



Arizona Climate Summary

April 2014

Summary of conditions for March 2014

March 2014 Temperature and Precipitation Summary

March 1st – 16th: We started off the month of March with a significant precipitation event. A low pressure center off the west coast made its way into the southwest which provided plenty of uplift to a relatively moist air mass over most of the state. Places like Flagstaff, Phoenix, and Tucson all reported receiving precipitation on the 1st and 2nd of the month with Flagstaff also reporting some snowfall on those days. Tucson reported 55 mph winds from the south on the 1st. Phoenix set a new record for precipitation on the 1st, with a value of 0.95", breaking the previous record of 0.72" from 1941. Once the cold front moved through, the state dried out and remained relatively dry for the rest of the month. Flagstaff set a new high nighttime temperature record on the 8th, with 33°F, just beating the old record of 32°F set in 1975. Tucson, on the 13th, set a new HiMin record as well, posting 60°F, beating the previous record of 58°F set in 1900.

March 14th – 31st: A couple of upper level low pressure systems moved over the southwest and Baja California, but there was not enough instability or moisture to produce storm activity or precipitation within the state. On the 14th, however, higher elevation areas of northern Arizona did receive a very light precipitation. Flagstaff had 0.01" while the city of Winslow reported a trace. A similar system crossed the state on the 26th of the month but no precipitation was reported. On the 27th, Window Rock reported 0.10" of rainfall, Flagstaff had 0.08" and Winslow reported 0.01". No more records were set or tied in Flagstaff, Phoenix, and Tucson for this month. The second half of the month was generally clear and dry and extremely warm.

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

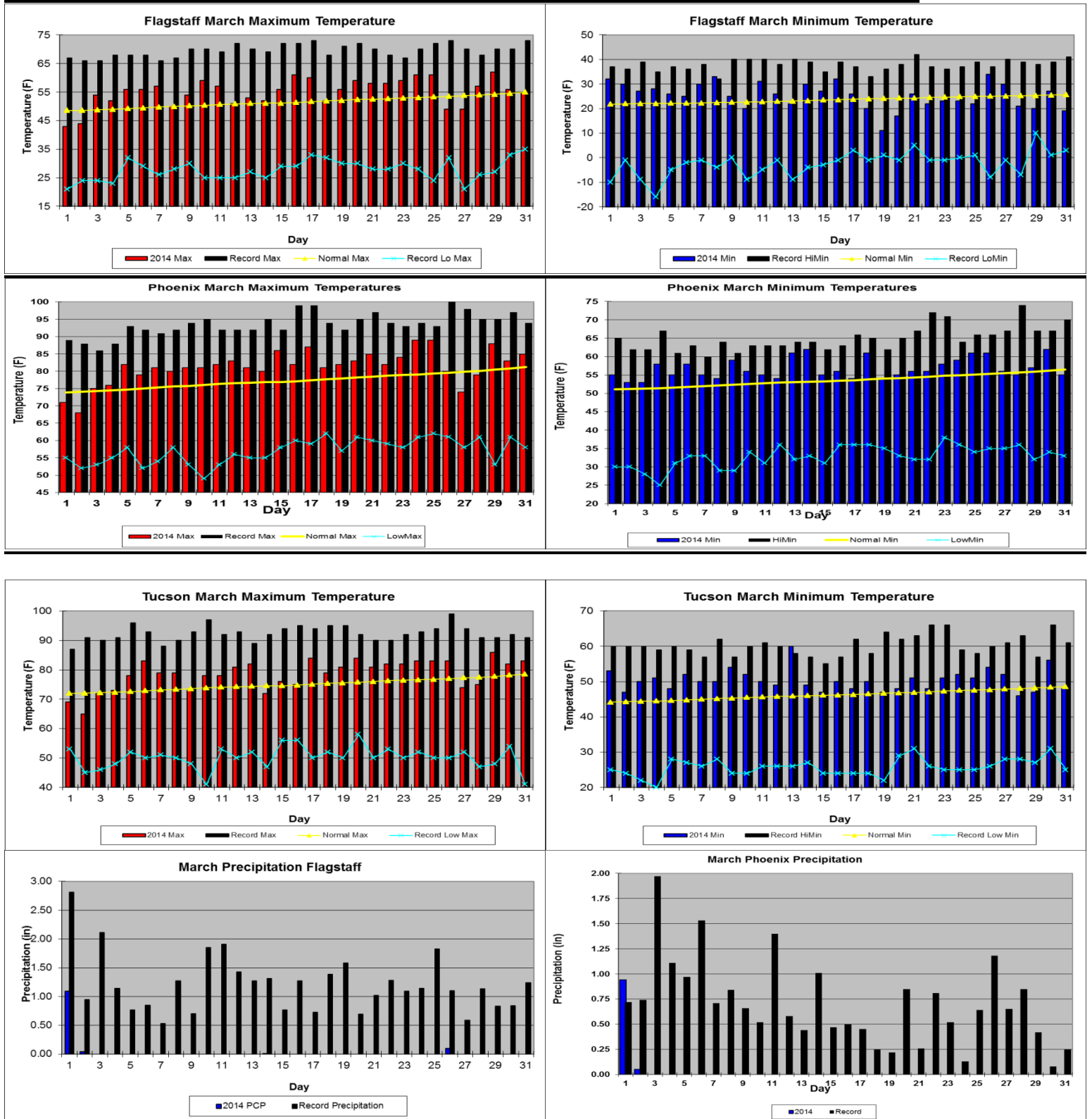
****Note:** The discrepancy between the Statewide Temperature and Precipitation values for Phoenix, Flagstaff and Tucson and the daily values in their graphs are due to the reporting times. Statewide Temperature and Precipitation values are taken at 5pm, while official daily records at the airports are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

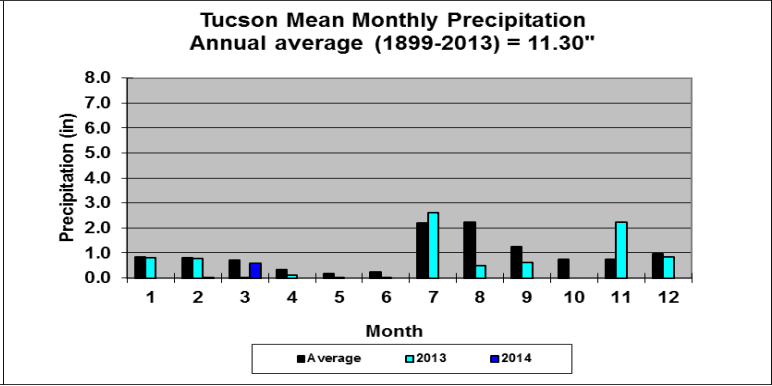
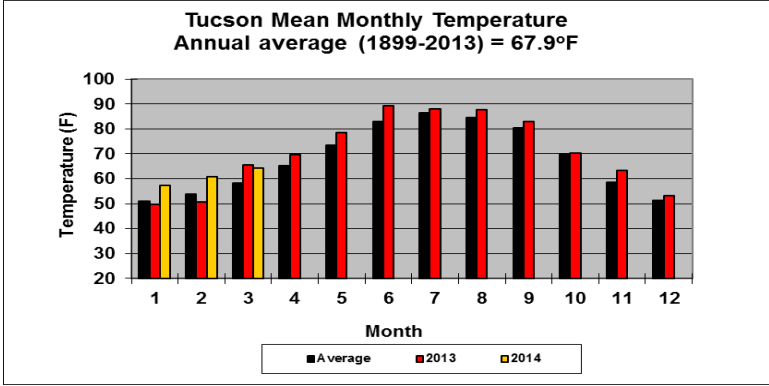
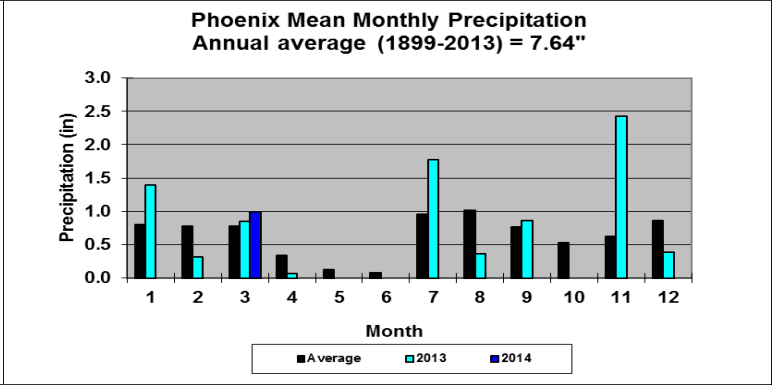
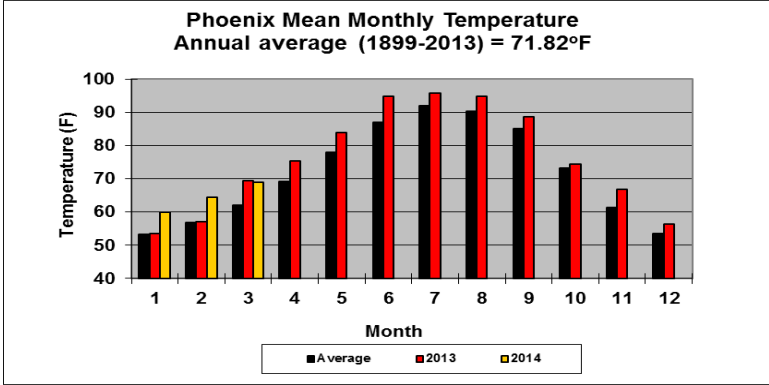
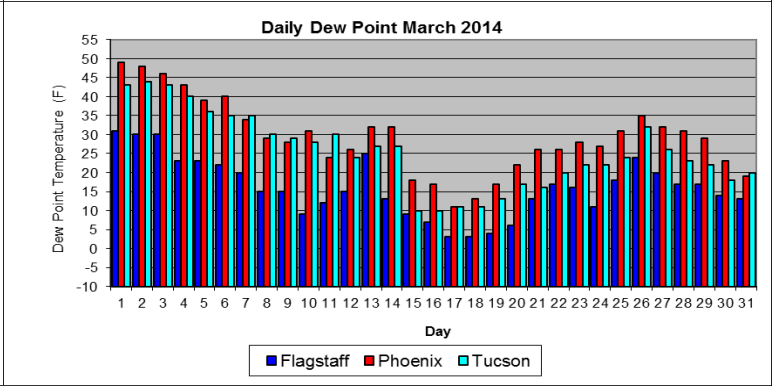
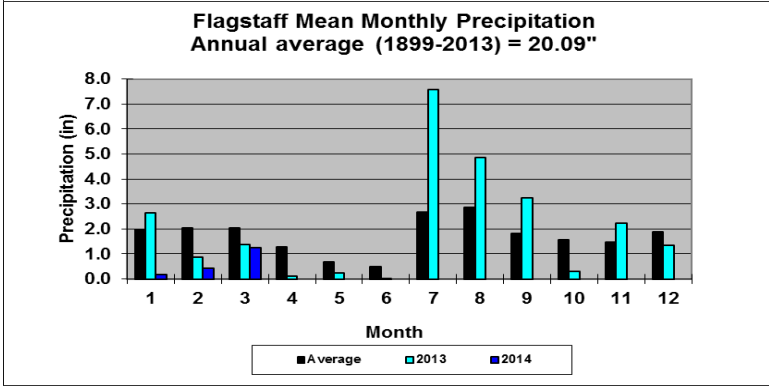
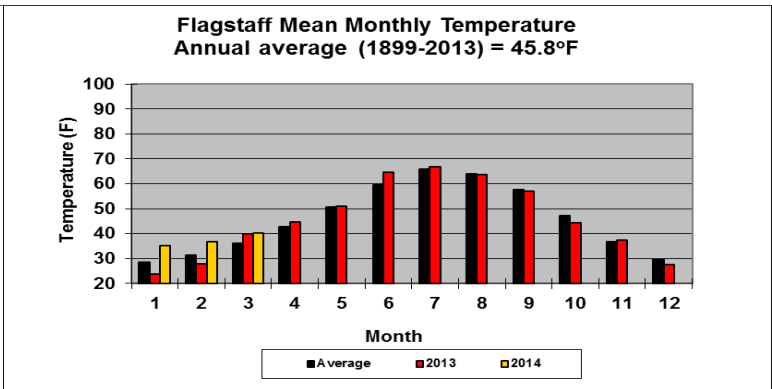
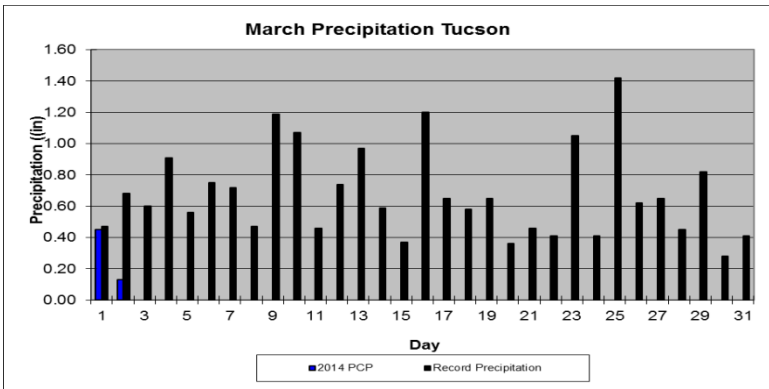
State Climate Office
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March 2014 Daily Temperature, Precipitation, & Dew Point for Flagstaff, Phoenix, and Tucson





