

# OKLAHOMA MONTHLY CLIMATE SUMMARY

## October 2008



October was a cool month for most of the state, and thanks to another intrusion of tropical moisture from the Pacific, wet for those of a western persuasion. The remnants of Hurricane Norbert soaked the northwestern one-third of Oklahoma and gave the Panhandle region its seventh wettest October on record. North central and west central Oklahoma were also benefactors of the tropical moisture, and their October totals ranked as the 13th and 11th wettest on record, respectively. On the other hand, the southeastern two-thirds of the state were parched with deficits of 2-4 inches of rain. On a statewide basis, the month ranked as the 48th wettest and 30th coolest on record. Severe weather was absent for the most part other than a few cases of strong winds and large hail. An early freeze visited the state on the 23rd when Kenton dropped to 24 degrees to go along with other sub-freezing temperatures across the southeast and far northwest. The year continued to come up a bit cool and ranked as the 48th coolest on record for the January-October time period. The same period ranked as the 21st wettest according to precipitation statistics.

### Precipitation

The Panhandle enjoyed a surplus of nearly 3 inches of rainfall, quite a bounty for that area of the state. West central Oklahoma fared similarly with another surplus of nearly 3 inches. East central Oklahoma was the most unfortunate with a deficit of nearly 3 inches, the 21st driest on record for that area. The year-to-date statistics across the state vary widely, from a surplus of nearly 16 inches in northeastern Oklahoma – the 4th wettest such period – to a deficit of nearly 6 inches in south central Oklahoma – the 38th driest on record. Overall, for the same period, the state has experienced a surplus of over 3 inches.

### Temperature

October was a bit more than a degree below normal based on the statewide average temperature. Virtually the entire state saw below normal temperatures, save for portions of central and northwestern Oklahoma. The state's first freezing temperature, as measured by the Oklahoma Mesonet, occurred at Kenton on October 23. The first widespread freeze in the state fell on the morning of the 27th.

### October 2008 Statewide Extremes

Description	Extreme	Station	Day
High Temperature	93°F	Tipton	4
Low Temperature	2°F	Antlers, Oilton	28
High Precipitation	5.92 in.	Erick	
Low Precipitation	0.33 in.	Durant	

### October Daily Highlights

**October 1-3:** The month's first three days were pleasant with cool mornings and seasonable afternoons. There was little rain to speak of as lows dropped into the 40s and 50s each morning and highs rose into the 70s and 80s.

**October 4-6:** A warm front lifted north on the fourth as an upper-level storm system approached from the west. That provided enough moisture to fire off showers and storms that dropped up to two inches of rainfall in southeastern Oklahoma. The storm system caused winds to gust over 40 mph in western Oklahoma. Highs were above normal in the 80s and 90s. The month's high temperature reading of 93 degrees occurred at Tipton and Grandfield on the fourth. The days continued mild as the storm system approached. Showers and storms hit the state on the fifth and sixth, with the storms on the sixth exceeding severe limits at times. The severe reports were mostly of large hail in western Oklahoma. Hail to the size of half dollars was reported in Comanche County. Most of the state saw rain over this three-day period, with heaviest amounts reported in southern sections of Oklahoma.

**October 7-10:** A mostly dry four days followed the previous bouts of rainfall. Each successive day was warmer than the last with the aid of strong southerly winds kicked up in lieu of an approaching upper-level storm. By the tenth, highs had risen into the mid-80s.

**October 11-15:** Moisture from the remnants of Pacific hurricane Norbert streamed into western Oklahoma in the form of clouds on the 11th. A surface low in the Oklahoma Panhandle kept winds gusting from the south at over 30 mph. Highs were in the 70s and 80s. Rain developed in the Oklahoma Panhandle as the remnants of Norbert interacted with a cold front. That front and associated storm system provided the focus for several rounds of showers through the 15th. In all, areas of the Panhandle received from 3-4 inches of rain while other parts of northwestern Oklahoma totaled 1-3 inches. The rest of the state had up to an inch. The cold front separated high temperatures in the 70s and 80s to the south and 50s in the north. The rainfall ended the afternoon of the 15th and cooler air settled in from the north.

**October 16-21:** The weather turned cold following the cold front's passage on the 15th. High pressure settled over the area and the weather became pleasant if not a bit windy. Winds gusted up to 40 mph on the 19th as a strong upper-level storm approached from the west. Highs were in the 70s and 80s for the most part, 5-10 degrees warmer than average for late October.

**October 22-23:** A cold front swept into the state and set off showers and storms, some of which exceeded severe limits. That cold front also gave the state its first freezing temperatures of the season. Areas in the Panhandle and southeastern Oklahoma dropped below freezing with Kenton coming in with the lowest reading of 24 degrees. A 75 mph wind gust was reported by the Camargo Mesonet site early on the 22nd and half dollar size hail fell near Laverne. Low temperatures dropped close to freezing on the 23rd. Rainfall totals were generally 1-2 inches in northeastern sections but less than an inch elsewhere.

<b>October 2008 Statewide Statistics</b>			
<b>Temperature</b>			
	<b>Average</b>	<b>Depart.</b>	<b>Rank (1895-2008)</b>
Month (October)	60.1°F	-1.2°F	30th Coolest
Season-to-Date (Sep-Oct)	64.9°F	-1.8°F	15th Coolest
Year-to-Date (Jan-Oct)	62.5°F	-0.3°F	48th Coolest
<b>Precipitation</b>			
	<b>Total</b>	<b>Depart.</b>	<b>Rank (1895-2008)</b>
Month (October)	2.96 in.	-0.42 in.	48th Wettest
Season-to-Date (Sep-Oct)	6.55 in.	-0.64 in.	47th Wettest
Year-to-Date (Jan-Oct)	35.24 in.	3.39 in.	21st Wettest
Depart. = Departure from 30-year normal			

**October 24-31:** Other than some chilly temperatures each morning, the month's final eight days were quite pleasant right through Halloween. High temperatures were mostly in the 70s throughout this period. The month's coldest reading of 21 degrees occurred at Antlers and Oilton on the 28th.

## Record Event Reports

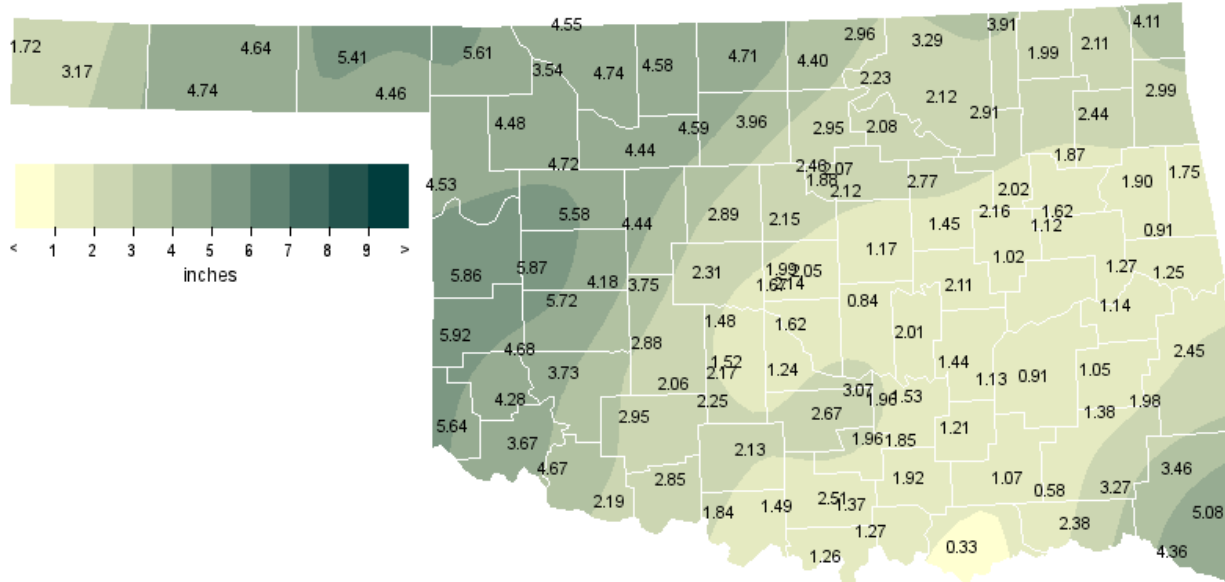
Description	Day	Location	Record	Previous Record	Year
Coldest Minimum Temperature	28	McAlester	24 degrees	26 degrees	1957

