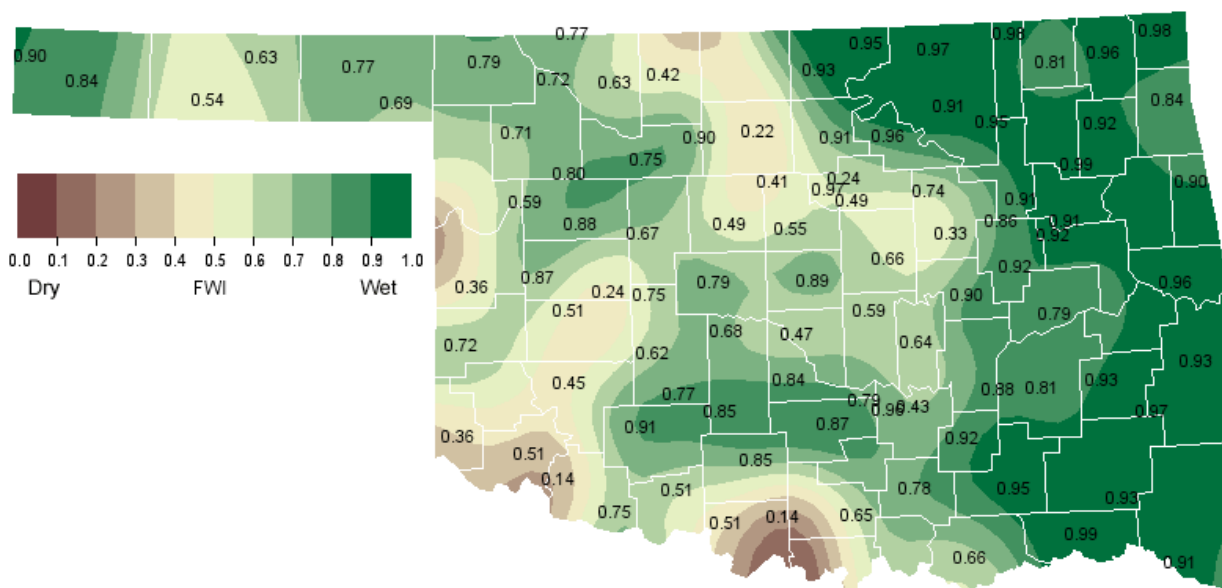
April 2005 Departure from Normal Precipitation



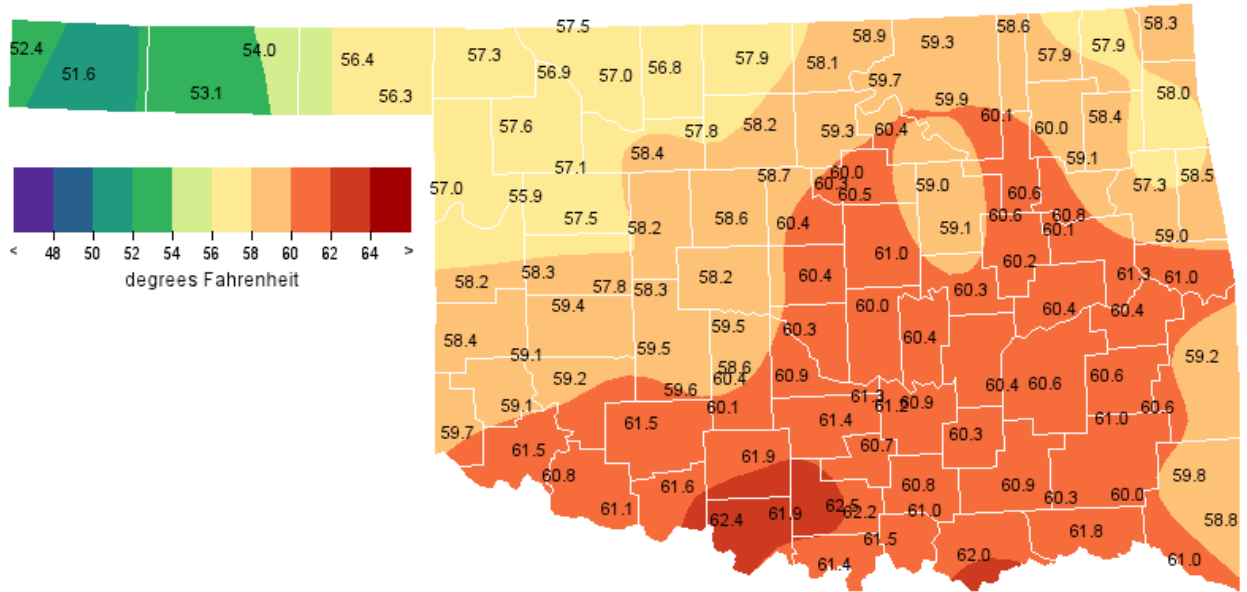
April 2005 Percent of Normal Precipitation



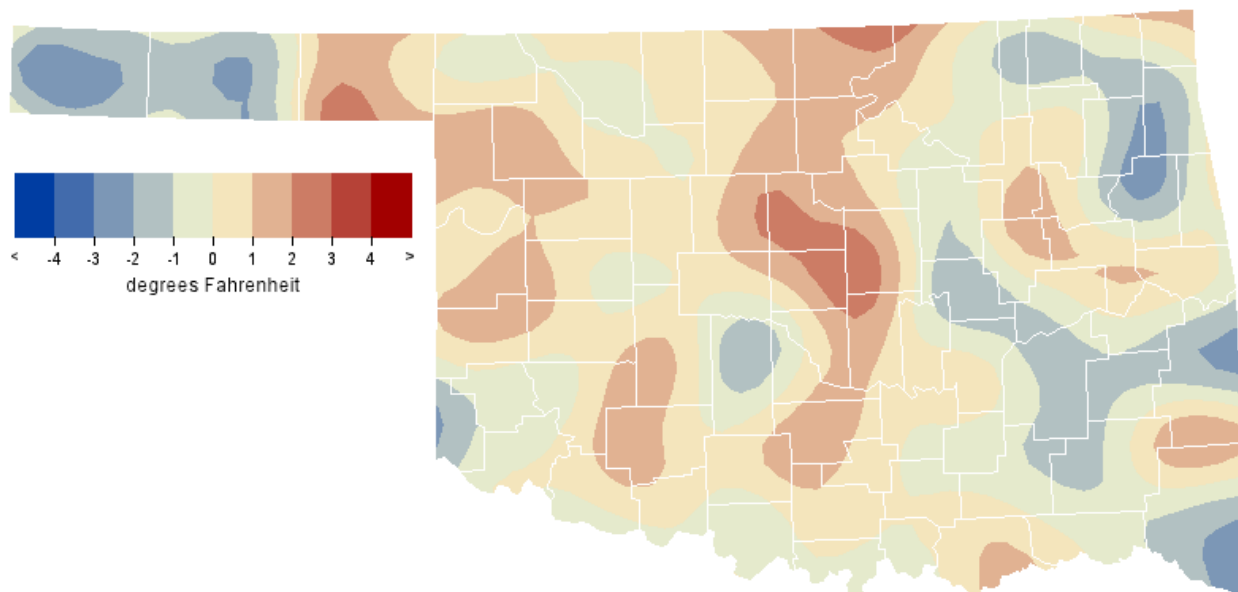
April 2005 Average Soil Moisture at 25cm



