

# OKLAHOMA MONTHLY CLIMATE SUMMARY

## APRIL 2007



The old adage “what a difference a year makes” is keenly applied to the last two Oklahoma Apriils. April of 2006 finished as the warmest on record for the state, and fresh off the 2<sup>nd</sup> warmest March since 1892, a similar statistic could have been expected during 2007 as well. Much to the dismay of sun-lovers and farmers alike, however, the floodgates to arctic air were thrown wide and April 2007 finished as the 8<sup>th</sup> coolest on record. The agricultural industry was hit particularly hard by the cold weather as the early warmth of March allowed crops to mature early, only to be damaged by the sub-freezing temperatures of April. For only the second time since statewide statistics began in 1892, the average temperature during March was warmer than that of the following April. The only other such occurrence was in 1907 during the state’s inaugural year. The precipitation statistics were rather unremarkable as the month finished as the 43<sup>rd</sup> driest on record.

### Precipitation

Precipitation patterns during April were chaotic due to the scattered nature of storms and localized heavy rainfall amounts, but much of the state received between 1-3 inches of rainfall. Areas in far southeastern and north central Oklahoma were a bit luckier with 4-7 inches. Those areas in-between were hit with amounts 40-80 percent of normal. East central and south central Oklahoma were the have-nots, both falling more than an inch below normal, ranked as the 27<sup>th</sup> and 25<sup>th</sup> driest Apriils on record, respectively. The Oklahoma Mesonet site at Hugo led the state with 7.01 inches of rainfall. West central Oklahoma had the 5<sup>th</sup> wettest March-April period on record while the east central region suffered through the 15<sup>th</sup> driest. The state had the 34<sup>th</sup> wettest March-April and the 37<sup>th</sup> wettest January-April periods on record.

### Temperature

The entire state experienced below normal temperatures for the month. Regions in the southeastern half of the state were between the 4<sup>th</sup>- and 7<sup>th</sup>-coolest on record, and all areas of the state ranked at least in the top 15 coolest. The March-April period was two degrees above normal, the 18<sup>th</sup> warmest on record. The January-April period stands near normal and the 43<sup>rd</sup> warmest on record.

<b>April 2007 Statewide Extremes</b>			
Description	Extreme	Station	Date
High Temperature	89°F	Webbers Falls	April 30th
Low Temperature	17°F	Jay	April 8th
High Precipitation	7.01 in.	Hugo	
Low Precipitation	1.00 in.	Kenton	

### April Daily Highlights

**April 1-2:** Near-perfect weather graced the month’s first two days with sunny skies, light winds and unseasonably warm temperatures as highs rose into the 70s and 80s.

**April 3-9:** A cold front entered northwestern Oklahoma on the 3<sup>rd</sup>, vanquishing the pleasant weather as it passed. Lows in the 50s and 60s failed to rebound much after the front’s passage, but areas south of the boundary rose into the 80s once again. The surface high pressure system that followed brought cold air to the region, dropping temperatures into the 30s and 40s the morning of the 4<sup>th</sup>. Skies remained clear for the first two days, finally clouding up on the 5<sup>th</sup> with the arrival of an upper-level storm system. Wintry weather moved into northern Oklahoma from Kansas with little or no accumulation reported. Temperatures remained unseasonably cool for the next few days, some 20-25 degrees below normal. . More light snow fell on the 6<sup>th</sup> and 7<sup>th</sup> with little accumulation, and widespread freezing temperatures were recorded throughout the period. The state’s lowest temperature of the month, 17 degrees, occurred at the Jay Mesonet site on the 8<sup>th</sup>.

**April 10-14:** Another storm system approached the state and triggered a round of storms on the 10<sup>th</sup> along an associated cold front and dryline. Golfball size hail fell in Comanche County, with many more hail and high wind reports from across the state. The heaviest rain fell in southeastern Oklahoma where close to two inches was reported in localized areas. Fierce northerly winds assaulted the state on the 11<sup>th</sup> with gusts up to 50 mph in northern Oklahoma. Highs reached the 60s and 70s but the day felt much cooler due to the wind. More storms formed on the 12<sup>th</sup> and 13<sup>th</sup> along a cold front. The strongest of the storms occurred on the 13<sup>th</sup> in southwestern Oklahoma.

Hail to the size of golf balls and strong winds were the main severe threat. Snow fell in the extreme northwest with nearly six inches being reported in Boise City. Two inches fell near Laverne in the main body of the state. Lows in the Panhandle on the 14<sup>th</sup> were mainly in the 20s.

**April 15-18:** Surface high pressure following a cold front left a clear, cool morning on the 15<sup>th</sup>. Temperatures rose into the 60s and 70s as the high pressure dome moved to the east. Southerly winds returned on the 16<sup>th</sup> and temperatures were a bit warmer, mainly in the 70s. An upper-level storm provided the impetus for rain and a few storms during the next couple of days. An inch of rain fell at the Vanoss Mesonet site on the 17<sup>th</sup> with slightly lesser amounts reported across central Oklahoma. Light rain continued into the early morning on the 18<sup>th</sup>. Lows fell into the 40s and 50s and rebounded into the 60s and 70s as surface high pressure moved over the state.

**April 19-23:** The 19<sup>th</sup> was seasonably cool with fog early, giving way to high clouds in the afternoon along with temperatures in the 70s. The temperatures and the southerly winds both increased the next few days in response to an upper-level storm. High temperatures in the 80s along with southerly winds gusting to near 50 mph culminated with a line of showers and storms on the 22<sup>nd</sup>. The storm formed along a dryline late on the 22<sup>nd</sup> and diminished quickly as they moved to the east, but not before spawning a couple of tornadoes and tennis ball size hail in Harper County. Both twisters were of the weak variety with little damage reported.

**April 24-26:** Very heavy rainfall was reported in far southeastern Oklahoma on the 24<sup>th</sup> from storms which fired along a dryline. The Oklahoma Mesonet site at Cloudy recorded over four inches, while the Mesonet site at Hugo nearly equaled that total. Two-inch totals were widespread in that area. A cold front began to move through late on the 24<sup>th</sup> and pushed through the state on the 25<sup>th</sup>. Northwesterly winds gusting to over 30 mph followed along behind the front, combining with temperatures in the 50s and 60s to make for a cold, blustery day. The 26<sup>th</sup> began cool and overcast with lows in the 40s and 50s and northerly winds. Temperatures managed to reach the 60s and 70s that afternoon.

**April 27-29:** Pleasant weather returned to the state for the next three days. Highs in the 70s and 80s made for nice spring days, with lows in the 40s and 50s cooling things off at night. An upper-level disturbance approached the state on the 29<sup>th</sup>, increasing the southerly winds and high temperatures.

**April 30:** Showers and thunderstorms associated with an upper-level storm dumped up to two inches of rainfall across southeastern Oklahoma on the month's last day. Severe weather was at a minimum for a springtime event, although some hail and high winds were reported. High temperatures for the day were predominantly in the 80s. The month's highest temperature of 89 degrees was reported at Webbers Falls on this day.

<b>April 2007 Statewide Statistics</b>			
<b>Temperature</b>			
	<b>Average</b>	<b>Depart.</b>	<b>Rank (1892-2007)</b>
Month (April)	55.2°F	-3.9°F	8th Coolest
Season-to-date (Mar-Apr)	56.6°F	2.0°F	18th Warmest
Year-to-Date (Jan-Apr)	47.0°F	0.2°F	43rd Warmest
<b>Precipitation</b>			
	<b>Total</b>	<b>Depart.</b>	<b>Rank (1892-2007)</b>
Month (April)	2.72 in.	-0.64 in.	43rd Driest
Season-to-Date (Mar-Apr)	6.75 in.	0.28 in.	34th Wettest
Year-to-Date (Jan-Apr)	9.70 in.	0.02 in.	37th Wettest
Depart. = Departure from 30-year normal			

## April 2007 Severe Weather

### Significant Tornadoes (EF2 or greater)

No significant tornadoes were reported in the state.

