



Arizona Climate Summary

May 2012

Summary of conditions for April 2012

April 2012 Temperature and Precipitation Summary

April 1st – 16th: Although April began with another low pressure system sweeping eastward from California, there was no moisture associated with the system, so no precipitation was reported in Arizona. On the 2nd, low became cut-off over Utah, and by the 3rd it was over New Mexico, but Arizona remained dry. High pressure returned on the 4th and 5th, and temperatures climbed back up into the 90s in the southwest deserts, peaking at 97°F on the 9th at Gila Bend. By the 11th, the high pressure ridge broke down as a strong low pressure system moved east through California. This system had some moisture associated with it, but by the time it reached Arizona much of the moisture had already fallen over California. The first wave of precipitation fell on the 11th in northern and central Arizona, with 0.15” or less reported in Flagstaff, Bullhead City and Prescott. The storm stalled off the California coast, and the 12th and 13th were dry in Arizona. The system finally moved through Arizona from the 14th through the morning of the 16th, leaving behind significant snowfall of 7.9” at Bellemont, 12” at the north rim of the Grand Canyon, 6” at Flagstaff (Fort Valley), 1.8” at Payson, and 3” each at Seligman and Show Low. Temperatures with this storm dropped into the mid 70s for the highs at the warmer locations, and down to 18°F at night at the north rim of the Grand Canyon.

April 17th – 30th: High pressure returned on the 17th and remained in place until the 26th. During this 9-day period, temperatures climbed well above normal statewide, peaking at 107°F at Buckskin Mountain on the 22nd. On that same day, the lowest maximum temperature reported was 71°F at the north rim of the Grand Canyon. On the 21st, Phoenix reached 100°F for the first time this year, tying the old record which was first set in 1989. The next day it was 105°F, breaking the old record of 101°F first set in 1939. Tucson reached 100 on the 22nd and 23rd, with 101 on the 22nd and 100 on the 23rd. Flagstaff reached 78°F on the 22nd and 23rd, breaking the previous records of 76 and 77°F respectively, both set in 1949. On Thursday the 26th, a very strong low pressure system moved eastward from California once again bringing rainfall to Arizona. Although there was copious moisture associated with the storm, it dumped most of the rainfall on California. The rainfall covered the northern and central portions of the state with the highest total of 0.58” in Flagstaff. Tucson remained dry and Phoenix received 0.03”, although many locations in the north valley had between 0.10” and 0.25”. After the system passed, temperatures rose again to bear normal values, with some areas slightly warmer than normal. The southwest deserts reached the lower 90s. The hot spots were Yuma at 97°F on the 28th and Bullhead City at 98°F on the 30th.

In This Issue: Overview of April, graphs of the April daily maximum and minimum temperatures, precipitation, mean daily dew points for Flagstaff, Phoenix, and Tucson; April climate statistics, maps of mean monthly maximum and minimum temperatures, precipitation, dew points, wind speeds for April; and graphs of the mean April 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. 18 of this report for calendar abbreviations.

Data are preliminary and are from the National Weather Service Forecast Offices in Flagstaff, Phoenix and Tucson.