## October 2008 Severe Weather

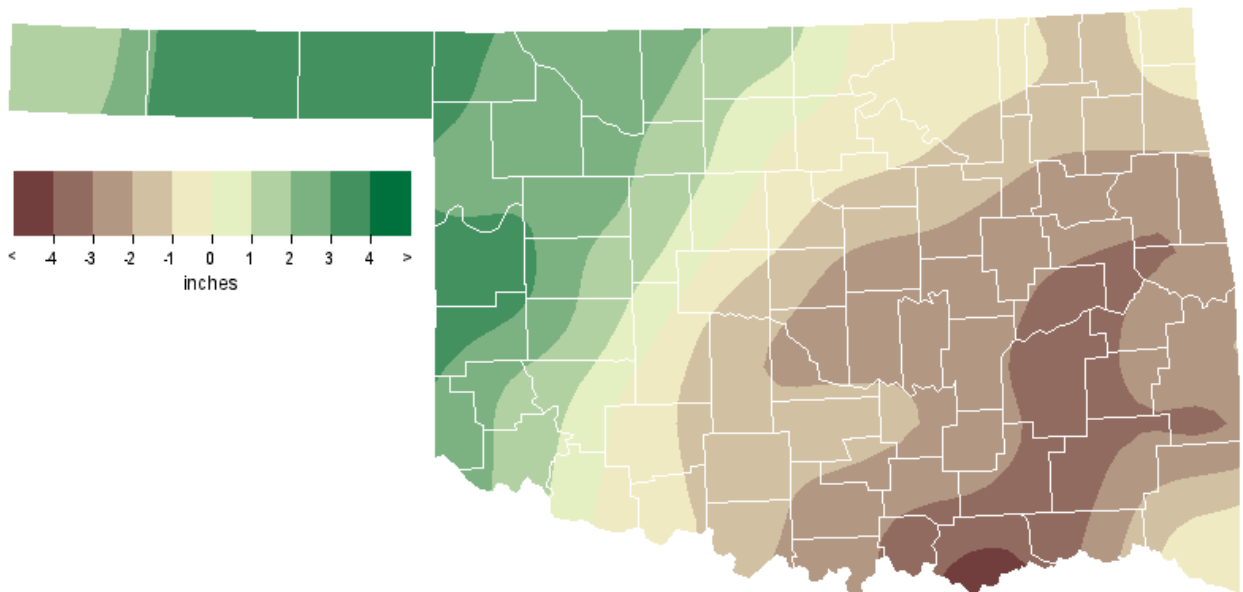
### Wind Gusts (70 mph or greater)

Speed (m.p.h)	Location	County	Day
75	4 WNW Camargo	Dewey	22

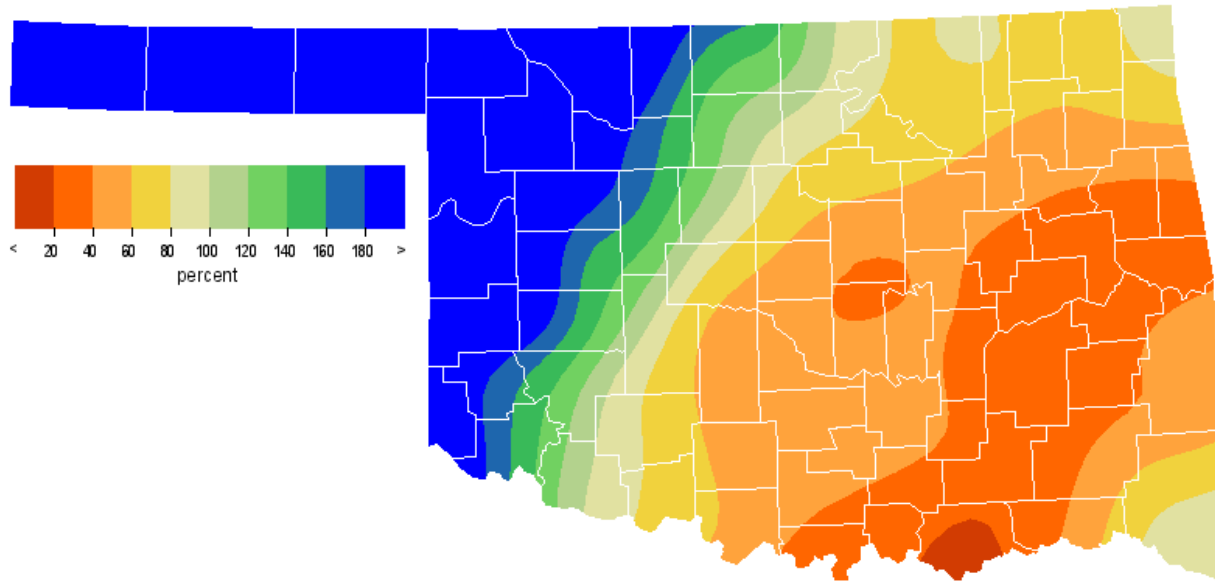
## October 2008 Observed Precipitation



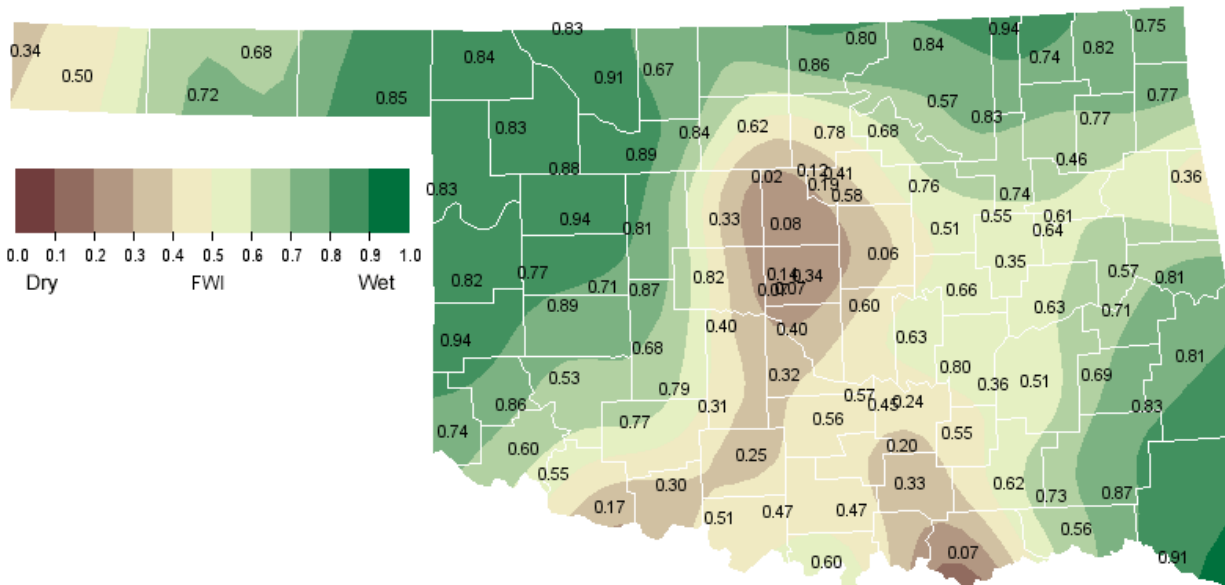
## October 2008 Departure from Normal Precipitation