April 2005 Average Temperature



April 2005 Departure from Normal Temperature



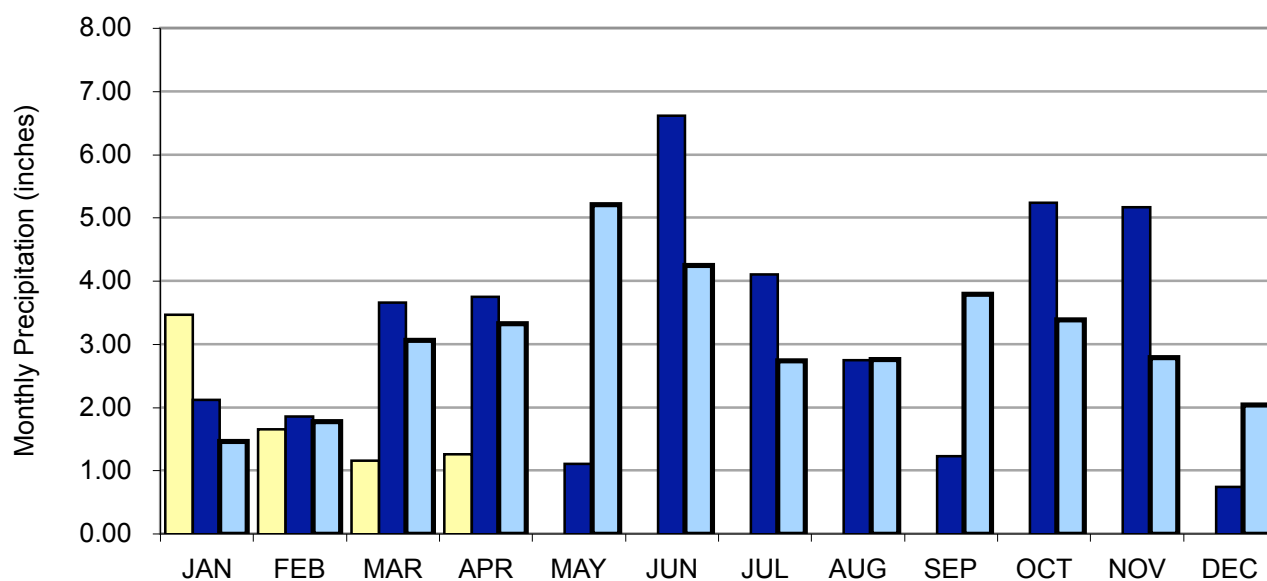
Mesonet Monthly Summary for April 2005

NAME	MEAN HIGH			LOW			TOT HIGH			NAME	MEAN HIGH			LOW			TOT HIGH				
	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR		DAY	TEMP	TEMP	DAY	TEMP	DAY	HDD	CDD	PPT	24-HR	DAY
PANHANDLE																					
Arnett	57.0	87	4	31	2	256	15	*****	*****	***	Goodwell	53.1	84	20	26	12	361	3	.93	.26	17
Beaver	56.4	91	4	26	2	285	27	.79	.45	17	Hooker	54.0	87	20	28	12	334	4	.81	.19	6
Boise City	51.6	82	18	25	1	403	0	1.82	.59	15	Kenton	52.4	81	18	28	1	378	0	1.20	.38	5
Buffalo	57.3	91	20	29	2	262	30	1.58	.54	17	Slapout	56.3	91	20	29	2	279	19	1.46	.86	17
NORTH CENTRAL																					
Blackwell	58.2	84	20	31	24	231	26	.52	.26	28	Medford	57.9	86	20	30	30	239	25	.52	.21	27
Breckenridge	58.2	83	20	32	24	230	25	.39	.18	6	Newkirk	58.9	84	20	33	30	215	31	.61	.32	28
Cherokee	56.8	86	20	30	30	265	18	.45	.14	10	Red Rock	59.3	83	21	31	24	202	32	.69	.40	6
Fairview	58.3	85	20	34	24	228	26	.56	.26	6	Seiling	57.1	84	20	31	2	255	20	*****	*****	***
Freedom	56.9	86	20	30	30	261	19	1.33	.59	10	Woodward	57.6	85	20	33	30	247	25	1.63	.82	10
Lahoma	57.8	83	20	33	2	232	15	.63	.43	6	Alva	57.0	87	20	30	2	259	21	.95	.37	6
May Ranch	57.4	88	20	33	30	245	19	1.88	.45	10											
NORTHEAST																					
Bixby	60.5	84	21	34	24	167	33	2.15	.98	6	Pryor	58.4	82	21	32	2	213	16	2.68	1.09	6
Burbank	59.7	83	20	33	2	197	38	.67	.27	6	Skiatook	60.1	82	21	37	2	178	31	1.90	.85	6
Copan	58.6	83	21	34	2	214	23	2.19	.87	6	Vinita	57.9	80	21	31	24	228	14	2.41	.86	6
Foraker	59.3	83	21	36	30	200	28	1.34	.34	6	Wynona	59.9	84	21	34	24	185	33	1.22	.51	6
Jay	58.1	79	21	28	24	227	19	2.28	.69	1	Porter	60.7	83	21	38	2	157	29	2.76	.74	5
Miami	58.2	79	20	32	2	224	21	3.60	1.06	21	Inola	59.1	83	21	33	2	196	18	3.32	1.31	21
Nowata	57.9	82	21	30	2	230	17	2.07	.72	6	Claremore	60.0	82	21	36	24	179	29	1.50	.67	6
Pawnee	60.5	84	21	33	2	177	41	.79	.36	1											
WEST CENTRAL																					
Bessie	59.4	83	20	36	30	190	22	1.04	.45	18	Putnam	57.5	82	20	34	30	240	15	.75	.29	18
Butler	58.3	83	20	32	30	224	23	.89	.33	18	Retrop	59.2	83	20	36	30	193	19	.83	.46	18
Camargo	55.9	83	20	27	2	284	11	.72	.40	6	Watonga	58.1	82	20	36	30	225	17	.51	.41	6
Cheyenne	58.2	82	4	34	30	217	12	1.08	.42	17	Weatherford	57.8	82	20	32	30	228	13	.53	.26	20
Erick	58.4	84	20	30	2	215	18	1.04	.35	17											
CENTRAL																					
Bowlegs	60.5	84	21	32	24	****	****	.74	.55	1	Okemah	60.2	81	21	34	2	167	25	1.44	.61	1
Bristow	59.1	83	21	29	24	201	23	1.27	.64	1	Perkins	60.5	85	21	32	24	174	37	.54	.28	1
Chandler	60.9	85	21	35	2	155	32	.90	.64	1	Shawnee	60.0	83	21	36	24	176	25	1.11	.68	1
Chickasha	58.6	83	21	27	2	210	19	.31	.11	6	Spencer	60.3	83	21	35	24	173	33	.55	.24	6
El Reno	58.2	82	20	31	2	225	22	.27	.25	6	Stillwater	60.4	83	21	29	24	****	****	.39	.13	6
