



Arizona Climate Summary

March 2014

Summary of conditions for February 2014

February 2014 Temperature and Precipitation Summary

February 1st – 16th: We started off the month of February with some moisture at the higher elevation as well as many areas of southern Arizona. A trough in the jet stream provided some uplift resulting in rainfall at the lower elevations and some snow at the higher elevations through the first week of the month. Flagstaff reported about an inch of snow on the 7th while Tucson reported traces of rainfall for both the 1st and 6th day of the month. The city of Phoenix reported 0.00” of precipitation for the entire month of February, and set two new record high temperatures of 88 and 86°F, and tied three record high temperatures of 84, 85 and 86°F. Phoenix had 12 days with daytime temperatures in the 80s, and 24 days with nighttime lows in the 50s.

February 17th – 28th : For the remainder February, unseasonably warm conditions continued with either zonal flow or high pressure ridges dominating the west. Daytime high temperature records were set or tied in many areas of the state. On the 13th, Flagstaff set a new record high of 62 degrees, beating the previous record of 58 degrees which was first set in 2002. Flagstaff and Tucson set new record highs on the 15th while Phoenix tied their record of 86. Flagstaff’s new record that day was 66, beating the old record of 64 degrees initially set in 1957. Also on the 15th, Tucson set a new record of 88 degrees, beating the old record by three degrees. On the 16th, Phoenix set a new record of 86, beating the previous record of 83 degrees. To view all the records broken or tied in Flagstaff, Tucson, and Phoenix, please check out the Climate Statistics section of this report. Near the end of the month, a low pressure system moved into the southwest, bringing rainfall to the northern part of the state. Flagstaff received 0.31” of precipitation on the 28th. Phoenix and Tucson missed out as that storm remained too far north to bring some relief from the dryness.

In This Issue: Overview of February, graphs of the February daily maximum and minimum temperatures, precipitation, mean daily dew points for Flagstaff, Phoenix, and Tucson; February climate statistics, maps of mean monthly maximum and minimum temperatures, precipitation, dew points, wind speeds for February; and graphs of the mean February 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.

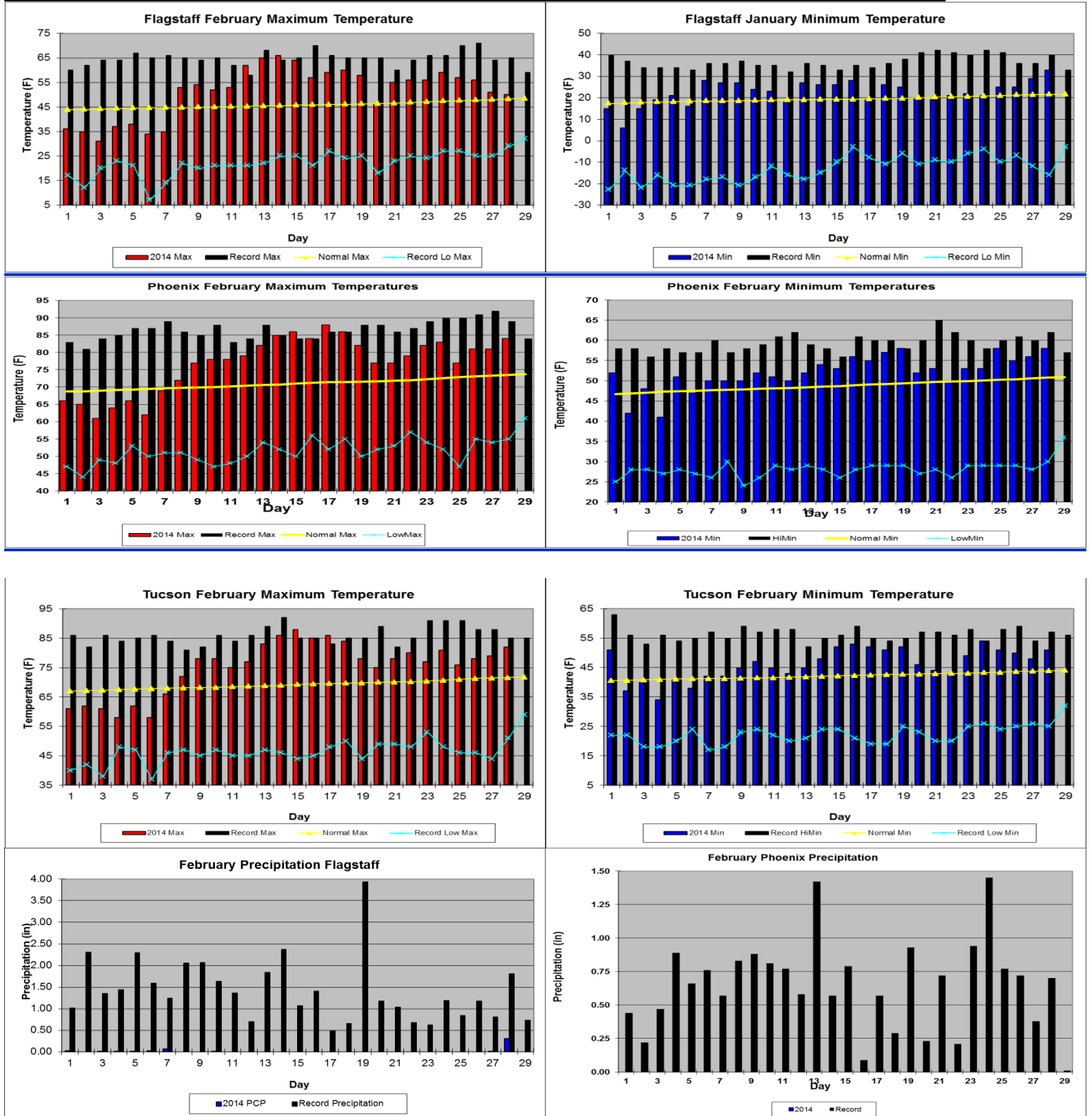
****Note:** The discrepancy between the Statewide Temperature and Precipitation values for Phoenix, Flagstaff and Tucson and the daily values in their graphs are due to the reporting times. Statewide Temperature and Precipitation values are taken at 5pm, while official daily records at the airports are taken from Midnight to Midnight.

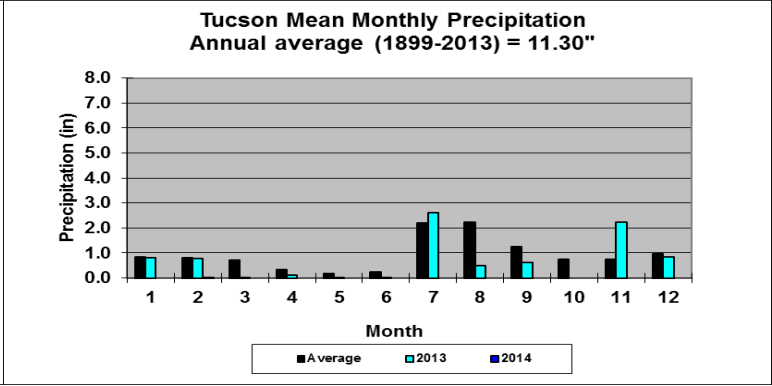
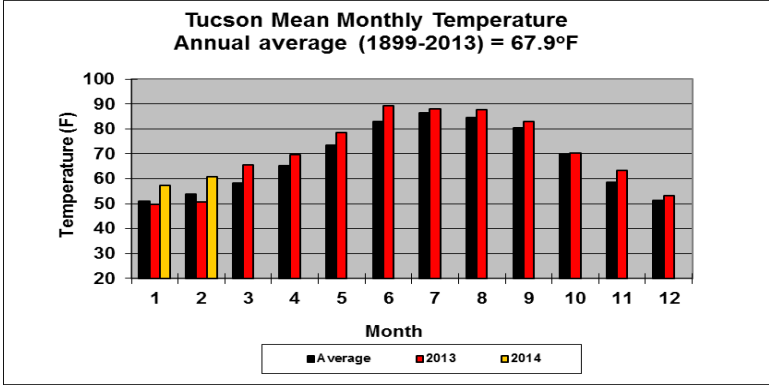
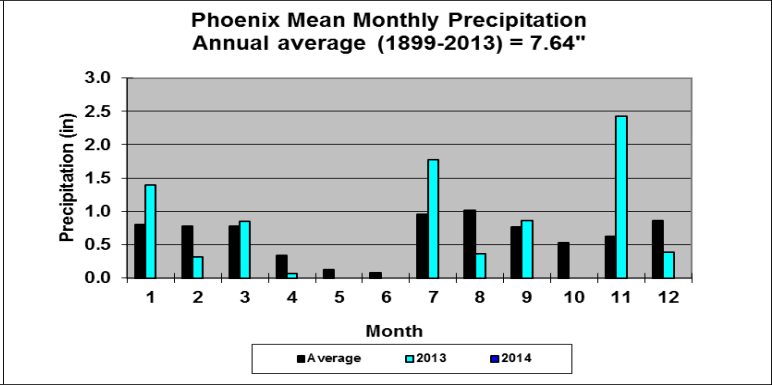
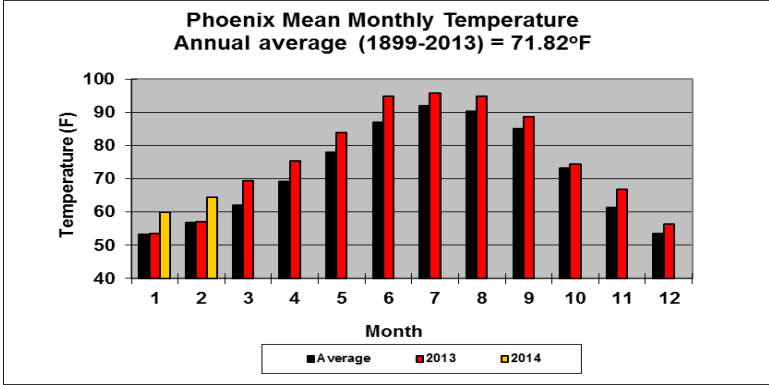
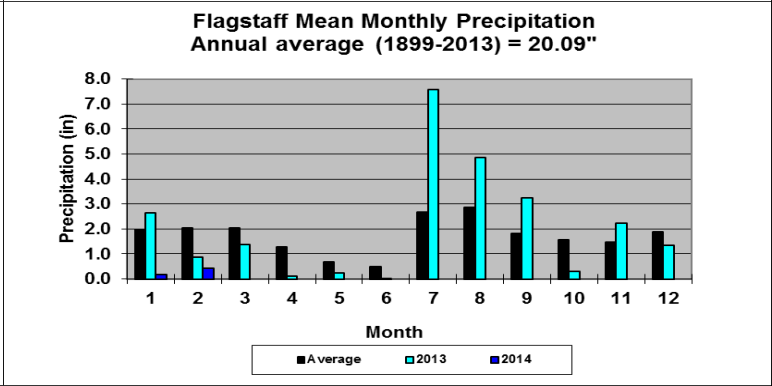
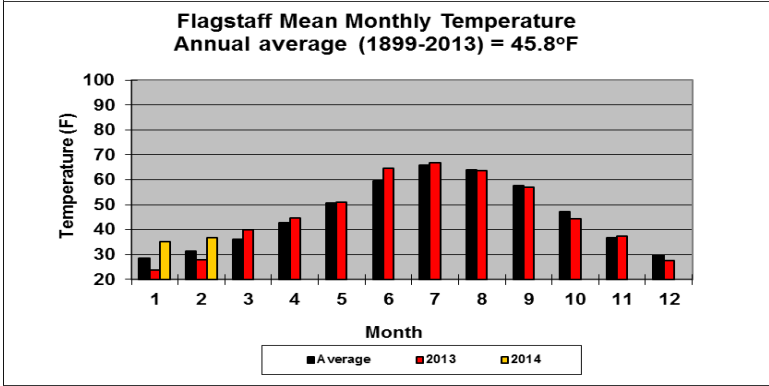
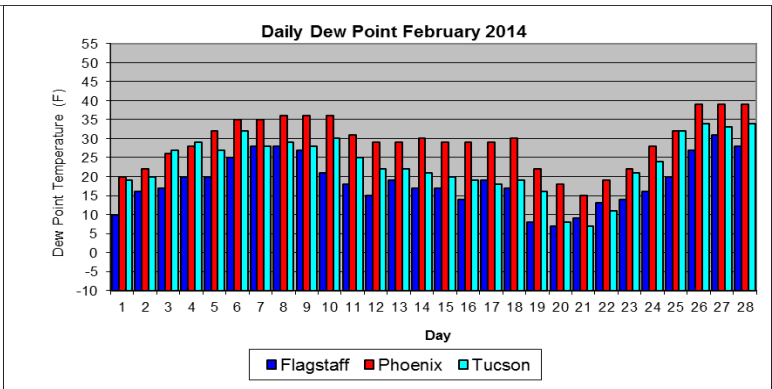
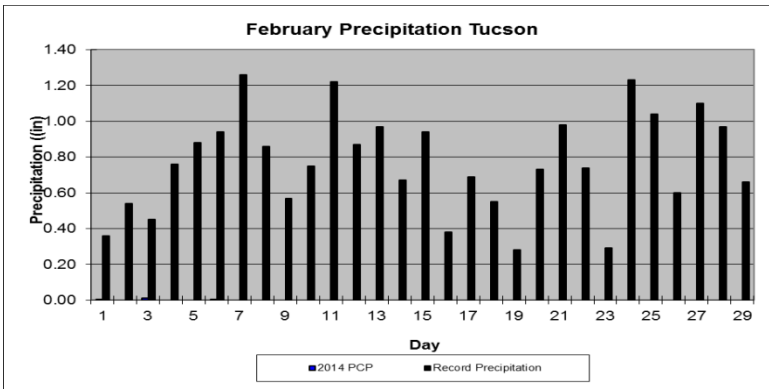
State Climate Office
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February 2014 Daily Temperature, Precipitation, & Dew Point for Flagstaff, Phoenix, and Tucson