## October 2008 Percent of Normal Precipitation



## October 2008 Average Soil Moisture at 25cm





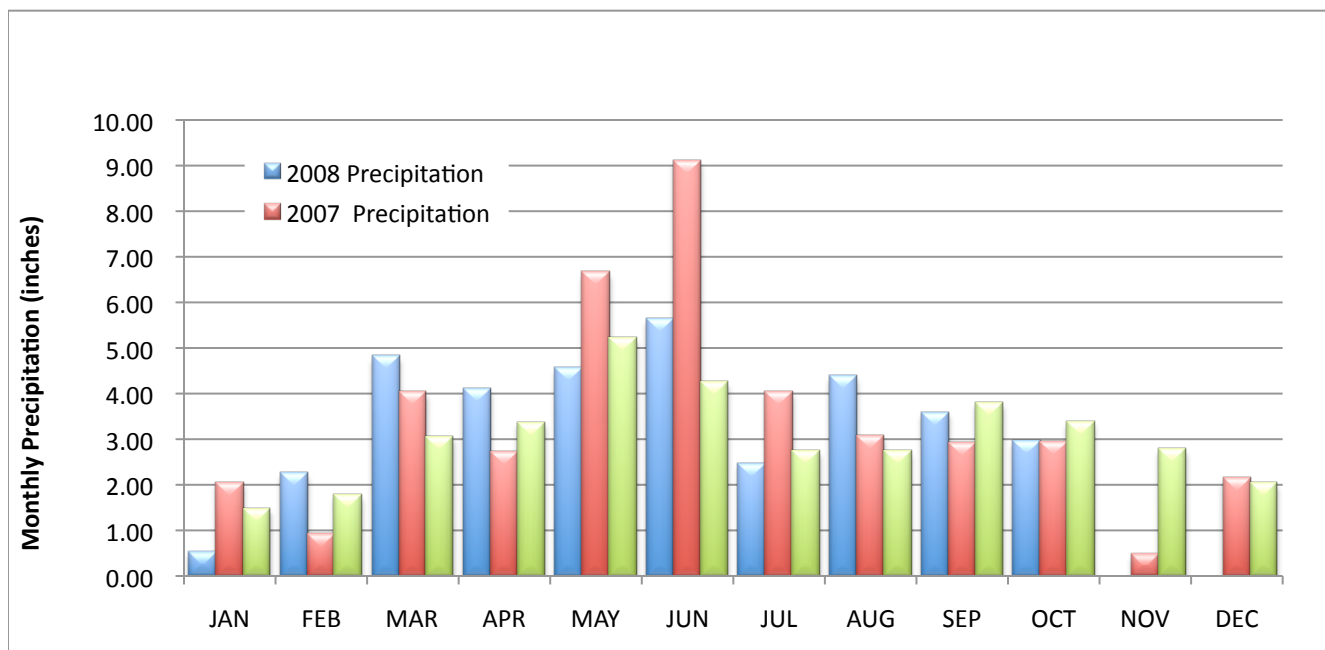
# Mesonet Monthly Summary for October 2008