Guthrie	60.4	84	21	34	24	174	36	.41	.34	6	Washington	60.9	85	21	37	2	153	29	*****	.07	6
Kingfisher	58.6	84	20	31	2	220	28	.39	.32	6	Ninnekah	60.4	84	21	31	2	174	36	.43	.15	20
Marena	60.3	83	21	36	2	177	35	.42	.27	6	Acme	60.1	84	21	31	24	182	34	*****	*****	***
Minco	59.4	81	20	34	2	187	20	.37	.15	20	Norman	60.4	83	21	34	2	****	****	.91	.70	10
Oilton	59.0	84	21	28	24	209	29	1.07	.50	1	Marshall	58.7	83	20	32	24	218	30	.73	.63	6
EAST CENTRAL																					
Calvin	*****	***	***	***	***	****	****	*****	*****	***	Stigler	60.4	84	28	34	24	163	26	2.16	.82	5
Cookson	59.0	81	28	30	24	198	19	3.12	.50	1	Stuart	60.4	86	28	38	24	161	23	2.52	1.06	10
Eufaula	60.6	84	28	37	24	****	****	2.00	.72	25	Tahlequah	57.4	79	21	29	2	239	10	2.96	1.07	6
Haskell	60.0	83	21	37	2	175	25	2.65	.79	5	Webbers Falls	61.0	85	21	34	2	****	****	2.11	.62	21
McAlester	60.6	85	28	34	2	161	28	1.39	.58	5	Westville	58.5	79	28	32	24	208	13	3.12	.65	1
Okmulgee	60.2	82	21	33	24	171	28	2.47	.81	6	Hectorville	60.6	82	21	38	2	160	28	1.84	.56	6
Sallisaw	61.0	84	28	34	2	150	31	3.21	.83	5											
SOUTHWEST																					
Altus	61.4	87	20	33	2	139	32	1.07	.56	20	Medicine Park	61.6	82	21	40	30	130	27	.58	.30	20
Fort Cobb	59.5	82	20	32	2	189	25	.40	.19	20	Tipton	60.8	86	20	32	2	156	30	.83	.54	20
Hinton	58.3	81	20	33	30	221	20	.36	.27	6	Walters	61.6	84	21	33	2	146	43	.81	.44	20
Hobart	59.2	83	20	35	2	196	21	.45	.17	24	Apache	59.6	81	21	37	30	186	24	.64	.23	6
Hollis	59.8	88	20	30	2	177	22	1.77	1.39	20	Grandfield	61.3	85	20	35	2	****	****	.64	.32	20
Mangum	59.1	86	20	29	2	198	21	.79	.47	20											
SOUTH CENTRAL																					
Ada	60.9	87	28	33	24	158	34	.66	.28	5	Ringling	61.9	85	21	35	2	134	42	.18	.10	24
Burneyville	61.3	88	28	30	2	158	45	.46	.28	25	Sulphur	60.8	85	28	29	2	****	****	.30	.13	6
Byars	61.3	84	21	36	2	146	34	.33	.18	6	Tishomingo	60.8	86	28	34	2	154	29	1.47	1.01	25
Centrahoma	60.3	87	28	32	2	170	28	1.84	.66	25	Waurika	62.4	89	21	34	2	129	51	*****	*****	***
Durant	61.9	88	28	38	2	123	30	1.04	.38	25	Vanoss	61.2	86	28	33	2	152	38	.32	.15	1
Ketchum Ranch	61.9	86	21	35	2	138	44	.37	.26	20	Bee	61.0	89	28	32	2	158	38	.67	.25	25
Lane	60.6	87	28	33	2	****	****	2.05	1.03	10	Newport	62.5	87	28	37	2	117	41	.26	.15	25
Madill	61.6	88	28	31	2	143	41	1.31	.88	11	Ardmore	62.2	88	28	37	2	124	41	.27	.10	25
Pauls Valley	61.4	84	21	33	2	142	35	.11	.03	6											
SOUTHEAST																					
Antlers	60.2	88	28	29	24	168	25	1.30	.70	5	Mt Herman	59.8	82	28	32	2	172	15	2.42	1.11	5
Clayton	61.0	85	28	32	24	146	26	1.59	.44	25	Talihina	60.6	84	28	32	2	160	28	2.08	.60	11
Cloudy	60.0	84	28	34	2	162	13	1.44	.50	5	Wilburton	60.6	85	28	33	24	160	28	1.93	.69	5
Hugo	61.7	85	28	38	24	122	24	2.30	1.07	5	Wister	59.3	83	28	32	24	187	15	2.64	.81	11
Idabel	61.0	84	28	34	24	140	20	2.77	.79	26	Broken Bow	58.9	84	28	29	2	188	5	2.09	1.25	5