FLAGSTAFF CLIMATE STATISTICS

February 2014

This February was the 9th warmest on record, but had no significant ranking in precipitation.

Avg Max Temp (F)	51.2	Normal	44.8
Avg Min Temp (F)	22.5	Normal	19.3
Avg Mean Temp (F)	36.9	Normal	32.1
Departure from Normal (F)	4.8		

Highest Monthly Avg Temp (F)	38.2	in 1947
Lowest Monthly Avg Temp (F)	19.5	in 1939

Highest Temp this month (F): 66 on 14th
 Lowest Temp this month (F): 6 on 2nd

Record High (F):	71	on 02/26/1986
Record Low (F):	-23	on 02/01/1985

Temperature or precipitation records this month:
 13th HiMax 62 set, previous record 58 set in 2004
 15th HiMax 66 set, previous record 64 set in 1957

Flagstaff Number of Days of:

Minimum Temp 30°F or higher	1
Minimum Temp 10°F or lower	1

Maximum Temp 65°F or higher	2
Maximum Temp 35°F or lower	4

Heating Degree Days	782	Normal	923
Cooling Degree Days	0	Normal	0
Degree base 65°F			

Total February Precipitation	0.43"
Normal February Precipitation	2.16"
Departure from normal	-1.73"
Greatest 24-Hr Precipitation	0.31" on 02/28-28
Total Precipitation Year-to-Date	0.60"
Departure from Normal	-3.61"

Number of Days:

Clear	20
Partly Cloudy	7
Cloudy	1

Greatest February Precipitation	10.05" in 1993
Least February Precipitation	0.001" in 1967

Average Wind Speed	6.8 mph
Highest Peak Gust	53 mph from 210° on 27 th

PHOENIX CLIMATE STATISTICS

February 2014

This February was the 2nd warmest on record, but had no significant ranking in precipitation.

Avg Max Temp(F)	76.8	Normal	70.7
Avg Min Temp(F)	52.0	Normal	48.7
Avg Mean Temp (F)	64.4	Normal	59.7
Departure from Normal (F)	4.7		

Highest Monthly Avg Temp (F)	66.0	in 1991
Lowest Monthly Avg Temp (F)	48.5	in 1939

Highest Temp this month (F): 88 on 17th
 Lowest Temp this month (F): 41 on 4th

Record High (F):	92	on 02/27/1986
		02/25/1921
Record Low (F):	16	on 01/07/1913
		02/07/1899

Temperature or precipitation records this month:
 15th HiMax 85 tied, first set in 1957
 16th HiMax 86 set, previous record 83 set in 1977
 17th HiMax 84 tied, first set in 1977
 18th HiMax 88 set, previous record 87 set in 1930
 19th HiMax 86 tied, first set in 1977

Phoenix Number of Days of:

Minimum Temp 45°F or lower	2
Minimum Temp 55°F or higher	8

Maximum Temp 65°F or lower 4
 Maximum Temp 85°F or higher 4

Heating Degree Days 65 Normal 163
 Cooling Degree Days 58 Normal 15
 Degree base 65°F

Total February Precipitation 0.00"
 Normal February Precipitation 0.92"
 Departure from normal -0.92"
 Greatest 24-Hr Precipitation 0.00 on 2/28-28
 2/27 – 27, 2/26-26
 Total Precipitation Year-to-Date 0.00"
 Departure from Normal -1.83"

Number of Days:
 Clear 3
 Partly Cloudy 25
 Cloudy 0

Greatest February Precipitation 4.64" in 1905
 Least February Precipitation 0.00" in 2014
 and 11 other years

Average Wind Speed 5.1 mph
 Highest Peak Gust 32 mph from 270° on 27th

TUCSON CLIMATE STATISTICS February 2014

This February was the 2nd warmest on record, but had no significant ranking in precipitation.

Avg Max Temp(F) 75.1 Normal 68.5
 Avg Min Temp(F) 46.2 Normal 42.2
 Avg Mean Temp(F) 60.7 Normal 55.3
 Departure from Normal (F) 5.4

Highest Monthly Avg Temp (F) 61.1 in 1957
 Lowest Monthly Avg Temp (F) 45.3 in 1903

Highest Temp this month (F): 88 on 15th
 Lowest Temp this month (F): 34 on 4th

Record High (F): 92 on 02/014/1957
 Record Low (F): 17 on 02/07/1899

Temperature or precipitation records this month.
 15th HiMax 88 set, previous record 85 set in 1957
 16th HiMax 85 tied, first set in 1994
 17th HiMax 86 set, previous record 83 set in 2004

Tucson Number of Days of:

Minimum Temp 35°F or lower 1
 Minimum Temp 50°F or higher 10
 Maximum Temp 60°F or lower 2
 Maximum Temp 85°F or higher 4

Heating Degree Days 138 Normal 273
 Cooling Degree Days 0 Normal 0
 Degree base 65°F

Total February Precipitation 0.01"
 Normal February Precipitation 0.86"
 Departure from normal -0.85"
 Greatest 24-Hr Precipitation 0.01" on 02/03–03
 Total Precipitation Year-to-Date 0.01"
 Departure from Normal -1.79"

Greatest February Precipitation 4.15" in 1905
 Least February Precipitation 0.00" in 2006
 and 9 other years