FLAGSTAFF CLIMATE STATISTICS

March 2014

This March was the 14th warmest on record, but had no significant ranking in precipitation.

Maximum Temp 60°F or higher	5
Maximum Temp 45°F or lower	2

Avg Max Temp (F)	55.1	Normal	50.4
Avg Min Temp (F)	25.3	Normal	23.6
Avg Mean Temp (F)	40.2	Normal	37.0
Departure from Normal (F)	3.2		

Heating Degree Days	761	Normal	868
Cooling Degree Days	0	Normal	0
Degree base 65°F			

Highest Monthly Avg Temp (F)	44.9	in 1934
Lowest Monthly Avg Temp (F)	26.8	in 1973

Total March Precipitation	1.24"
Normal March Precipitation	2.12"
Departure from normal	-0.88"
Greatest 24-Hr Precipitation	1.09" on 03/01-01
Total Precipitation Year-to-Date	1.84"
Departure from Normal	-4.49"

Highest Temp this month (F): 62 on 29th
 Lowest Temp this month (F): 11 on 19th

Number of Days:

Record High (F): 73 on 03/17/2007
 03/26/1988, 03/31/1966
 Record Low (F): -16 on 03/04/1966

Clear	24
Partly Cloudy	6
Cloudy	1

Temperature or precipitation records this month:
 8th HiMin 33 set, previous record 32 set in 1975

Greatest March Precipitation	6.75" in 1970
Least March Precipitation	0.00" in 1972

Flagstaff Number of Days of:

Minimum Temp 30°F or higher	7
Minimum Temp 15°F or lower	1

Average Wind Speed	7.9 mph
Highest Peak Gust	63 mph from 220° on 30 th

PHOENIX CLIMATE STATISTICS

March 2014

This March was the 8th warmest on record, but had no significant ranking in precipitation.

Phoenix Number of Days of:

Avg Max Temp(F)	81.3	Normal	76.9
Avg Min Temp(F)	56.7	Normal	53.5
Avg Mean Temp (F)	69.0	Normal	65.2
Departure from Normal (F)	3.8		

Minimum Temp 55°F or lower	14
Minimum Temp 60°F or higher	6
Maximum Temp 70°F or lower	1
Maximum Temp 85°F or higher	7

Highest Monthly Avg Temp (F)	72.3	in 2004
Lowest Monthly Avg Temp (F)	54.3	in 1897

Heating Degree Days	7	Normal	81
Cooling Degree Days	137	Normal	87
Degree base 65°F			

Highest Temp this month (F): 89 on 25th and 24th
 Lowest Temp this month (F): 53 on 3rd and 2nd

Total March Precipitation	0.99"
Normal March Precipitation	0.99"
Departure from normal	0.00"
Greatest 24-Hr Precipitation	0.94 on 3/1-1
Total Precipitation Year-to-Date	0.99"
Departure from Normal	-1.83"

Record High (F): 100 on 03/26/1988
 Record Low (F): 25 on 03/04/1966

Temperature or precipitation records this month:
 1st Precip 0.95" set, previous record 0.72" in 1941

Number of Days:
 Clear 13
 Partly Cloudy 17
 Cloudy 1

Least March Precipitation 0.00" in 2008 and 11 other years

Average Wind Speed 6.6 mph
 Highest Peak Gust 41 mph from 230° on 26th

Greatest March Precipitation 4.82" in 1941

TUCSON CLIMATE STATISTICS
 March 2014

This March was the 6th warmest on record, but had no significant ranking in precipitation.

Heating Degree Days 42 Normal 179
 Cooling Degree Days 30 Normal 29
 Degree base 65°F

Avg Max Temp(F) 78.5 Normal 74.1
 Avg Min Temp(F) 50.4 Normal 46.2
 Avg Mean Temp(F) 64.4 Normal 60.1
 Departure from Normal (F) 4.3

Total March Precipitation 0.58"
 Normal March Precipitation 0.73"
 Departure from normal -0.15"
 Greatest 24-Hr Precipitation 0.45" on 03/01-01
 Total Precipitation Year-to-Date 0.59"
 Departure from Normal -1.94"

Highest Monthly Avg Temp (F) 66.6 in 2004
 Lowest Monthly Avg Temp (F) 51.5 in 1973

Greatest March Precipitation 3.88" in 1993
 Least March Precipitation 0.00" in 1984 and 7 other years

Highest Temp this month (F): 86 on 29th
 Lowest Temp this month (F): 46 on 28th

Record High (F): 99 on 03/26/1988
 Record Low (F): 13 on 03/02/2013

Number of Days:
 Clear 28
 Partly Cloudy 0
 Cloudy 0

Temperature or precipitation records this month.
 13th HiMin 60 set, previous record 58 in 1900

Tucson Number of Days of:
 Minimum Temp 50°F or lower 18
 Minimum Temp 60°F or higher 1
 Maximum Temp 65°F or lower 2
 Maximum Temp 85°F or higher 1