NAME	MEAN HIGH		LOW		HDD		CDD		TOT HIGH		NAME	MEAN HIGH		LOW		HDD		CDD		TOT HIGH	
	TEMP	TEMP	DAY	TEMP	DAY			PPT	24-HR	DAY		TEMP	TEMP	DAY	TEMP	DAY			PPT	24-HR	DAY
<b>PANHANDLE</b>																					
Arnett	58.7	87	4	28	27	217	23	4.53	2.09	14	Goodwell	56.3	89	10	25	27	285	14	4.74	1.63	12
Beaver	57.4	90	4	25	27	259	24	5.41	1.87	14	Hooker	56.4	90	10	25	27	283	16	4.64	1.77	12
Boise City	54.5	85	3	24	27	330	4	3.17	1.39	14	Kenton	55.0	85	10	23	24	316	6	1.72	.73	14
Buffalo	58.6	91	4	27	27	235	37	5.61	2.71	14	Slapout	57.9	89	4	28	27	240	21	4.46	2.00	14
<b>NORTH CENTRAL</b>																					
Alva	58.8	90	4	27	27	231	39	4.74	1.46	6	May Ranch	58.5	88	4	29	27	****	****	4.55	1.67	14
Blackwell	58.9	84	1	26	28	227	39	4.40	1.24	6	Medford	58.7	84	4	28	28	237	40	4.71	1.44	13
Breckinridge	59.0	86	1	27	28	232	46	3.96	1.55	13	Newkirk	58.5	82	1	27	27	230	29	2.96	1.03	22
Cherokee	58.7	86	4	29	28	233	39	4.58	1.31	6	Red Rock	59.8	86	1	25	28	204	43	2.95	.95	22
Fairview	60.3	89	4	31	27	194	48	4.44	1.66	13	Seiling	59.1	89	4	26	27	220	36	4.72	1.14	5
Freedom	59.1	89	4	27	27	219	35	3.54	1.34	14	Woodward	59.0	87	4	27	27	216	31	4.48	1.70	14
Lahoma	59.0	86	4	32	28	226	40	4.59	1.42	13											
<b>NORTHEAST</b>																					
Bixby	60.1	84	1	26	28	190	37	2.02	1.45	22	Nowata	57.9	82	1	23	28	245	24	1.99	1.52	22
Burbank	59.2	84	1	23	28	213	33	2.23	.70	22	Pawnee	60.3	85	1	25	28	183	39	2.08	.83	22
Claremore	60.4	85	1	28	28	177	36	****	****	***	Porter	60.7	84	1	27	28	171	38	1.62	.65	22
Copan	****	***	***	***	***	****	****	3.91	1.77	22	Pryor	58.4	82	1	24	28	229	24	2.44	1.22	22
Foraker	58.9	84	1	27	28	216	28	3.29	1.18	22	Skiatook	60.2	84	1	30	28	181	32	2.91	1.34	22
Inola	58.9	82	1	25	28	214	25	1.87	.98	22	Vinita	57.7	82	11	24	28	246	20	2.11	1.41	22
Jay	58.4	80	11	24	28	230	25	2.99	1.00	4	Wynona	59.4	84	1	25	28	202	27	2.12	1.08	22
Miami	58.0	80	11	25	28	238	20	4.11	2.15	22											
<b>WEST CENTRAL</b>																					
Bessie	60.3	89	4	29	27	****	****	5.72	2.18	13	Putnam	59.4	87	4	30	27	212	38	5.58	1.71	14
Butler	60.2	91	4	27	27	196	46	5.87	1.96	5	Retrop	61.0	90	4	29	27	172	49	4.68	1.49	5
Camargo	****	***	***	***	***	****	****	****	****	***	Watonga	59.7	86	4	31	27	207	43	4.44	1.76	13
Cheyenne	59.8	86	4	30	27	194	32	5.86	2.01	5	Weatherford	59.9	89	4	30	27	202	43	4.18	1.42	13
Erick	59.3	88	4	28	27	204	27	5.92	2.10	14											
<b>CENTRAL</b>																					
Acme	61.4	87	4	30	28	161	49	2.25	1.28	6	Ninnekah	60.5	87	4	27	28	178	40	2.17	1.12	6
Bowlegs	61.2	84	1	25	28	161	42	2.01	.69	15	Norman	61.3	85	1	29	27	160	46	1.62	.61	6
Bristow	59.5	84	1	22	28	205	34	1.45	.96	22	Oilton	59.3	85	1	21	28	210	33	2.77	1.58	22
Lake Carl Blac	59.4	87	1	24	28	214	41	2.46	.81	22	OKC E	61.1	85	1	28	28	169	50	2.14	.67	22
Chandler	61.2	86	1	24	28	163	45	1.17	.65	22	OKC N	62.1	85	1	31	28	150	60	1.99	.83	6
Chickasha	60.3	87	4	26	28	184	39	1.52	.78	6	OKC W	61.9	85	1	31	28	150	52	1.67	.67	6
El Reno	58.9	85	1	24	27	226	38	2.31	.85	6	Okemah	60.5	84	1	25	28	176	35	2.11	.79	22
Guthrie	61.0	86	1	28	27	178	55	2.15	.79	14	Perkins	60.8	86	1	27	28	179	48	2.12	.90	22
Kingfisher	****	***	***	***	***	****	****	2.89	.88	14	Shawnee	61.3	83	1	28	28	162	45	.84	.44	22
Marena	61.1	87	1	27	28	****	****	1.88	.81	22	Spencer	61.2	85	1	28	28	170	52	2.05	.89	22
Minco	60.4	85	4	29	27	181	39	1.48	.57	6	Stillwater	60.1	86	1	25	28	196	44	2.07	.80	22
Marshall	59.7	86	1	25	28	214	49	****	****	***	Washington	61.3	87	4	27	28	158	44	1.24	.60	6
<b>EAST CENTRAL</b>																					
Calvin	61.4	85	1	23	28	156	44	1.44	.72	6	Sallisaw	60.9	83	1	26	28	171	45	1.25	.51	22
Cookson	58.8	80	11	22	28	218	26	.91	.47	22	Stigler	59.9	82	1	25	28	184	27	1.14	.33	6
Eufaula	61.5	84	1	26	28	155	48	****	****	***	Stuart	61.9	84	1	28	28	143	47	1.13	.40	22
Haskell	60.0	85	1	24	28	190	36	1.12	.56	22	Tahlequah	59.7	81	1	24	28	197	31	1.90	.73	22
Hectorville	61.4	84	1	29	28	156	45	2.16	1.56	22	Webbers Falls	61.1	85	1	25	28	167	45	1.27	.55	14
McAlester	61.1	84	1	22	28	165	43	.91	.41	22	Westville	58.5	78	11	24	28	220	18	1.75	.72	22
Okmulgee	60.1	85	1	23	28	190	37	1.02	.57	22											
<b>SOUTHWEST</b>																					
Altus	62.3	92	4	30	27	151	68	3.67	1.34	5	Hollis	61.5	91	4	31	27	158	49	5.64	2.56	5
Apache	61.0	87	4	28	27	****	****	2.06	.82	6	Mangum	60.7	92	4	26	27	186	51	4.28	1.48	5
Fort Cobb	60.6	88	4	29	27	179	44	2.88	1.03	6	Medicine Park	62.6	89	4	34	24	****	****	2.95	1.45	6
Grandfield	63.6	93	4	30	27	125	82	2.19	1.12	13	Tipton	63.1	93	4	31	27	137	79	4.67	1.97	13
Hinton	59.7	88	4	28	27	205	42	3.75	1.05	6	Walters	63.0	90	4	30	28	****	****	2.85	1.03	13
Hobart	61.5	92	4	30	27	171	63	3.73	.88	14											
<b>SOUTH CENTRAL</b>																					
Ada	61.9	86	1	25	28	149	52	1.53	.96	6	Madill	63.9	89	4	27	28	119	84	1.27	1.09	6
Ardmore	63.3	88	4	29	28	****	****	1.37	1.08	6	Newport	63.8	89	4	31	28	113	77	2.51	1.87	6
Burneyville	63.6	90	4	24	28	128	84	1.26	1.07	6	Pauls Valley	62.6	87	4	27	28	136	61	2.67	1.69	6
Byars	63.2	85	1	29	28	****	****	3.07	1.43	6	Ringling	63.2	88	4	31	28	125	69	1.49	.77	6
Centrahoma	61.5	86	1	23	28	****	****	1.21	.62	6	Sulphur	61.4	85	4	24	28	163	53	1.96	1.22	6
Durant	64.0	86	1	28	28	104	71	.33	.17	6	Tishomingo	61.7	86	1	26	28	****	****	1.92	1.00	6
Fittstown	61.4	85	1	27	28	155	43	1.85	.93	6	Vanoss	61.8	86	1	24	28	155	56	1.96	1.30	6
Ketchum Ranch	63.1	89	4	30	28	****	****	2.13	1.47	6	Waurika	63.3	90	4	31	28	121	69	1.84	1.28	6
Lane	61.9	85	1	23	28	142	45	1.07	.65	6											
<b>SOUTHEAST</b>																					
Antlers	60.9	85	1	21	28	168	42	.58	.38	6	Idabel	61.6	82	1	28	28	146	41	4.36	1.79	4
Broken Bow	60.1	83	1	26	28	182	29	5.08	1.93	15	Mt Herman	60.3	81	1	26	28	172	28	3.46	1.26	6
Clayton	61.2	83	1	25	28	158	41	1.38	.67	6	Talihina	60.4	82	1	24	28	180	39	1.98	1.11	6
Cloudy	60.4	83	1	27	28	****	****	3.27	1.48	6	Wilburton	60.5	82	1	23	28	176	38	1.05	.38	22
Hugo	62.1	82	1	30	28	132	41	2.38	.90	15	Wister	58.9	82	11	24	28	212	23	2.45	1.49	6

## October 2008 Mesonet Precipitation Comparison

Climate Division	Precipitation (inches)	Departure from Normal (inches)	Rank since 1895	Wettest on Record (Year)	Driest on Record (Year)	Oct-07
Panhandle	4.29	2.78	7th Wettest	6.41 (2000)	0.03 (1952)	0.26
North Central	4.20	1.54	13th Wettest	9.65 (1998)	0.00 (1952)	3.17
Northeast	2.55	-1.08	45th Driest	17.33 (1941)	0.05 (1917)	4.78
West Central	5.28	2.72	11th Wettest	9.41 (1986)	0.00 (1910)	1.59
Central	1.93	-1.73	39th Driest	13.51 (1941)	0.00 (1917)	3.26
East Central	1.33	-2.94	21st Driest	14.75 (1941)	0.19 (1904)	4.25
Southwest	3.52	0.54	32nd Wettest	11.44 (1983)	0.00 (1952)	2.28
South Central	1.73	-2.52	28th Driest	14.61 (1981)	0.00 (1917)	2.54
Southeast	2.60	-2.36	40th Driest	12.62 (1984)	0.10 (1921)	4.16
Statewide	2.96	-0.42	48th Wettest	11.32 (1941)	0.14 (1952)	2.95