Number of Days:
 Clear 23
 Partly Cloudy 4
 Cloudy 0

Average Wind Speed 6.1 mph
 Highest Peak Gust 30 mph from 230° on 28th

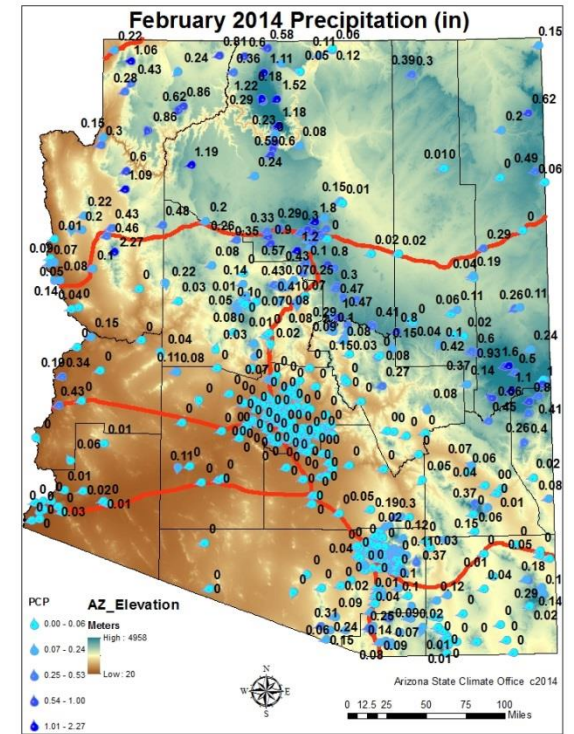
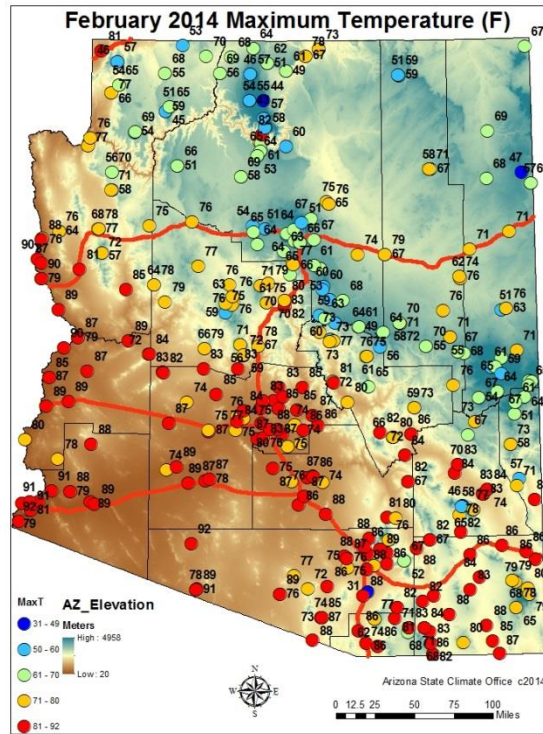
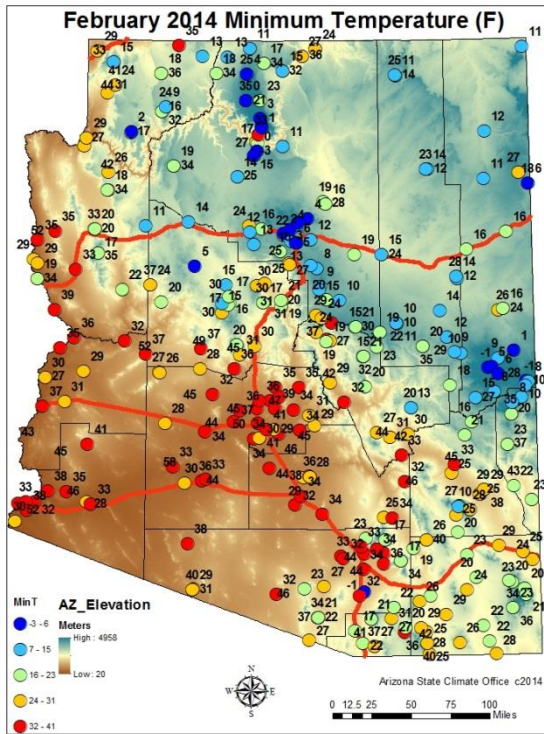
Data are from the National Weather Service and the National Climatic Data Center and are **preliminary**.

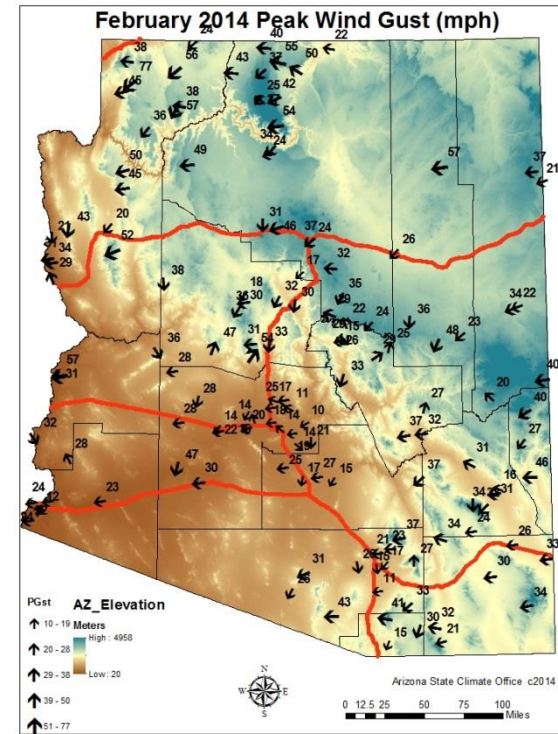
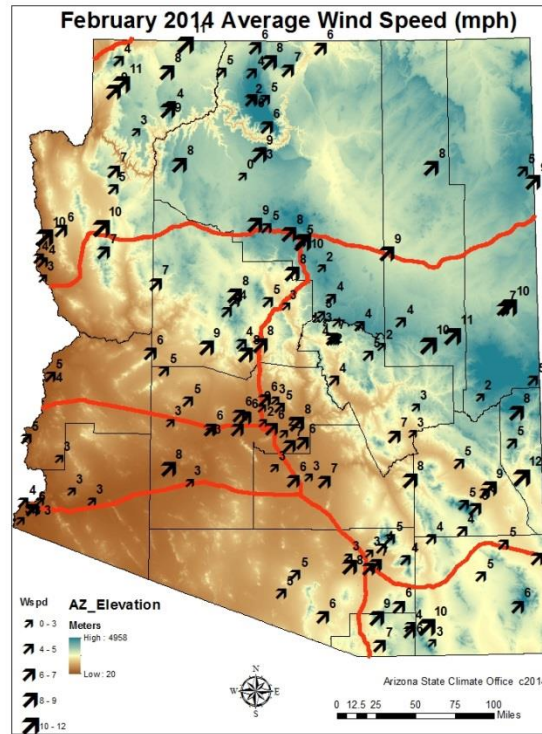
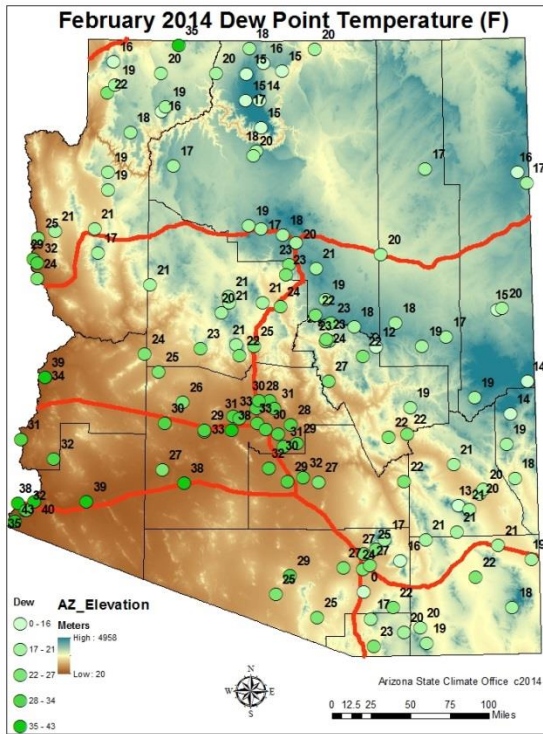
Winds for February:

Day	Phoenix		Flagstaff		Tucson	
	Avg	Max	Avg	Max	Avg	Max
1	9.4	26	5.3	17	7.5	24
2	3.5	14	5.9	25	4.2	14
3	5.3	31	4.2	23	8.3	30
4	6.5	18	11.5	36	4.6	19
5	3	12	3.9	17	5.6	21
6	5.5	13	7.6	24	4.5	18
7	4.7	18	11.4	24	4.7	18
8	4.7	13	7.5	24	5	22
9	3.9	13	7.8	33	6	19
10	6.4	20	5.2	26	7.8	24
11	3	16	5.8	19	6.6	18
12	4.6	17	2.6	30	5.6	17
13	5.5	12	5.4	24	5.5	18
14	4.2	12	3.9	25	6.1	15
15	4.6	12	6.4	35	8.1	22
16	5.5	14	10.3	31	5.6	18
17	4.8	14	5.3	33	7.2	19
18	5.3	20	5.2	23	5.7	17
19	5.6	23	11.3	47	6.3	17
20	3.7	17	5.6	25	7.1	21
21	4.4	12	5	23	6.5	18
22	4.7	12	4.8	25	6.6	18
23	4	13	5.4	28	3.5	16
24	4.7	15	3.6	25	5.8	17
25	4.5	16	6.8	28	4.6	17
26	4.4	15	6.7	25	5.9	18
27	7	32	15.3	53	5.7	26
28	9	28	10.5	43	9.3	30

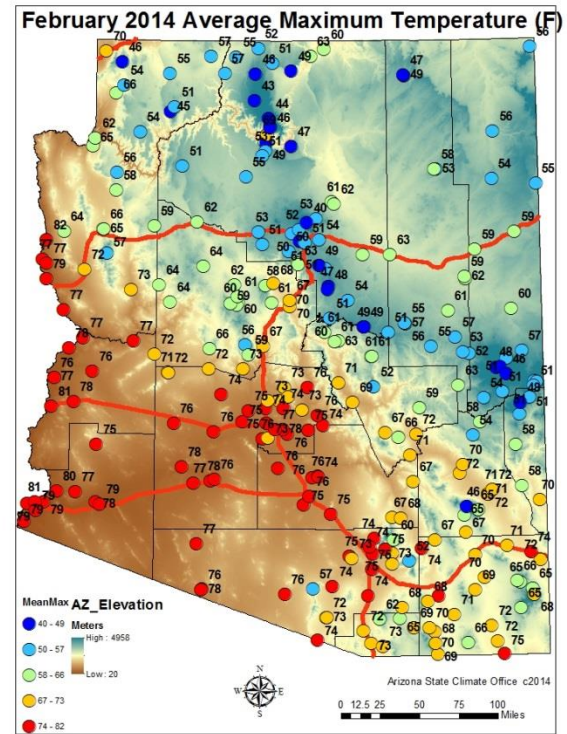
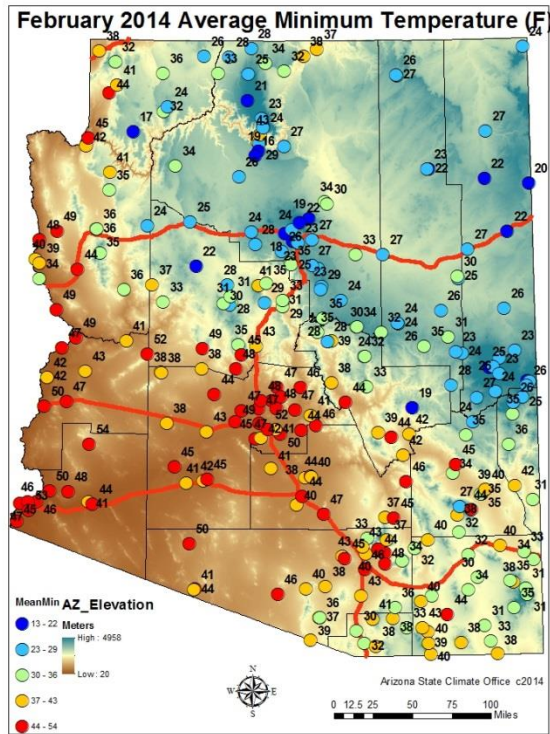
Dew Points for February:**Daily Average Dew Point (°F):**