### Hail (2 inches in diameter or greater)

Size (in.)	Location	County	Date
2.00	Laverne	Harper	23

### Wind Gusts (70 mph or greater)

No significant wind gusts were reported in the state.

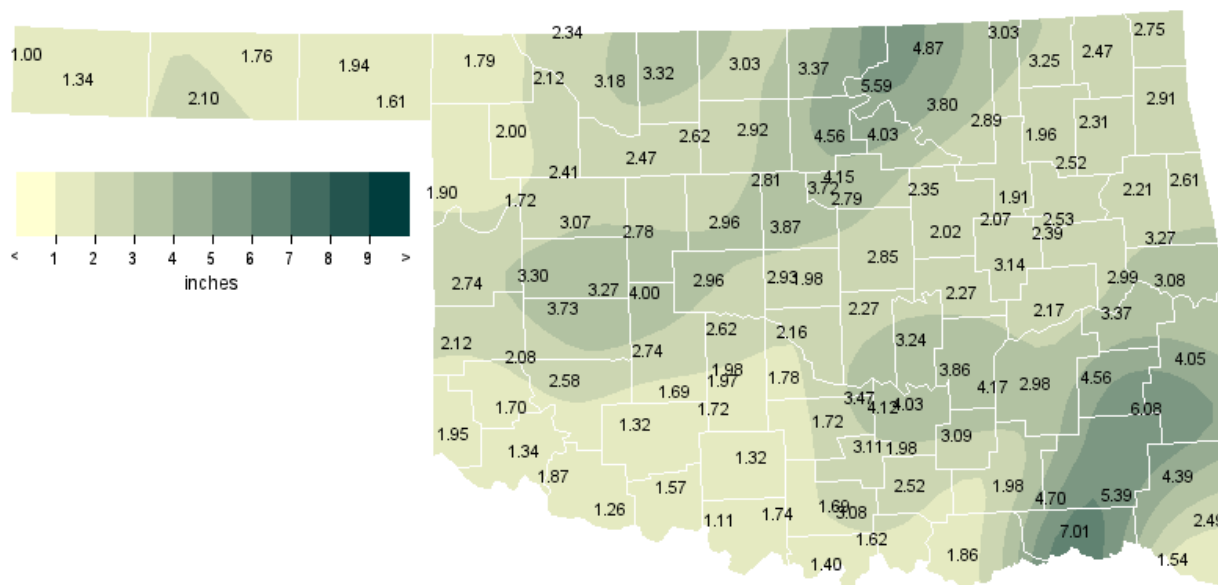
### Flooding

Location	County	Date
2 S Kemp	Bryan	24
Soper	Choctaw	24
7 E Rattan	Pushmataha	24

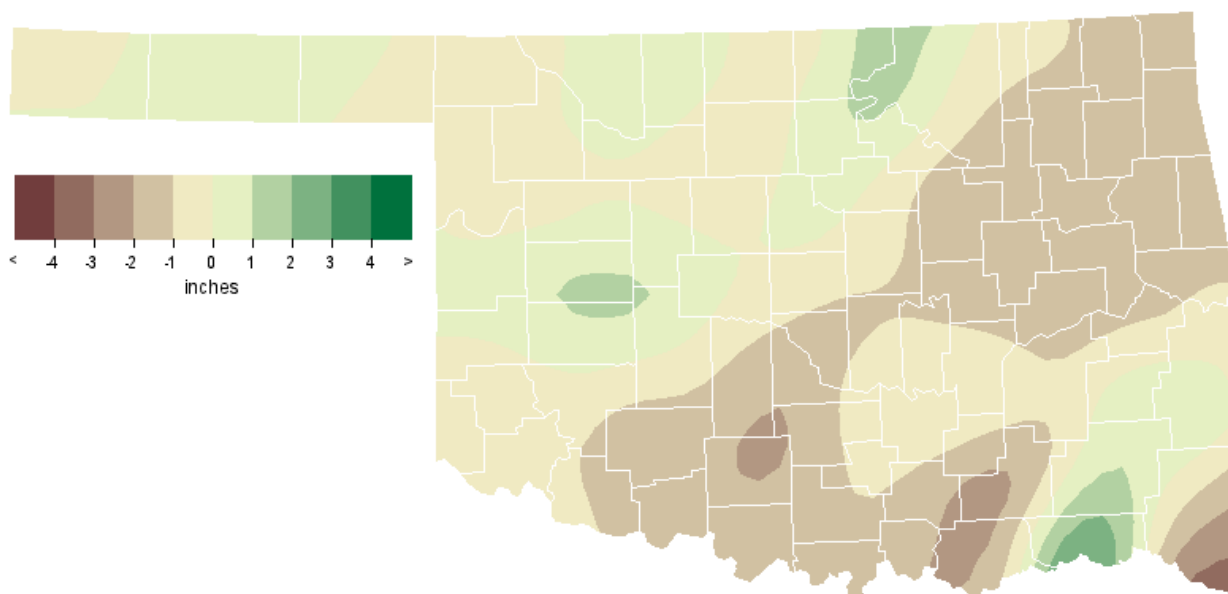
## Record Event Reports

Description	Day	Location	Record	Previous Record	Year
Coollest High Temperature (tied)	6	Oklahoma City	41	41	1899
Coollest Low Temperature (tied)	8	McAlester	29	29	2003
Coollest Low Temperature	8	Muskogee	24	29	1938
Coollest Low Temperature	8	Bartlesville	24	25	2003
Coollest Low Temperature	8	Tulsa	26	29	1938

