

June 2014 Temperature and Precipitation Summary

June 1st – 14th: For the first week of June, Arizona experienced dry conditions with not even a trace of precipitation reported anywhere in the state. Temperatures on average were slightly above normal. Moving into the second week, a low pressure center making its way through the southwest generated some thunderstorm activity. Areas of north and northeast Phoenix reported a trace of rain on the 10th and 11th. Prescott also reported a trace of rainfall on the 11th; but no station had measurable rainfall until the 13th of June. In fact, the 13th and 14th were the only two days of the month that any measureable rain fell. On the 13th, Douglas had 0.05", Bisbee-Douglas Airport had 0.04, and Safford had 0.01", while on the 14th, Bisbee-Douglas Airport had another 0.04". Several records were set or tied within the first two weeks in Phoenix and Tucson: three high minimum records in Phoenix and two high minimum records in Tucson. One high maximum record of 110°F was tied in Phoenix on the 2nd while Tucson set a new high maximum of 108°F on the 2nd and tied a high maximum of 107°F on the 3rd. Temperature and precipitation record details can be found in the Climate Statistics section of this report.

<u>June 15th – 30th</u>: The second half of the month was not quite as dry as the first half. As a trough in the jet stream moved over the southwest, thunderstorms developed over the southeastern part of the state, with rainfall amounts up to 0.15" in the Tucson area on the 17^{th} and 18^{th} . Things dried out again as westerly flow returned, though temperatures remained near normal through the end of the month. On the 29^{th} , both Tucson and Flagstaff reported a trace of rain. Phoenix airport continued to have no measurable rain for the month of June. Regarding temperature records, Flagstaff tied a high minimum temperature of 57° F, first set in 1949.

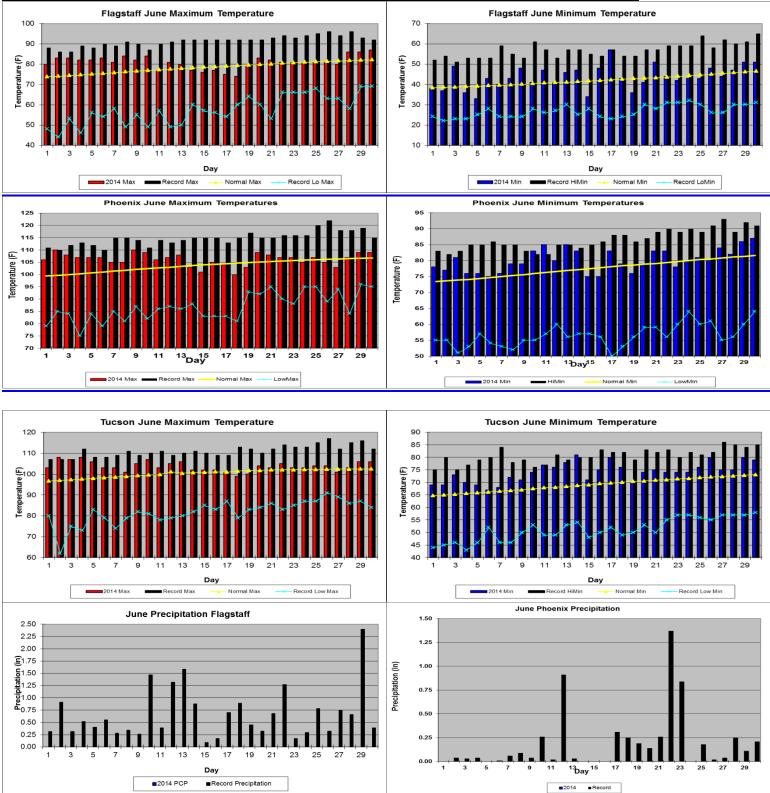
In This Issue: Overview of June, graphs of the June daily maximum and minimum temperatures, precipitation, mean daily dew points for Flagstaff, Phoenix, and Tucson; June climate statistics, maps of mean monthly maximum and minimum temperatures, precipitation, dew points, wind speeds for June; and graphs of the mean June temperature and precipitation for the period of record for Tucson, Phoenix, and Flagstaff, graphs of the cumulative precipitation for the calendar year for Flagstaff, Phoenix, and Tucson. Climate calendars for Flagstaff, Phoenix, Tucson, Prescott, Winslow and Yuma, including daily and monthly normals and extremes, for each month of the year, can be downloaded directly from the State Climate website. See p. 19 of this report for calendar abbreviations.

Data are preliminary and are from the National Weather Service Forecast Offices in Flagstaff, Phoenix and Tucson. **<u>Note:</u> The discrepancy between the Statewide Temperature and Precipitation values for Phoenix, Flagstaff and Tucson and the daily values in their graphs are due to the reporting times. Statewide Temperature and Precipitation values are taken at 5pm, while official daily records at the airports are taken from Midnight to Midnight.