Day	Phx	Tuc	Flg
1	20	19	10
2	22	20	16
3	26	27	17
4	28	29	20
5	32	27	20
6	35	32	25
7	35	28	28
8	36	29	28
9	36	28	27
10	36	30	21
11	31	25	18
12	29	22	15
13	29	22	19
14	30	21	17
15	29	20	17
16	29	19	14
17	29	18	19
18	30	19	17
19	22	16	8
20	18	8	7
21	15	7	9
22	19	11	13
23	22	21	14
24	28	24	16
25	32	32	20
26	39	34	27
27	39	33	31
28	39	34	28





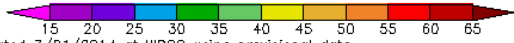
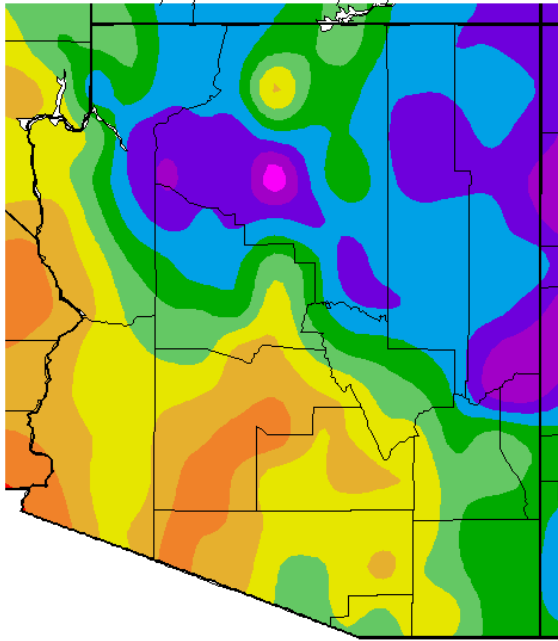
The lowest minimum temperature was -3°F at Grand Canyon Airport and Bright Angel, and the highest minimum was 58°F at Oatman. The lowest maximum temperature of 31°F was recorded at Sahuarita, while the highest maximum temperature of 92°F was reported at Yuma and Ajo. The lowest rainfall amount was $0.00''$ at most stations in Arizona and the highest was $2.27''$ at Moss Basin. The lowest dew point was 12°F at Red Lake and the highest was 43°F at Yuma. The highest peak wind gust was 77 mph at Mount Logan.



February 2014

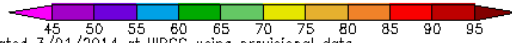
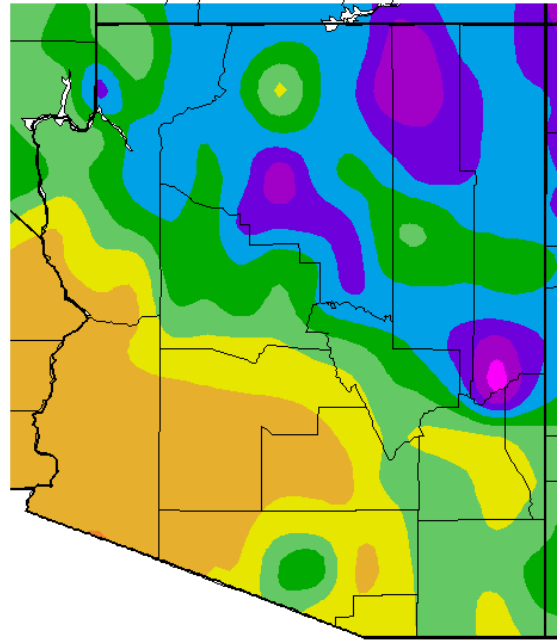
The highest average minimum temperature was 54°F at Kofa Mine, and the lowest average minimum temperature was 13°F at Alpine. The highest average maximum temperature was 82°F at Bullhead City and lowest average maximum temperature was 40°F at Snowslide.

Av. Min. Temperature (deg. F)
2/1/2014 - 2/28/2014



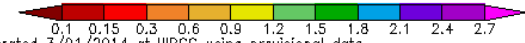
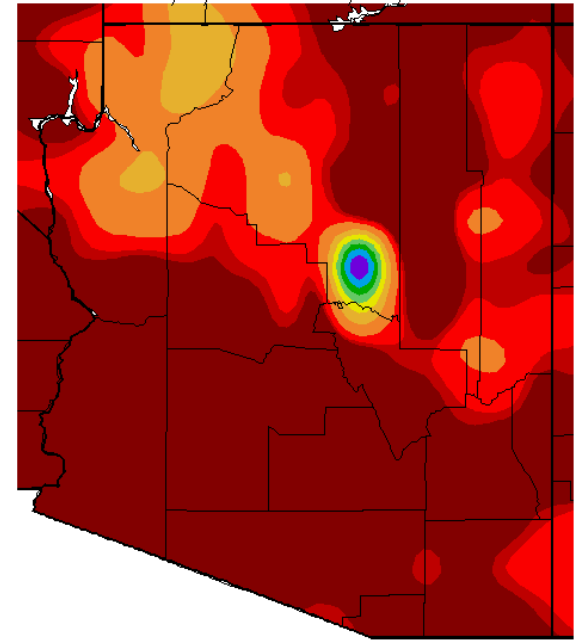
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NOAA Regional Climate Centers

Av. Max. Temperature (deg. F)
2/1/2014 - 2/28/2014



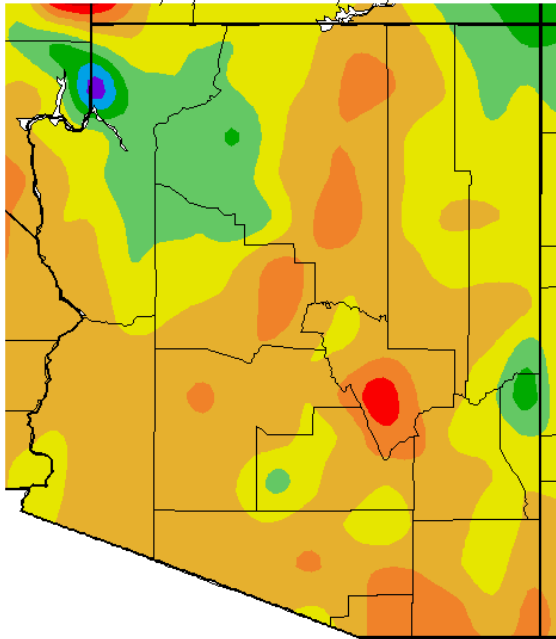
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Total Precipitation (in.)
2/1/2014 - 2/28/2014



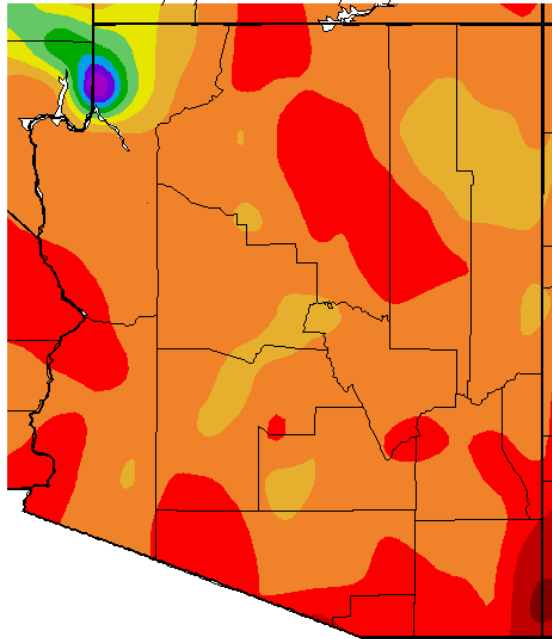
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Av. Min. Temperature dep from Ave (deg. F)
2/1/2014 – 2/28/2014



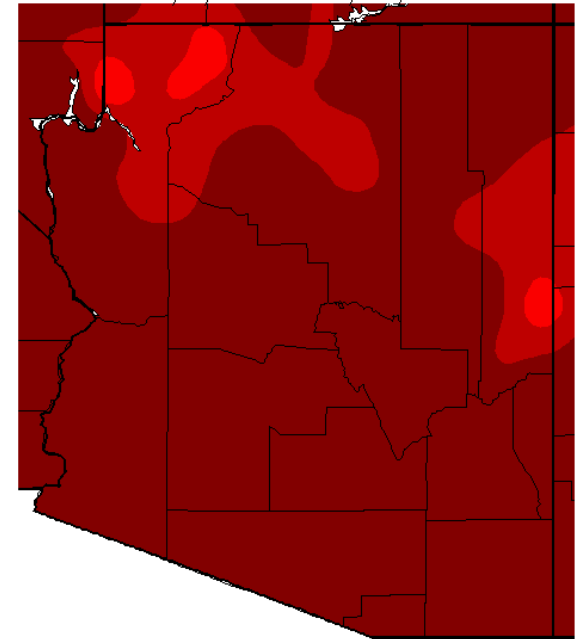
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Av. Max. Temperature dep from Ave (deg F)
2/1/2014 – 2/28/2014