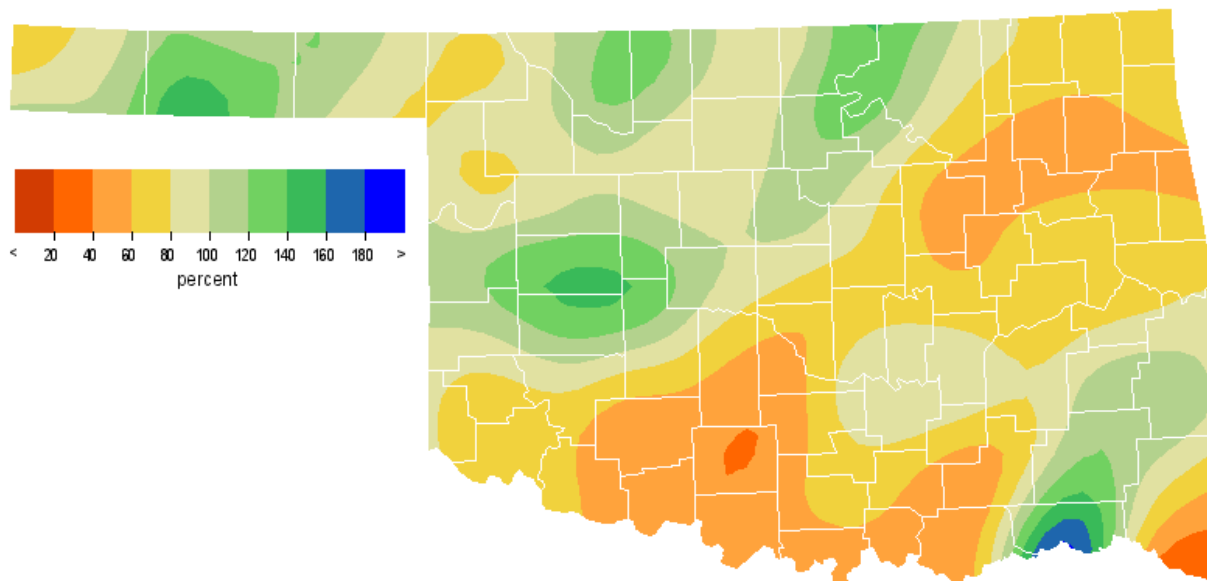
## April 2007 Observed Precipitation



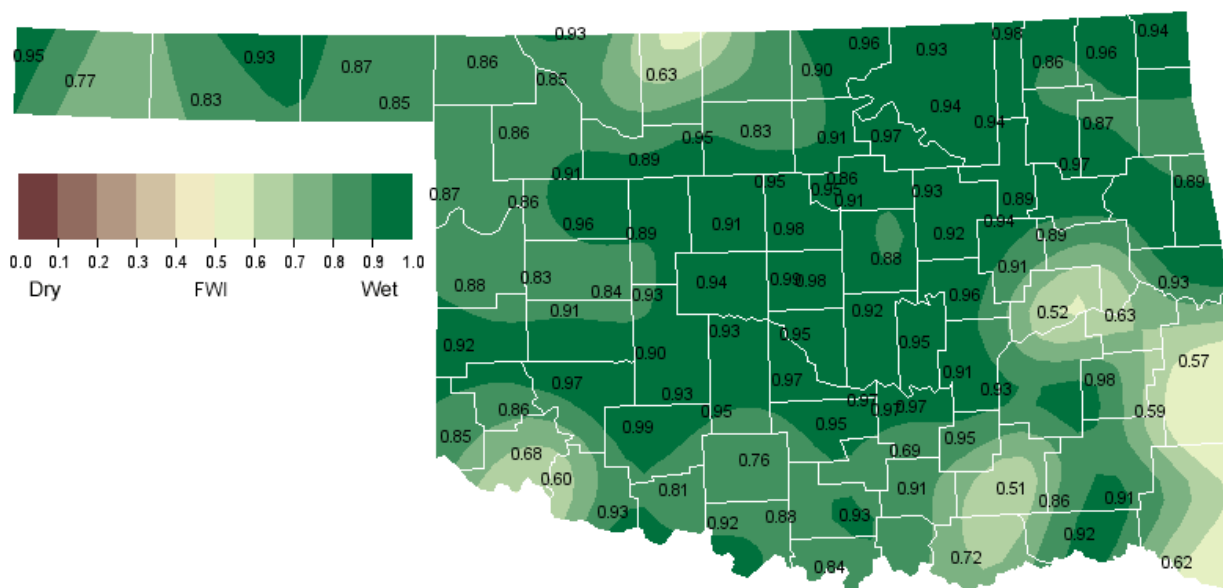
## April 2007 Departure from Normal Precipitation



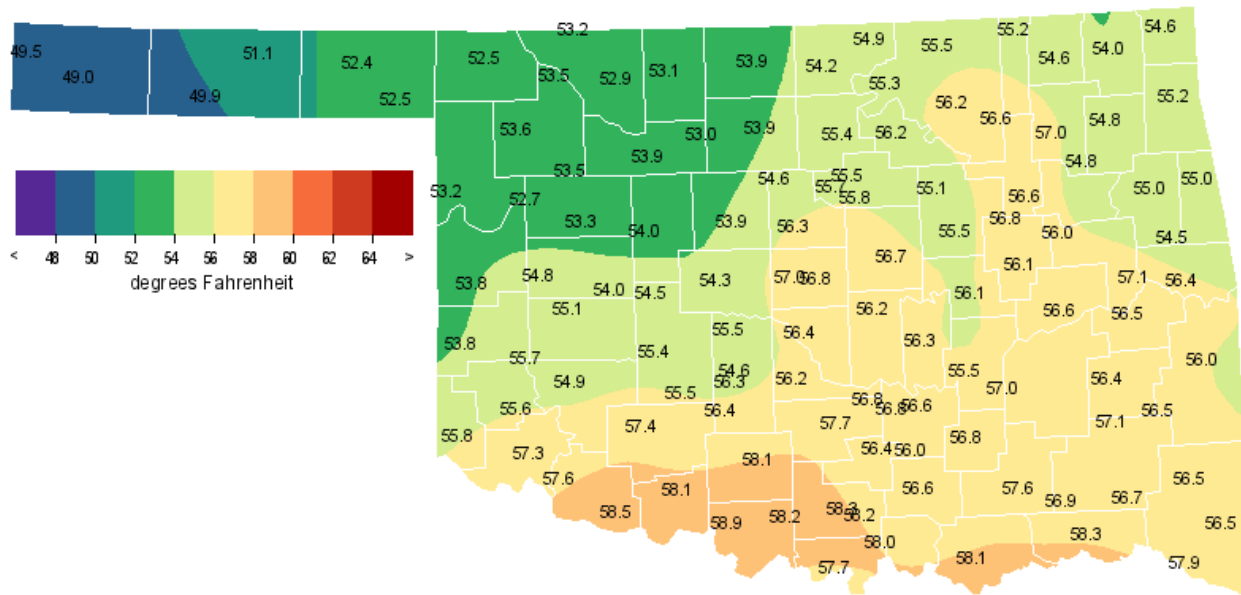
## April 2007 Percent of Normal Precipitation



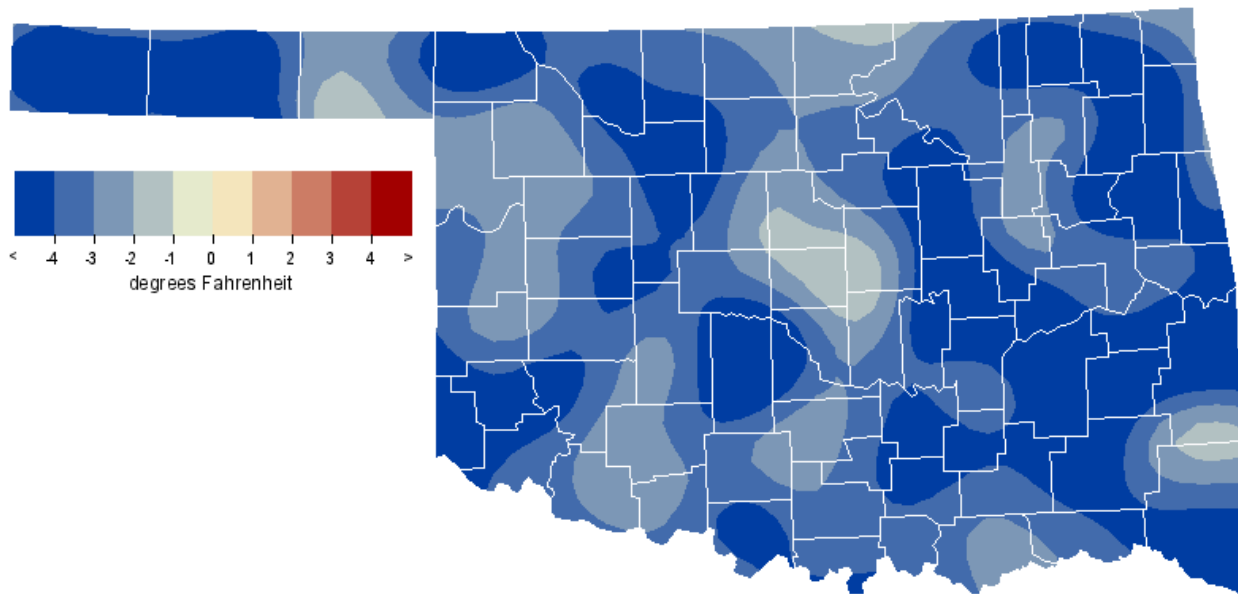
## April 2007 Average Soil Moisture at 25cm