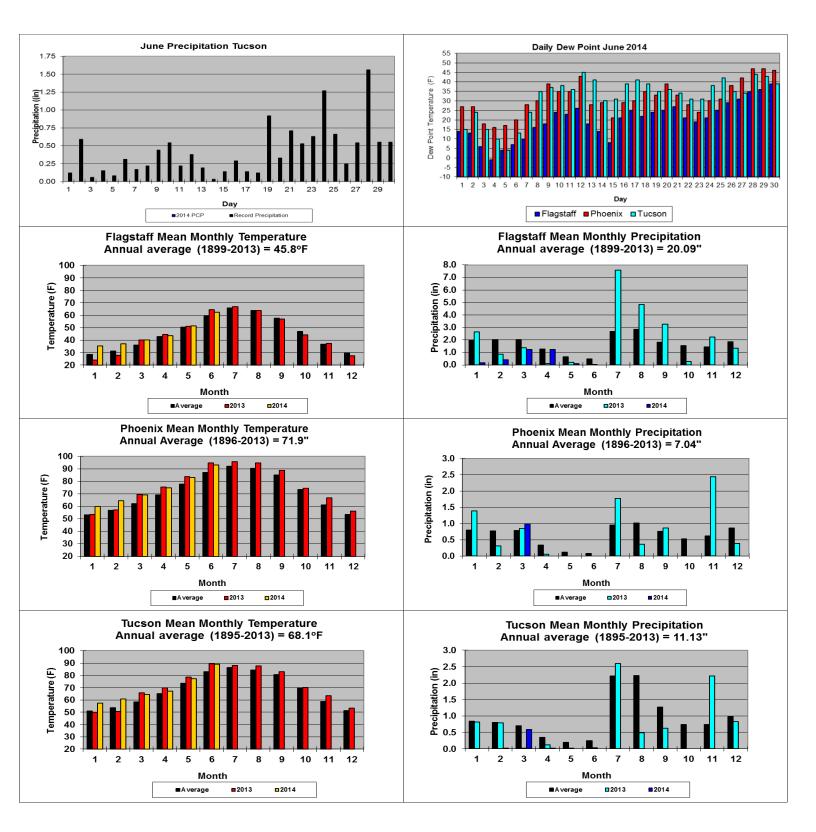
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June 2014 Daily Temperature, Precipitation, & Dew Point for Flagstaff, Phoenix, and Tucson



FLAGSTAFF CLIMATE STATISTICS June 2014

This June was the 15 th warmest and was tied with	Maximum Temp 85°F or higher 3					
23 other years as the driest on record.	Maximum Temp 75° F or lower 2					
Avg Max Temp (F) 81.0 Normal 77.9	Heating Degree Days 87 Normal 170					
Avg Min Temp (F) 43.7 Normal 41.9	Cooling Degree Days 14 Normal 17					
Avg Mean Temp (F) 62.3 Normal 59.9	Degree base 65°F					
Departure from Normal (F) 2.4						
	Total June Precipitation T					
Highest Monthly Avg Temp (F) 66.5 in 1974	Normal June Precipitation 0.36"					
Lowest Monthly Avg Temp (F) 53.0 in 1965	Departure from normal -0.36"					
	Greatest 24-Hr Precipitation T on 06/01-01					
Highest Temp this month (F): 87 on 30 th	Total Precipitation Year-to-Date 3.21"					
Lowest Temp this month (F): $33 \text{ on } 5^{\text{th}}$	Departure from Normal -5.26"					
Record High (F): 96 on 06/28/2013	Number of Days:					
06/26/1970	Clear 30					
Record Low (F): 22 on 06/02/1955	Partly Cloudy 0					
06/02/1951	Cloudy 0					
Temperature or precipitation records this month:	Greatest June Precipitation 2.92" in 1955					
17 th HiMin of 57 tied, first set in 1949.	Least June Precipitation0.00" in 2014 and					
	23 other years					
Flagstaff Number of Days of:						
Minimum Temp 55°F or higher 1	Average Wind Speed 10.5 mph					
Minimum Temp 35°F or lower 2	Highest Peak Gust 61 mph from 220° on 17 th					