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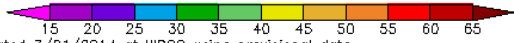
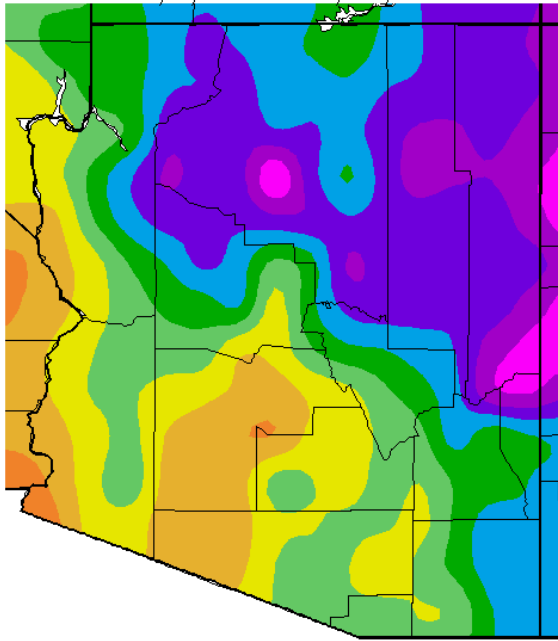
Percent of Average Precipitation (%)
2/1/2014 – 2/28/2014



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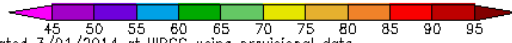
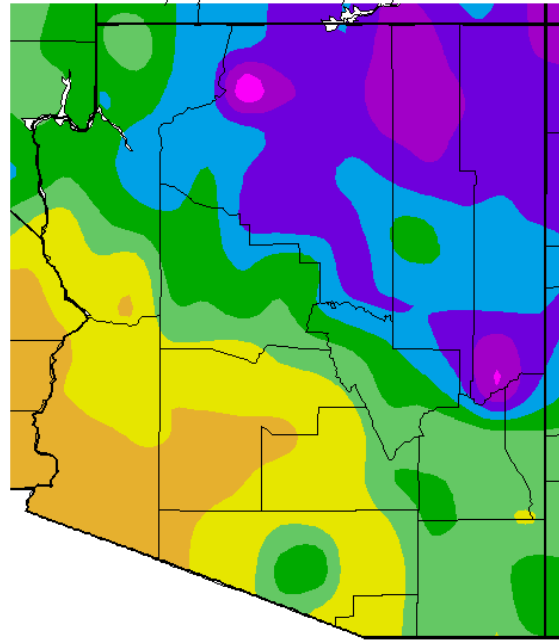
February minimum temperatures were 2 to 6°F warmer than normal in most of southern Arizona and north central Arizona. Only the northwest and the far northeast corner of the state saw cooler than normal minimum temperatures. Daytime high temperatures were 4 to 8°F warmer than normal in February. Precipitation continued to be less than 25% across the state with most stations receiving no precipitation at all.

Av. Min. Temperature (deg. F)
1/1/2014 - 2/28/2014



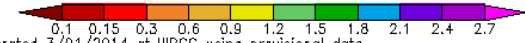
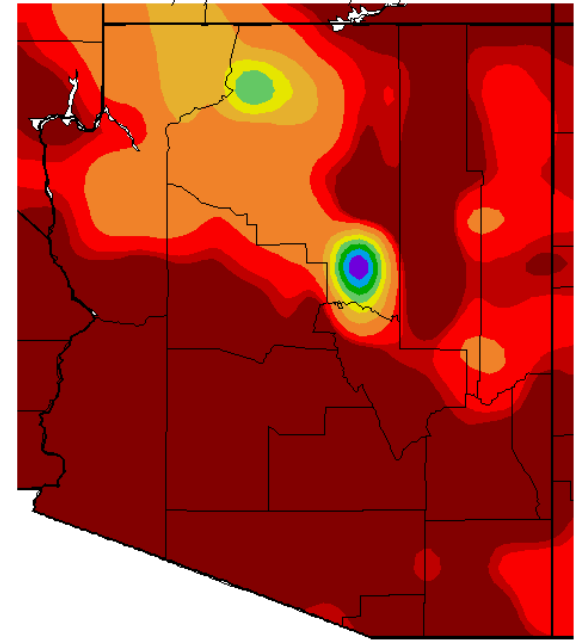
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Av. Max. Temperature (deg. F)
1/1/2014 - 2/28/2014



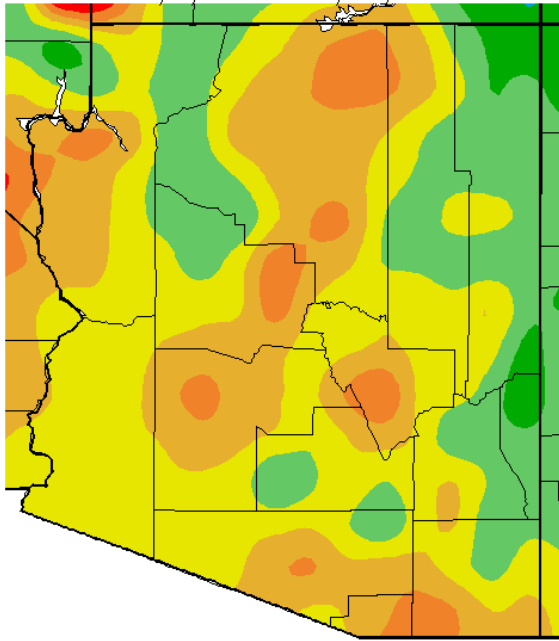
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Total Precipitation (in.)
1/1/2014 - 2/28/2014



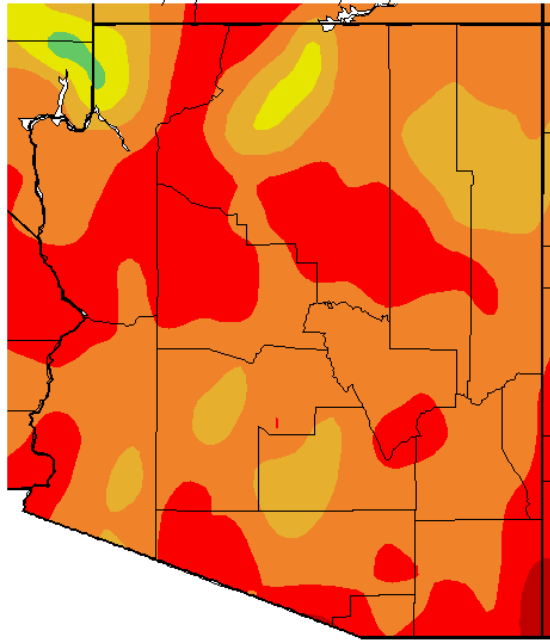
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Av. Min. Temperature dep from Ave (deg. F)
1/1/2014 – 2/28/2014



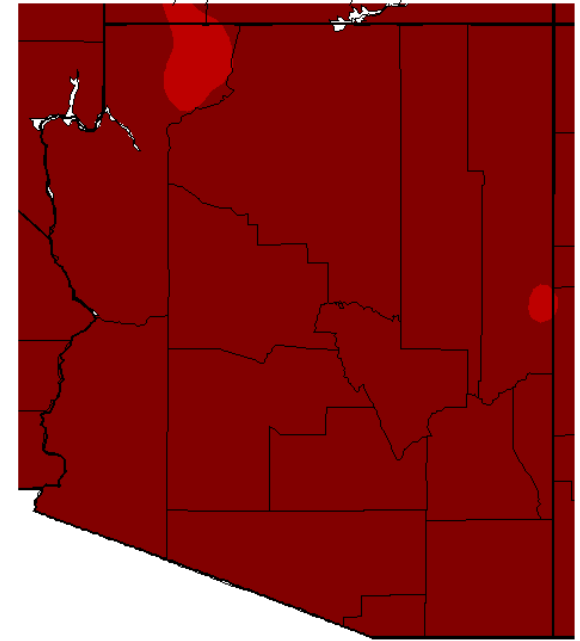
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Av. Max. Temperature dep from Ave (deg F)
1/1/2014 – 2/28/2014



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Percent of Average Precipitation (%)
1/1/2014 – 2/28/2014

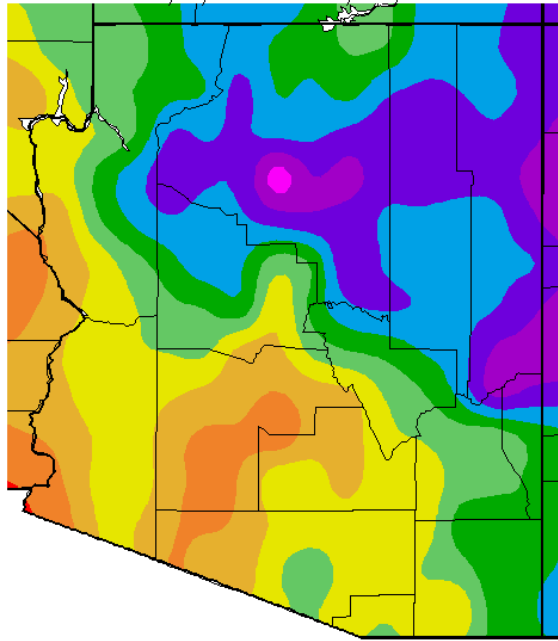


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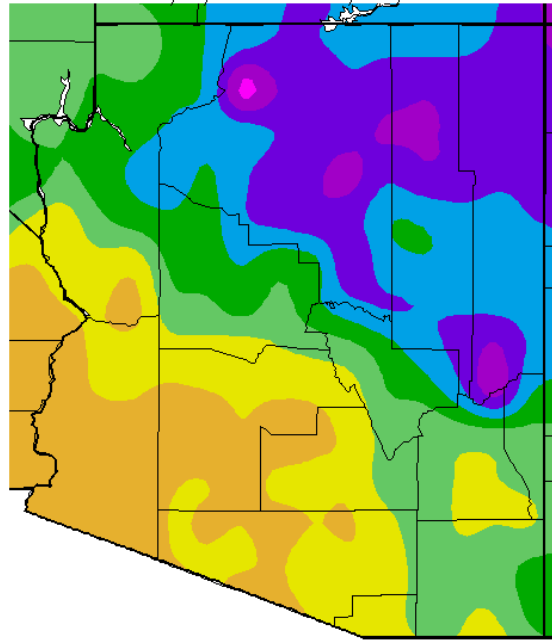
Calendar Year 2014

Nighttime temperatures ranged from 2°F below average to 4°F above average in most areas of the state. The cooler than average temperatures were mostly along the eastern border counties and in western Coconino and northwest Yavapai counties. Daytime highs were all warmer than normal with warmest conditions along the southern border and in Yavapai and Coconino counties. Precipitation was virtually non-existent in February.