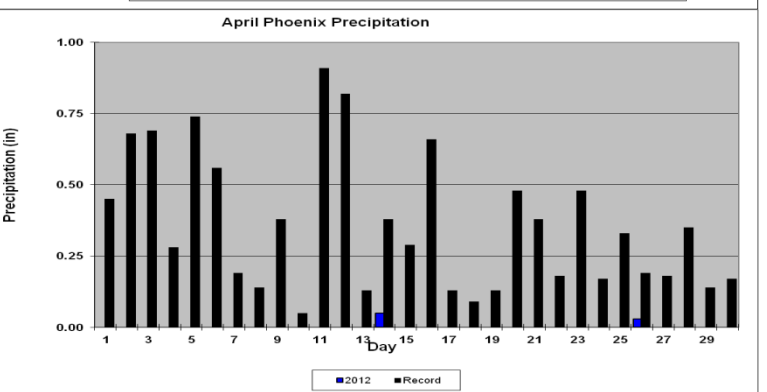
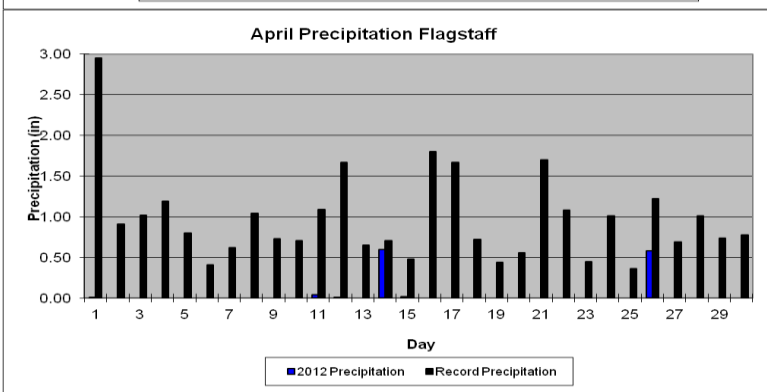
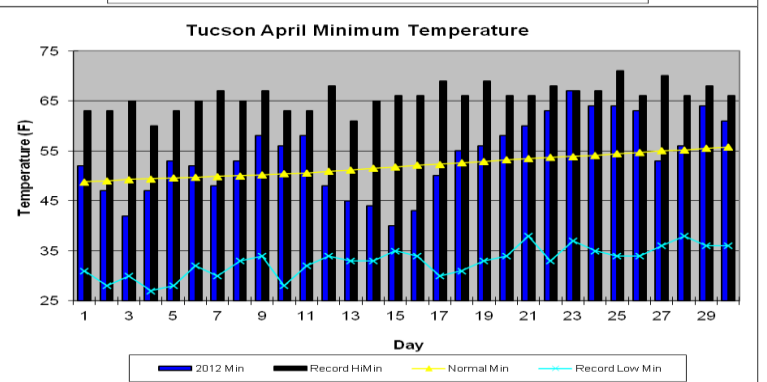
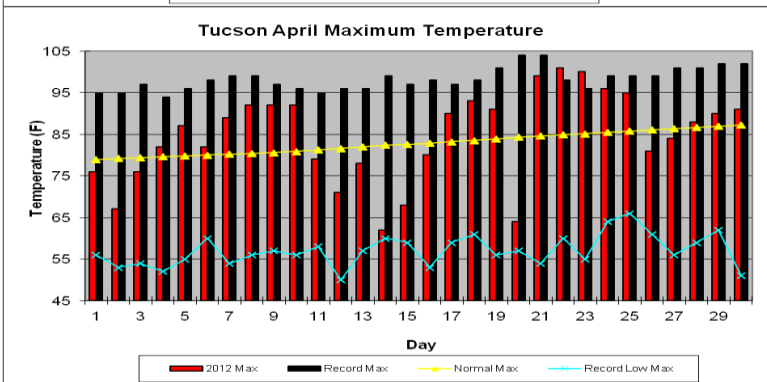
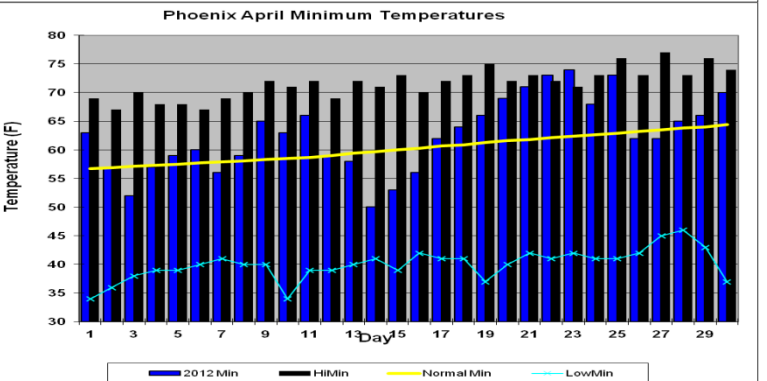
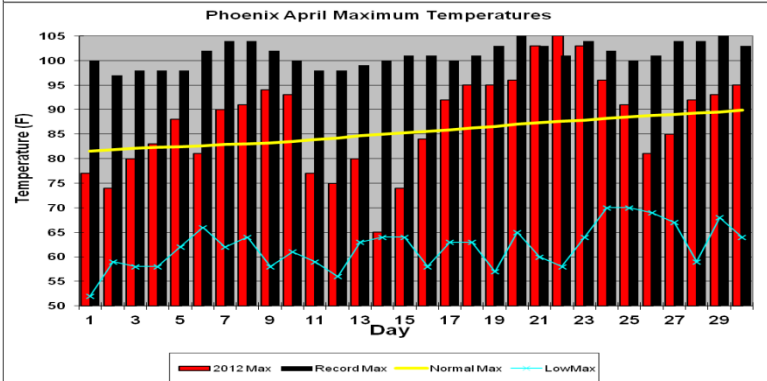
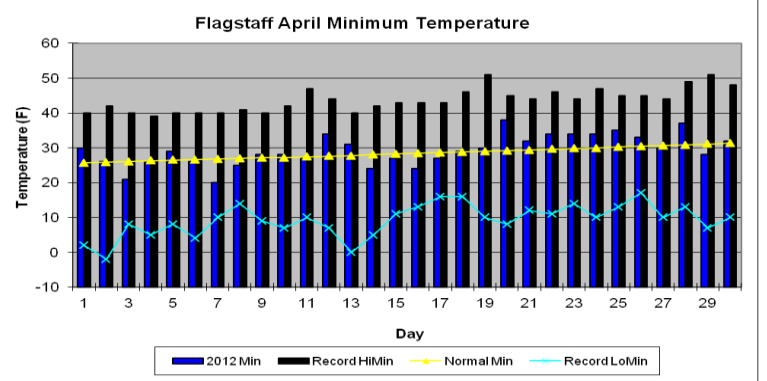
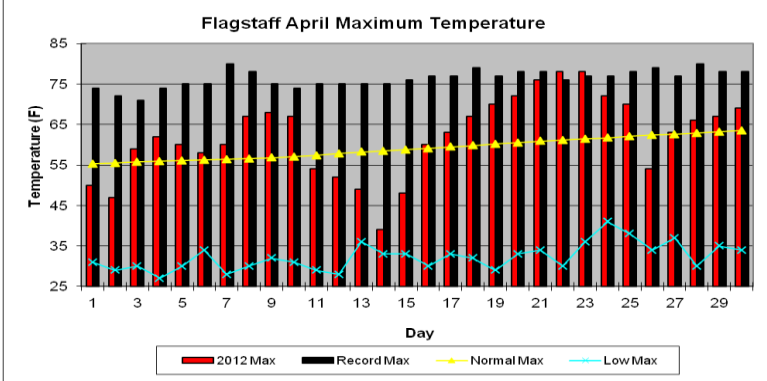
****Note:** The discrepancy between the Statewide Temperature and Precipitation values for Phoenix, Flagstaff and Tucson and the daily values in their graphs are due to the reporting times. Statewide Temperature and Precipitation values are taken at 5pm, while official daily records at the airports are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