Average Wind Speed 7.4 mph
 Highest Peak Gust 55 mph from 190° on 1st

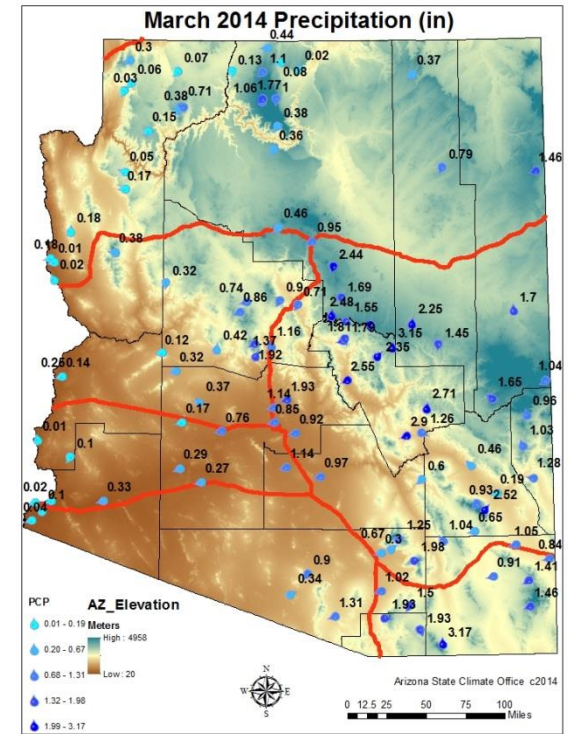
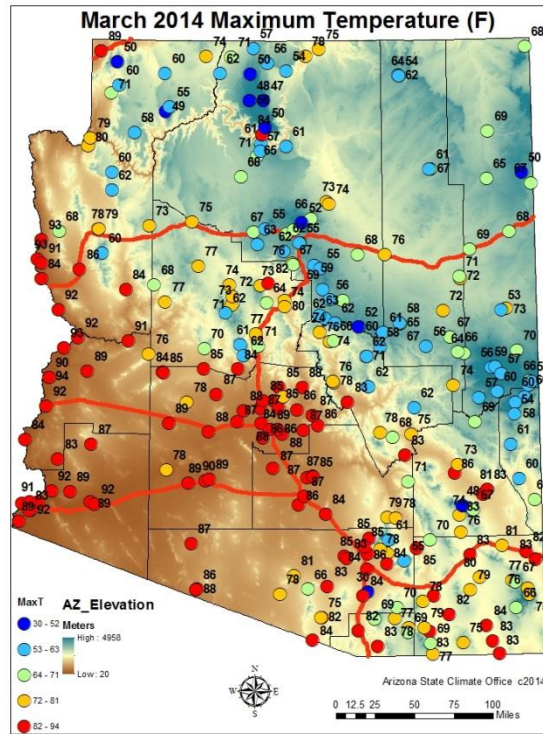
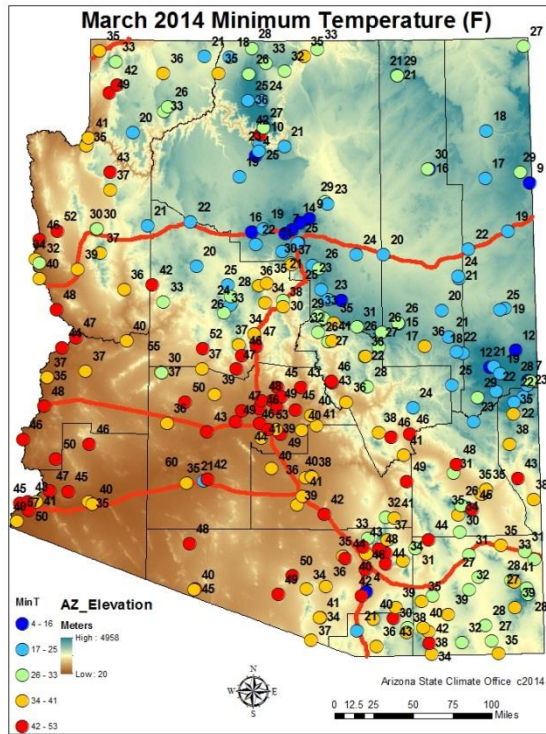
Data are from the National Weather Service and the National Climatic Data Center and are **preliminary**.

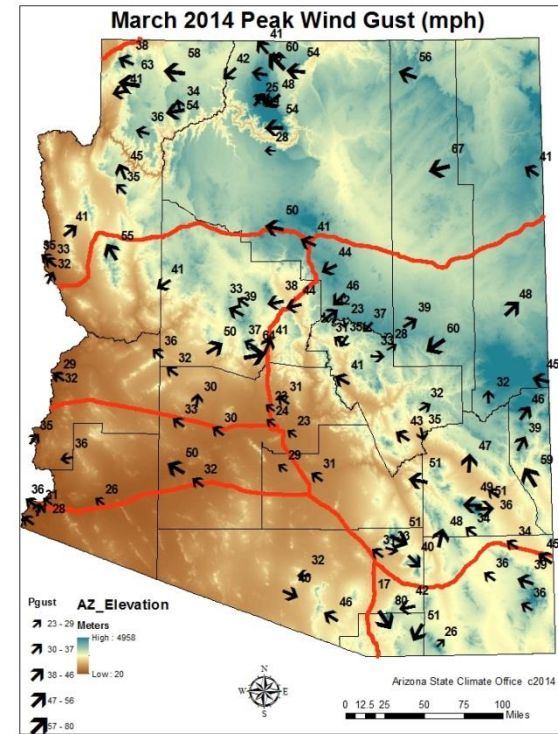
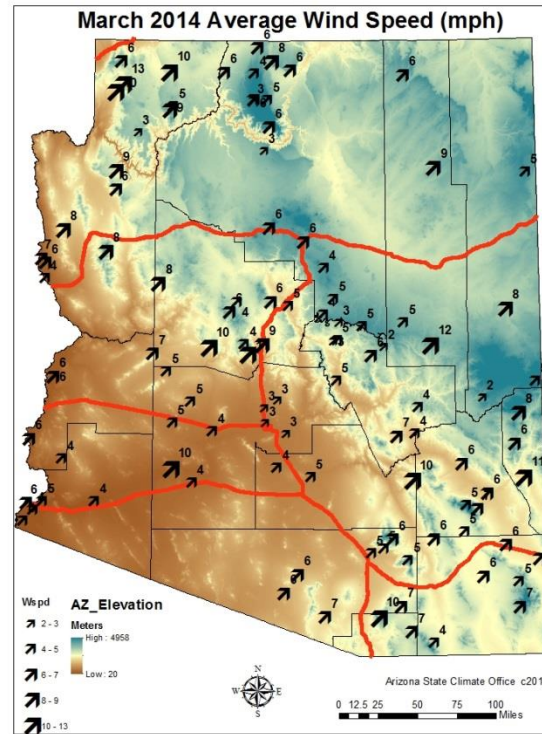
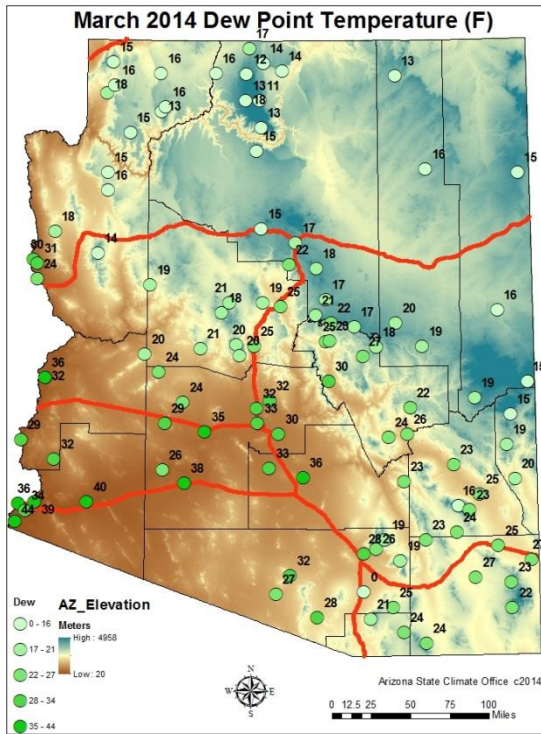
Wind Speeds:

Day	Phoenix		Flagstaff		Tucson	
	Avg	Max	Avg	Max	Avg	Max
1	9.6	30	12.2	48	15	55
2	5.8	17	7	22	5.9	37
3	3.8	13	3.3	19	4	25
4	5.1	18	5.6	24	5.5	22
5	3.8	17	5.2	22	5	17
6	4.7	16	5.9	24	6.9	25
7	6.6	20	5.1	22	7.1	29
8	7.4	28	16.5	38	8.8	36
9	7.9	20	7	24	13.5	39
10	6.4	15	8.2	28	7	19
11	7.4	24	7.6	27	5	25
12	5.3	20	8.6	29	7.8	32
13	5.8	17	4.3	27	11	28
14	7.3	24	4.4	19	5.5	34
15	10.7	38	11.8	39	11.7	36
16	7.1	28	12.3	30	4.9	29
17	9	27	14.2	49	8.4	32
18	7.6	25	7.2	25	6.8	22
19	5.2	17	3.5	22	5.4	19
20	4.4	21	5.9	29	6.1	20
21	5.7	18	7.8	33	7	25
22	4.6	17	5.1	28	5.8	27
23	5	15	3.3	24	6.6	20
24	4.6	15	4.3	19	5.7	19
25	6.7	30	6.3	23	7.6	29
26	13.2	41	17.5	52	13.9	40
27	5.9	22	10.1	32	6.4	29
28	4.8	18	2.8	24	4.9	17
29	4.7	16	6	30	5.3	16
30	9.2	29	13.8	63	8.7	29
31	8.8	24	12.6	39	6.9	26

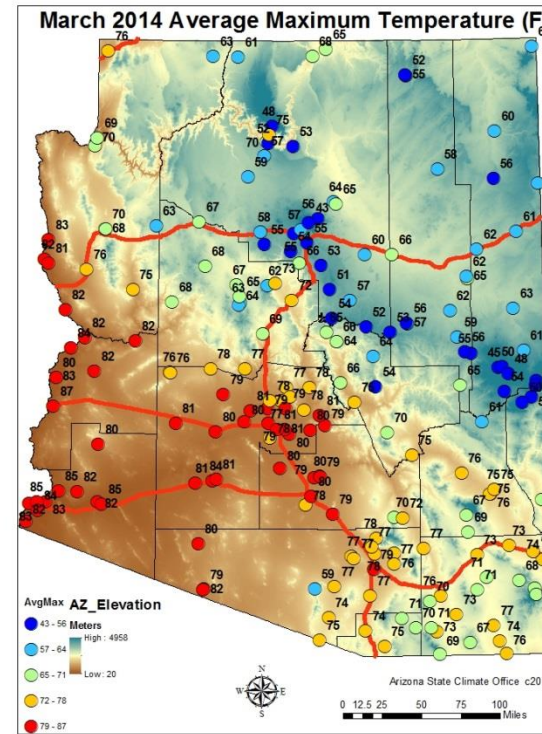
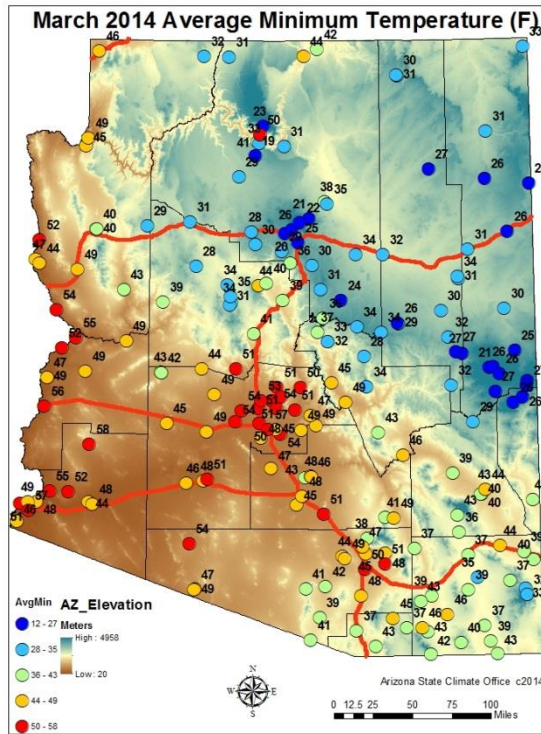
Dew Points for March:**Daily Average Dew Point (°F):**