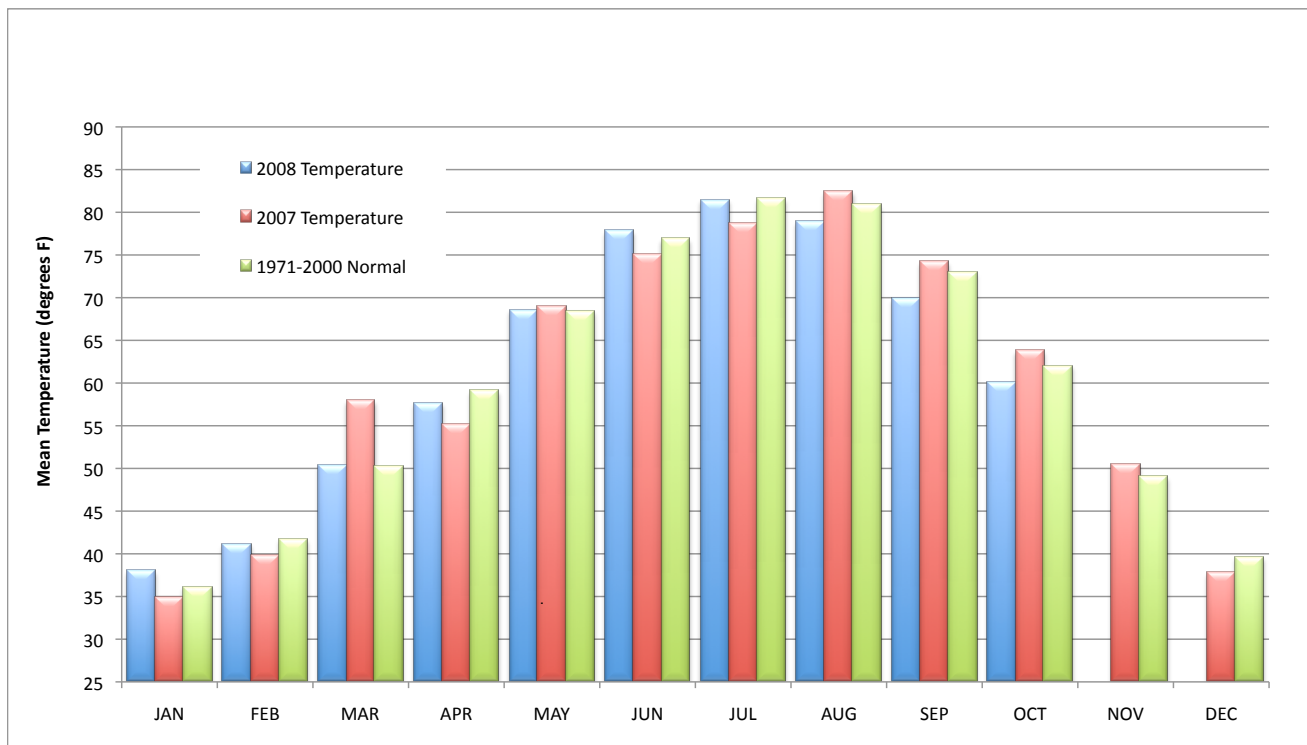
## 2007 and 2008 Statewide Precipitation Monthly Totals vs. Normal



## October 2008 Mesonet Temperature Comparison

Climate Division	Average Temp (F)	Departure from Normal (F)	Rank since 1895	Hottest on Record (Year)	Coldest on Record (Year)	Oct-07 (F)
Panhandle	56.9	-0.9	34th Coolest	66.4 (1963)	50.9 (1925)	61.0
North Central	59.0	-1.4	26th Coolest	69.6 (1963)	52.1 (1925)	62.6
Northeast	59.2	-1.5	28th Coolest	70.0 (1963)	52.9 (1925)	62.7
West Central	59.9	-0.6	40th Coolest	69.0 (1963)	53.8 (1925)	63.4
Central	60.7	-1.2	32nd Coolest	70.3 (1963)	54.5 (1925)	64.0
East Central	60.5	-1.6	28th Coolest	71.2 (1963)	55.5 (1925)	64.7
Southwest	61.8	-0.7	41st Coolest	70.5 (1963)	55.4 (1925)	65.3
South Central	62.7	-0.8	38th Coolest	71.5 (1963)	56.4 (1976)	65.8
Southeast	60.7	-1.7	20th Coolest	70.6 (1963)	55.7 (1976)	65.4
Statewide	60.1	-1.2	30th Coolest	69.9 (1963)	54.4 (1925)	63.8

## 2007 and 2008 Statewide Temperature Monthly Averages vs. Normal





## Mesonet Extremes for October 2008

Climate Division	High Temp (F)			Low Temp (F)			High Monthly Rainfall (inches)			High Daily Rainfall (inches)		
	High Temp (F)	Day	Station	Low Temp (F)	Day	Station	High Monthly Rainfall (inches)	Station	High Daily Rainfall (inches)	Day	Station	
Panhandle	91	4th	Buffalo	23	24th	Kenton	5.61	Buffalo	2.71	14th	Buffalo	
North Central	90	4th	Alva	25	28th	Red Rock	4.74	Alva	1.70	14th	Woodward	
Northeast	85	1st	Claremore	23	28th	Burbank	4.11	Miami	2.15	22nd	Miami	
West Central	91	4th	Butler	27	27th	Butler	5.92	Erick	2.18	13th	Bessie	
Central	87	1st	Marena	21	28th	Oilton	2.89	Kingfisher	1.58	22nd	Oilton	
East Central	85	1st	Calvin	22	28th	Cookson	2.16	Hectorville	1.56	22nd	Hectorville	
Southwest	93	4th	Tipton	26	27th	Mangum	5.64	Hollis	2.56	5th	Hollis	
South Central	90	4th	Burneyville	23	28th	Centrahoma	3.07	Byars	1.87	6th	Newport	
Southeast	85	1st	Antlers	21	28th	Antlers	5.08	Broken Bow	1.93	15th	Broken Bow	
Statewide	93	4th	Tipton	21	28th	Antlers	5.92	Erick	2.71	14th	Buffalo	

# November Climatological Outlook

Oklahoma's weather descends rather rapidly during November from the pleasantries of autumn into the chill of early winter. The state's normal temperature (averaged statewide) during the month, 49.0 degrees Fahrenheit, is the 4th lowest of any of the year's 12 months. Based on monthly averages across the state, November is 13 degrees cooler than October, easily Oklahoma's largest temperature difference between consecutive months. The increasingly frequent intrusions of cooler (and sometimes frigid) air, frequently accompanied by some dreary, dismal weather, are usually separated by interludes of gorgeous autumn days. The pleasant interludes provide farmers with an opportunity to complete the harvest of peanuts, cotton, and sorghum, or to finish drilling the new wheat crop. The statewide-averaged November normal precipitation is 2.78 inches, making November the 6th wettest of the months in Oklahoma. Snow, sleet, and ice are frequent late-November visitors to the state, too often creating travel hazards during the long Thanksgiving weekend.

## Temperature

Mean: 49.0 degrees  
Warmest November: 1989, 56.2 degrees  
Coolest November: 1929, 42.6 degrees  
Warmest location: Waurika, 53.4 degrees  
Coolest location: Turpin, 42.8 degrees  
Hottest recorded: 95 degrees, Waukomis, November 1, 1914  
Coalgate, November 1, 1937  
Coldest recorded: -15 degrees, Kenton, November 28, 1976

Statewide-averaged monthly temperature extremes for the Novembers since 1892 have varied between 56.0 degrees in 1999 and 41.3 degrees in 1929. The range of normal daily average temperatures across the state, as published by the National Climatic Data Center, is from 53.4 degrees at Waurika to 42.8 degrees at Turpin. Normal daily maximum temperatures fall between Waurika's 65.3 degrees and Newkirk's 56.6 degrees. Normal daily minimum temperatures range from 42.9 degrees at Okemah to 28.4 degrees at three panhandle reporting stations (Turpin, Boise City, and Beaver). Hot weather is rare, but not absent, during the month. Coalgate set a state record for November's highest temperature when the thermometer registered 95 degrees on November 1, 1937. November's coldest day, according to the Oklahoma record book, occurred on November 28, 1976 when a temperature of 15 degrees below zero (-15) was reported at Kenton.