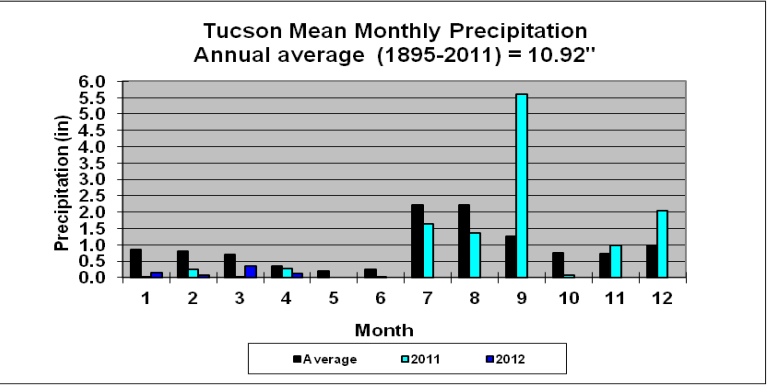
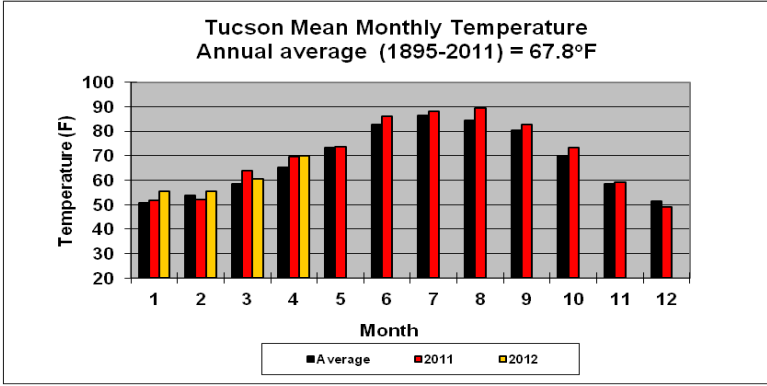
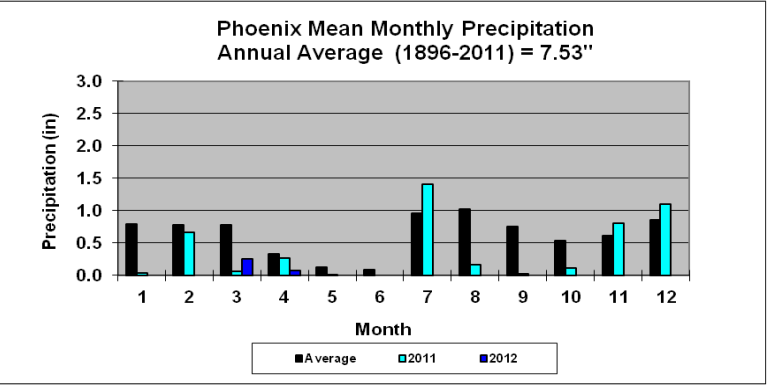
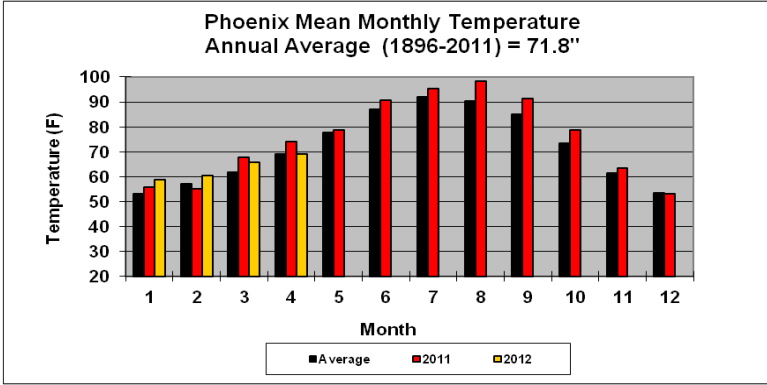
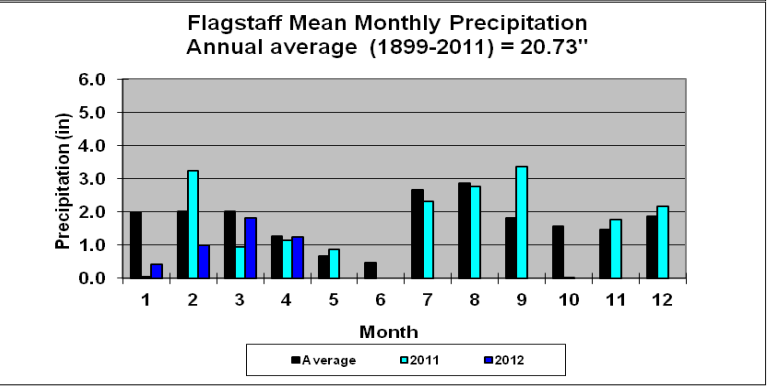
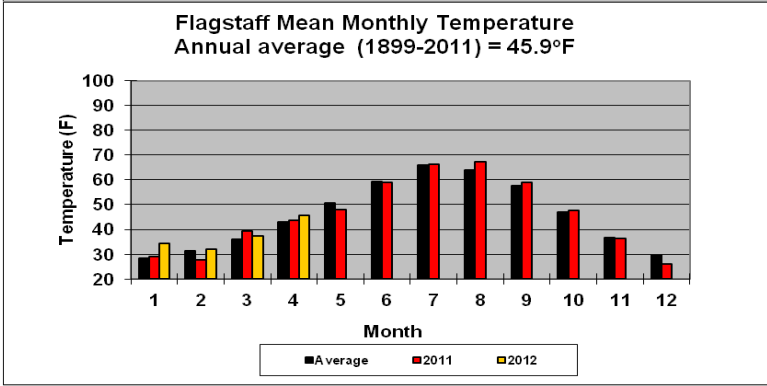
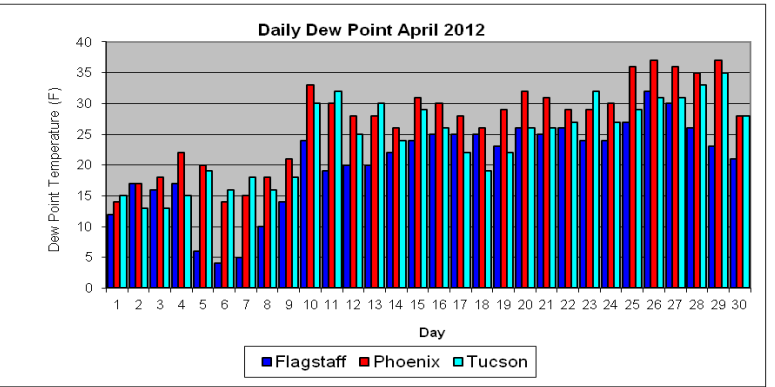
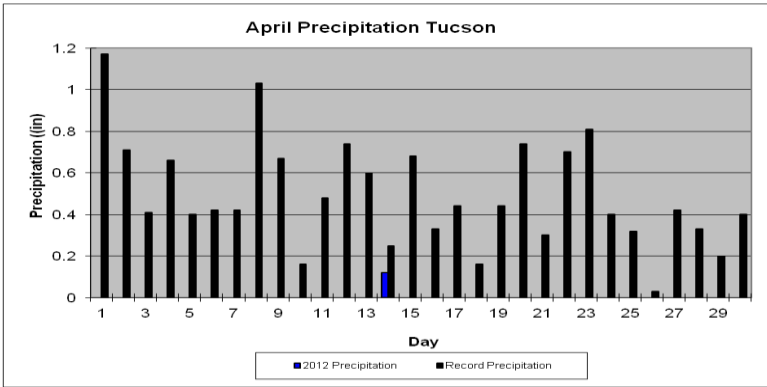
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April 2012 Daily Temperature, Precipitation, & Dew Point for Flagstaff, Phoenix, and Tucson