**April 2007 Average Temperature**



**April 2007 Departure from Normal Temperature**



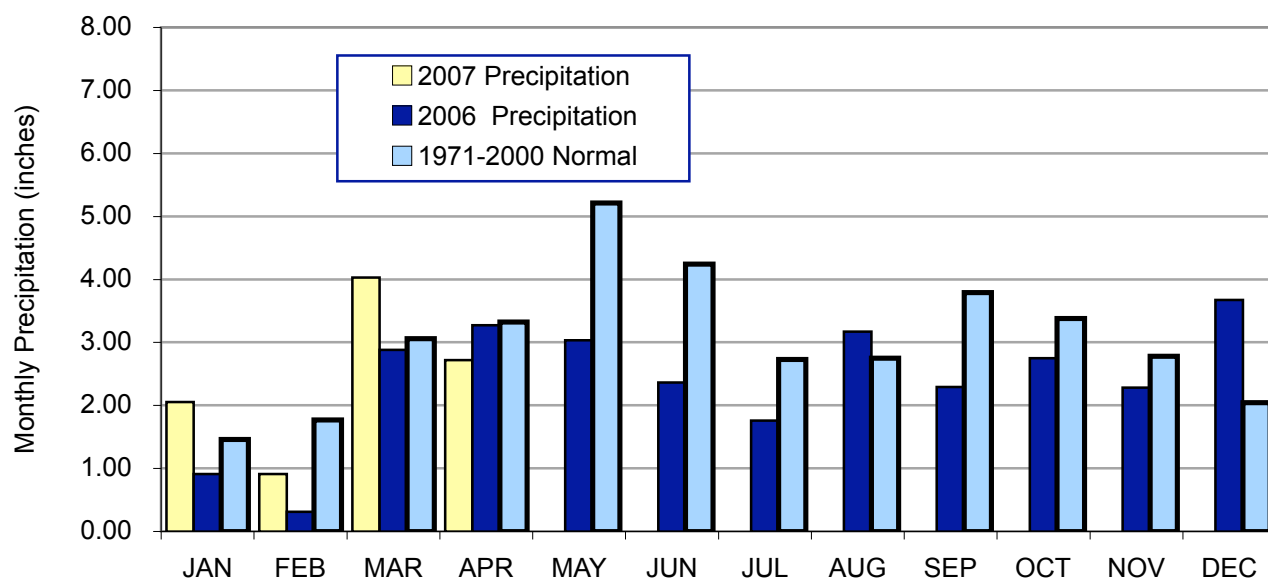
# Mesonet Monthly Summary for April 2007