PHOENIX CLIMATE STATISTICS June 2014

This June was the 7th warmest on record, and was Temperature or precipitation records this month: 2nd HiMax 110 tied, first set in 2006 tied with 69 other years as the driest on record. 10th HiMin 83 set, previous record 82 in 2013 11th HiMin 85 set, previous record 82 in 1991 Avg Max Temp(F) 106.2 Normal 103.9 Avg Min Temp(F) 13th HiMin 85 tied, first set in 2013 80.1 Normal 77.7 Avg Mean Temp (F) 93.2 Normal 90.8 Departure from Normal (F) 2.4 Phoenix Number of Days of: Minimum Temp 75°F or lower 3 Minimum Temp 85°F or higher Highest Monthly Avg Temp (F) 94.8 in 2013 4 Maximum Temp 105°F or lower Lowest Monthly Avg Temp (F) 79.0 in 1965 11 Maximum Temp 110°F or higher 2 110 on 9^{th} , 2^{nd} Highest Temp this month (F): 75 on 16th,15th,6th Lowest Temp this month (F): Heating Degree Days 0 0 Normal **Cooling Degree Days** 855 Normal 774 Record High (F): 122 on 06/26/1990 Degree base 65°F Record Low (F): 49 on 06/04/1908

Total June PrecipitationTNormal June Precipitation0.02"Departure from normal-0.02"Greatest 24-Hr PrecipitationT on 6/30-30Total Precipitation Year-to-Date0.99"Departure from Normal-2.24"

22

Number of Days: Clear

Cicai	
Partly Cloudy	8
Cloudy	0

Greatest June Precipitation1.70" in 1972Least June Precipitation0.00" in 2014 and 69other years0.00" in 2014 and 69

Average Wind Speed 7.4 mph Highest Peak Gust 35 mph from 270° on 16th

TUCSON CLIMATE STATISTICS June 2014

This June was the 3rd warmest on record, and was tied with 29 other years as the driest.

Avg Max Temp(F)	103.8 Normal	100.3
Avg Min Temp(F)	74.1 Normal	69.3
Avg Mean Temp(F)	88.9 Normal	84.8
Departure from Norma	l (F) 4.1	

Highest Monthly Avg Temp (F)	89.4 in 2013
Lowest Monthly Avg Temp (F)	77.6 in 1965

Highest Temp this month (F): $108 \text{ on } 4^{\text{th}}, 2^{\text{nd}}$ Lowest Temp this month (F): $67 \text{ on } 6^{\text{th}}$

Record High (F): 117 on 06/26/1990 Record Low (F): 43 on 06/04/1908

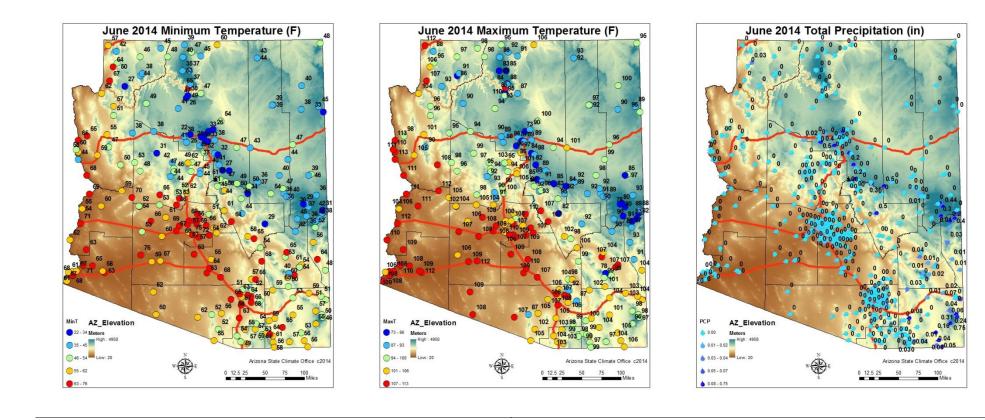
Temperature or precipitation records this month:
2 nd HiMax 108 set, previous record 107 in 2013
3 rd HiMax 107 tied, first set in 1996
11 th HiMin 77 tied, first set in 1979
14 th HiMin 81 set, previous record 80 in 1959

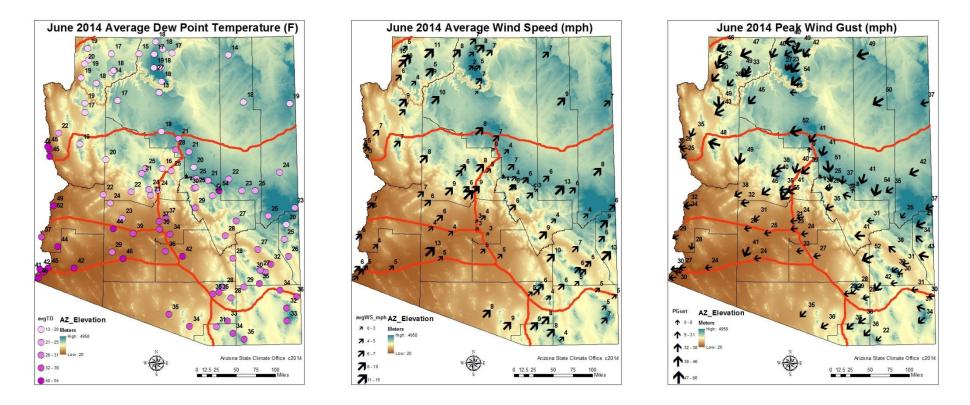
Tucson Number of Days of:					
Minimum Temp 70°F or	6				
Minimum Temp 80°F or	4				
Maximum Temp 100°F o	2				
Maximum Temp 105°F o	11				
Heating Degree Days	0 Normal	0			
Cooling Degree Days	725 Normal	594			
Degree base 65°F					