April 2005 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Apr-04
Panhandle	1.23	-0.62	47th Driest	5.28 (1942)	0.00 (1909)	2.41
North Central	0.85	-2.11	10th Driest	7.43 (1999)	0.55 (1989)	3.77
Northeast	2.06	-1.94	16th Driest	9.67 (1942)	0.17 (1989)	4.30
West Central	0.82	-1.78	11th Driest	8.73 (1997)	0.15 (1996)	2.45
Central	0.65	-2.88	3rd Driest	9.49 (1942)	0.24 (1989)	2.88
East Central	2.47	-1.86	17th Driest	11.82 (1957)	0.75 (1989)	6.76
Southwest	0.76	-1.91	9th Driest	7.30 (1997)	0.14 (1989)	2.76
South Central	0.73	-3.03	6th Driest	11.43 (1942)	0.53 (1989)	4.12
Southeast	2.06	-2.43	9th Driest	12.79 (1957)	0.53 (1987)	4.53
Statewide	1.26	-2.10	6th Driest	8.50 (1942)	0.58 (1989)	3.75

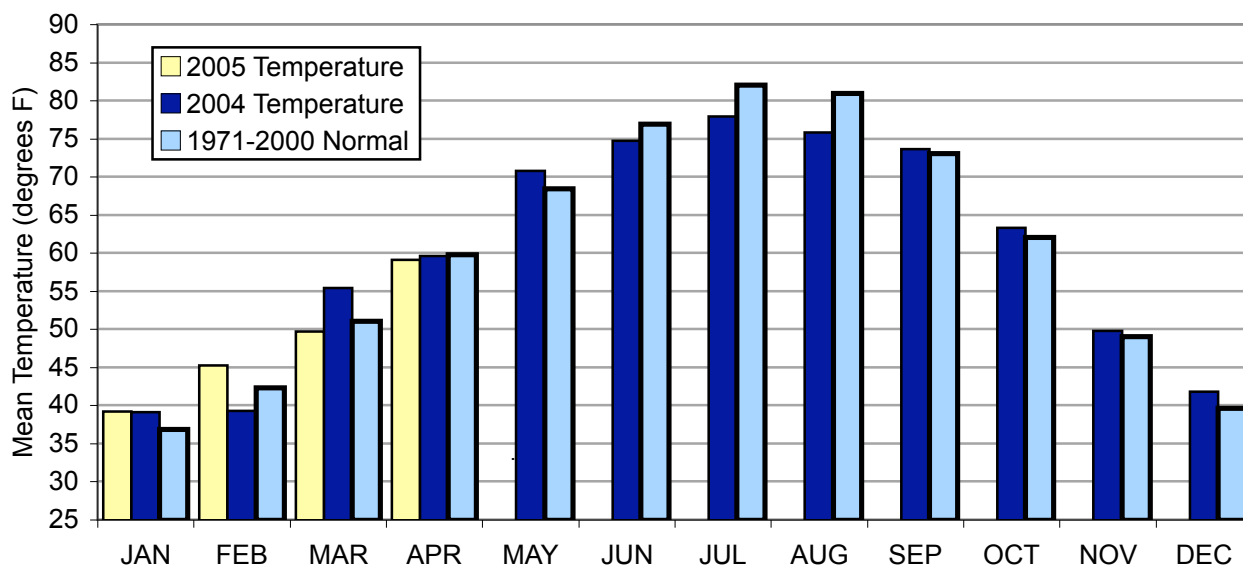
2004 and 2005 Statewide Precipitation Monthly Totals vs. Normal



April 2005 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Apr-04 (F)
Panhandle	54.8	-0.4	55th Warmest	62.2 (1981)	48.2 (1926)	55.7
North Central	57.8	0.2	50th Warmest	65.0 (1981)	50.8 (1983)	58.0
Northeast	59.3	0.4	44th Warmest	66.1 (1981)	52.5 (1907)	59.0
West Central	58.1	0.2	53rd Warmest	64.5 (1954)	52.1 (1926)	59.1
Central	59.8	0.2	50th Warmest	66.2 (1981)	53.6 (1983)	60.2
East Central	60.0	-0.2	55th Coolest	66.7 (1896)	53.9 (1907)	61.4
Southwest	60.2	-0.2	52nd Coolest	66.5 (1954)	54.2 (1926)	61.3
South Central	61.4	0.1	56th Coolest	67.5 (1948)	55.9 (1983)	62.3
Southeast	60.3	-0.3	41st Coolest	66.7 (1954)	55.4 (1983)	60.6
Statewide	59.1	0.0	52nd Warmest	65.4 (1981)	53.2 (1983)	59.7

2004 and 2005 Statewide Temperature Monthly Averages vs. Normal



Mesonet Extremes for April 2005

Climate Division	High Temp			Low Temp			High Monthly Rainfall		High Daily Rainfall		
	(F)	Day	Station	(F)	Day	Station	(inches)	Station	(inches)	Day	Station
Panhandle	91	20th	Buffalo	25	1st	Boise City	1.82	Boise City	0.86	17th	Slapout
North Central	88	20th	May Ranch	30	30th	Medford	1.88	May Ranch	0.82	10th	Woodward
Northeast	84	21st	Pawnee	28	24th	Jay	3.60	Miami	1.31	21st	Inola
West Central	84	20th	Erick	27	2nd	Camargo	1.08	Cheyenne	0.46	18th	Retrop
Central	85	21st	Washington	27	2nd	Chickasha	1.44	Okemah	0.70	10th	Norman
East Central	86	28th	Stuart	29	2nd	Tahlequah	3.21	Sallisaw	1.07	6th	Tahlequah
Southwest	88	20th	Hollis	29	2nd	Mangum	1.77	Hollis	1.39	20th	Hollis
South Central	89	28th	Bee	29	2nd	Sulphur	2.05	Lane	1.03	10th	Lane
Southeast	88	28th	Antlers	29	2nd	Broken Bow	2.77	Idabel	1.25	5th	Broken Bow
Statewide	91	20th	Buffalo	25	1st	Boise City	3.60	Miami	1.39	20th	Hollis

May Climatological Outlook

Oklahoma's weather reaches something of a crescendo in May as springtime comes to full flower. May is Oklahoma's wettest (statewide-averaged precipitation of 5.13 inches) and certainly its stormiest month (an average of 19.9 tornadoes, more than one-third of the annual average, occurring on 5.5 days, statewide). Its position in the spring transition season is confirmed by a monthly mean temperature, averaged statewide, of 68.4 degrees that ranks fifth highest among the months. Vestiges of winter are occasionally seen in the far northwestern portions of the state, but mostly May is a time for flowering of most plants, full leafing of deciduous trees, planting of row crops, and the maturing and ripening of the winter wheat that was sowed the previous fall.