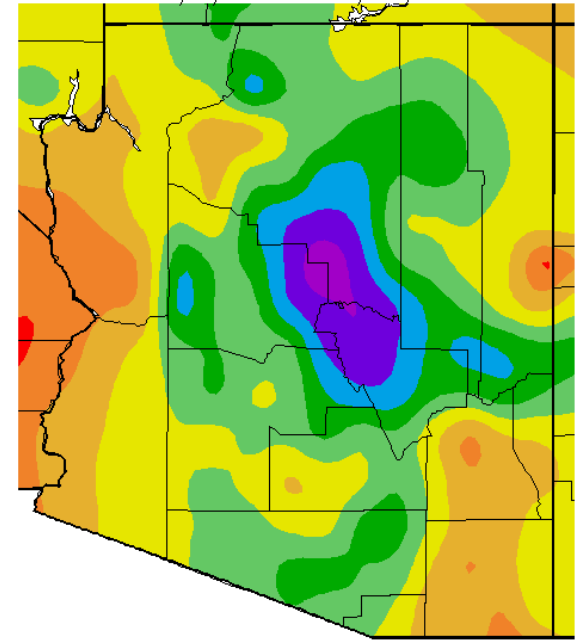
Av. Min. Temperature (deg. F)
10/1/2013 – 2/28/2014



Av. Max. Temperature (deg. F)
10/1/2013 – 2/28/2014



Total Precipitation (in.)
10/1/2013 – 2/28/2014

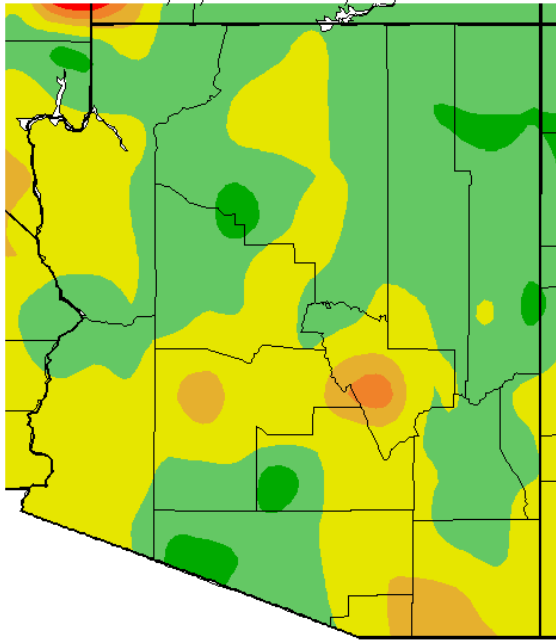


15 20 25 30 35 40 45 50 55 60 65
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45 50 55 60 65 70 75 80 85 90 95
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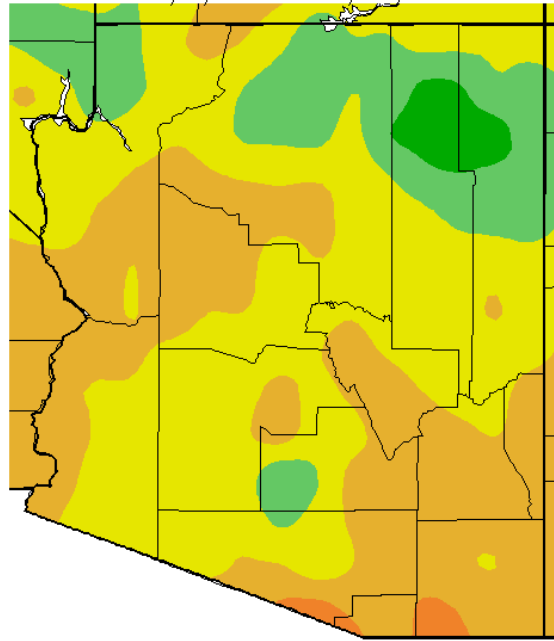
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Av. Min. Temperature dep from Ave (deg. F)
10/1/2013 – 2/28/2014



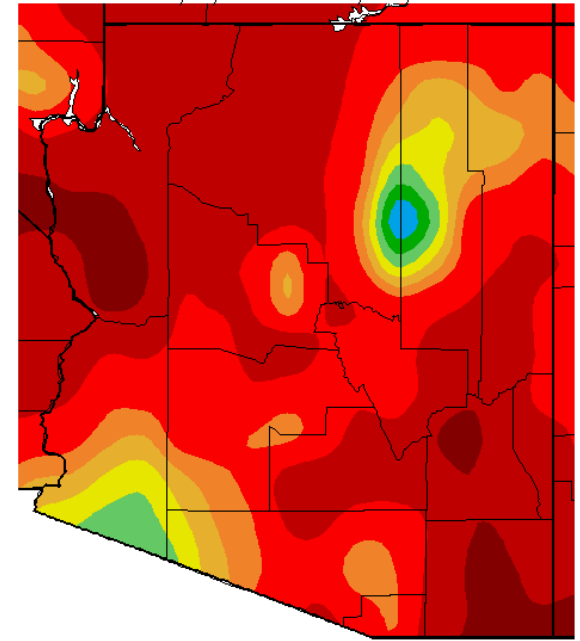
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Av. Max. Temperature dep from Ave (deg F)
10/1/2013 – 2/28/2014



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Percent of Average Precipitation (%)
10/1/2013 – 2/28/2014

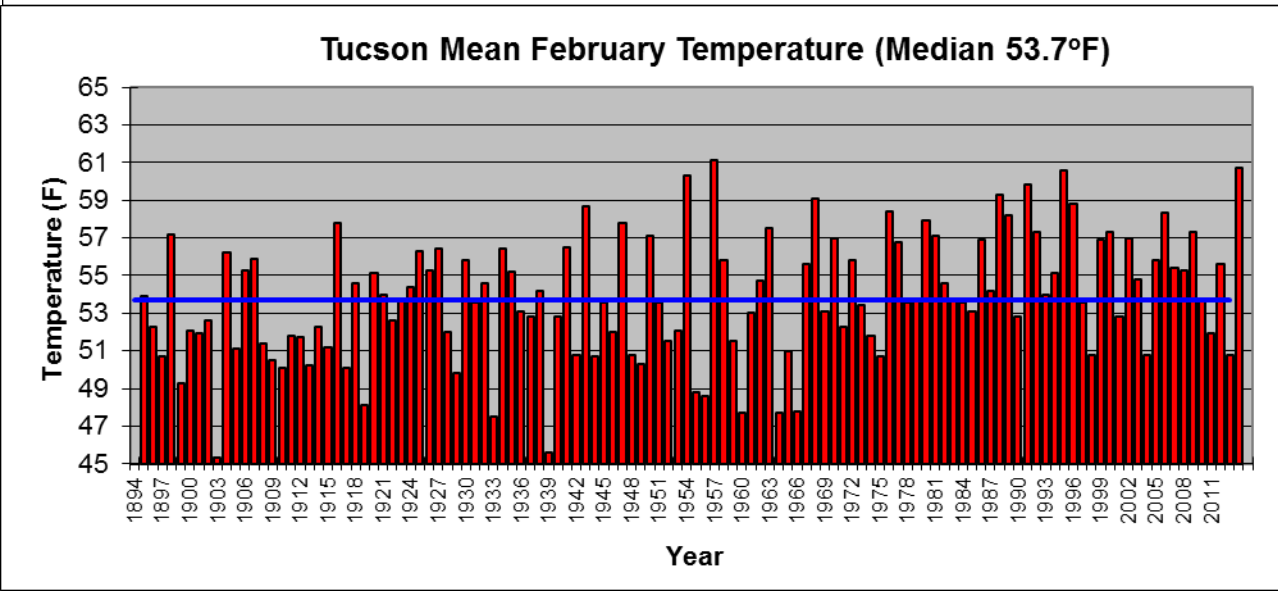
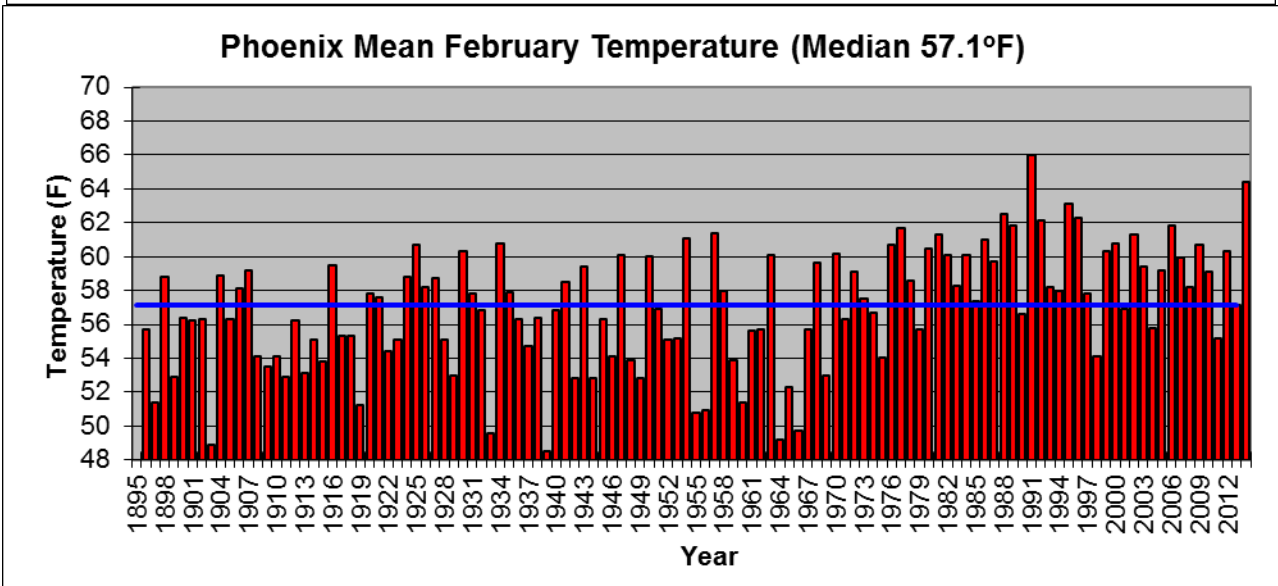
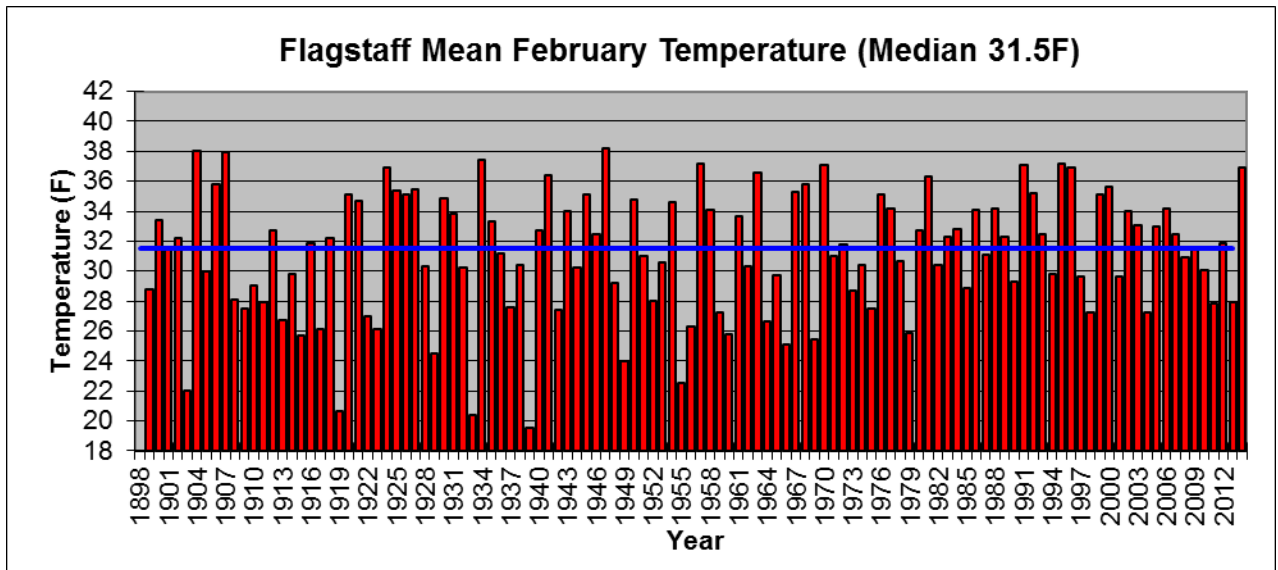