Total June Precipitation	Т				
Normal June Precipitat	0.20"				
Departure from normal	-0.20"				
Greatest 24-Hr Precipit	tation	T on MM			
Total Precipitation Yea	r-to-D	Date 0.61"			
Departure from Norma	1	-2.66"			
Greatest June Precipita Least June Precipitation other years	2.07" in 1915 0.00" in 2014 and 29				
Number of Days:					
Clear	26				
Partly Cloudy	0				
Cloudy	0				
Average Wind Speed Highest Peak Gust	7.7 n 37 m	mph 1ph from 240° on 15 th			

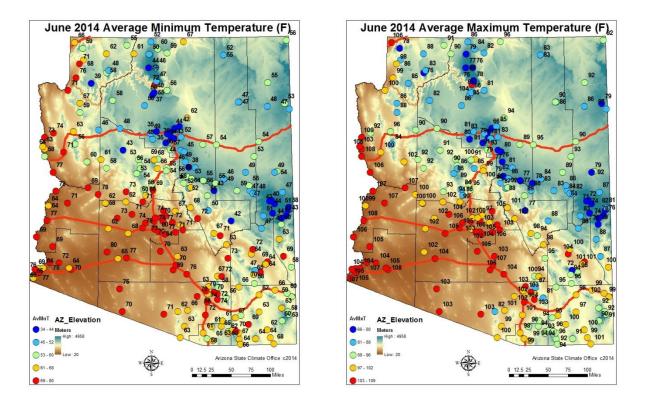
Data are from the National Weather Service and the National Climatic Data Center and are **preliminary.**

Wind Speeds:							Dew Points for June:			e:
Day	Day Phoenix		Flags	taff	Tucso	n	Daily	Averag	ge Dew	Point (°F):
<u>(mph</u>) Avg	Max	Avg	Max	Avg	Max	Day	Phx	Tuc	Flg
1	6.9	20	9.6	35	5.6	23	1	27	15	14
2	6	19	14.7	39	4.6	24	2	27	24	13
3	5.8	19	11.8	39	7.2	27	3	18	15	6
4	6.2	25	8.1	36	6.8	24	4	16	10	-1
5	5.5	23	6.2	34	7	26	5	17	4	4
6	7	28	8	30	6.9	22	6	20	13	7
7	6.9	22	7.7	29	7.4	28	7	28	24	10
8	4.6	19	5.8	26	6.8	21	8	30	35	16
9	5	21	8.8	27	5.3	20	9	39	37	18
10	9.3	29	8.8	37	6.8	29	10	35	38	24
11	7.6	29	11.8	39	9.6	30	11	35	36	23
12	7.4	21	9	38	5.7	24	12	43	45	26
13	8.3	29	13.4	51	9.5	30	13	28	41	18
14	8.7	31	13.3	40	11.3	32	14	29	30	14
15	7.2	24	13.2	42	11.2	37	15	21	31	8
16	9.8	35	24.9	60	10.5	33	16	29	39	21
17	11.7	30	24.2	61	11.3	33	17	30	41	25
18	9.5	30	14.5	38	12.4	35	18	35	39	22
19	5.9	24	3.6	24	6	20	19	33	35	24
20	7.3	25	7	30	6.7	23	20	39	36	25
21	9.6	32	11.8	39	7.2	25	21	33	34	27
22	6.6	24	9.1	38	6.3	26	22	28	31	21
23	7	20	7.6	29	6.3	28	23	24	31	19
24	6.3	19	8.1	27	7.2	28	24	30	38	21
25	8.3	23	8.3	31	8.3	28	25	31	42	25
26	7.8	27	15.7	43	9.3	29	26	38	35	29
27	8.3	23	11.8	35	8.9	30	27	42	34	31
28	6.8	19	7.2	28	7.4	21	28	47	44	35
29	8.1	21	7.8	28	5.3	18	29	47	43	36
30	7.3	22	8.6	28	6.3	21	30	46	39	39



