

# agweather connection

## EL NINÑO

### Will it stay or go this spring?

As Oklahoma marches into spring, wet and cool weather continues to beleague the state, but will it continue? The current conditions are a product of an El Niño weather pattern. El Niño is the warming of the eastern tropical ocean waters, which can impact weather patterns across the globe.

"The El Niño effects in the state are often minimal, with stronger impacts to the south of Oklahoma," said Gary McManus, Associate State Climatologist. "However, with a strong event like this one, Oklahoma can see wetter and cooler conditions, such as what occurred this winter. This happens as the jet stream, or storm track, is drawn farther to the south. The additional rain chances and cloudiness result in an increase in precipitation and lower temperatures."

Winter storms blanketed the state in rain, snow and ice, causing a statewide surplus of 0.18 inches compared to normal.

"This winter was fairly wet in the southern half of the state along with the Oklahoma Panhandle and generally normal or below normal in the north," said McManus. "Statewide, the winter of 2009-2010 ranked as the 30th wettest since 1921."

Typically, Oklahoma sees very few significant snowstorms. Snowfalls of 8 inches or more generally occur once every couple of years in the northwest to about every other decade in the far south, said McManus.

"This year has definitely been more active, owed in part to the strong El Niño, especially in southern Oklahoma," said McManus.

The El Niño weather conditions are expected to continue through spring 2010 according to a publication released by the National Oceanic and Atmospheric Administration. NOAA's seasonal outlooks for April through June 2010 show much of Oklahoma below average in temperature, whereas only the Panhandle looks to have a chance at above average precipitation. The rest of the state has an equal chance at above average or below average precipitation.

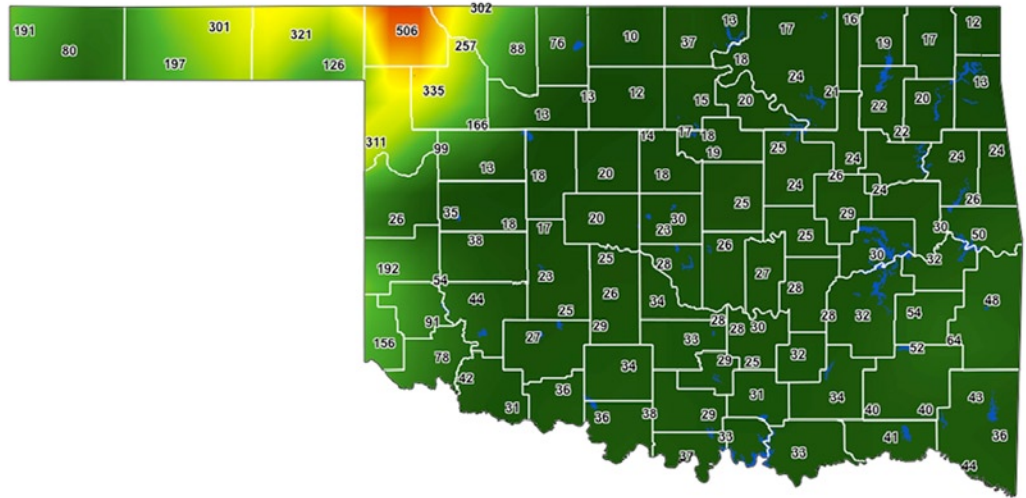
So, it appears cooler, wetter weather is here to stay, for a while. Perhaps Oklahoma's blistering heat, and scorched fields and lawns will be forgotten this summer.



# COLDER & WETTER

## Keetch-Bryam Drought Index

- Start at <http://aqweather.mesonet.org>
- Click "Soil/Water" from the horizontal menu
- Select "DROUGHT" from the left menu
- Choose "Keetch-Bryam Drought Index"
- The drought index is based on an arbitrary 8 inches of water in the soil. When the full 8 inches of water are available, the scale equals 0. As water evaporates, the drought index increases in value. When the scale equals 800, all the water has been removed from the soil



## Recent Rainfall

- Start at <http://aqweather.mesonet.org>
- Click "Weather" from the horizontal menu
- Select "RAINFALL" from the left menu
- Choose "Recent Mesonet Rainfall Table"