Precipitation

Mean: 5.13 inches
Wettest May: 1957, 10.68 inches
Driest May: 1988, 1.30 inches
Wettest location: Smithville, 7.06 inches
Driest location: Regnier, 2.02 inches
Most recorded: 22.38 inches, Hennessey, 1957

May usually is characterized by a pleasant range of temperatures across the state, although there are times most years when it is evident that the hot Oklahoma summer is drawing near. Monthly mean temperatures since 1892 have ranged from 62.3 degrees in 1907 to 75.8 degrees in 1896. Normal daily maximum temperatures across the state vary from 84.6 degrees at Waurika to 76.5 degrees at Arnett. Normal daily minimum temperatures fall between 61.2 degrees at Ardmore and 46.8 degrees at Boise City. Historical extremes of temperature during the month are 114 degrees at Weatherford, reported on May 25, 2000 and 19 degrees at Hooker on May 1, 1909. Temperatures in southwestern Oklahoma, the state's hot spot, reach 100 degrees an average of slightly more than once each May. Freezing temperatures are also rare, occurring less than once per year in the panhandle, rarely elsewhere. Freezes have occurred in the state's most northerly regions as late as the end of the month.

Temperature

Mean: 68.4 degrees
Warmest May: 1896, 75.8 degrees
Coolest May: 1907, 62.3 degrees
Hottest recorded: 114 degrees, Weatherford, May 25, 2000
Coldest recorded: 19 degrees, Hooker, May 1, 1909

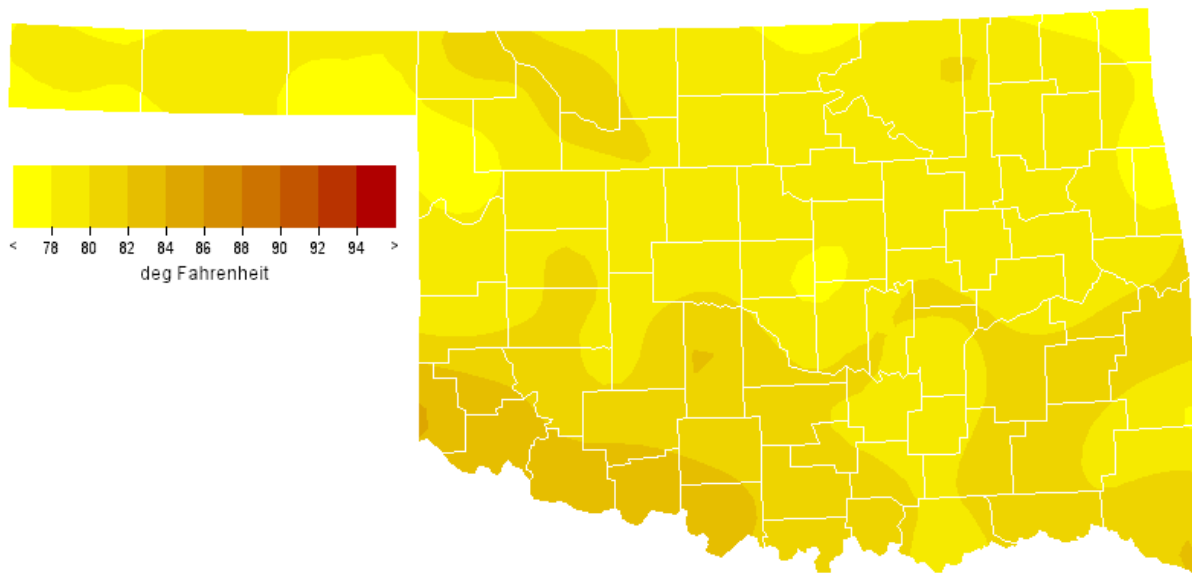
The Oklahoma panhandle's climate differs from the rest of the state in that its primary precipitation season is shifted toward summer, being tied to the patterns of the High Plains, of which it is a part. Elsewhere in the state, May is the month of maximum precipitation and May is, in fact, the panhandle's second wettest month by a small margin. May has produced statewide-averaged monthly precipitation totals ranging from 10.68 inches in 1957 to 1.30 inches in 1988. Extremes of individual station-normal precipitation for the month are 7.06 inches in the southeast at Smithville and 2.29 inches in the western panhandle at Regnier. Miami recorded the greatest May monthly total precipitation, 23.95 inches, in 1943. The record-breaking 1957 statewide-averaged precipitation was amplified by the May total of 22.38 inches of rain recorded at Hennessey, most of which fell during the drought-breaking, flood-producing deluge that hammered much of the state on the 15th and 16th. Purcell apparently holds the single reporting-day precipitation record for May, measuring 13.68 inches of rain on May 11, 1950. Interestingly, the events that produced the Purcell and Hennessey precipitation records (and the widespread flooding that occurred after each) bracket the state's driest ever 7-year period.

Springtime in Oklahoma is noted for severe thunderstorms and tornadoes. Over the last 52 years (the period of reasonably comprehensive statistics on the subject) Oklahoma has been struck by more tornadoes in May than in any other two months combined (April and June rank second and third, respectively, among the months). May 1999 holds the state record for most tornadoes in a single month with a nearly unbelievable confirmed total of 91. Most of those tornadoes (59) occurred in central and western Oklahoma on the afternoon and evening of May 3. That outbreak caused extensive damage and killed 40 people along a wide path extending generally from Amber to Stroud. Some of the fiercest storms struck in the southern portion of the Oklahoma City metropolitan area. A mobile Doppler radar operated by a University of Oklahoma research team measured winds as great as 318 miles per hour in one of the funnels, the greatest wind speed yet measured on the planet.