FLAGSTAFF CLIMATE STATISTICS

April 2012

April was the 23rd warmest and had no significant ranking for precipitation.

Avg Max Temp (F)	62.2	Normal	58.2
Avg Min Temp (F)	29.3	Normal	28.5
Avg Mean Temp (F)	45.7	Normal	43.3
Departure from Normal (F)	+2.4		

Highest Monthly Avg Temp (F) 50.4 in 1989
 Lowest Monthly Avg Temp (F) 36.2 in 1975

Highest Temp this month (F): 78 on 22nd, 23rd
 Lowest Temp this month (F): 20 on 7th

Record High (F): 80 on 4/07/1992
 4/07/1989

Record Low (F): -2 on 4/02/1975

Temperature or precipitation records this month:
 22nd HiMax 78 set, previous record 76 in 1949
 23rd HiMax 78 set, previous record 77 in 1949

Flagstaff Number of Days of:

Minimum Temp 20° or lower	1
Minimum Temp 30° or higher	14
Maximum Temp 50° or lower	5
Maximum Temp 70° or higher	7

Heating Degree Days	572	Normal	649
Cooling Degree Days	0	Normal	0
Degree base 65°F			

Total April Precipitation	1.24"
Normal April Precipitation	1.15"
Departure from normal	+0.09"
Greatest 24-Hr Precipitation	0.60 on 4/14
Total Precipitation Year-to-Date	4.46"
Departure from Normal	-3.02"

Number of Days:

Clear	25
Partly Cloudy	4
Cloudy	1

Greatest April Precipitation	5.62" in 1965
Least April Precipitation	0.00" in 1991

Average Wind Speed	7.6 mph
Highest Peak Gust	55 mph from 210° on 11 th

PHOENIX CLIMATE STATISTICS

April 2012

April had no significant ranking for temperature and was the 14th driest on record

Avg Max Temp(F)	87.6	Normal	85.2
Avg Min Temp(F)	62.6	Normal	60.2
Avg Mean Temp (F)	75.1	Normal	72.1
Departure from Normal (F)	+2.4		

Highest Monthly Avg Temp (F) 80.0 in 1989
 Lowest Monthly Avg Temp (F) 62.4 in 1967

Highest Temp this month (F): 105 on 22nd
 Lowest Temp this month (F): 50 on 14th

Record High (F): 105 on 4/22/2012
 4/29/1992

4/20/1989
 Record Low (F): 35 on 4/10/1922

Temperature or precipitation records set this month:
 21st HiMax 103 tied, first set in 1989
 22nd HiMax 105 set, previous record 101 in 1939
 22nd HiMin 73 set, previous record 72 in 1989
 23rd HiMin 74 set, previous record 71 in 1997

Phoenix Number of Days of:

Minimum Temp 60° or lower	12
Minimum Temp 70° or higher	5
Maximum Temp 80° or lower	8
Maximum Temp 100° or higher	3

Heating Degree Days	8	Normal	20
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Cooling Degree Days 319 Normal 251
 Degree base 65°F

Partly Cloudy 16
 Cloudy 0

Total April Precipitation 0.08"
 Normal April Precipitation 0.28"
 Departure from normal -0.20"
 Greatest 24-Hr Precipitation 0.05" on 4/14
 Total Precipitation Year-to-Date 0.33"
 Departure from Normal -2.77"

Greatest April Precipitation 3.36" in 1926
 Least April Precipitation 0.00" in 1896, 2008,
 and 27 other years.

Average Wind Speed 6.7 mph
 Highest Peak Gust 41 mph from 280° on 26th

Number of Days:

Clear 14

TUCSON CLIMATE STATISTICS

April 2012

April was the 10th warmest and had no significant ranking for precipitation

Avg Max Temp(F) 85.5 Normal 82.1
 Avg Min Temp(F) 54.0 Normal 52.0
 Avg Mean Temp(F) 69.8 Normal 67.0
 Departure from Normal (F) +2.8

Highest Monthly Avg Temp (F) 73.8 in 1989
 Lowest Monthly Avg Temp (F) 57.8 in 1975

Highest Temp this month (F): 101 on 22nd
 Lowest Temp this month (F): 40 on 15th

Record High (F): 104 on 4/21/1989
 4/20/1989

Record Low (F): 27 on 4/04/1945

Temperature or precipitation records set this month:
 22nd HiMax 101 set, previous record 98 in 1965
 23rd HiMax 100 set, previous record 96 in 1949
 23rd HiMin 67 tied, first set in 1967

Tucson Number of Days of:

Minimum Temp 50° or lower 10
 Minimum Temp 60° or higher 8
 Maximum Temp 70° or lower 3
 Maximum Temp 100° or higher 2

Heating Degree Days 49 Normal 60
 Cooling Degree Days 198 Normal 121
 Degree base 65°F

Total April Precipitation 0.12"
 Normal April Precipitation 0.31"
 Departure from normal -0.19"
 Greatest 24-Hr Precipitation 0.12" on 4/13-14
 Total Precipitation Year-to-Date 0.68"
 Departure from Normal -2.16"

Greatest April Precipitation 3.53" in 1905
 Least April Precipitation 0.00" in 1895, 2006,
 and 24 other years.