Day	Phx	Tuc	Flg
1	49	43	31
2	48	44	30
3	46	43	30
4	43	40	23
5	39	36	23
6	40	35	22
7	34	35	20
8	29	30	15
9	28	29	15
10	31	28	9
11	24	30	12
12	26	24	15
13	32	27	25
14	32	27	13
15	18	10	9
16	17	10	7
17	11	11	3
18	13	11	3
19	17	13	4
20	22	17	6
21	26	16	13
22	26	20	17
23	28	22	16
24	27	22	11
25	31	24	18
26	35	32	24
27	32	26	20
28	31	23	17
29	29	22	17
30	23	18	14
31	19	20	13





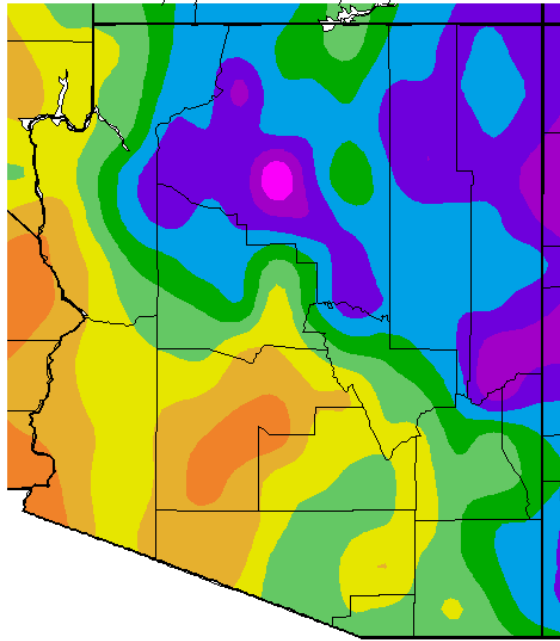
The lowest minimum temperature was -2°F at Flagstaff, and the highest minimum was 60°F at Oatman. The lowest maximum temperature of 30°F was recorded at Sahuarito, while the highest maximum temperature of 94°F was reported at Parker. The lowest rainfall amount was $0.00''$ at most stations in Arizona and the highest was $4.31''$ at Workman Creek. The lowest dew point was 0°F at Sahuarito and the highest was 44°F at Yuma. The highest peak wind gust was 80 mph at Hopkins.



March 2014

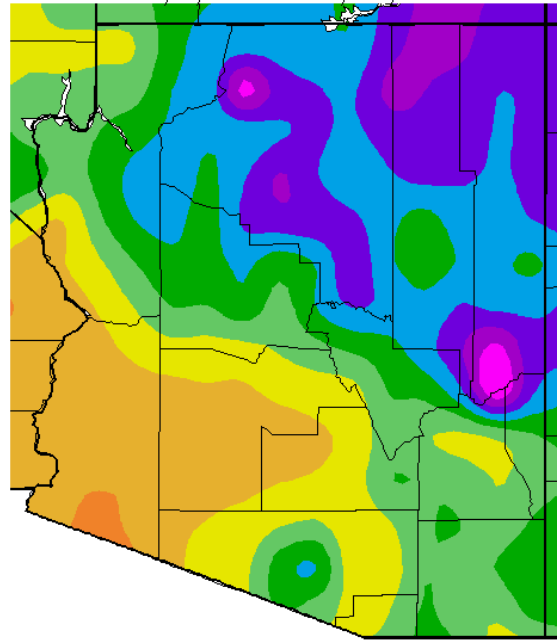
The highest average minimum temperature was 58°F at Oatman, and the lowest average minimum temperature was 12°F at Alpine. The highest average maximum temperature was 87°F at Ehrenburg and lowest average maximum temperature was 43°F at Snowslide.

Av. Min. Temperature (deg. F)
3/1/2014 – 3/30/2014



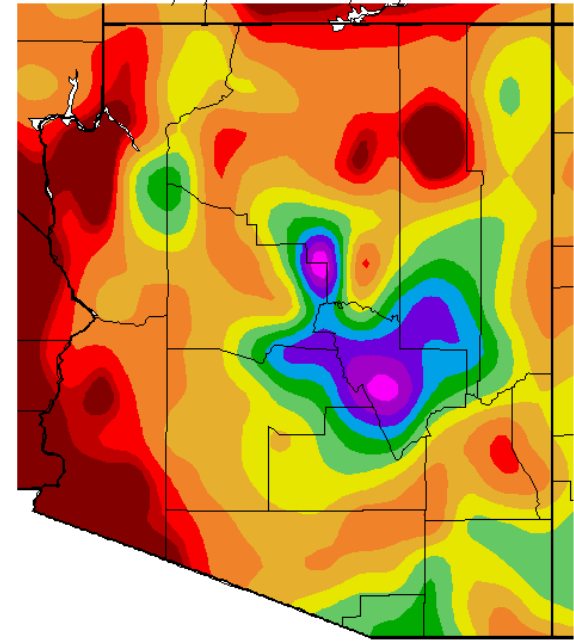
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Av. Max. Temperature (deg. F)
3/1/2014 – 3/30/2014



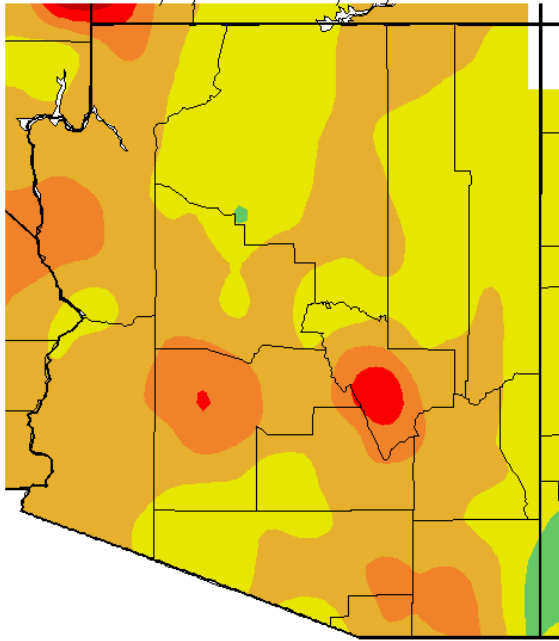
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Total Precipitation (in.)
3/1/2014 – 3/30/2014



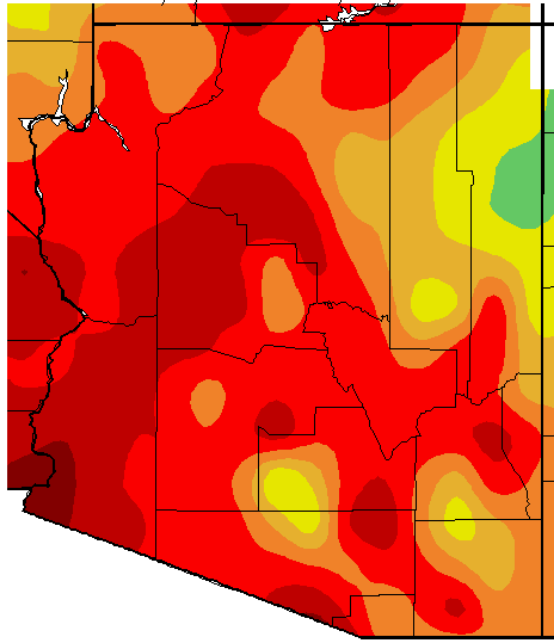
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Av. Min. Temperature dep from Ave (deg. F)
3/1/2014 – 3/30/2014



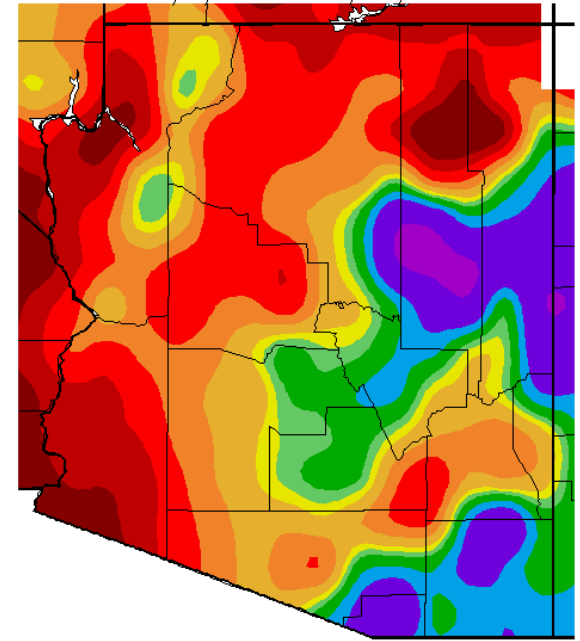
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Av. Max. Temperature dep from Ave (deg F)
3/1/2014 – 3/30/2014