**Mesonet Rainfall Totals (In Inches)**  
Data complete through 11:59 pm CST March 10, 2010

Station	7 Day	10 Day	14 Day	30 Day	60 Day	90 Day	March	2010	2009
Acme	0.62	0.64	0.76	*	*	*	0.64	*	41.40
Ada	0.91	0.91	1.23	2.41	5.70	7.40	0.91	5.72	49.97
Altus	0.43	0.63	0.63	0.93	*	*	0.63	*	26.14
Alva	0.89	0.93	1.00	1.23	2.25	2.37	0.93	2.25	*
Antlers	1.13	1.21	1.85	3.34	9.53	11.47	1.21	9.70	54.53
Apache	0.88	0.92	1.06	2.29	5.26	5.91	0.92	5.28	35.35
Ardmore	1.21	1.40	1.56	2.63	5.73	7.15	1.40	5.77	44.52
Arnett	0.52	0.53	0.71	0.81	2.37	2.45	0.53	2.37	*
Beaver	0.87	0.87	1.21	1.68	3.13	3.16	0.87	3.13	16.11
Bessie	*	*	*	*	*	*	*	*	*
Bixby	0.84	0.84	0.94	2.23	5.48	7.20	0.84	5.52	45.16
Blackwell	1.33	1.33	1.34	2.16	3.66	4.01	1.33	3.67	*
Boise City	0.92	0.95	0.98	1.45	2.40	2.43	0.95	2.40	16.01
Bowlegs	1.62	1.62	2.30	3.82	7.67	9.26	1.62	7.68	46.72
Breckinridge	1.00	1.00	1.02	1.71	3.55	3.66	1.00	3.55	28.39
Bristow	1.26	1.26	1.48	2.99	5.68	6.48	1.26	5.70	41.03
Broken Bow	1.21	1.25	1.89	3.01	11.99	15.16	1.25	12.12	76.61
Buffalo	0.60	0.65	0.69	1.26	2.54	2.58	0.65	2.54	14.35
Burbank	1.24	1.24	1.24	2.17	4.20	4.66	1.24	4.25	39.40
Burneyville	1.22	1.88	1.97	3.35	6.41	8.53	1.88	6.48	51.22
Station	7 Day	10 Day	14 Day	30 Day	60 Day	90 Day	March	2010	2009
Butler	0.29	0.29	0.37	0.80	3.10	3.17	0.29	3.10	26.48
Byars	1.12	1.12	1.42	2.99	5.85	7.47	1.12	5.86	43.46
Camargo	0.39	0.39	0.48	0.67	2.25	2.32	0.39	2.25	22.77
Centrahoma	1.89	1.89	2.50	3.63	7.02	8.66	1.89	7.07	*
Chandler	0.76	0.76	0.85	2.41	5.43	6.53	0.76	5.47	36.97
Cherokee	0.76	0.76	0.80	1.10	2.27	2.39	0.76	2.27	28.61
Cheyenne	0.27	0.27	0.33	1.00	3.51	3.59	0.27	3.51	26.25
Chickasha	0.63	0.63	0.86	1.93	4.88	5.55	0.63	4.88	36.78
Claremore	1.04	1.04	1.04	2.31	6.06	8.41	1.04	6.11	50.49
Clayton	0.52	0.66	1.20	2.46	6.11	8.85	0.66	6.14	59.04
Cloudy	0.91	0.94	1.59	3.03	11.69	16.30	0.94	11.83	*
Cookson	0.76	0.76	0.80	1.92	5.48	7.00	0.76	5.48	60.10