## Precipitation

Mean: 2.78 inches  
Wettest year: 1909, 5.72 inches  
Driest year: 1910, 0.12 inches  
Wettest location: Carnasaw Fire Tower, 5.64 inches  
Driest location: Goodwell and Regnier, 0.61 inches  
Most recorded: 17.01 inches, Idabel, 2000

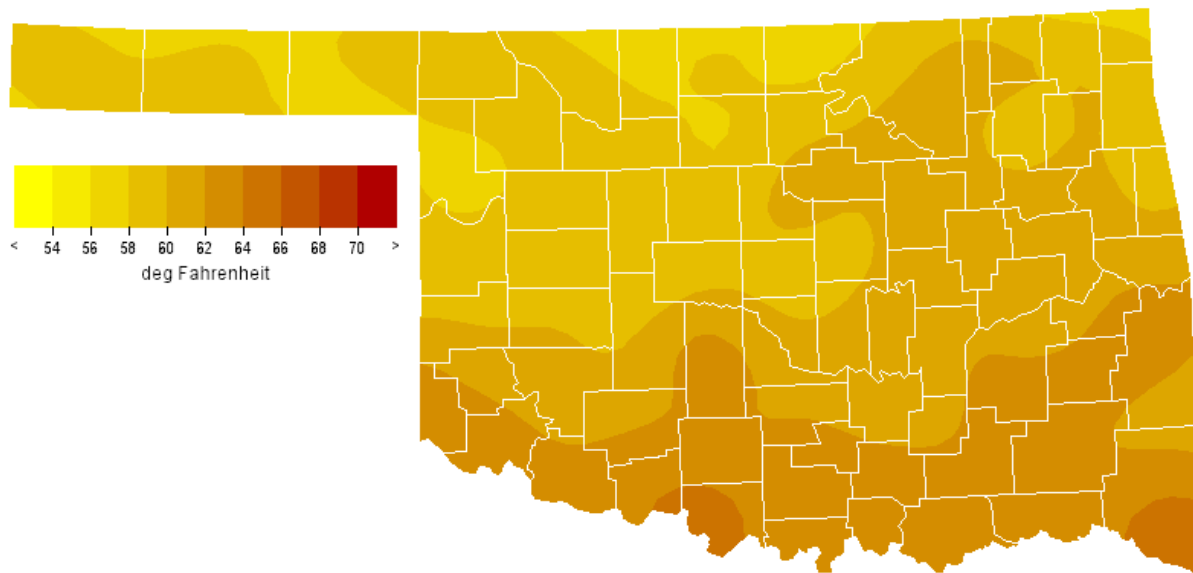
November precipitation is highly variable from year-to-year. The state's driest recorded November, a statewide averaged precipitation of 0.12 inches was attained three times in 1910, 1949, and 1989. The record high precipitation for November is 5.72 inches in 1909. During much of the state's history, November was thought of as a much drier month than it is today. During the period from 1931 through 1960, the statewide-averaged precipitation during November across Oklahoma was only 1.87 inches, nearly a full inch less than the currently established monthly normal (compiled from 1971 through 2000). Annual precipitation across Oklahoma compiled from the earlier was a full 3.25 inches less than the value currently in use. Increased precipitation during November has contributed more to the recent increases in annual precipitation than any other month. At individual locations within Oklahoma, November normal precipitation ranges 5.64 inches at the Carnasaw Fire Tower in McCurtain County to 0.61 inch at the panhandle's Goodwell and Regnier. Stilwell averages 9.6 days with measurable precipitation (at least 0.01 inch), whereas Leedey averages a mere 2.4 such days. Ponca City holds the record for most precipitation in one day at a recognized reporting site during November: 11.11 inches on November 20, 1979. Idabel recorded 17.01 inches of precipitation during November 2000 to establish the record for total precipitation during the month at a regular reporting station.

## Tornadoes

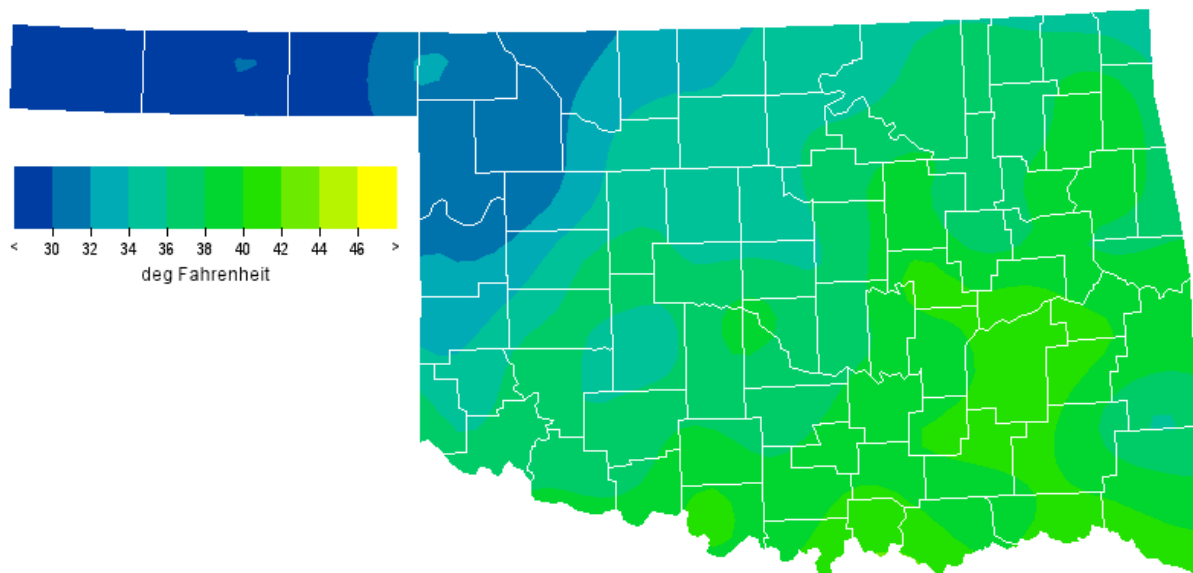
Average November Tornadoes: 1  
Most: 12 (1958)

Severe and dangerous weather takes on a myriad of forms during November. There were 76 November tornadoes reported in the state from 1950 through 2003. Twelve of those were recorded on November 17, 1958 to establish the state record for most November tornadoes, both during a month and on a day. A tornado that struck Camel Creek School and the town of Bethany on November 19, 1930 killed 23 people. On November 4, 1922, a tornado between Shamrock and Drumright resulted in 11 deaths. The most recent November tornado fatalities occurred on November 19, 1973 when five people were killed in Blanchard. There were no tornadoes reported within the state during 32 of those 54 Novembers.