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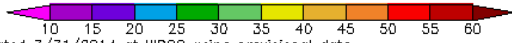
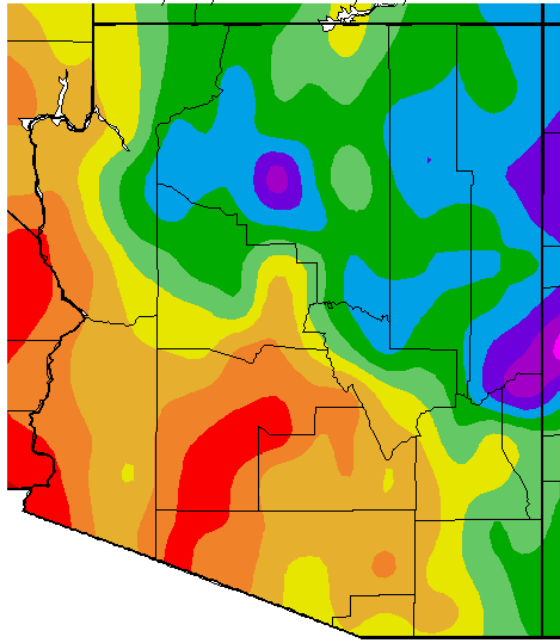
Percent of Average Precipitation (%)
3/1/2014 – 3/30/2014



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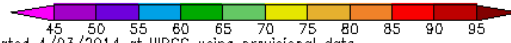
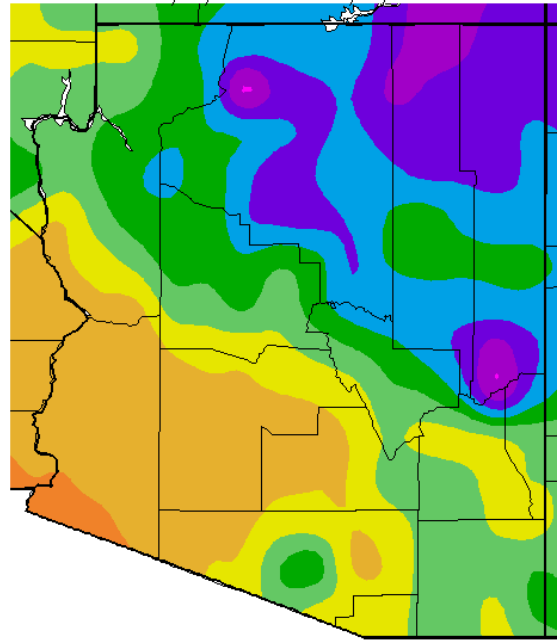
March minimum temperatures were generally 0 to 6°F warmer than normal statewide with Gila County more than 8°F warmer than normal. Daytime temperatures were 2 to 5°F warmer than normal except on the Colorado Plateau where temperatures have only been 0 to 2°F warmer than normal. March precipitation was highly variable across the state with drier than normal conditions in the western and northern thirds of the state and near normal in central Arizona and 150 to 300% of normal in east central and southeast Arizona.

Av. Min. Temperature (deg. F)
12/31/2013 – 3/30/2014



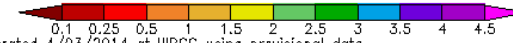
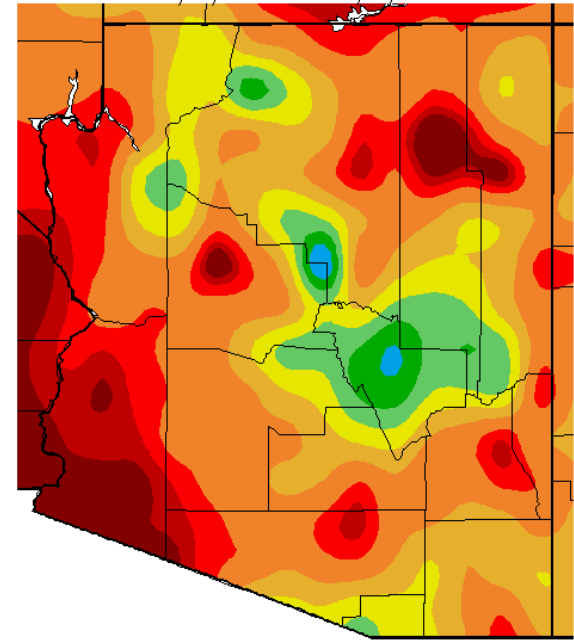
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Av. Max. Temperature (deg. F)
1/3/2014 – 4/2/2014



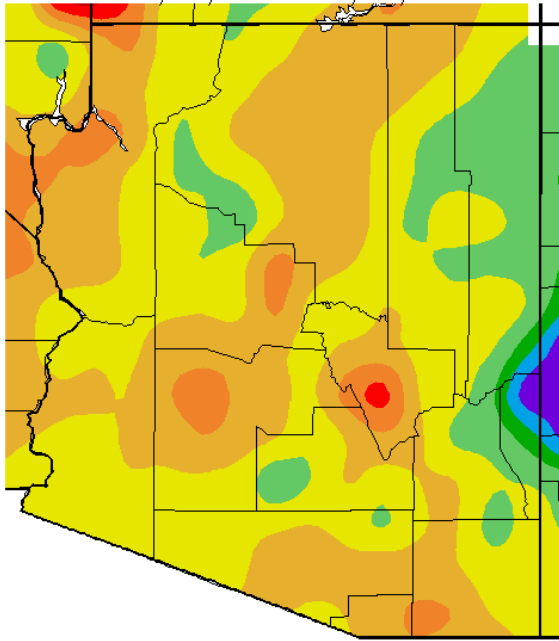
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Total Precipitation (in.)
1/3/2014 – 4/2/2014



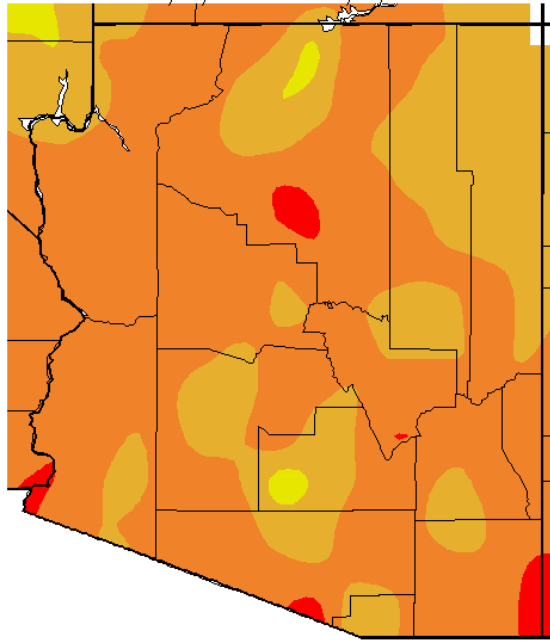
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Av. Min. Temperature dep from Ave (deg. F)
12/31/2013 – 3/30/2014



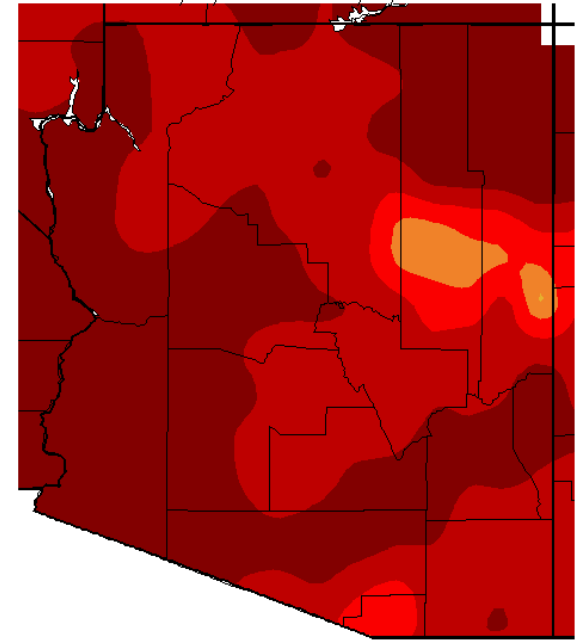
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Av. Max. Temperature dep from Ave (deg F)
1/3/2014 – 4/2/2014



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Percent of Average Precipitation (%)
1/3/2014 – 4/2/2014

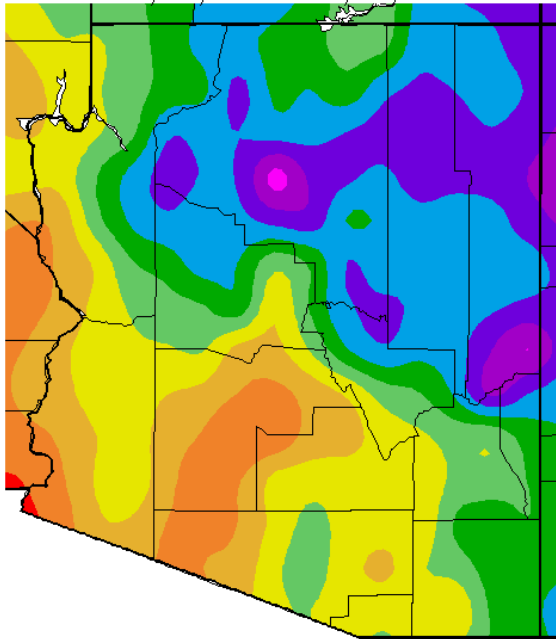


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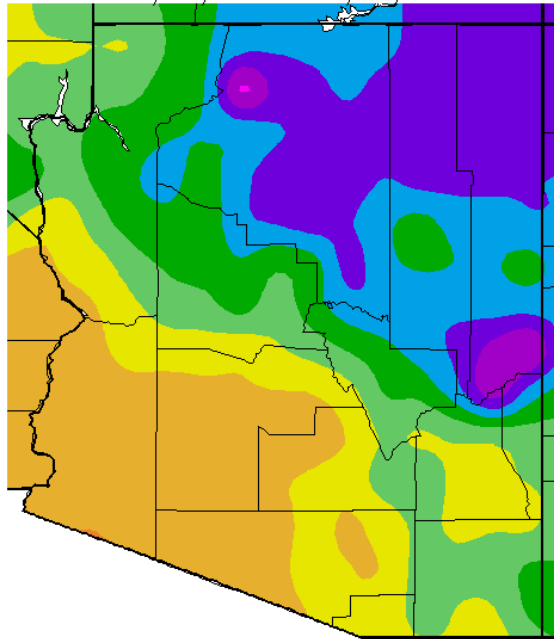
Calendar Year 2014

Calendar year minimum temperatures ranged from 2°F cooler than average to 6°F warmer than average with the coolest conditions along the eastern border. The warmest nighttime temperatures were in Gila County. Daytime highs were 4 to 6°F warmer than normal with the Colorado Plateau slightly cooler than the rest of the state. Precipitation so far this year has been less than 50% of normal statewide. The Mogollon Rim has been the wettest place, but still much drier than normal.