Generated 3/01/2014 at WRCC using provisional data.
NOAA Regional Climate Centers

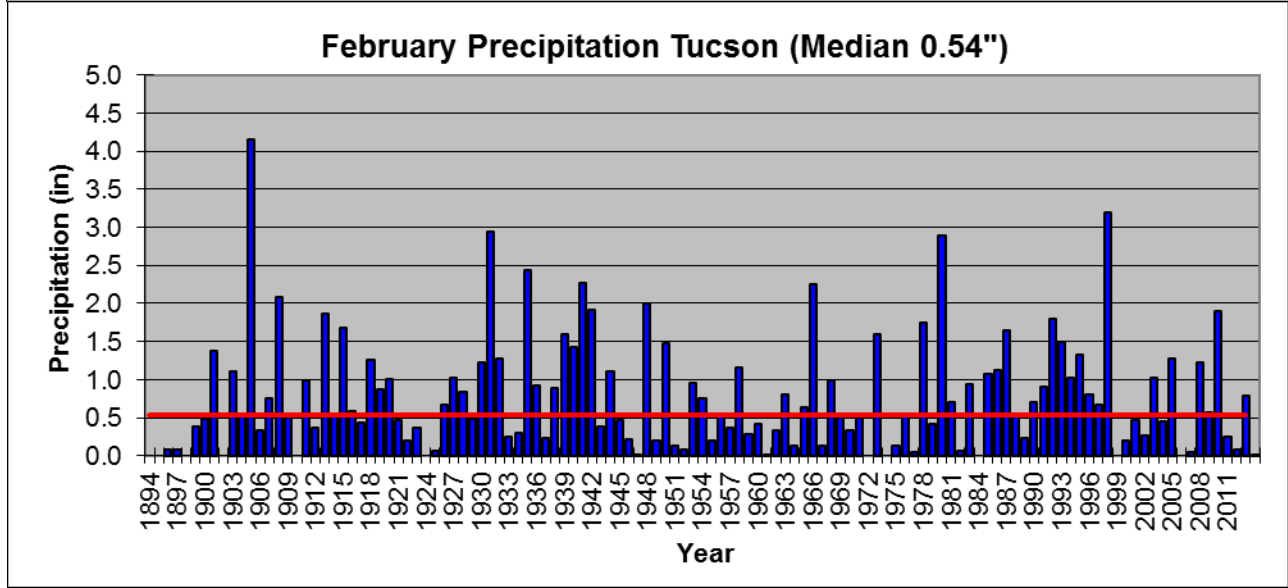
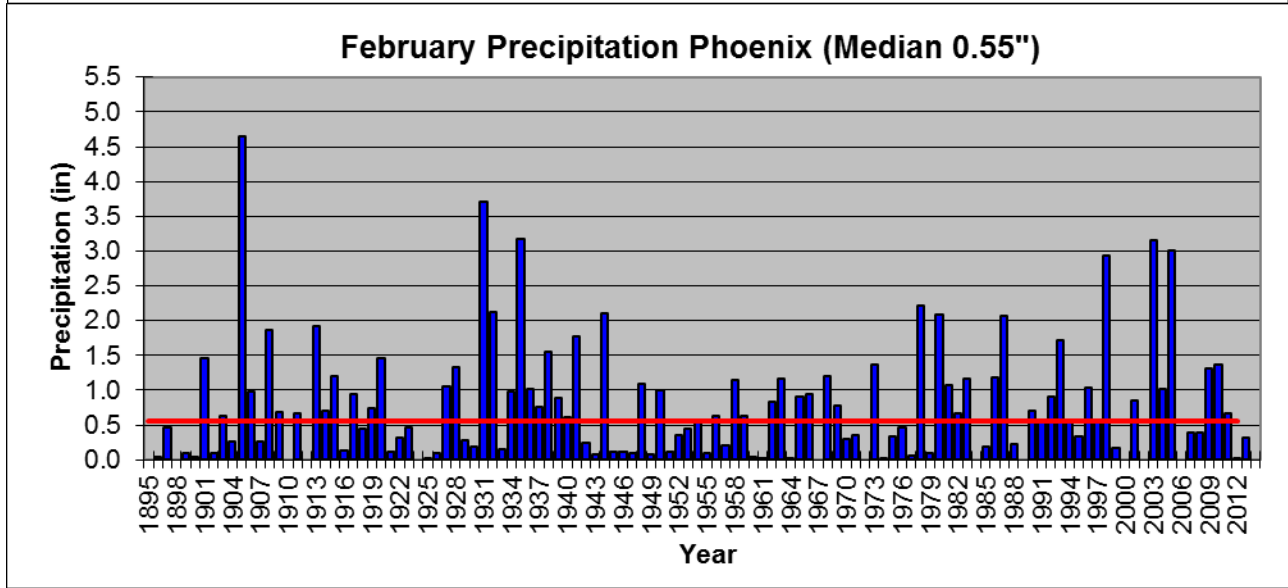
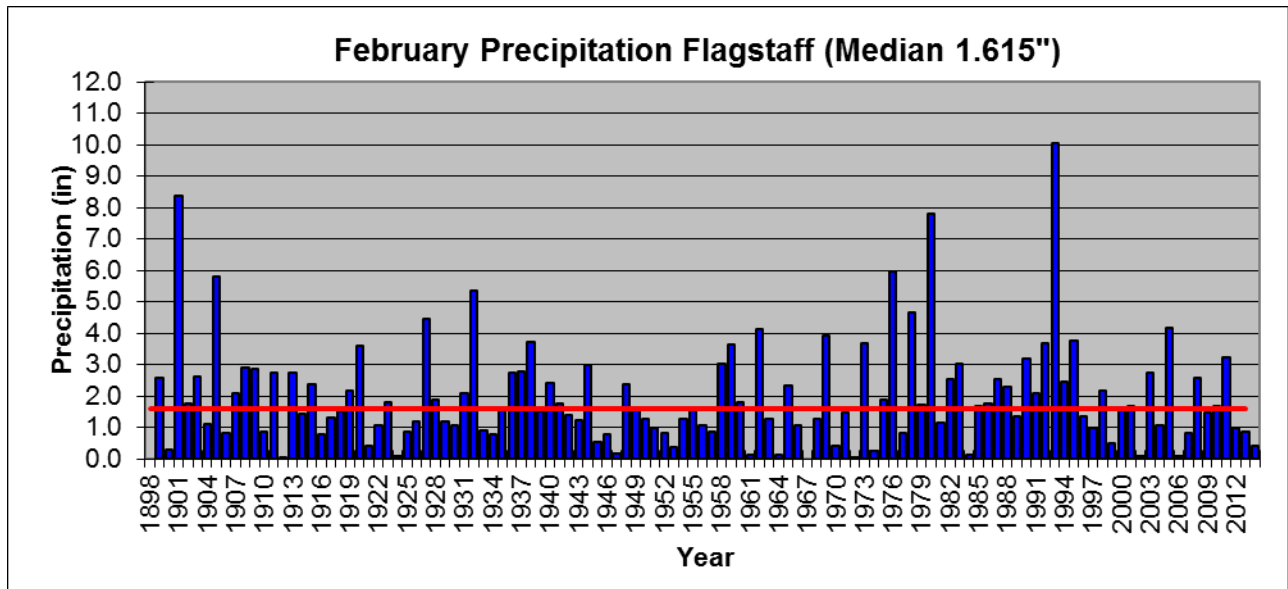
2014 Water Year

Minimum temperatures have been within 2°F of normal statewide while daytime high temperatures have generally been warmer than normal in all areas except the northeast corner of the state which was cooler than normal. Most of the state has received less than 70% of normal precipitation, while the northwest and southeast quarters of Arizona have had less than 50% of normal precipitation. Only southern Yuma and southern Coconino and Navajo counties had above normal precipitation.