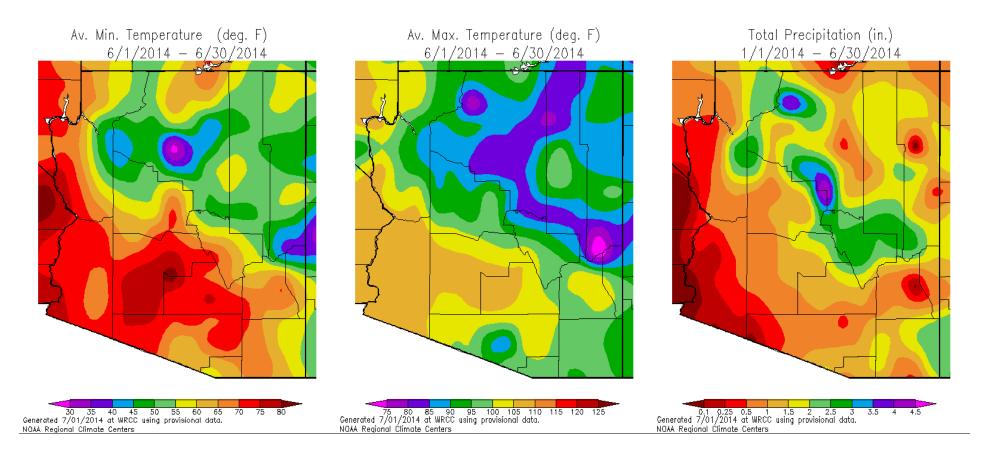


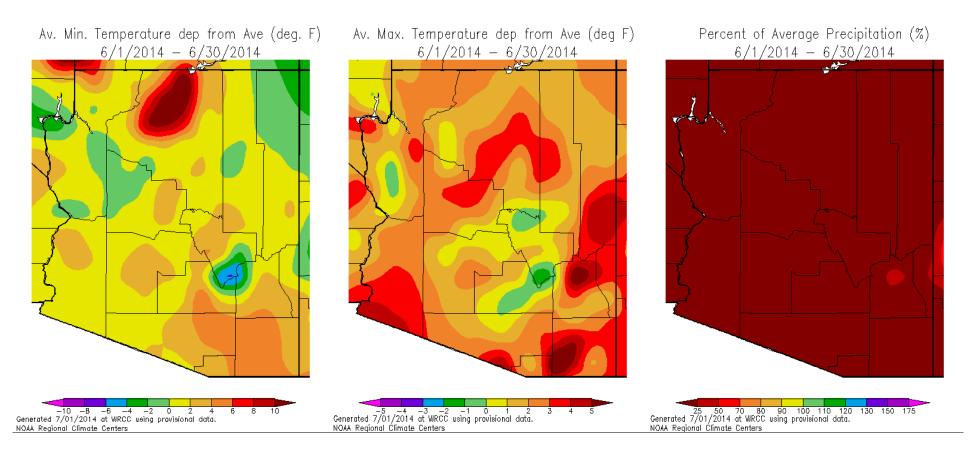
The lowest minimum temperature was $22^{\circ}F$ at Fort Valley, and the highest minimum was $80^{\circ}F$ at Phoenix. The lowest maximum temperature of $73^{\circ}F$ was recorded at Snowslide Canyon, while the highest maximum temperature of $113^{\circ}F$ was reported at Bullhead City. The lowest rainfall amount was 0.00° at most stations in Arizona and the highest was 0.75° at Rucker. The lowest dew point was $13^{\circ}F$ at Tusayan and the highest was $54^{\circ}F$ at Red Lake. The highest peak wind gust was 66 mph at Tweeds Point.