NAME	MEAN HIGH		LOW		HDD	CDD	TOT HIGH			NAME	MEAN HIGH		LOW		HDD	CDD	TOT HIGH				
	TEMP	TEMP DAY	TEMP DAY	TEMP DAY			PPT	24-HR	DAY		TEMP	TEMP DAY	TEMP DAY	TEMP DAY			PPT	24-HR	DAY		
<b>PANHANDLE</b>																					
Arnett	53.2	85	2	28	7	361	7	1.90	1.26	13	Goodwell	50.0	82	2	27	7	451	0	2.10	.60	21
Beaver	52.4	87	2	28	7	388	10	1.94	.67	12	Hooker	51.2	85	2	28	7	415	0	1.76	.63	13
Boise City	49.0	81	2	24	7	482	1	1.34	.40	21	Kenton	49.5	81	2	22	14	466	1	1.00	.41	14
Buffalo	52.5	88	2	24	7	387	12	1.79	.63	23	Slapout	52.5	88	2	28	7	384	9	1.61	.91	13
<b>NORTH CENTRAL</b>																					
Alva	52.9	84	2	25	7	372	9	3.18	2.04	13	May Ranch	53.2	86	2	23	7	373	20	2.34	1.38	13
Blackwell	54.2	83	2	25	8	341	15	3.37	2.25	13	Medford	53.9	83	29	26	7	346	12	3.03	1.97	13
Breckinridge	53.8	82	2	24	8	345	11	2.92	1.95	13	Newkirk	54.9	85	2	26	7	327	24	****	****	***
Cherokee	53.2	83	29	24	7	365	9	3.32	2.56	13	Red Rock	55.5	85	2	24	7	308	22	4.56	1.95	13
Fairview	53.8	83	29	26	8	347	12	2.47	1.79	13	Seiling	53.6	83	29	29	7	356	13	2.41	1.53	13
Freedom	53.5	85	2	24	7	362	16	2.12	1.62	13	Woodward	53.7	86	2	27	7	356	17	2.00	1.50	13
Lahoma	53.0	81	29	25	7	363	3	2.62	1.75	13											
<b>NORTHEAST</b>																					
Bixby	56.7	86	2	25	8	283	32	1.91	1.29	13	Nowata	54.7	83	2	22	8	323	14	3.25	1.53	13
Burbank	55.3	86	2	24	8	316	25	5.59	2.70	13	Pawnee	56.2	87	2	24	8	300	35	4.03	1.70	13
Claremore	57.0	86	2	26	8	278	39	1.96	1.26	13	Porter	56.9	85	30	26	8	****	****	2.53	.97	24
Copan	55.2	84	2	26	8	315	21	3.03	1.73	13	Pryor	54.8	86	30	19	8	330	23	2.31	1.29	13
Foraker	55.6	86	2	25	8	313	30	4.87	2.54	13	Skiatook	56.6	86	2	26	8	290	37	2.89	1.42	13
Inola	54.8	83	30	23	8	319	14	2.52	1.24	13	Vinita	54.0	83	30	22	8	342	13	2.47	1.54	13
Jay	55.2	86	30	17	8	328	35	2.91	1.26	24	Wynona	56.3	88	2	26	8	296	34	3.80	1.54	13
Miami	54.6	84	30	21	8	337	23	2.75	1.61	13											
<b>WEST CENTRAL</b>																					
Bessie	55.1	82	29	29	7	313	16	3.73	2.64	13	Putnam	53.3	81	29	28	7	360	9	3.07	1.75	13
Butler	54.9	83	29	30	7	318	15	3.30	2.02	13	Retrop	55.7	81	29	31	7	297	19	2.08	1.39	13
Camargo	52.7	82	29	27	7	373	3	1.72	.86	13	Watonga	54.0	80	29	28	7	344	15	2.78	1.81	13
Cheyenne	53.8	80	2	28	7	343	7	2.74	.85	13	Weatherford	53.9	80	29	29	7	340	8	3.27	2.30	13
Erick	53.8	81	29	30	7	338	3	2.12	1.04	13											
<b>CENTRAL</b>																					
Acme	56.4	81	22	31	7	281	24	1.72	.58	24	Ninnekah	56.3	82	29	31	15	284	22	1.97	.72	13
Bowlegs	56.3	83	2	26	8	287	26	3.24	1.13	13	Norman	56.4	83	2	32	7	288	30	2.16	.68	17
Bristow	55.6	85	2	22	8	313	29	2.02	1.12	13	Oilton	55.1	86	2	21	8	328	31	2.35	1.00	24
Chandler	56.7	85	2	28	8	283	34	2.85	.89	13	Oklahoma City N	57.0	84	2	30	7	279	38	2.93	.99	13
Chickasha	54.6	81	29	28	15	320	8	1.98	.76	13	Oklahoma City W	****	***	***	***	***	****	****	****	****	***
El Reno	54.3	83	2	27	8	333	12	2.96	1.12	13	Okemah	56.1	83	30	25	8	293	26	2.27	1.18	13
Guthrie	56.3	85	2	29	8	293	32	3.87	1.91	13	Perkins	55.7	83	2	25	8	301	23	2.79	1.20	24
Kingfisher	53.9	83	29	26	8	344	12	2.96	1.76	13	Shawnee	55.6	82	2	29	8	****	****	2.27	1.01	13
Marena	55.7	85	2	26	8	306	26	3.72	1.57	13	Spencer	56.7	84	2	27	8	****	****	1.85	.85	17
Minco	55.4	80	2	29	7	305	18	2.62	.89	17	Stillwater	55.5	86	2	23	8	311	27	4.15	1.71	24
Marshall	54.5	83	2	26	8	330	16	2.81	1.66	13	Washington	56.2	83	2	31	7	283	19	1.78	.75	17
<b>EAST CENTRAL</b>																					
Calvin	55.4	82	30	30	8	303	15	3.86	1.33	24	Sallisaw	56.5	87	30	22	8	283	28	3.08	1.22	24
Cookson	54.5	84	30	18	8	334	21	3.27	1.27	24	Stigler	56.5	85	29	23	8	284	28	3.37	.99	24
Eufaula	56.6	84	30	26	8	276	25	2.17	.57	13	Stuart	57.0	83	30	31	8	268	28	4.17	1.95	10
Haskell	56.1	85	2	24	8	291	24	2.39	.96	24	Tahlequah	55.1	84	30	18	8	323	25	2.21	.96	13
Hectorville	56.9	84	2	26	8	280	36	2.07	1.31	13	Webbers Falls	57.1	89	30	24	8	276	38	2.99	1.04	13
McAlester	56.0	84	30	28	8	****	****	2.94	1.53	10	Westville	55.0	84	30	18	8	323	22	2.61	1.19	24
Okmulgee	56.1	85	2	23	8	293	25	3.14	1.41	24											
<b>SOUTHWEST</b>																					
Altus	57.3	85	24	31	7	259	27	1.34	.71	17	Hollis	55.9	84	10	31	7	281	8	1.95	.95	13
Apache	55.6	79	29	30	7	295	13	1.69	.58	13	Mangum	55.7	81	2	31	15	291	11	1.70	.93	13
Fort Cobb	55.4	80	29	30	7	305	16	2.74	1.00	13	Medicine Park	57.3	80	29	30	7	256	26	1.32	.75	13
Grandfield	58.6	85	10	33	7	231	38	1.26	.57	17	Tipton	57.0	84	24	32	7	****	****	1.05	.61	13
Hinton	54.5	81	2	30	7	331	16	4.00	2.96	13	Walters	57.7	82	2	32	7	****	****	1.26	.51	17
Hobart	54.8	81	24	31	7	315	10	2.58	1.35	13											
<b>SOUTH CENTRAL</b>																					
Ada	56.6	81	2	32	8	278	26	4.03	1.33	13	Madill	58.0	81	3	32	15	242	32	1.62	.68	24
Ardmore	58.2	82	29	34	7	242	37	3.08	2.10	24	Newport	58.2	83	29	34	7	242	39	1.69	.55	13
Burneyville	57.7	82	29	32	15	253	33	1.40	.54	13	Pauls Valley	57.6	82	2	33	7	257	34	1.72	.95	13
Byars	56.8	80	2	31	7	277	30	3.47	1.51	13	Ringling	58.2	81	29	31	15	241	37	1.74	1.05	13
Centrahoma	56.7	82	30	31	15	276	28	3.09	1.46	24	Sulphur	56.4	80	30	30	15	282	25	3.11	1.08	13
Durant	58.2	83	3	32	8	236	31	1.86	1.00	24	Tishomingo	56.6	82	30	34	8	274	23	2.52	1.51	24
Fittstown	56.0	80	30	32	7	290	18	1.98	.67	13	Vanoss	56.9	83	2	31	7	277	34	4.12	1.09	13
Ketchum Ranch	58.1	82	2	32	15	243	35	1.32	.60	17	Waurika	58.9	83	22	34	7	222	39	1.11	.37	17
Lane	57.6	83	3	32	15	251	30	1.98	.88	13											
<b>SOUTHEAST</b>																					
Antlers	57.0	86	3	29	7	264	23	4.70	2.84	24	Idabel	57.9	84	30	29	8	236	23	1.54	.47	24
Broken Bow	56.5	83	2	28	8	269	13	2.49	1.40	24	Mt Herman	56.5	81	29	27	8	272	16	4.39	2.90	24
Clayton	57.1	85	30	27	8	262	24	****	****	***	Talihina	56.5	84	2	26	8	282	28	6.08	2.66	24
Cloudy	56.7	83	30	30	8	267	18	5.39	4.08	24	Wilburton	56.4	84	2	25	8	284	26	4.56	1.30	24
Hugo	58.3	83	3	32	8	227	26	7.01	3.95	24	Wister	56.0	85	29	20	8	292	22	4.05	2.00	24

## April 2007 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Apr-06
Panhandle	1.68	-0.17	43rd Wettest	5.28 (1942)	0.00 (1909)	0.41
North Central	2.86	-0.10	48th Wettest	7.43 (1999)	0.55 (1989)	3.10
Northeast	3.12	-0.88	43rd Driest	9.67 (1942)	0.17 (1989)	6.26
West Central	2.76	0.16	44th Wettest	8.73 (1997)	0.15 (1996)	1.40
Central	2.62	-0.91	44th Driest	9.49 (1942)	0.24 (1989)	3.56
East Central	2.95	-1.38	27th Driest	11.82 (1957)	0.75 (1989)	4.24
Southwest	2.00	-0.67	45th Driest	7.30 (1997)	0.14 (1989)	1.74
South Central	2.34	-1.42	25th Driest	11.43 (1942)	0.53 (1989)	4.00
Southeast	4.47	-0.02	57th Driest	12.79 (1957)	0.53 (1987)	4.05
Statewide	2.72	-0.64	43rd Driest	8.50 (1942)	0.58 (1989)	3.27