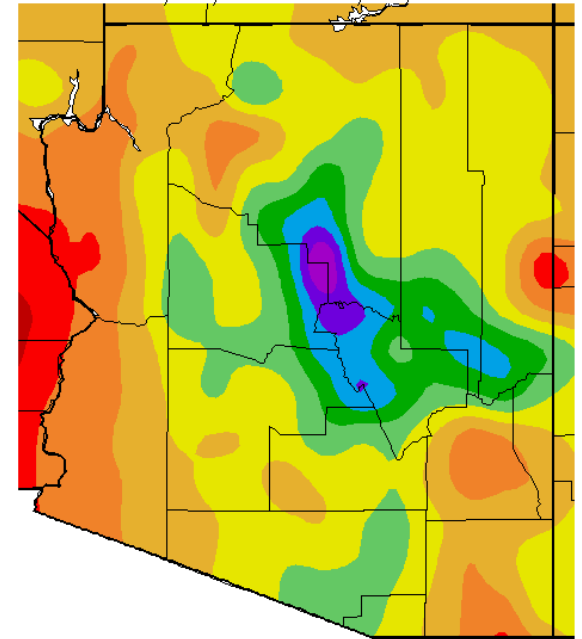
Av. Min. Temperature (deg. F)
9/30/2013 - 3/30/2014



Av. Max. Temperature (deg. F)
9/30/2013 - 3/30/2014



Total Precipitation (in.)
9/30/2013 - 3/30/2014

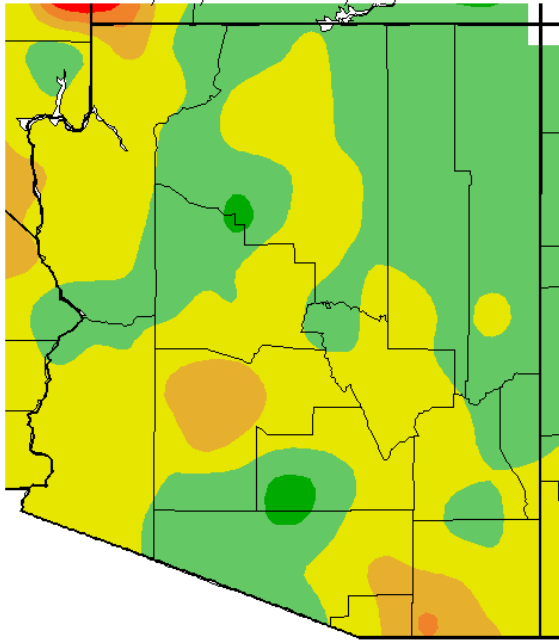


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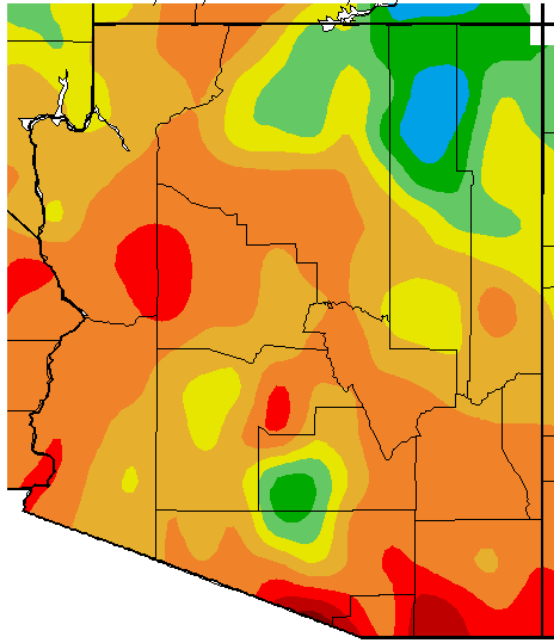
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Av. Min. Temperature dep from Ave (deg. F)
9/30/2013 – 3/30/2014



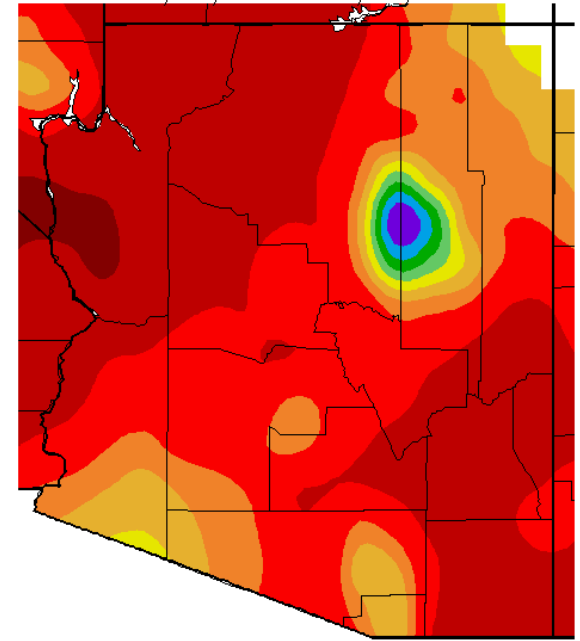
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Av. Max. Temperature dep from Ave (deg F)
9/30/2013 – 3/30/2014



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Percent of Average Precipitation (%)
9/30/2013 – 3/30/2014

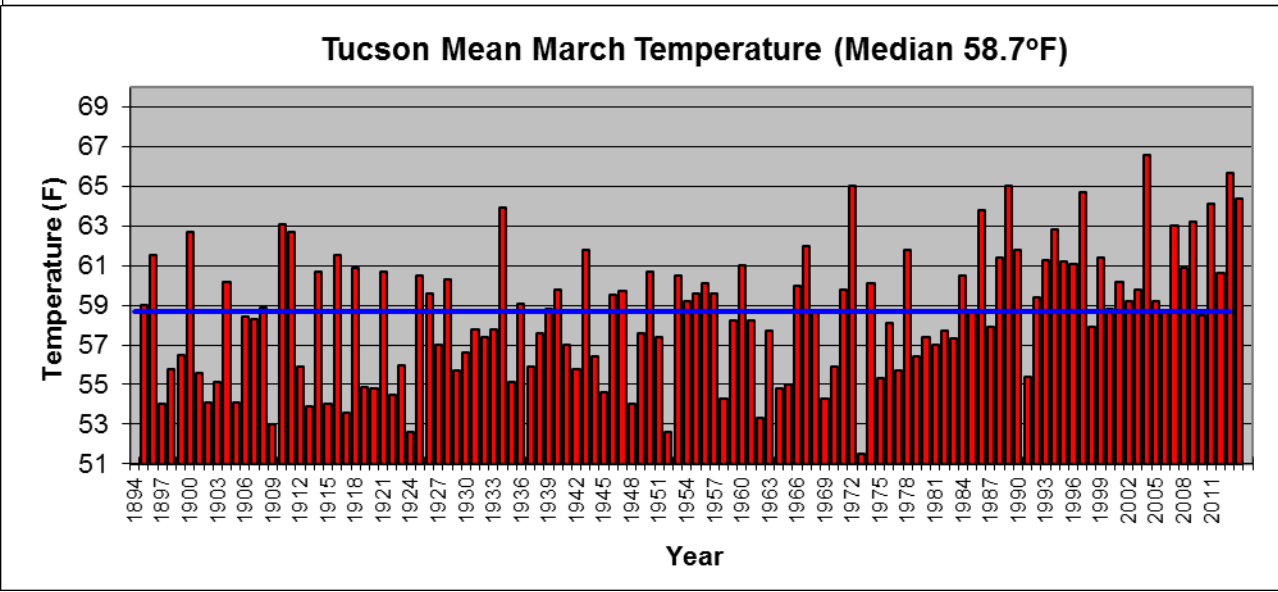
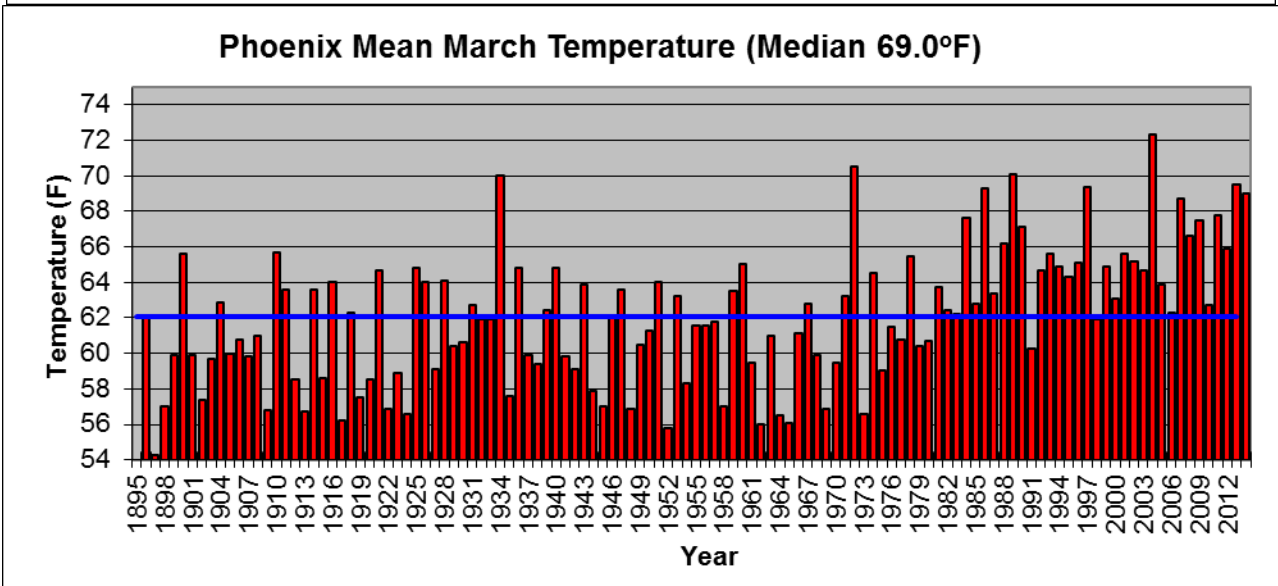
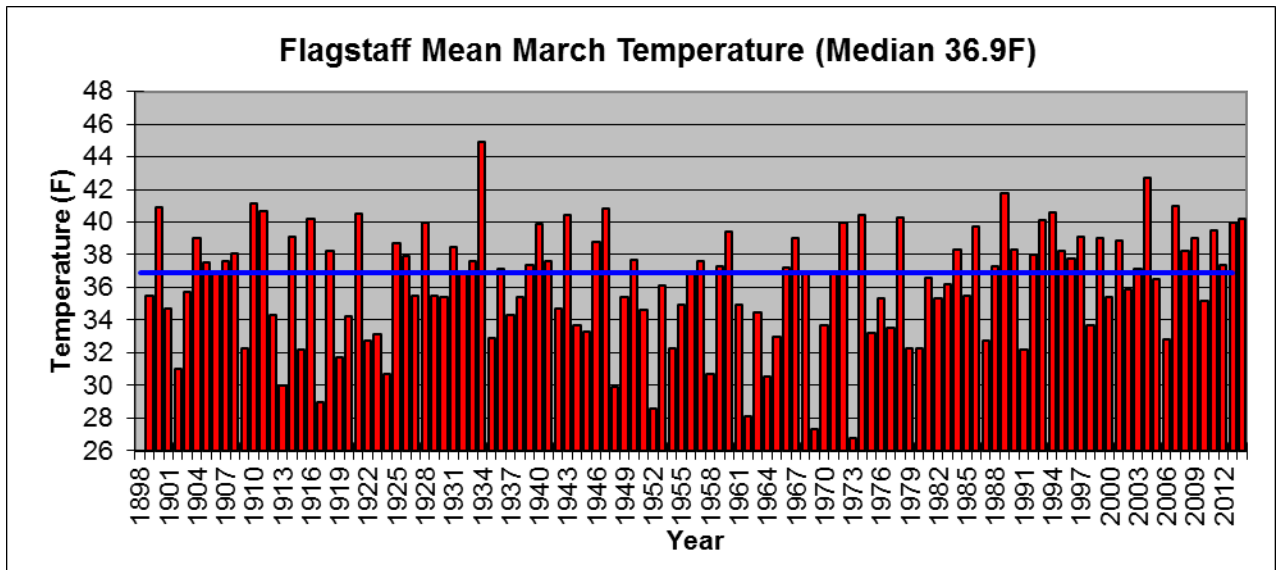


