agweather connection

n Oklahoma, weather isn't always typical. This summer, many parts of the state experienced the expected scorching temperatures and sporadic rainfall. However, several normally dry areas had very heavy rains. A strip of the state from Cheyenne towards Medford and surrounding areas in north central Oklahoma received almost twice their normal rainfall this summer.

"The Oklahoma Mesonet station at Cheyenne had 13.8 inches of rain from June 1-August 24 while Blackwell had 17.9 inches," said Gary McManus, Associate State Climatologist. "Normal summer (June-August) rainfall at Cheyenne is 7.47 inches, so their total is more than 6 inches above normal. Blackwell's normal total is a bit higher at 11.49 inches, so their total this summer is also more than 6 inches above normal."

McManus said it is important to remember that the so-called normal is a mixture of high and low totals. The areas of Oklahoma that are "normally" dry see more dry times than wet times, but they still experience rainfall. In a sense, normal weather is made up of the unusual, especially here in Oklahoma. But really, wet patterns are a bit unusual in Oklahoma, said McManus.

"This summer, that part of the state just happened to get into a favorable pattern that saw multiple storms move across the area," said McManus. "There is no distinct reason why these areas might have received heavy rainfall when they are normally dry."

Although some portions of Oklahoma received heavy rainfall, other parts of the state were exceedingly hot and dry.

"Buffalo received less than 5 inches of rain from June 1-August 24 which is about 4 inches below normal. Similar deficits were seen in the Panhandle and southern Oklahoma," said McManus. "Extreme heat visited two parts of the state during July with 115°F being recorded by the Mesonet sites at Buffalo and Freedom on July 9 and July 10, respectively. That tied the all-time record high for any month at Buffalo and broke Freedom's alltime record high."

Because of Oklahoma's location, the state usually has a high pressure dome set up over it, which tends to pump up the heat and dial down the rainfall, said McManus. However, as shown by this summer, Oklahoma's weather can be fickle.

"Oklahomans should always be prepared for the unusual when it comes to weather," said McManus. "Our history demands it."

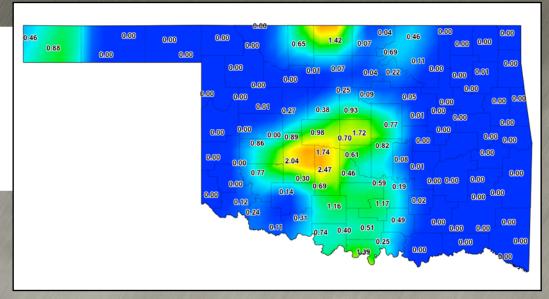
WEATHER EXTREMES INCLUDE:

Highest temperature, 120°F, five locations, Alva, 7/18/1936 Altus, 7/19/1936 and 8/12/1936 Poteau, 8/10/1936 Tishomingo, 7/26/1943 Tipton, 6/27/1994 Lowest Temperature, -27°F, Vinita, 2/13/1905 Watts, 1/18/1930 Highest 1-day rainfall, 15.68 inches, Enid, 10/11/1973

LOOKING BACK

Accumulated rainfall maps

- Start at http://agweather.mesonet.org
- Select "Weather" from the horizontal menu
- Choose "RAINFALL"
- The "7-day Rainfall Accumulation" is shown at right, but there are a number of time frames to choose from



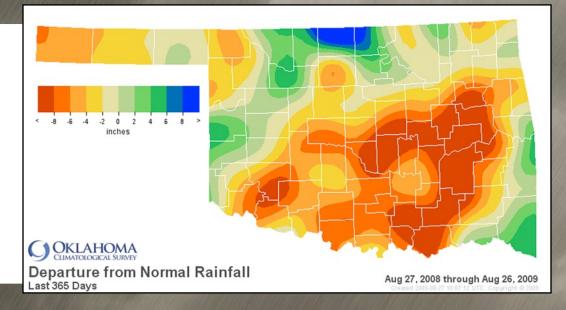
Rainfall and drought update

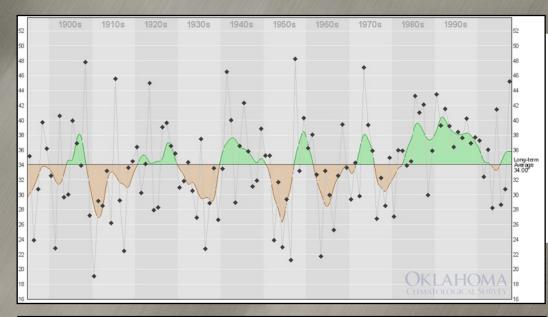
- Start at <u>http://agweather.mesonet.org</u>
- Select "Climate" from the horizontal menu
- Then pick "OKLAHOMA CLIMATE DATA"
- Then select "Drought and Rainfall Update"
- "Last 365 days," which is on the horizontal menu, is shown at right, but there are a number of time frames to choose from

	ision Rainfall Normal Normal Driest since Wettest since (88 periods)										
Climate Division				Driest since	Wettest since						
Panhandle	17.13"	-3.97"	81%	2005-06 (16.92")	2007-08 (20.54")	27th driest					
N. Central	33.44"	+1.79"	106%	2005-06 (20.39")	2007-08 (36.27")	24th wettest					
Northeast	40.47"	-1.50"	96%	2005-06 (27.42")	2007-08 (61.08")	37th wettest					
W. Central	29.62"	+0.53"	102%	2007-08 (27.70")	2006-07 (43.10")	21st wettest					
Central	32.06"	-5.93"	84%	2005-06 (22.12")	2007-08 (41.85")	35th driest					
E. Central	38.14"	-7.95"	83%	2005-06 (26.32")	2007-08 (52.76")	26th driest					
Southwest	25.53"	-5.27"	83%	2005-06 (18.51")	2007-08 (25.73")	31st driest					
S. Central	33.30"	-7.66"	81%	2005-06 (23.91")	2007-08 (35.79")	31st driest					