## 2006 and 2007 Statewide Precipitation Monthly Totals vs. Normal

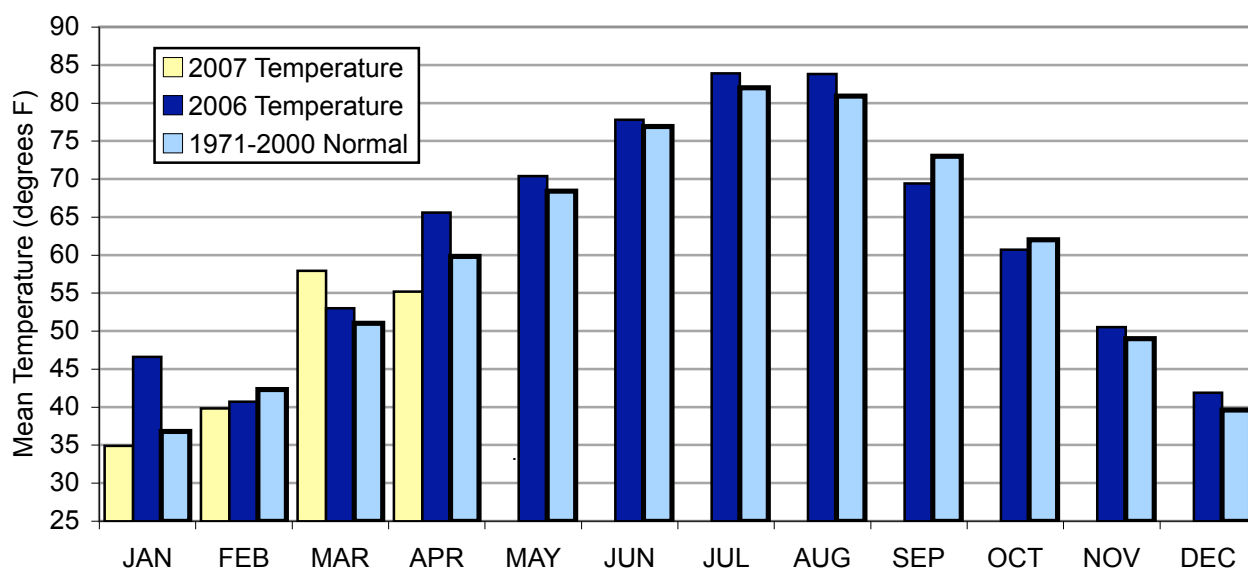




## April 2007 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Apr-06 (F)
Panhandle	51.3	-3.9	12th Coolest	62.2 (1981)	48.2 (1926)	61.8
North Central	53.8	-3.8	10th Coolest	65.0 (1981)	50.8 (1983)	64.0
Northeast	55.5	-3.4	15th Coolest	66.1 (1981)	52.5 (1907)	65.1
West Central	54.1	-3.8	11th Coolest	65.1 (2006)	52.1 (1926)	65.1
Central	55.7	-3.9	7th Coolest	66.5 (2006)	53.6 (1983)	66.5
East Central	56.0	-4.2	4th Coolest	66.7 (1896)	53.9 (1907)	66.5
Southwest	56.4	-4.0	8th Coolest	67.2 (2006)	54.2 (1926)	67.2
South Central	57.5	-3.8	5th Coolest	68.1 (2006)	55.9 (1983)	68.1
Southeast	56.9	-3.7	4th Coolest	68.1 (2006)	55.4 (1983)	68.1
Statewide	55.2	-3.9	8th Coolest	65.8 (2006)	53.2 (1983)	65.8

## 2006 and 2007 Statewide Temperature Monthly Averages vs. Normal



## Mesonet Extremes for April 2007

Climate Division	High Temp			Low Temp			High Monthly Rainfall			High Daily Rainfall		
	(F)	Day	Station	(F)	Day	Station	(inches)	Station	(inches)	Day	Station	
Panhandle	88	2nd	Slapout	22	14th	Kenton	2.10	Goodwell	1.26	13th	Arnett	
North Central	86	2nd	Woodward	23	7th	May Ranch	4.56	Red Rock	2.56	13th	Cherokee	
Northeast	88	2nd	Wynona	17	8th	Jay	5.59	Burbank	2.70	13th	Burbank	
West Central	83	29th	Butler	27	7th	Camargo	3.73	Bessie	2.64	13th	Bessie	
Central	86	2nd	Stillwater	21	8th	Oilton	4.15	Stillwater	1.91	13th	Guthrie	
East Central	89	30th	Webbers Falls	18	8th	Westville	4.17	Stuart	1.95	10th	Stuart	
Southwest	85	24th	Altus	30	7th	Fort Cobb	4.00	Hinton	2.96	13th	Hinton	
South Central	83	22nd	Waurika	30	15th	Sulphur	4.12	Vanoss	2.10	24th	Ardmore	
Southeast	86	3rd	Antlers	20	8th	Wister	7.01	Hugo	4.08	24th	Cloudy	
Statewide	89	30th	Webbers Falls	17	8th	Jay	7.01	Hugo	4.08	24th	Cloudy	

# 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.

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 15<sup>th</sup> and 16<sup>th</sup>. 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.

### **Temperature**

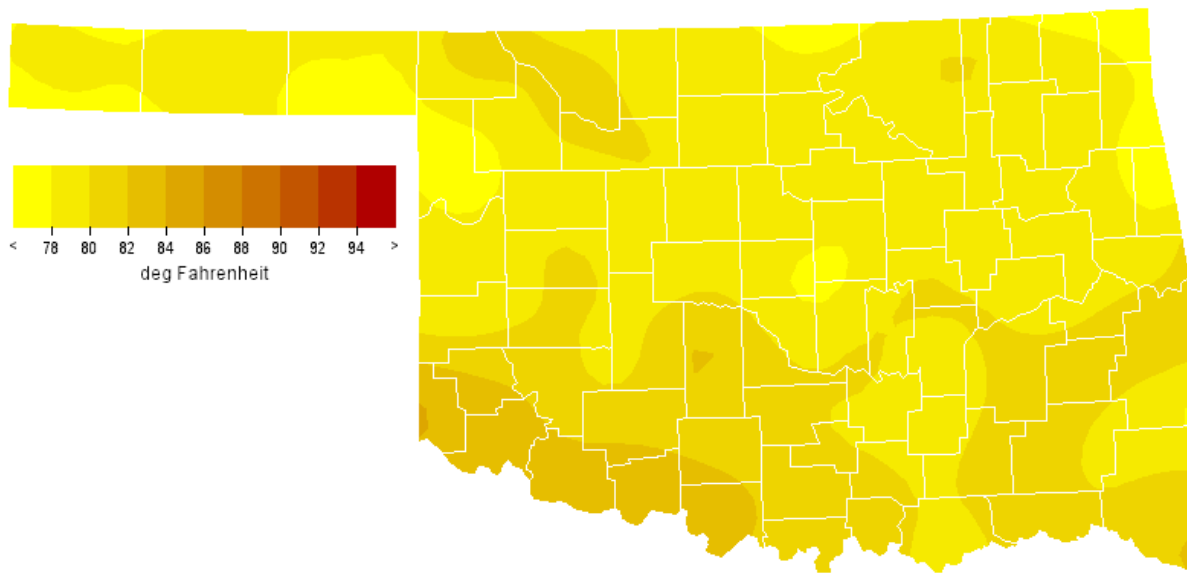
Mean: 68.4 degrees  
Warmest May: 1896, 75.8 degrees  
Coolest May: 1907, 62.3 degrees  
Hottest recorded: 114 degrees, Weatherford, May 25, 2000  
Coldest recorded: 19 degrees, Hooker, May 1, 1909

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.