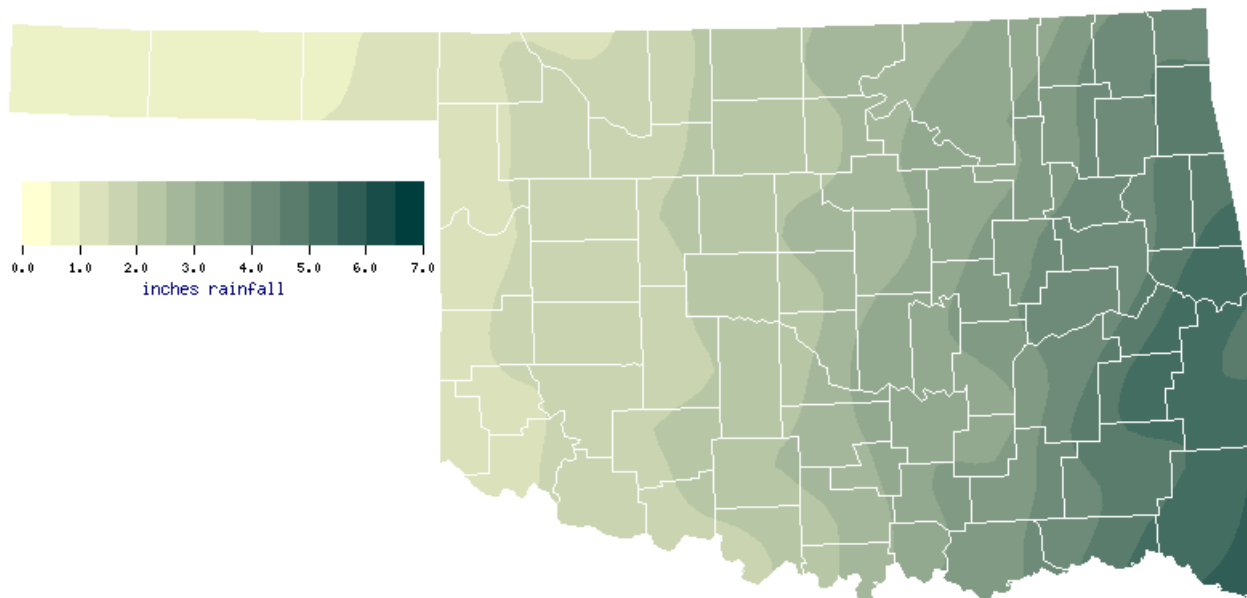
## November Normal Daily Maximum Temperature (1971-2000)



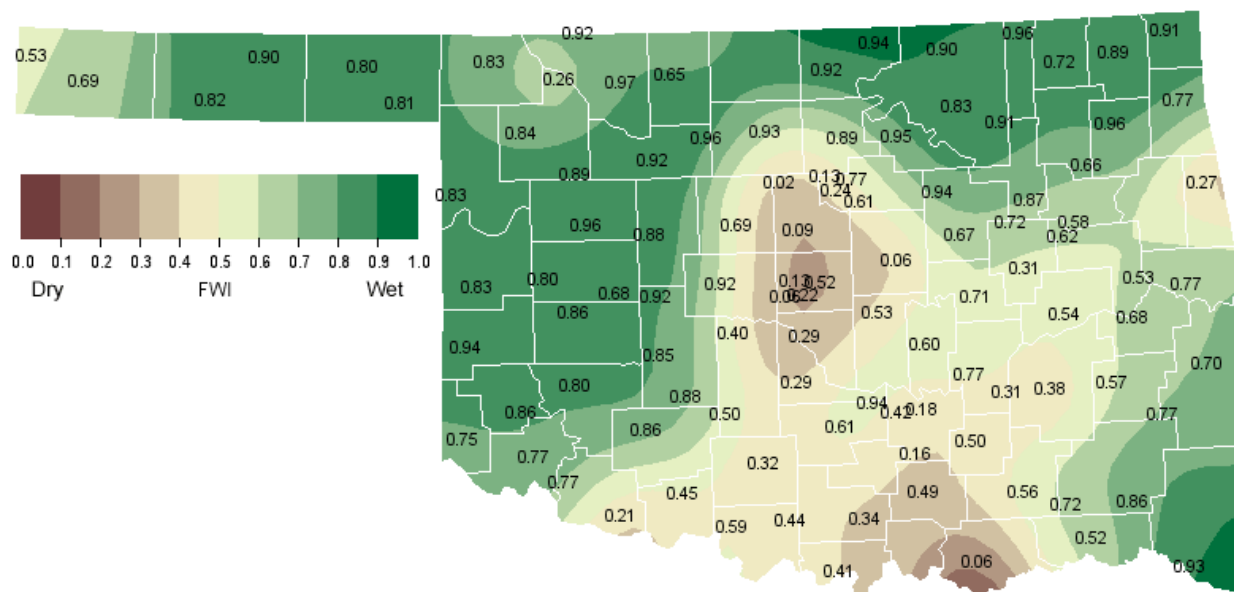
## November Normal Daily Minimum Temperature (1971-2000)



## November Normal Precipitation (1971-2000)



## November 1, 2008 Soil Moisture Conditions at 25cm



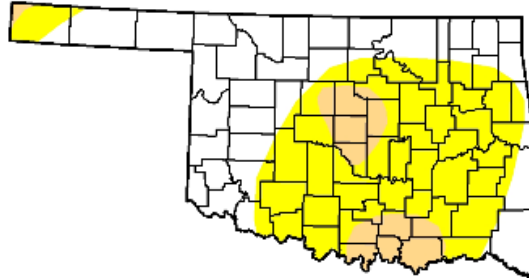
# U.S. Drought Monitor

## Oklahoma

November 4, 2008  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	45.1	54.9	9.7	0.0	0.0	0.0
Last Week (10/28/2008 map)	75.9	24.1	4.6	0.0	0.0	0.0
3 Months Ago (08/12/2008 map)	62.6	37.4	8.2	5.5	3.5	0.0
Start of Calendar Year (01/01/2008 map)	83.4	16.6	7.1	0.0	0.0	0.0
Start of Water Year (10/07/2008 map)	84.4	15.6	5.0	3.5	0.0	0.0
One Year Ago (11/06/2007 map)	76.7	23.3	6.0	0.0	0.0	0.0



**Intensity:**

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

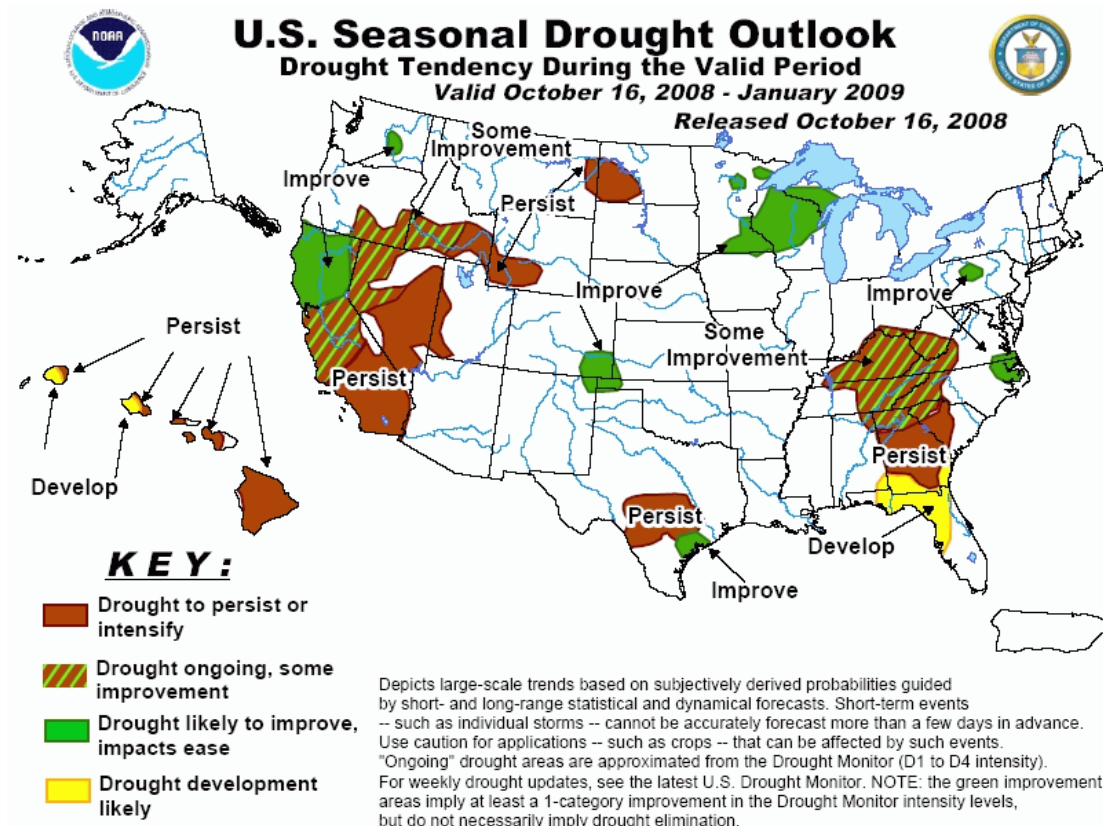
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements