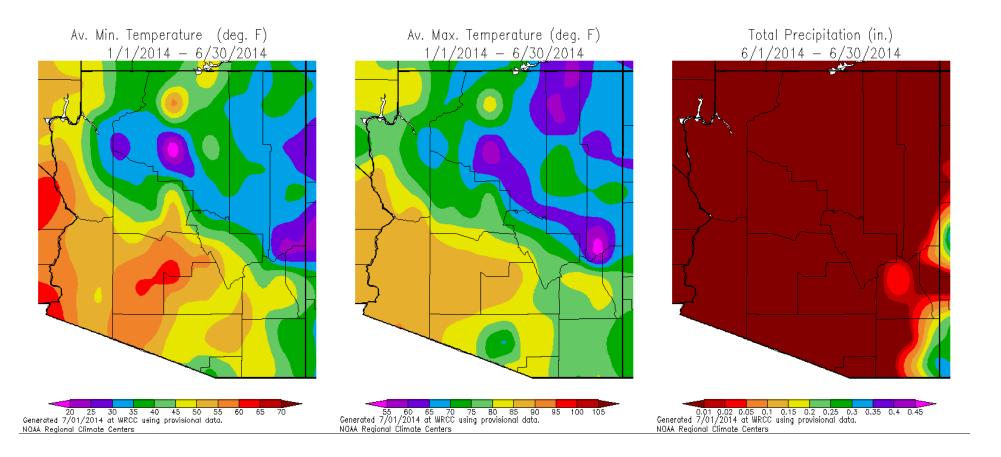


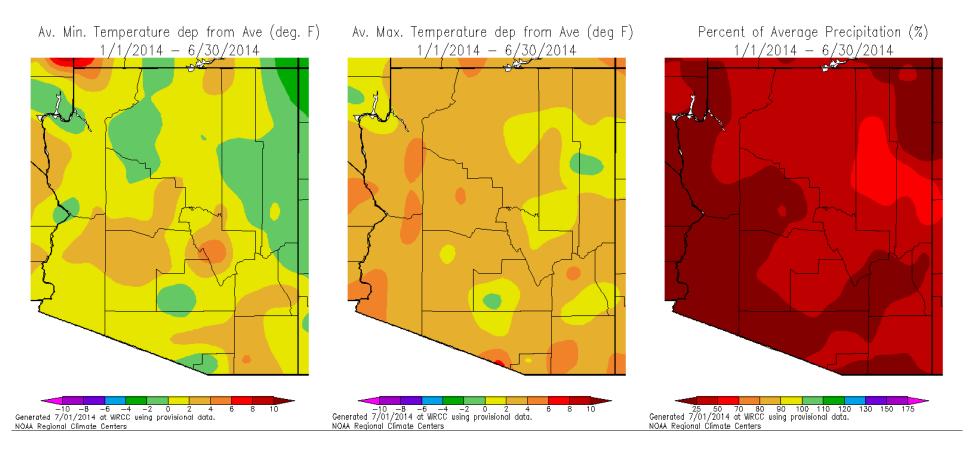
The highest average minimum temperature was 76°F at Phoenix Sky Harbor AP and the lowest average minimum temperature was 34°F at Fort Valley. The highest average maximum temperature was 109°F at Bullhead City and lowest average maximum temperature was 66°F at Snowslide Canyon.





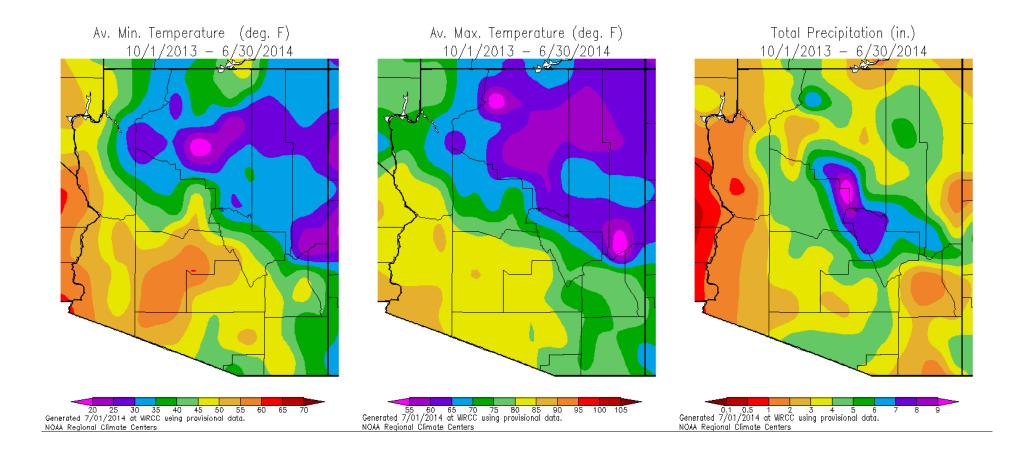
June minimum temperatures were 2-4°F cooler than normal in northern Apache County, but 2-4°F warmer than normal across most of the state. Northern Coconino County saw minimum temperatures 6°F or more warmer than normal. Daytime temperatures were also 3 to 5°F warmer than normal statewide. Exceptions were in northern and southern Gila County and Mohave County where high temperatures were slightly cooler than normal. June precipitation was less than 25% of normal statewide.