Number of Days:

Clear 29
 Partly Cloudy 1
 Cloudy 0

Average Wind Speed 6.9 mph
 Highest Peak Gust 43 mph from 230° on 26th

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

Winds for April:

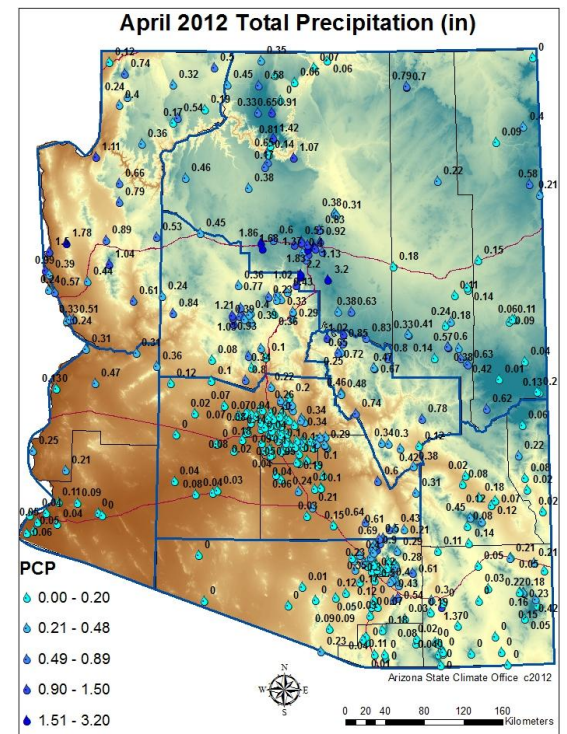
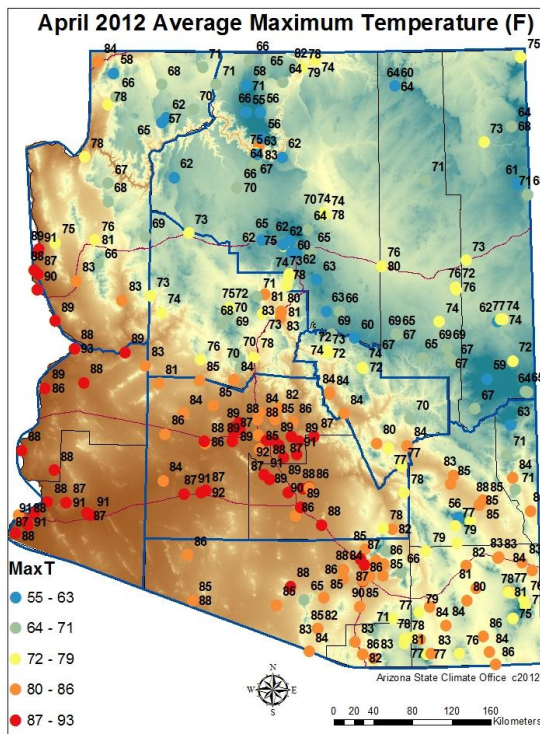
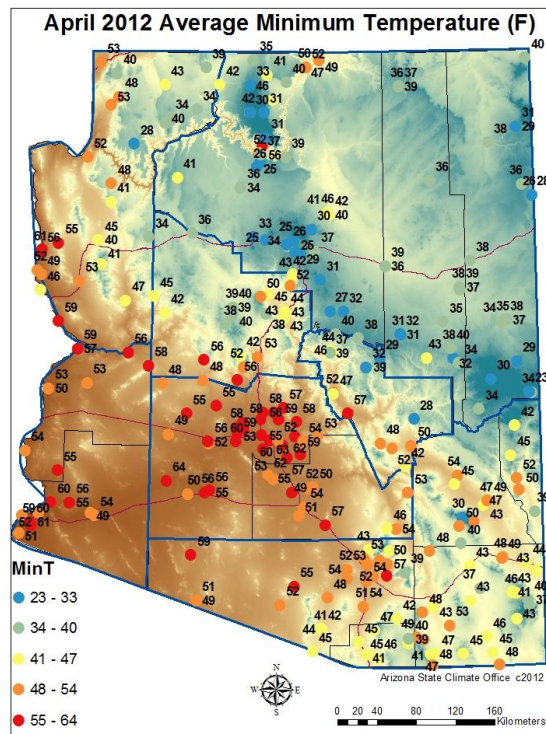
Day	Phoenix		Flagstaff		Tucson	
	(mph)	Avg	Max	Avg	Max	Avg
1	12.7	33	15.6	52	9.4	31
2	10.1	31	6.9	28	10	33
3	4.6	23	4.5	22	4.9	20
4	5.1	13	6.8	30	5.8	18
5	8.7	28	13	47	8	32
6	6.8	23	11.1	39	6.6	26
7	3	16	6.1	23	5.4	21
8	4.1	16	4.6	25	6.4	24
9	4.3	23	5.2	25	6.8	28
10	8.1	28	7.2	37	8.7	26
11	10.1	30	16.1	55	10.3	36
12	8.3	22	15.7	37	5.2	20
13	7.9	37	12.3	45	8.4	32
14	14.1	38	14.9	43	13.2	38
15	4.3	18	7.3	28	5.2	20
16	4.8	18	2.4	16	4.5	17
17	4.6	20	4	25	5.1	20
18	6.1	22	7.9	38	7.1	26
19	6.6	25	5.2	29	7.7	23
20	5.7	18	7.3	30	5.1	22
21	4.2	18	4	20	5.6	18
22	5.5	21	3.2	23	5.7	20
23	6.1	28	6.8	38	6.6	36
24	5.8	21	7.4	31	5.9	23
25	4.7	18	3.5	30	6.2	24
26	11.2	41	9.9	41	9.6	43
27	5.1	18	3.8	21	5.7	24
28	5.5	20	4	22	6.5	22
29	5.8	21	4.7	26	6.7	21
30	7	21	5.8	32	5.7	28