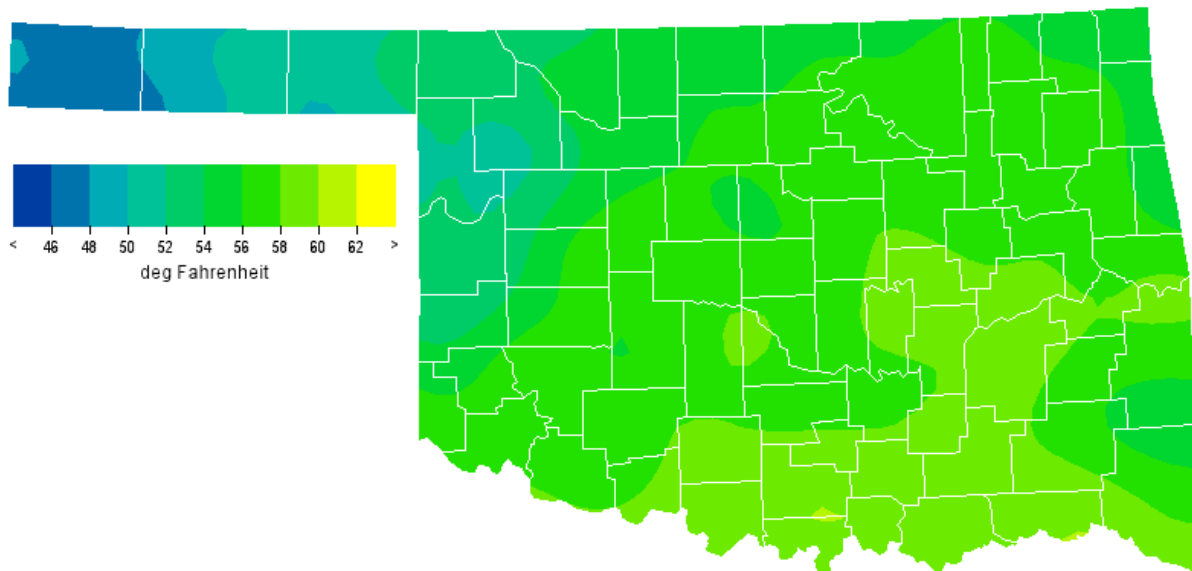
Tornadoes

Average May Tornadoes: 20.4
Most: 90 (1999)

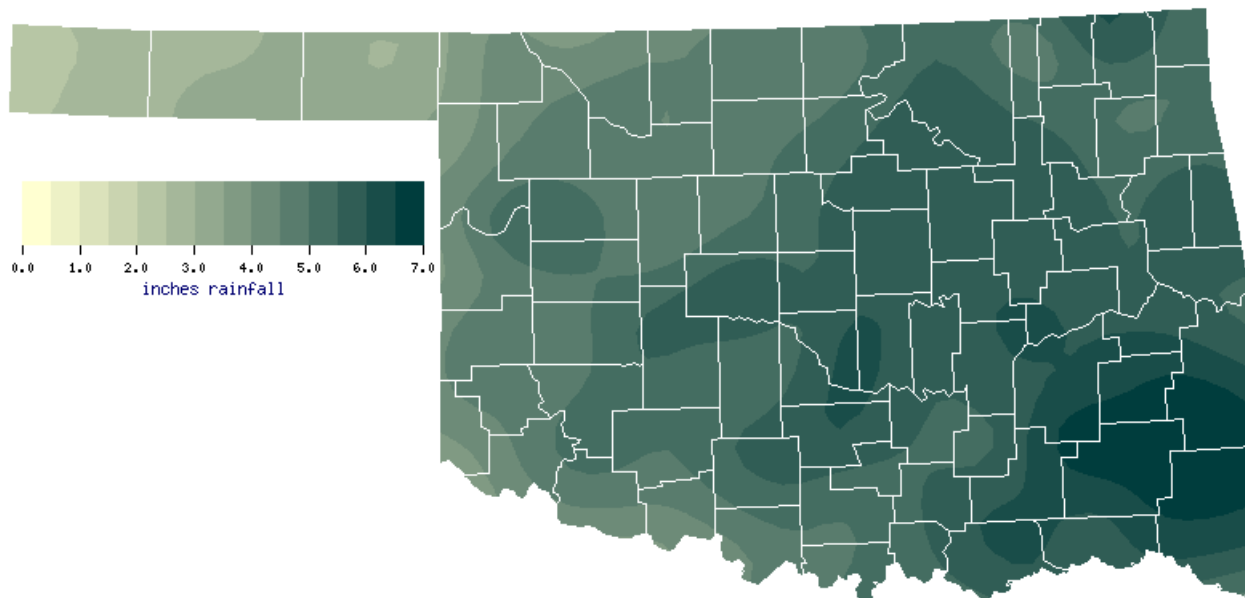
May Normal Monthly Maximum Temperature (1971-2000)



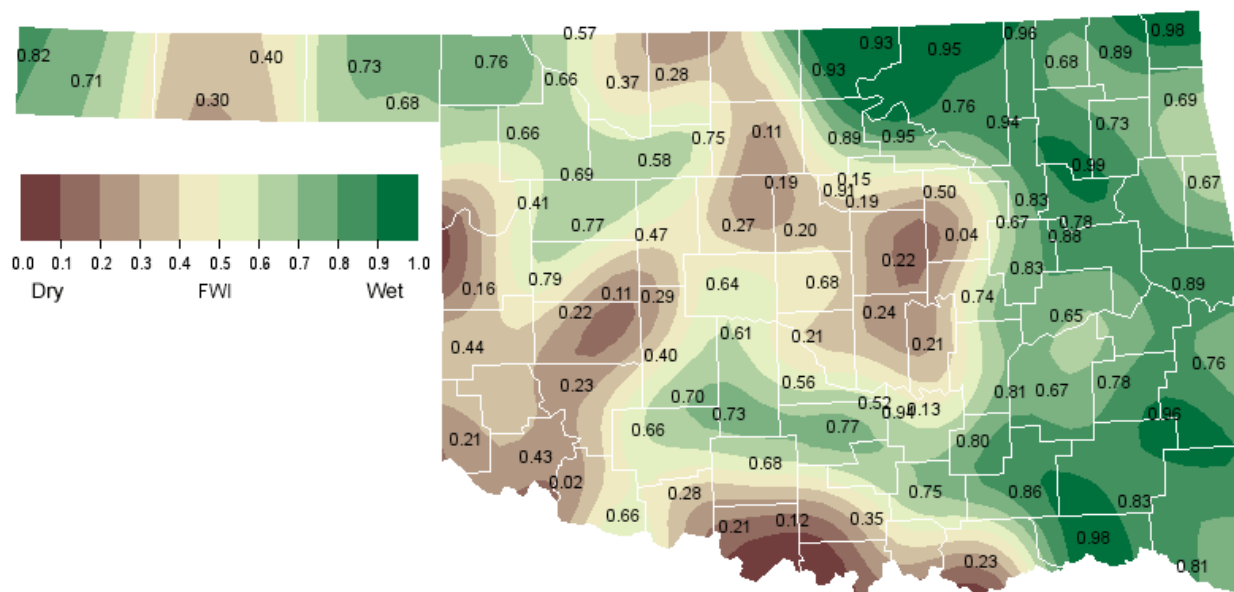
May Normal Monthly Minimum Temperature (1971-2000)