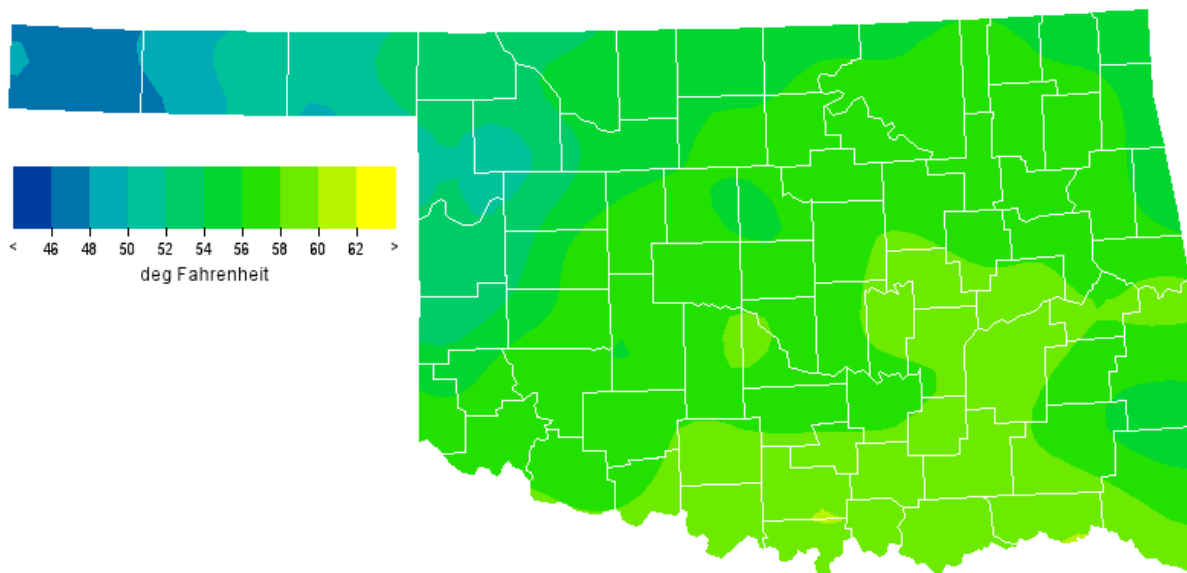
### **Tornadoes**

Average May Tornadoes: 19.9  
Most: 90 (1999)

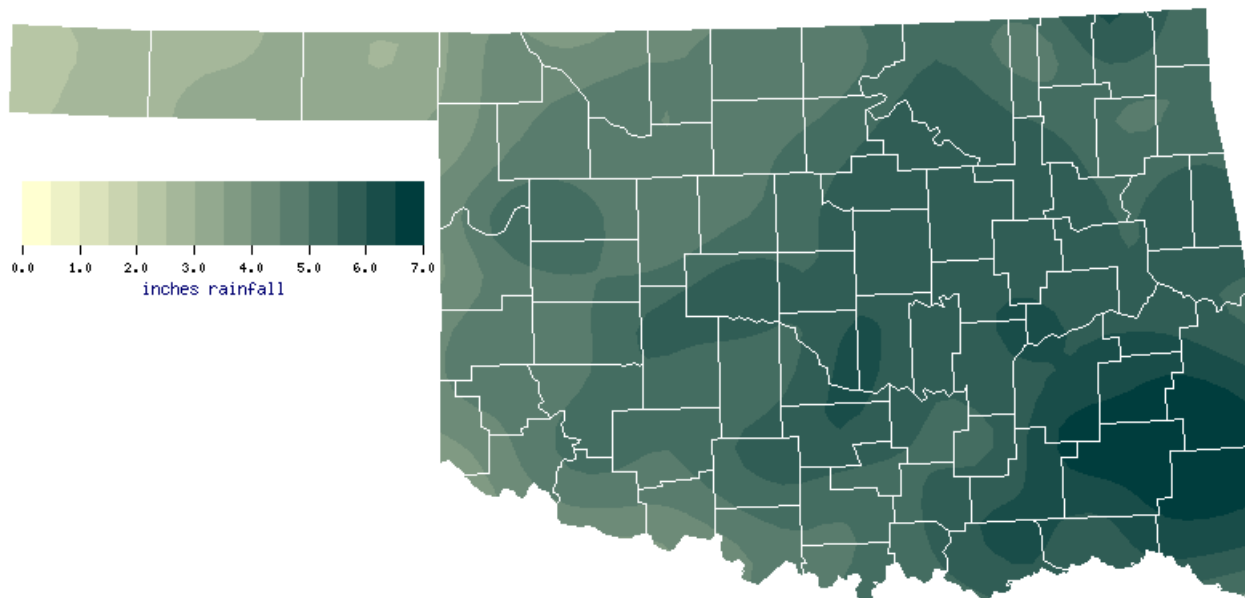
### **May Normal Daily Maximum Temperature (1971-2000)**



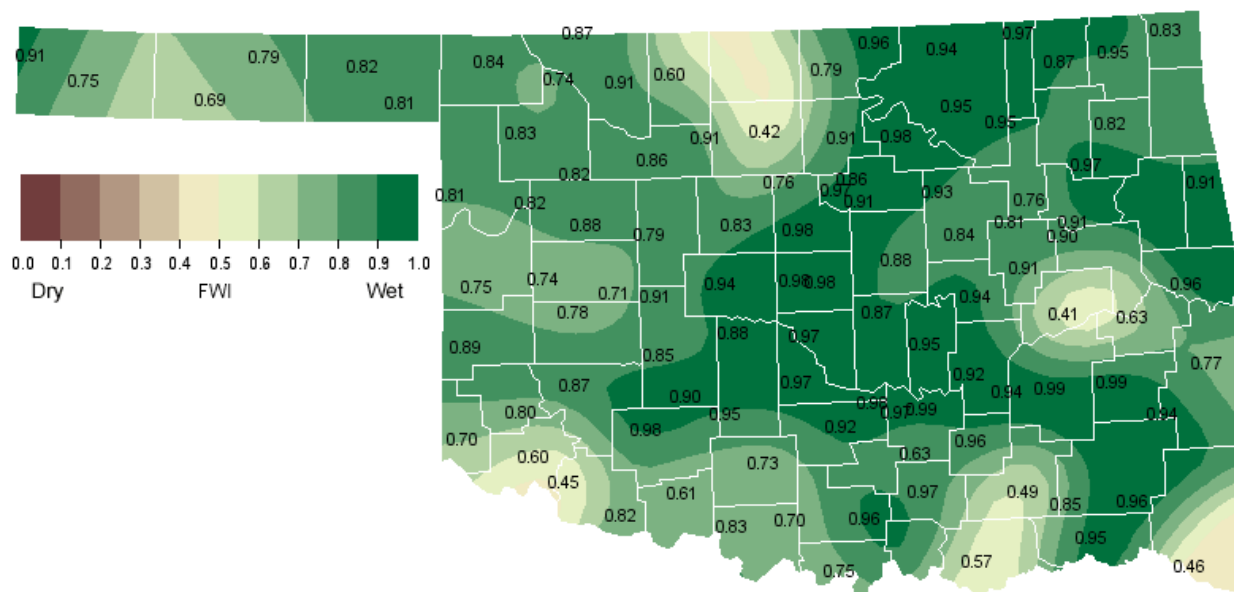
### **May Normal Daily Minimum Temperature (1971-2000)**



### May Normal Precipitation (1971-2000)



### May 1, 2007 Soil Moisture Conditions at 25cm



# U.S. Drought Monitor

## Oklahoma

May 1, 2007  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	95.1	4.9	0.0	0.0	0.0	0.0
Last Week (04/24/2007 map)	94.5	5.5	0.0	0.0	0.0	0.0
3 Months Ago (02/06/2007 map)	50.2	49.8	26.9	15.5	0.0	0.0
Start of Calendar Year (01/02/2007 map)	31.3	68.7	39.8	24.5	18.2	0.0
Start of Water Year (10/03/2006 map)	2.7	97.3	92.7	46.2	16.6	0.0
One Year Ago (05/02/2006 map)	0.0	100.0	99.8	92.6	30.0	0.0