Dew Points for April:

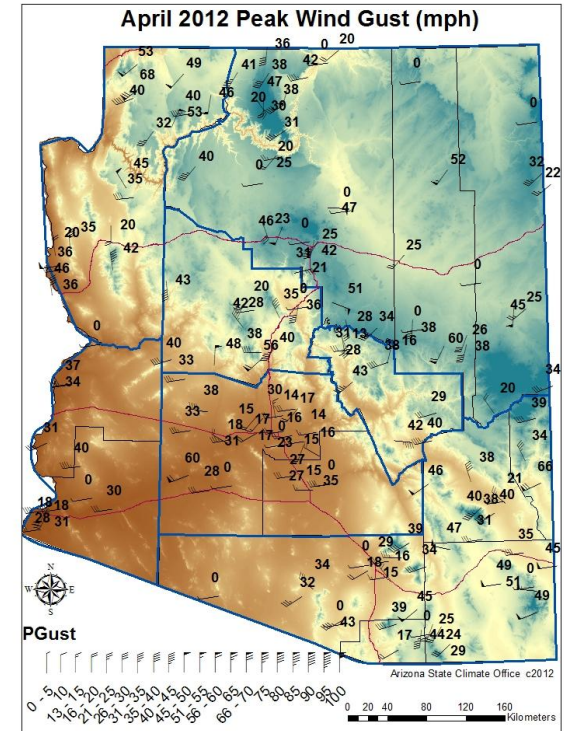
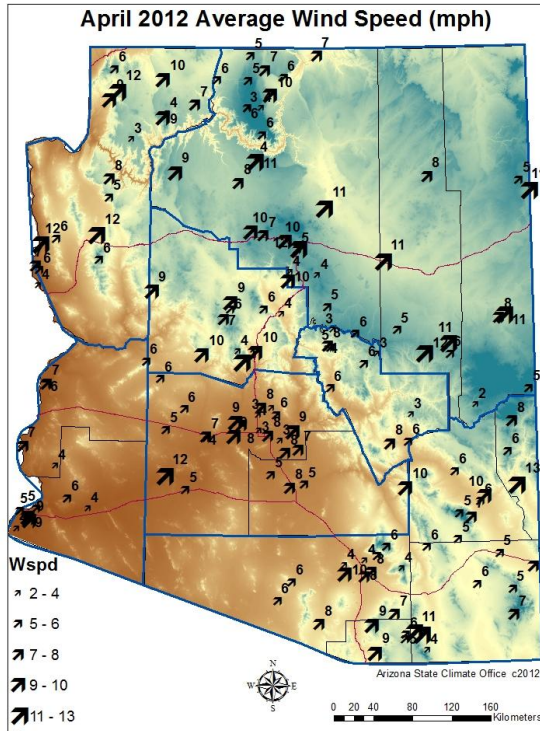
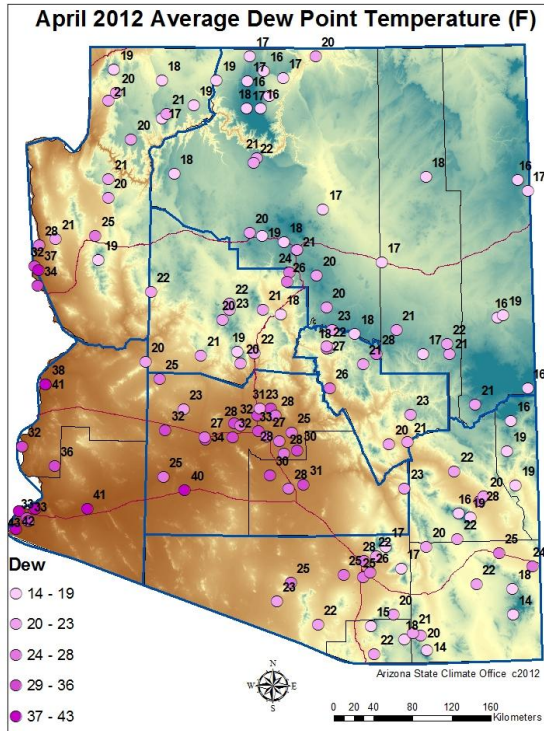
Daily Average Dew Point (°F):