May Normal Precipitation (1971-2000)

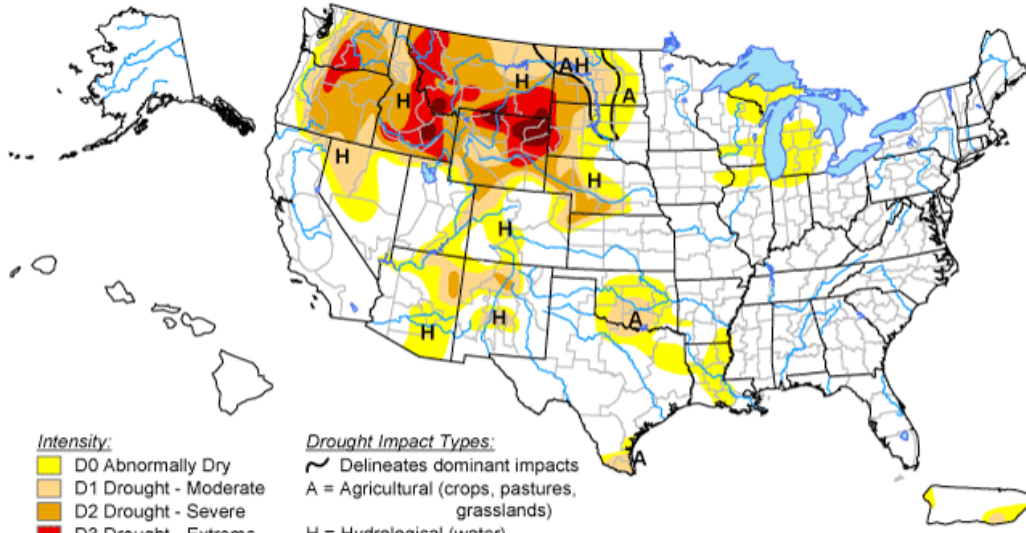


May 1, 2005 Soil Moisture Conditions at 25cm



U.S. Drought Monitor

April 26, 2005
Valid 8 a.m. EDT



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

Drought Impact Types:
 ~ Delineates dominant impacts
 A = Agricultural (crops, pastures, grasslands)
 H = Hydrological (water)
 (No type = Both impacts)

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



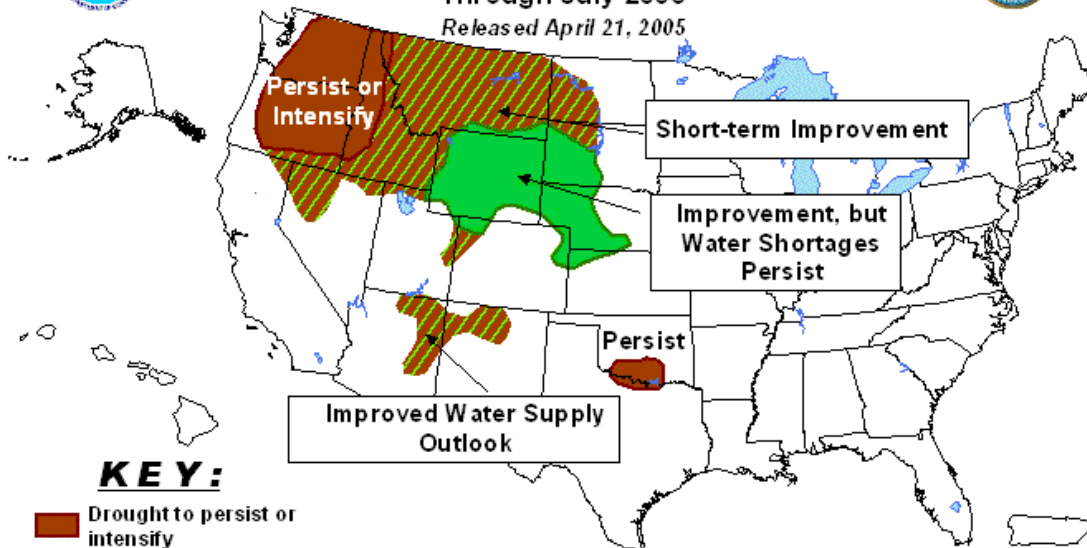
Released Thursday, April 28, 2005
 Author: Richard Tinker, NOAA/NWS/NCEP/CPC

<http://drought.unl.edu/dm>



U.S. Seasonal Drought Outlook

Through July 2005
 Released April 21, 2005

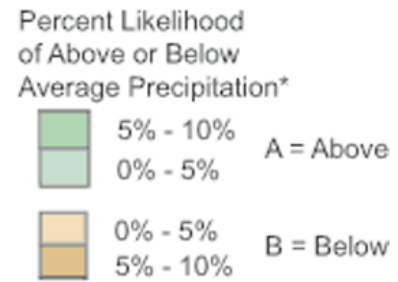
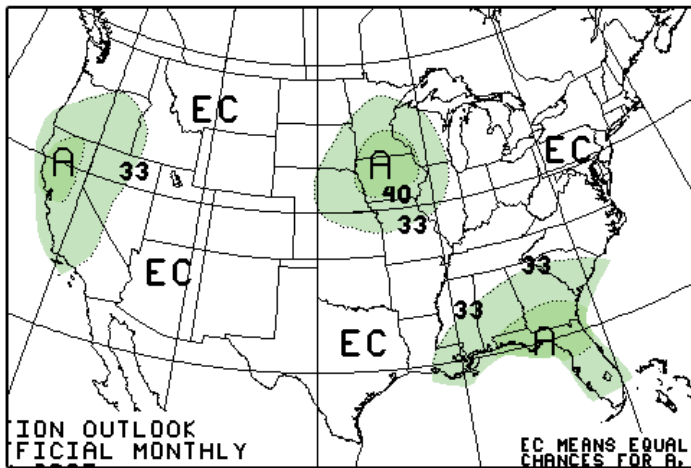