**Intensity:**

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

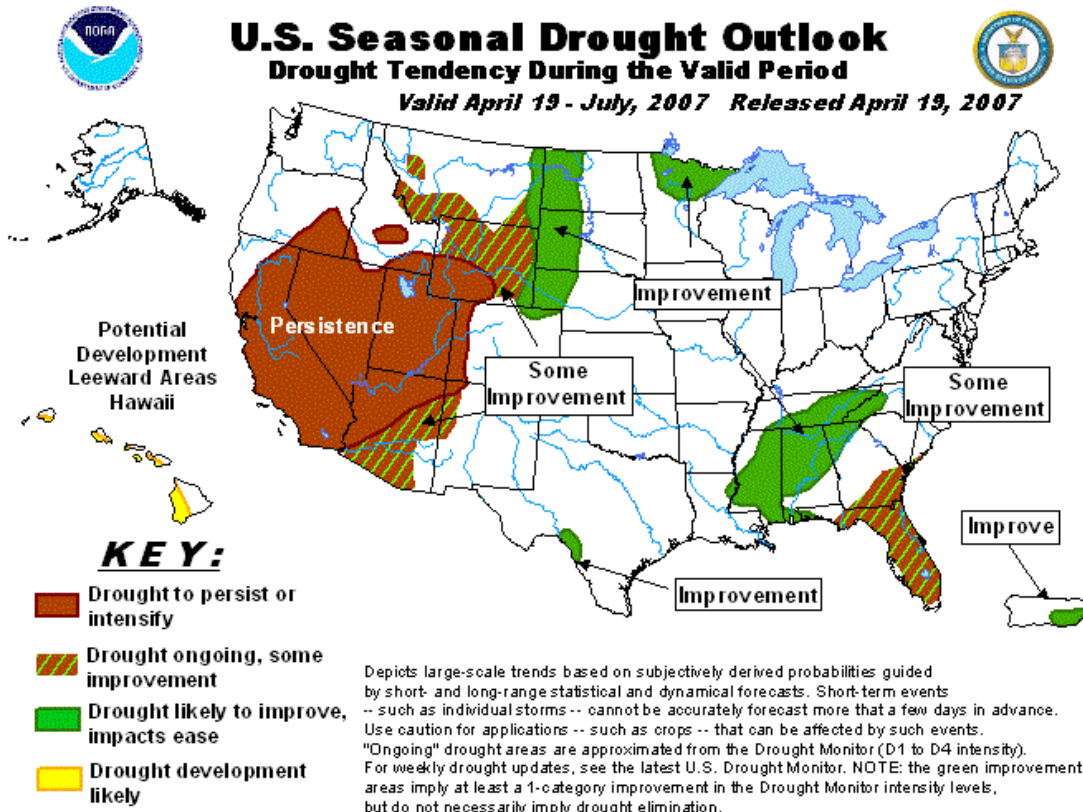
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements



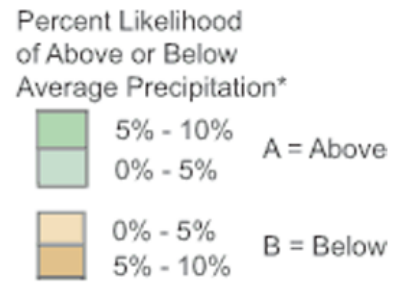
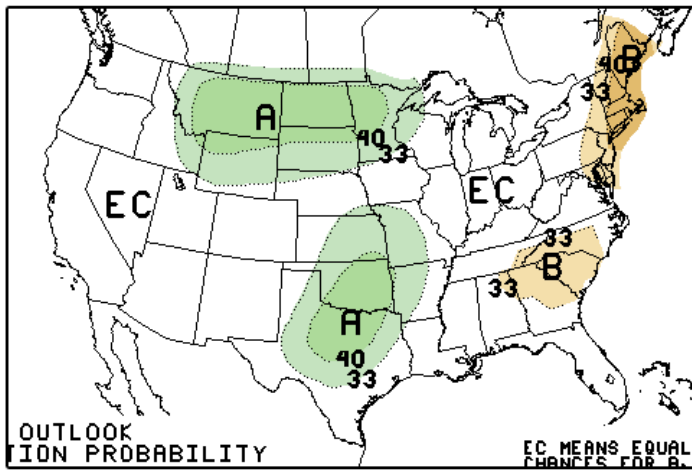
Released Thursday, May 3, 2007

Author: Brian Fuchs, National Drought Mitigation Center

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

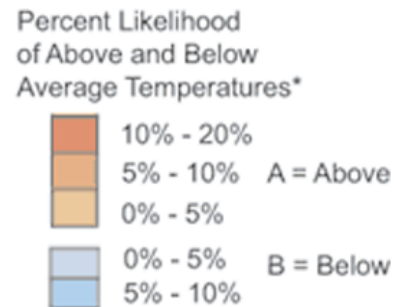
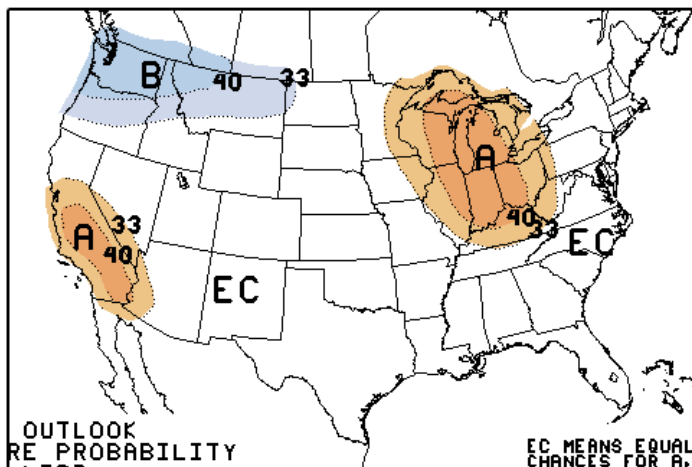


## May 2007 U.S. Precipitation Forecast



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

## May 2007 U.S. Temperature Forecast

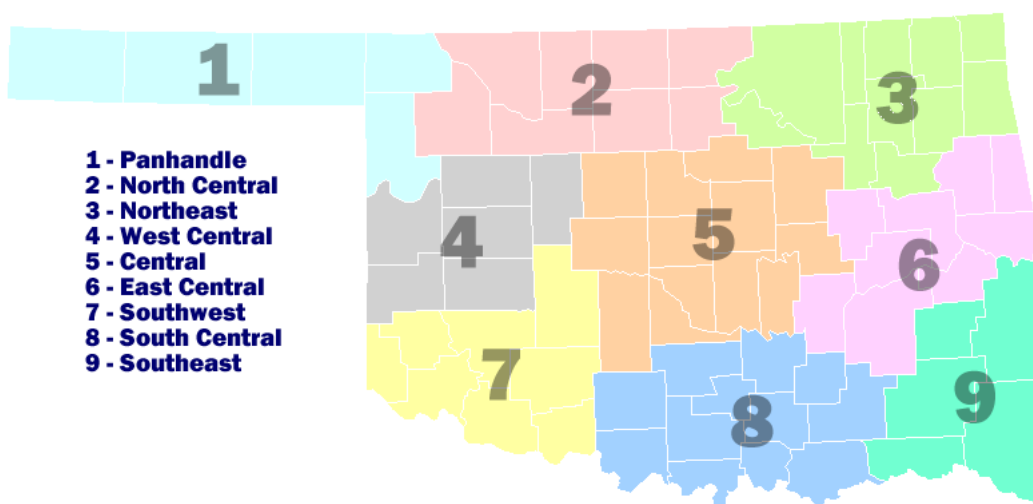


\*EC indicates no forecasted anomalies due to lack of model skill.

## 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](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](mailto:ocs@ou.edu)) or telephone (405/325-2541)



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