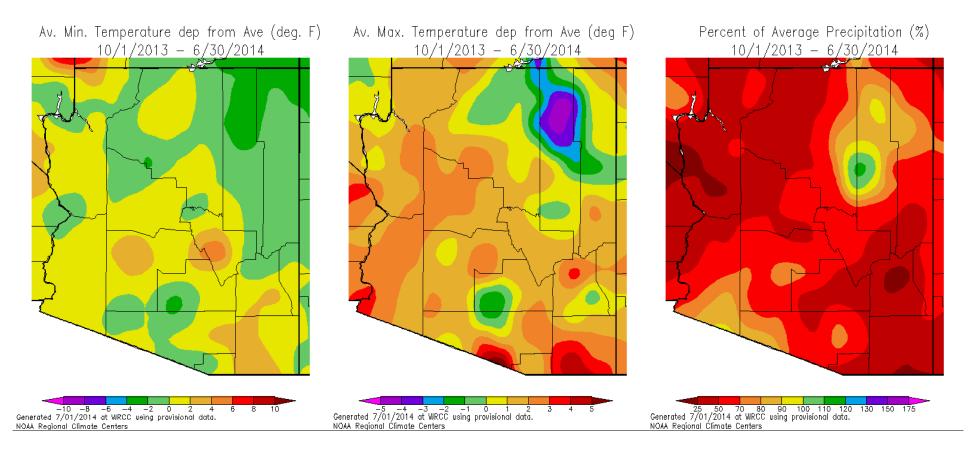




Calendar Year 2014

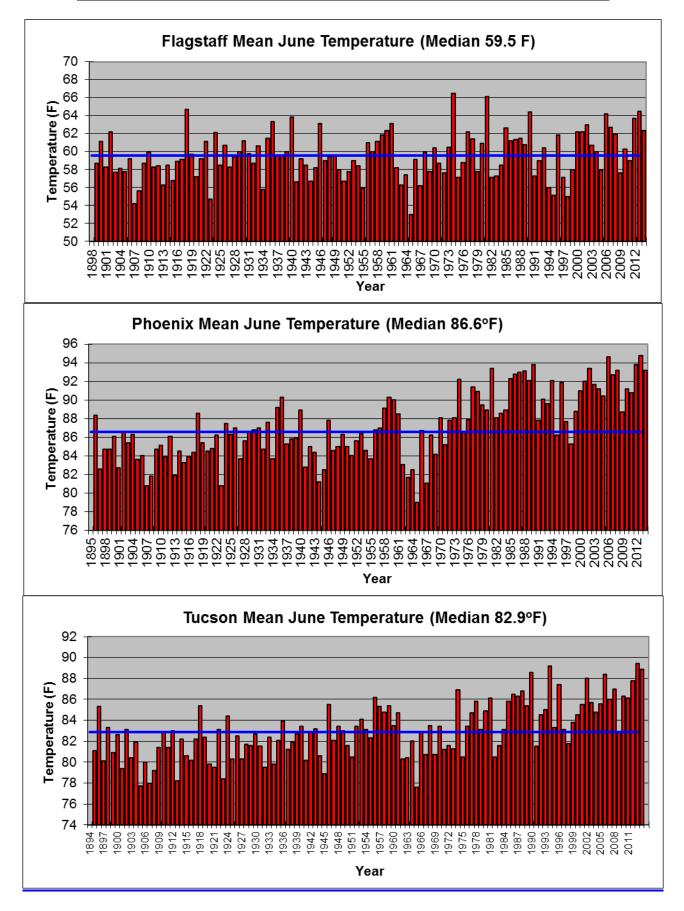
Calendar year minimum temperatures ranged from 2°F cooler along the eastern border to 4 to 6°F warmer than average in Gila County. Daytime highs have been 0 to 4°F warmer than normal statewide. Precipitation so far this year has been less than 50% of normal statewide, with central Navajo and Apache counties at 70% of normal and the southwestern quarter of the state and the lower Colorado River Valley have received less than 25% of normal precipitation.