Shown as March 2010												
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday						
Periods of Record	1 T Avgs: 61/33	2 T Avgs: 61/35	3 T Avgs: 61/33	4 T Avgs: 62/34	5 T Avgs: 62/34	6 T Avgs: 63/35						
Temps 1954-2009	Sig Prcp Freq: 9%						Sig Prcp Freq: 13%					
Precip 1954-2009	Extremes:						Extremes:					
Snow 1954-2009	High T 92 (2006)						High T 87 (2006)					
	Low T 10 (1962)						Low T 6 (1980)					
	Precip 0.59 (2004)						Precip 0.75 (1988)					
	Snow 3.0 (1995)						Snow 3.0 (1995)					
7 T Avgs: 64/35	8 T Avgs: 62/35	9 T Avgs: 63/36	10 T Avgs: 66/36	11 T Avgs: 65/39	12 T Avgs: 63/39	13 T Avgs: 64/38						
Sig Prcp Freq: 11%							Sig Prcp Freq: 16%					
Extremes:							Extremes:					
High T 84 (1974)							High T 81 (1974)					
Low T 12* (1955)							Low T 8 (1967)					
Precip 1.03 (1998)							Precip 1.48 (1976)					
Snow trace (1998)							Snow 2.0 (1964)					
14 T Avgs: 66/37	15 T Avgs: 65/39	16 T Avgs: 63/37	17 T Avgs: 66/38	18 T Avgs: 66/40	19 T Avgs: 64/41	20 T Avgs: 66/39						
Sig Prcp Freq: 11%							Sig Prcp Freq: 11%					
Extremes:							Extremes:					
High T 90 (1967)							High T 84* (1955)					
Low T 13 (1954)							Low T 15 (1954)					
Precip 1.82 (1990)							Precip 1.36 (1998)					
Snow trace (1999)							Snow trace (1999)					
21 T Avgs: 67/38	22 T Avgs: 67/39	23 T Avgs: 69/41	24 T Avgs: 67/41	25 T Avgs: 66/39	26 T Avgs: 65/40	27 T Avgs: 68/42						
Sig Prcp Freq: 16%							Sig Prcp Freq: 9%					
Extremes:							Extremes:					
High T 88 (1997)							High T 89 (1995)					
Low T 19 (1974)							Low T 12 (1955)					
Precip 1.22 (1957)							Precip 1.07 (1979)					
Snow 4.0 (1968)							Snow 2.0 (2006)					
28 T Avgs: 69/44	29 T Avgs: 68/43	30 T Avgs: 66/42	31 T Avgs: 70/41	Key		Mar. Averages						
Sig Prcp Freq: 27%				* - Record since tied		High Temp 65 F						
Extremes:				Highlight = Mar record		Low Temp 39 F						
High T 91 (1963)				Extremes:		All Temps in deg F						
Low T 22 (1955)				All Precip in inches		Avg Temp 52 F						
Precip 0.99 (1996)				Sig Prcp Freq = Pct of		Precip 2.45*						
Snow 0.87 (1958)						Snow 0.4*						

## Averages and Extremes

- Start at <http://agweather.mesonet.org>
- Click "Climate" from the horizontal menu
- Choose "Oklahoma Climate Data" from the left menu
- Select "OK Climate Data"
- Pick "Coop Data" from the bottom of the left-hand menu
- Choose "Monthly Climate Calendar"
- Finally, select a Coop Station and a month
- It is interesting to compare these calendars to the Monthly Weather Summaries found in the "Climate" Section under "PAST WEATHER DATA"

## April – June 2010

### Temperature

THREE-MONTH OUTLOOK  
TEMPERATURE PROBABILITY  
0.5 MONTH LEAD  
VALID TO JUN 2010  
MADE 18 MAR 2010

### Precipitation

THREE-MONTH OUTLOOK  
PRECIPITATION PROBABILITY  
0.5 MONTH LEAD  
VALID TO JUN 2010  
MADE 18 MAR 2010

**The seasonal outlooks combine the effects of long-term trends, soil moisture, and, when appropriate, the ENSO cycle.**

## El Niño Outlook

- Start at <http://agweather.mesonet.org>
- Click "Climate" from the horizontal menu
- Then choose "NATIONAL CLIMATE DATA" from the left menu
- Select "El Niño - S. Oscillation"
- Under the "Expert Discussions/Assessments" section, there is a helpful link to a "Weekly El Niño (ENSO) Evolution, Status, and Prediction Presentation"
- This document discusses current conditions, outlooks and a summary. Some of the information can be overwhelmingly scientific, but there are some great graphics and explanations

# HARVEST HISTORY

HARVEST  
2010

Although it is too early to predict the success of this year's harvest, 95 percent of the state's wheat ranked fair to excellent as of March 22. Any late freezes could alter the ranking.



The ice and snow storms in late 2009 and early 2010 toppled utility poles and cost the state millions.

HARVEST  
2009

Winter 2009 was dry. A warm February and March was followed by late freezes in April. The freezes caused significant damage and Oklahoma only harvested about 77 million bushels of wheat.

HARVEST  
2008

In 2008, the right combination of weather conditions produced a harvest of 166.5 million bushels of wheat. Farm communities rejoiced.



HARVEST  
2007

In 2007, a late freeze in April damaged some wheat. In May and June, rain and muddy fields prevented about 40 percent of the wheat from being harvested.

Spring and summer 2007 were very wet. Flooding was widespread throughout Oklahoma.

HARVEST  
2006

In winter of 2005-2006, Oklahoma experienced a significant drought and fire season for the state. The drought devastated the wheat crop, which ended up being about 50 percent of average.

Hundreds of thousands of acres in Oklahoma were lost to wildfires in 2005-2006.