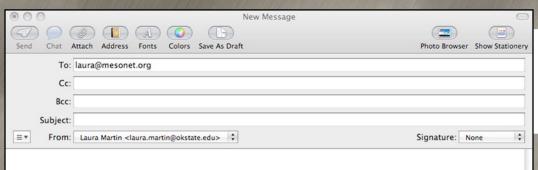
Departure from normal

- Start at http://agweather.mesonet.org
- Select "Climate" from the horizontal menu
- Then pick "OKLAHOMA CLIMATE DATA"
- Then select "Drought and Rainfall Update"
- "Last 365 days," which is on the horizontal menu, is shown at right, but there are a number of time frames to choose from
- Scroll down to the bottom of the page and you will have four "Rainfall Stats" maps to choose from





Mesonet Rainfall To									
Data complete through	-								
Station	7 Day	10 Day	14 Day	30 Day	60 Day	90 Day	August	2009	2008
Acme	0.65	0.88	0.88	5.69	9.14	11.42	1.11	28.94	25.64
Ada	0.01	0.03	0.03	1.60	6.47	12.52	1.28	31.02	•
Altus	0.07	0.15	0.15	3.03	4.39	6.10	0.57	17.21	21.13
Alva	0.26	3.79	3.79	•	•	•	•	•	28.98
Antlers	0.06	0.10	0.10	3.10	5.93	9.18	2.72	32.62	44.99
Apache	0.13	0.98	0.98	4.40	7.64	9.84	0.99	23.67	28.40
Ardmore	0.34	0.37	0.37	3.87	5.78	7.58	1.34	27.54	25.16
Arnett	0.00	2.76	2.84	5.96	6.85	7.40	4.33	12.58	
Beaver	0.13	2.02	2.18	3.82	4.75	7.68	2.40	12.76	18.92
Bessie	0.86	3.33	3.33	6.22	10.04	•	3.45	•	31.96
Bixby	1.25	2.37	2.37	5.60	7.41	9.64	4.14	26.02	53.08
Blackwell	0.08	6.82	7.01	9.59	14.18	17.96	9.03	•	•
Boise City	1.11	1.20	1.20	2.32	5.37	6.29	1.40	9.38	13.10
Bowlegs	0.15	0.34	0.43	4.55	7.56	9.73	4.23	26.24	45.87
Breckinridge	0.23	4.33	4.60	7.31	9.04	10.72	6.83	19.22	•
Bristow	0.32	0.90	0.90	3.45	6.24	8.67	1.55	24.26	41.42
Broken Bow	1.12	1.14	1.15	8.13	15.15	15.97	4.79	47.55	53.88
Buffalo	0.19	1.07	1.07	2.11	2.50	4.83	1.89	10.65	23.14
Burbank	0.79	4.46	4.84	5.64	11.34	14.77	5.32	28.93	44.30
Burneyville	0.39	0.40	0.40	1.87	5.12	6.74	0.91	30.79	22.84
Station	7 Day	10 Day	14 Day	30 Day	60 Day	90 Day	August	2009	2008
Butler	0.00	3.00	3.03	5.08	8.10	9.87	3.62	19.09	27.47
Byars	0.03	0.62	0.62	1.95	5.99	8.16	1.26	26.42	32.45
Camargo	0.00	2.18	2.22	5.46	6.37	7.01	2.96	15.93	*
Centrahoma	0.00	•	•	•	•				35.52
Chandler	1.75	3.01	3.03	8.31	11.05	11.82	4.96	24.78	34.78



Rainfall trends

- Start at http://agweather.mesonet.org
- Select "Climate" from the horizontal menu
- Then pick "OKLAHOMA CLIMATE DATA"
- Choose "OK Climate Trends"
- Select a climate division and product type. Then choose a time frame.
- The graph at left shows Annual Statewide Precipitation

Rainfall totals

- Start at http://agweather.mesonet.org
- Click "Weather" from the horizontal menu
- Then select "RAINFALL"
- Finally, choose ""Recent Mesonet Rainfall Table"

E-mail us

 If you are looking for data you can't find or are looking for a specific time period, just shoot us an <u>e-mail</u> and let us help As we move from summer to fall, Oklahoma begins to gradually cool down. Storm systems and cold fronts march across the state, bringing a secondary rainy season and severe weather.

"Early September is still basically summer-type weather and really a continuation of August," said Gary McManus, Associate State Climatologist. "By about mid-September, however, more frequent and powerful cold fronts begin to make their way to Oklahoma. Then it's a steady cool down through December."

Northwest Oklahoma experiences a freeze before the end of September in about 10 percent of years. Oklahoma has been as hot as 115 degrees (Alva, 9/3/1939 and 9/3/1947) and as cold as 25 degrees (Boise City, 9/30/1985) during September, said McManus. October weather means jackets in the morning but those can usually be slung over a shoulder in the afternoon. Triple digit temperatures are rare in October. The northern two-thirds of Oklahoma has a 50/50 chance of their first freeze in October, said McManus.

"November begins the cool season in Oklahoma, even though it is still considered fall," said McManus. "Cold air makes regular excursions into the state and the only savior is the occasional Indian Summer – that stretch of weather in the 70s and 80s that can occur after an extended cold period. But in general, November goes downhill rather quickly from fall to winter."

Snow, sleet and ice are frequent late-November visitors to the state. Many Thanksgiving travel plans have been ruined due to wintry weather, said McManus. Extreme southern Oklahoma normally will see their first freeze in late November.

December is winter, pure and simple, the state's second-coldest month, said McManus.

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