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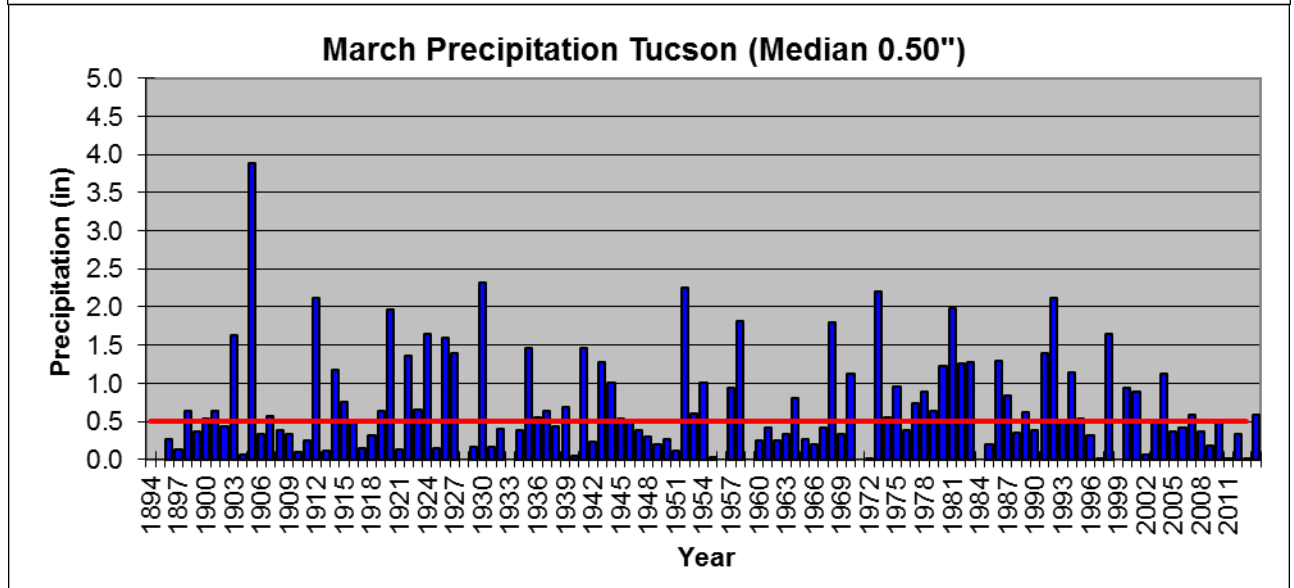
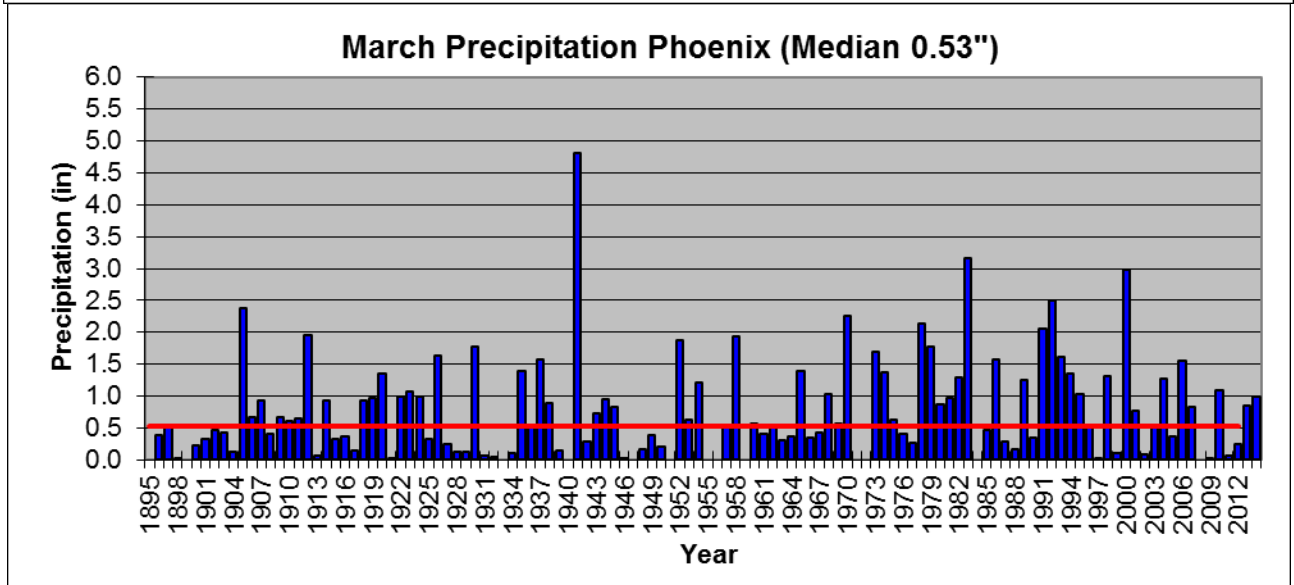
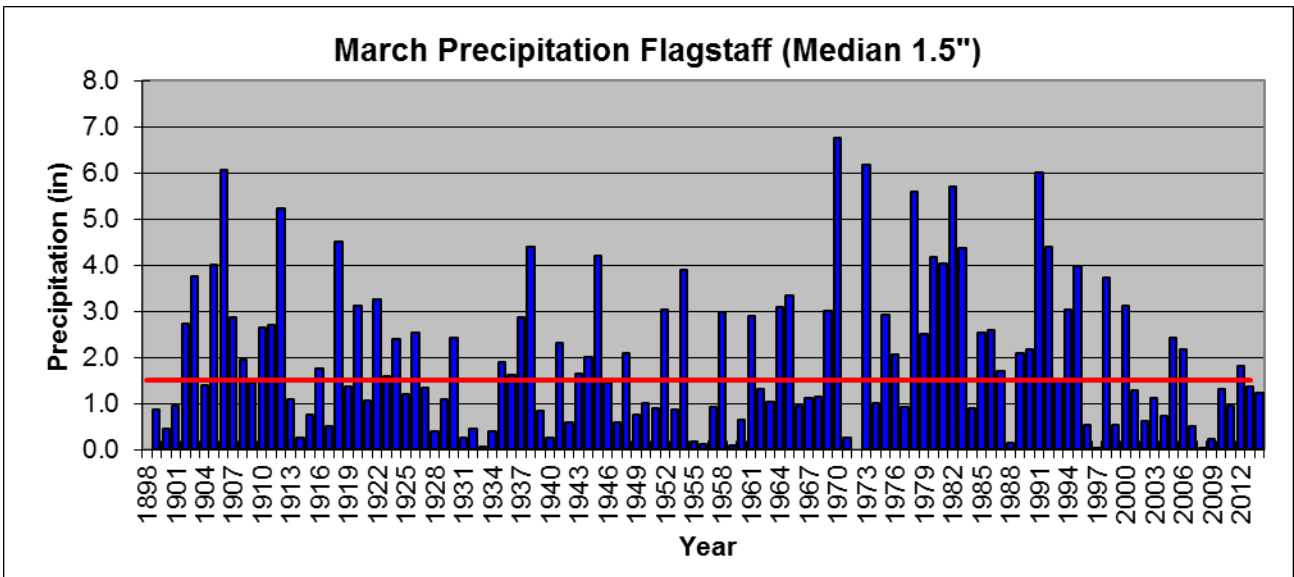
2014 Water Year

Minimum temperatures continue to be within 2°F of normal statewide. Daytime temperatures have been within 3°F of normal, with the warmest areas in the southern part of the state and the coldest area in northern Navajo County. Dry conditions continue in the northwest and southeast, with the predominant storm track clearly visible from the southwest to the northeast and bull's-eye over southern Coconino and central Navajo counties.