February Mean Temperature Graphs – Flagstaff, Phoenix, and Tucson 1895-2014:

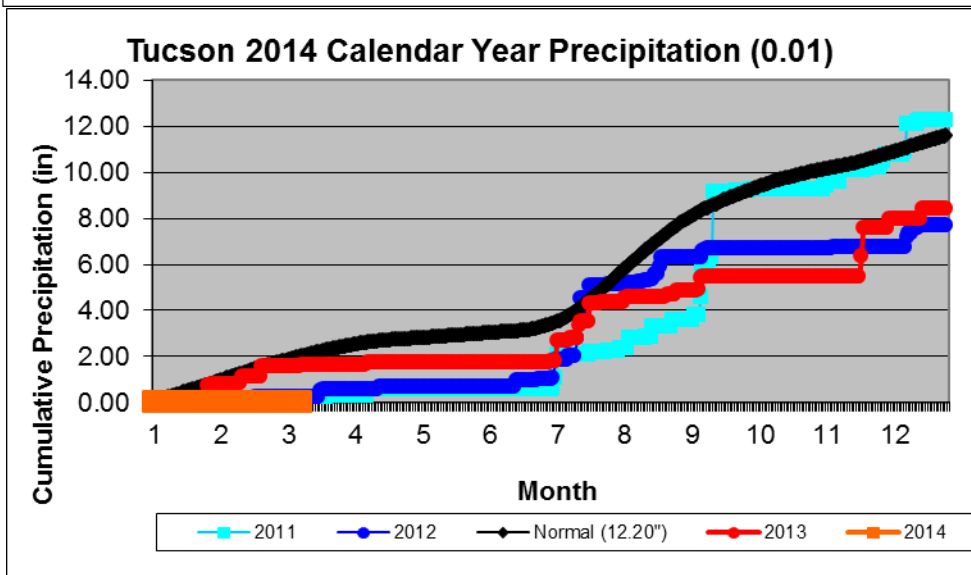
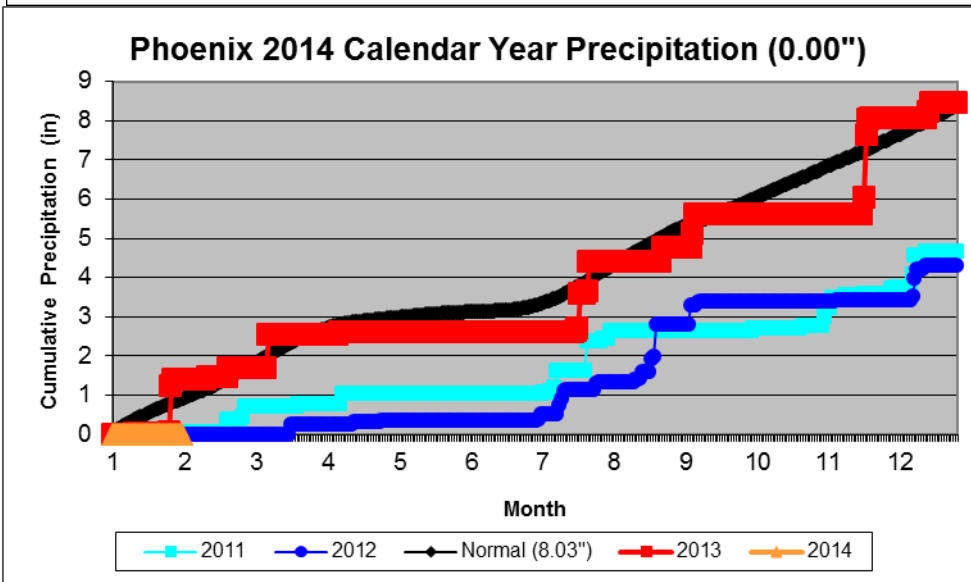
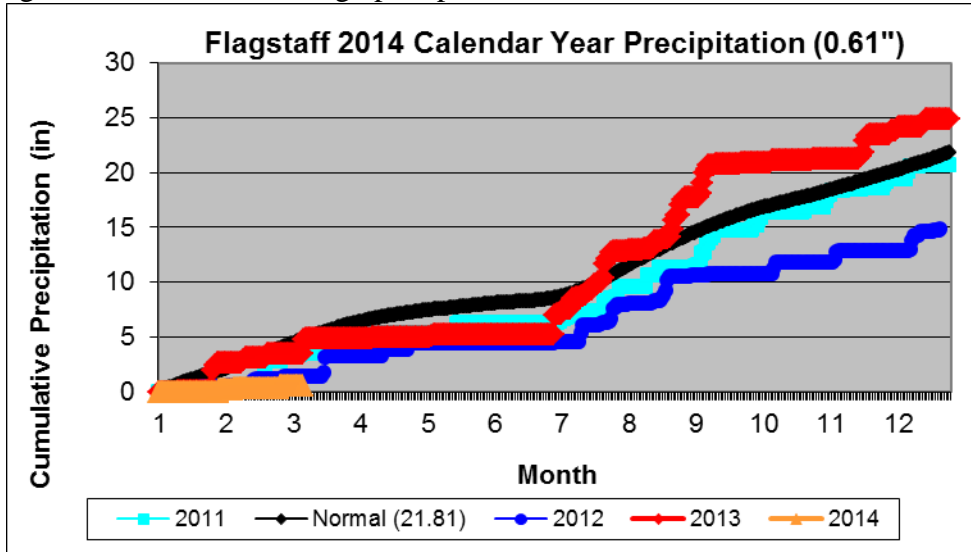


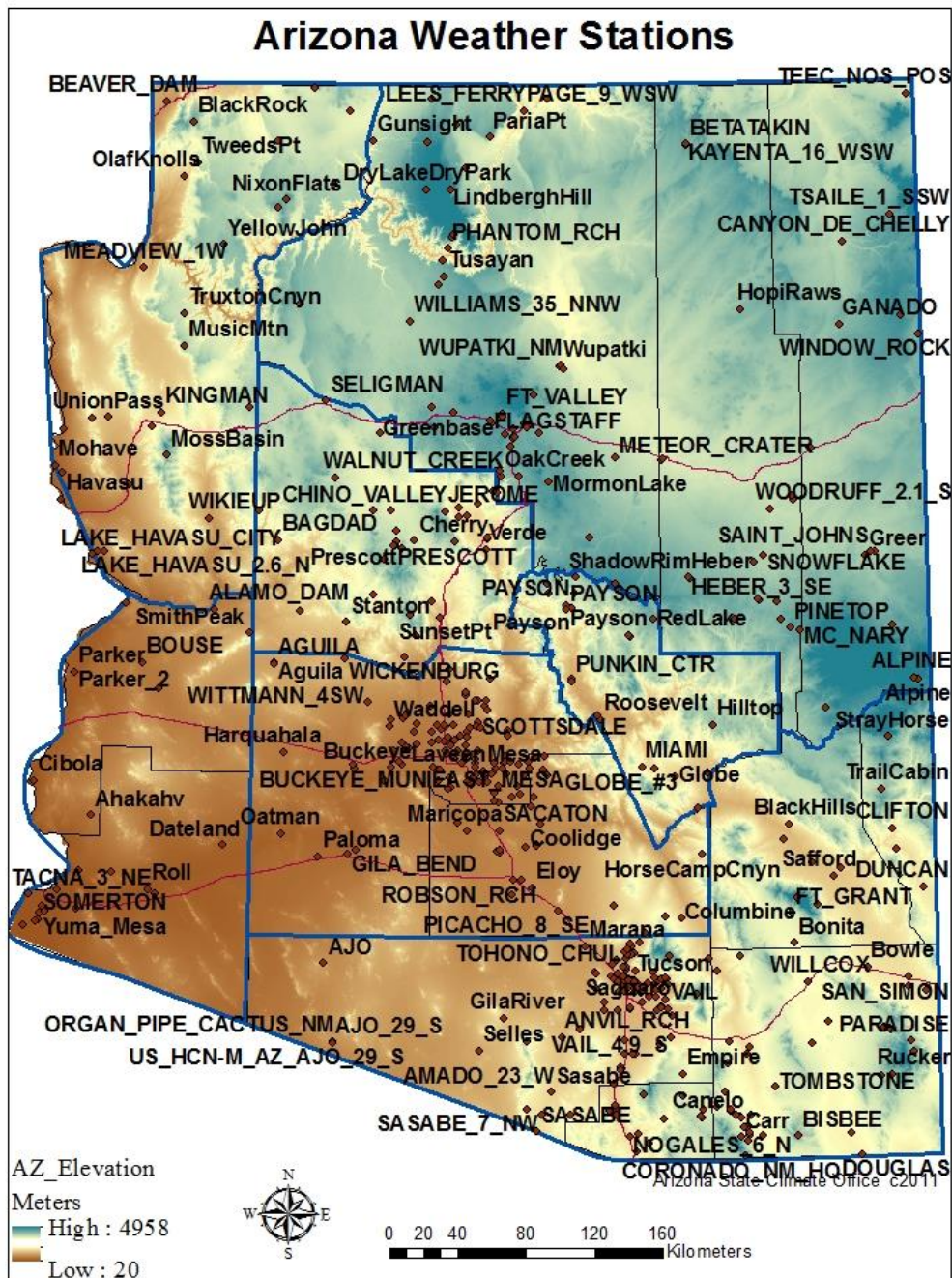
February Mean Precipitation Graphs – Flagstaff, Phoenix, and Tucson 1895-2014:



2014 Cumulative Precipitation Graphs – Flagstaff, Phoenix and Tucson:

All of Arizona is starting 2014 with below average precipitation..





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)