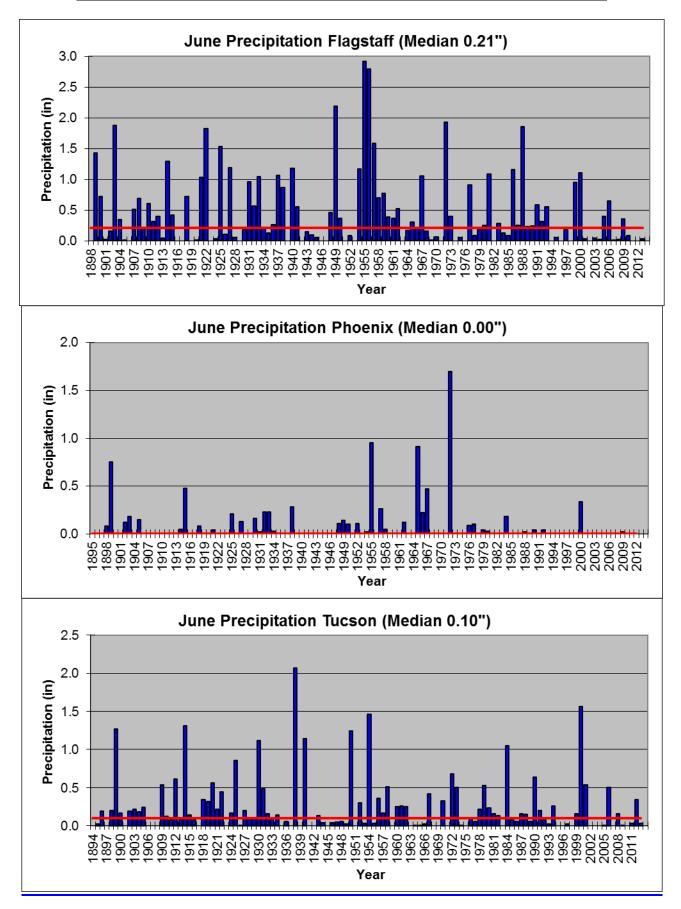




2014 Water Year

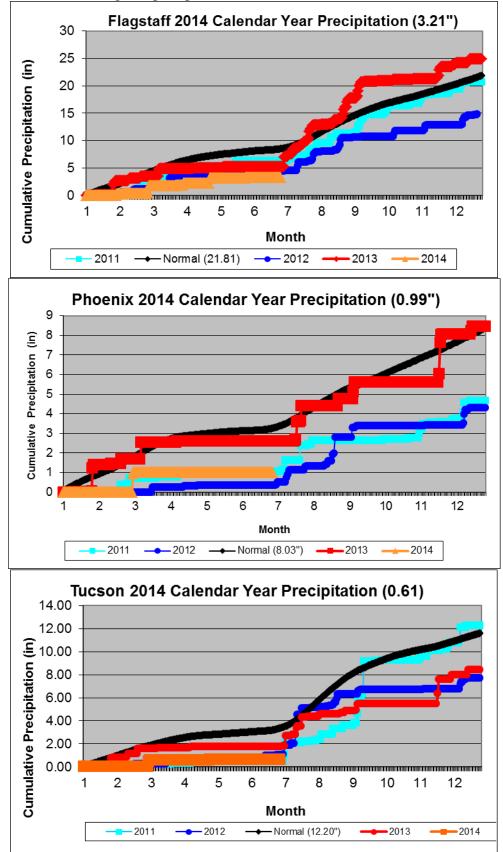
Minimum temperatures on the Colorado Plateau are 0 to 4°F cooler than normal, while the southwestern half of the state has been 0 to 2°F warmer than normal. Gila County has been 2 to 6°F warmer than normal. Daytime temperatures have been 1 to 3°F warmer than normal across most of the state, with the northeastern corner 0 to 5°F cooler than normal. The third consecutive dry water year continues to record below average precipitation statewide, except central Navajo County.

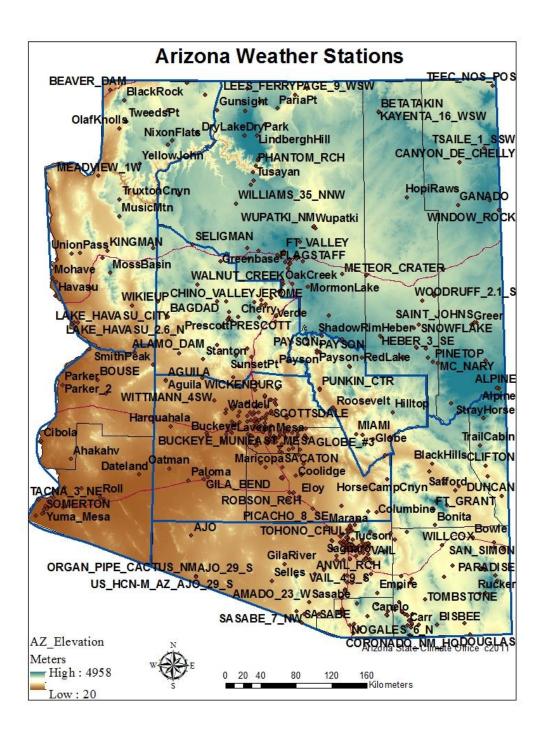




2014 Cumulative Precipitation Graphs – Flagstaff, Phoenix and Tucson:

All of Arizona is still well below average on precipitation, with southern Arizona the farthest behind.





The downloadable normals and extremes calendars use the following abbreviations:

NORM = 30 year (1971-2000) average value (degrees Fahrenheit (F))

OBS = The temperature observation for that day this year

AVG = Average daily temperature

- HI MAX = Highest maximum temperature for that day (F)
- LO MAX = Lowest maximum temperature for that day (F)
- LO MIN = Lowest minimum temperature for that day (F)
- HI MIN = Highest minimum temperature for that day (F)
- Mx PCP = Maximum precipitation for that day (inches)

Mx SNO = Maximum snowfall for that day (inches)