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

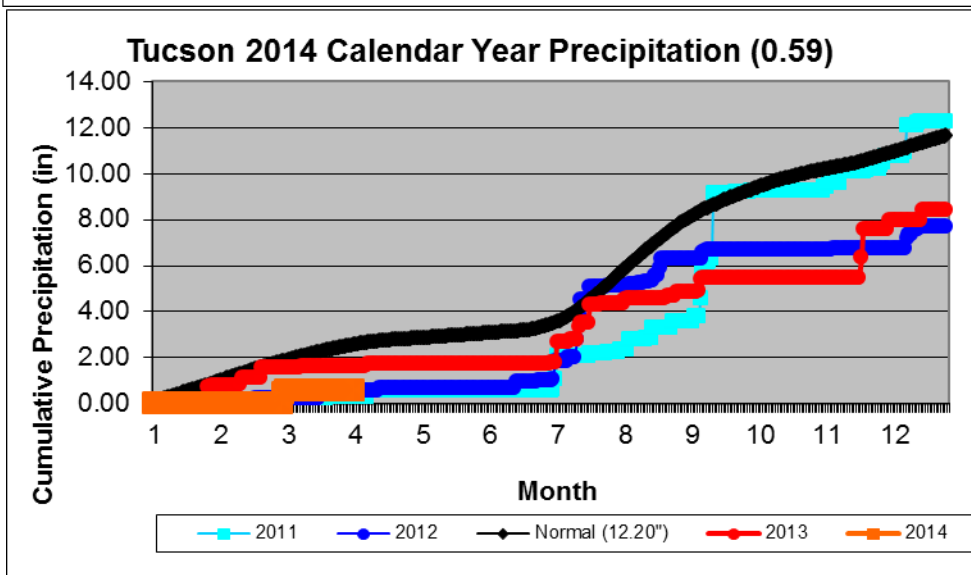
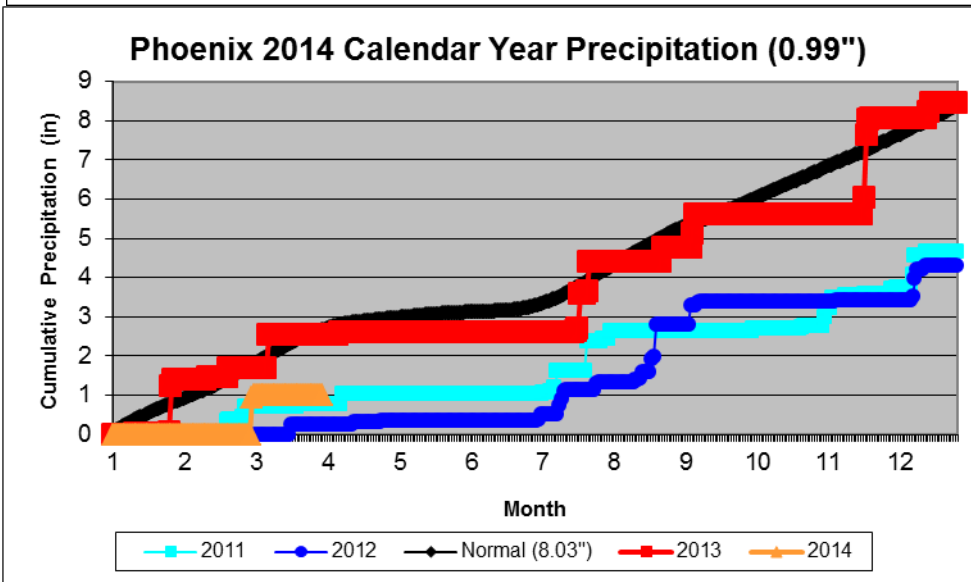
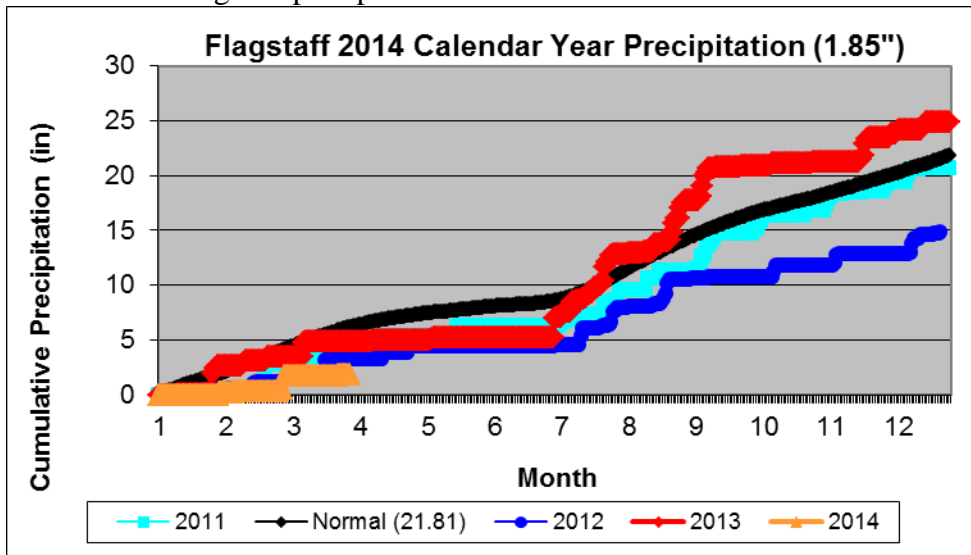


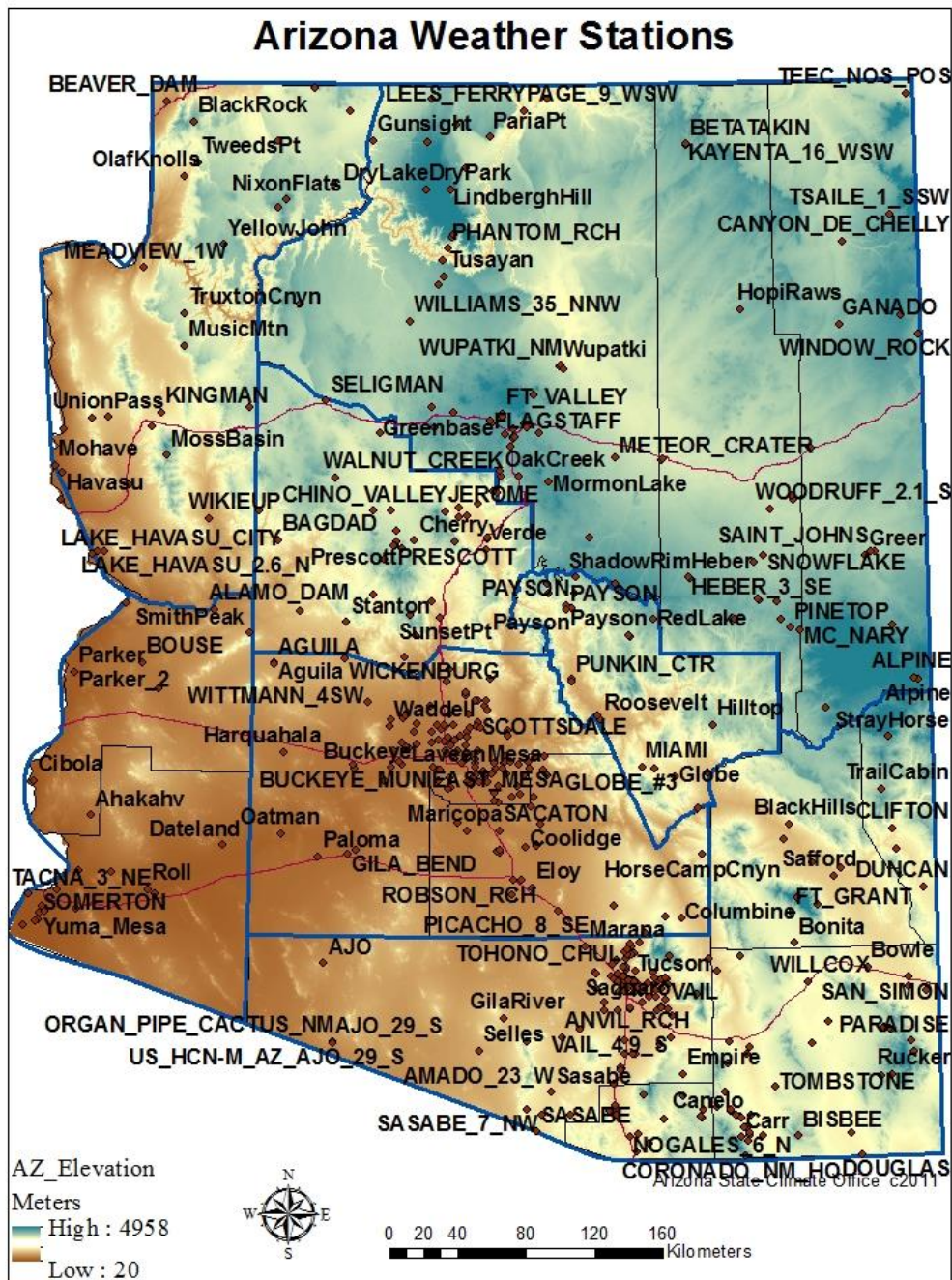
March Mean Precipitation Graphs – Flagstaff, Phoenix, and Tucson 1895-2014:



2014 Cumulative Precipitation Graphs – Flagstaff, Phoenix and Tucson:

All of Arizona is still well below average on 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)