KEY:

- Drought to persist or intensify
- Drought ongoing, some improvement
- Drought likely to improve, impacts ease
- Drought development likely

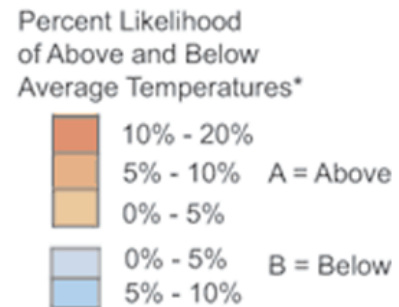
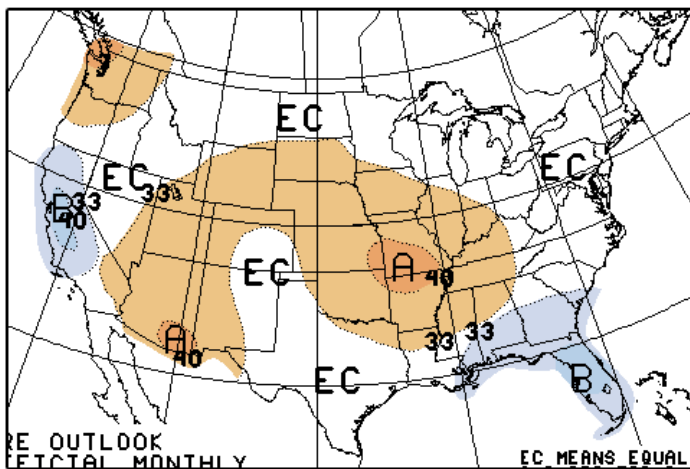
Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short- and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance, so use caution if using this outlook for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are schematically approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text. NOTE: the green improvement areas imply at least a 1-category improvement in the Drought Monitor intensity levels, but do not necessarily imply drought elimination.

May 2005 U.S. Precipitation Forecast



*EC indicates no forecasted anomalies due to lack of model skill.

May 2005 U.S. Temperature Forecast

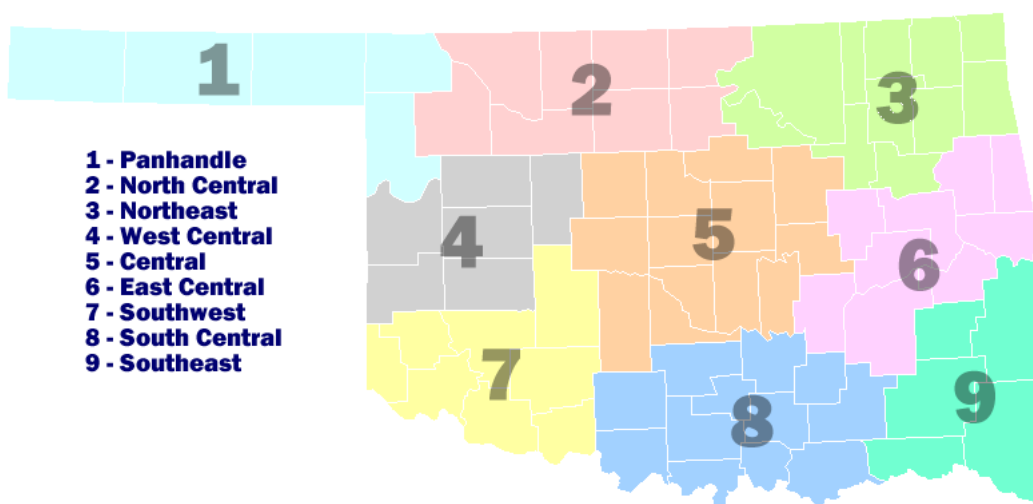


*EC indicates no forecasted anomalies due to lack of model skill.

May Climate Normals

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	78.8	50.8	64.8	3.30
2	79.1	54.9	67.0	4.68
3	78.9	56.6	67.8	5.40
4	79.5	55.0	67.3	4.64
5	79.6	57.5	68.6	5.45
6	79.2	57.8	68.5	5.77
7	81.8	56.8	69.3	4.80
8	80.8	58.8	69.8	5.52
9	80.5	57.5	69.0	6.31
Statewide	79.8	56.3	68.1	5.21

Oklahoma Climate Divisions



Interpretation Information

Mean Daily Temperature: Calculated from an average of the daily maximum and minimum temperatures. Daily averages are summed for each day, and then divided by the number of valid data points – typically the number of days in the month. Although this may differ from the “true” daily average, it is consistent with historical methods of observation and comparable to the normals and extremes for stations and regions of the state.

Degree Days: Degree Days are calculated each day of the month for which there is a temperature report and the mean temperature for the day is less than (Heating Degree Days) or greater than (Cooling Degree Days) 65 degrees. Daily values are summed to arrive at a monthly total. HDD/CDD are qualitative measures of how much heating/cooling was required to maintain a comfortable indoor temperature. Missing observations may result in an artificially high or low value.

Severe Weather Reports: Only the most significant events are listed. Tornadoes of F2 or greater strength (on the 0-5 Fujita scale), hail of two inches diameter or greater, and wind speeds of 70 miles per hour or above are listed. National Weather Service defines storms as severe when they produce a tornado, hail of three-quarters inch or greater, or wind speeds above 57 miles per hour (50 knots). For additional reports, contact the Oklahoma Climatological Survey, Storm Prediction Center, or your local National Weather Service forecast office.

Soil Moisture: The soil moisture variable displayed is the Fractional Water Index (FWI), measured at a depth of 25 cm. This unitless value ranges from very dry soil having a value of 0, to saturated soils having a value of 1.

Additional Resources

Sunrise / Sunset tables

U.S. Naval Observatory: <http://aa.usno.navy.mil/data>

Severe Storm Reports

Storm Prediction Center: <http://spc.noaa.gov/climo/>

National Climatic Data Center (more than about 4-5 months old):

<http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwEvent~Storms>

Seasonal Outlooks

Climate Prediction Center:

http://www.cpc.ncep.noaa.gov/products/OUTLOOKS_index.html

Climate Calendars and other local weather and climate information

Oklahoma Climatological Survey: <http://climate.ocs.ou.edu> or

<http://www.ocs.ou.edu/>

E-mail (ocs@ou.edu) or telephone (405/325-2541)



Oklahoma Climatological Survey is the State
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