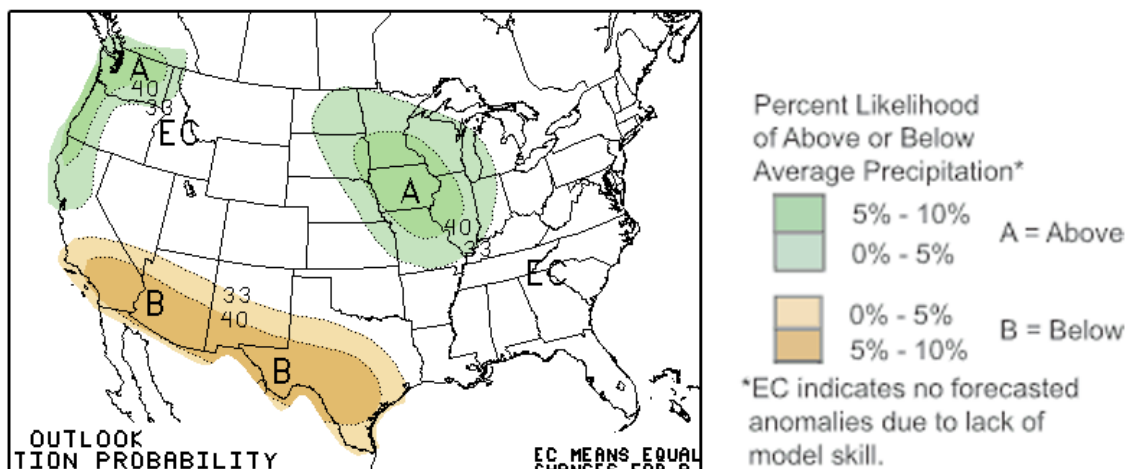
Released Thursday, November 6, 2008

Author: Mark Svoboda, National Drought Mitigation Center

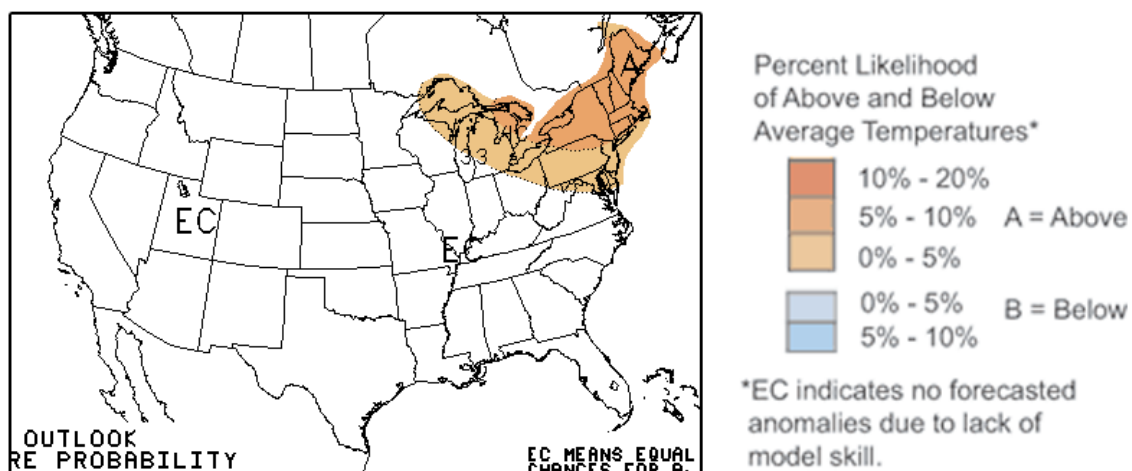
<http://drought.unl.edu/dm>



## November 2008 U.S. Precipitation Forecast



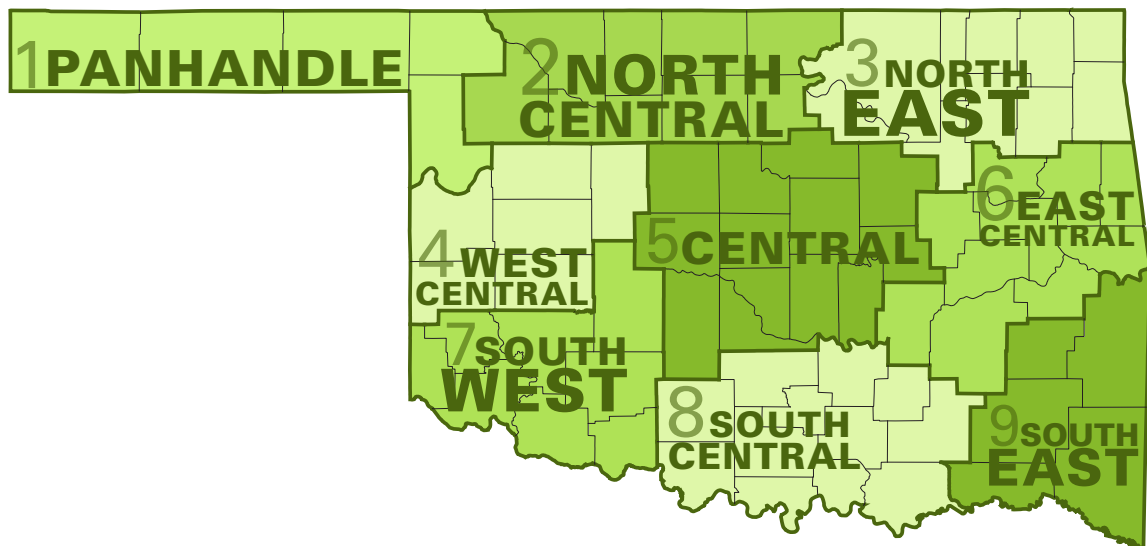
## November 2008 U.S. Temperature Forecast



## November Climate Normals

Climate Division	Max. Temperature (°F)	Min. Temperature (°F)	Avg. Temperature (°F)	Precipitation (inches)
1	58.8	30.2	44.6	1.0
2	58.1	33.4	45.8	2.1
3	60.0	37.5	48.8	3.6
4	59.0	34.3	46.7	1.7
5	60.3	37.2	48.8	2.7
6	60.9	39.0	50.0	4.2
7	61.7	36.3	49.0	1.7
8	62.7	39.2	51.0	3.1
9	63.0	39.0	51.0	5.0
Statewide	60.5	36.4	48.5	2.9

## 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.mesonet.org> or

<http://climate.ok.gov/>

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



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