Day	Phx	Tuc	Flg
1	14	15	12
2	17	13	17
3	18	13	16
4	22	15	17
5	20	19	6
6	14	16	4
7	15	18	5
8	18	16	10
9	21	18	14
10	33	30	24
11	30	32	19
12	28	25	20
13	28	30	20
14	26	24	22
15	31	29	24
16	30	26	25
17	28	22	25
18	26	19	25
19	29	22	23
20	32	26	26
21	31	26	25
22	29	27	26
23	29	32	24
24	30	27	24
25	36	29	27
26	37	31	32
27	36	31	30
28	35	33	26
29	37	35	23
30	28	28	21

April 2012 Temperature, Dew Point, Wind Speed, and Precipitation Maps are based on **preliminary data** from the National Weather Service, the Arizona Meteorological Network (AZMet), operated by the University of Arizona College of Agriculture Cooperative Extension and the RAWS (Remote Automated Weather Station) network operated by the Bureau of Land Management and Forest Service and the CoCoRaHS (Community Collaborative Rain, Hail and Snow) Network.

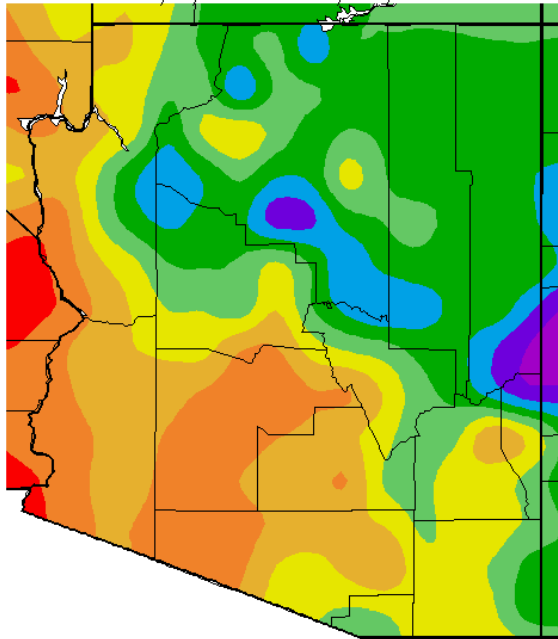


Average nighttime temperatures ranged from 23°F at Alpine to 64°F at Oatman in west central Arizona. Average daytime temperatures ranged from 55°F at Dry Park in northern Arizona to 93°F at Lake Havasu City. Precipitation values ranged from 0" in many places in the southwest deserts to 3.20" at Mormon Lake.

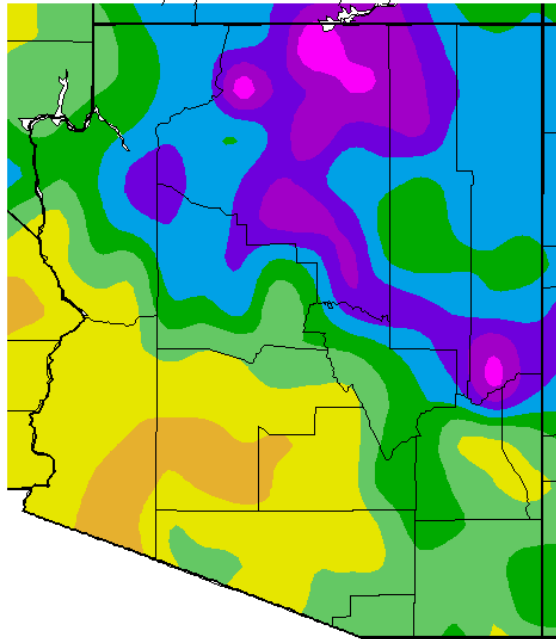


Average monthly dew points ranged from 14°F at Rucker in southeastern Arizona to 43°F at Yuma Valley. Average winds were light, with 13 mph as the highest average at Guthrie. The highest peak wind gust was 68 mph at Tweed’s Point in northwestern Arizona. This month we have wind barbs to represent the peak winds. The barbs are like arrows with feathers at the end to show the wind speed. The end with the feathers is pointing in the direction the winds blow from, as they blow into the station. One half barb is 5 mph, a full barb is 10 mph, and a pennant is 50 mph. So Four Springs will have one pennant and two full and one half barbs.

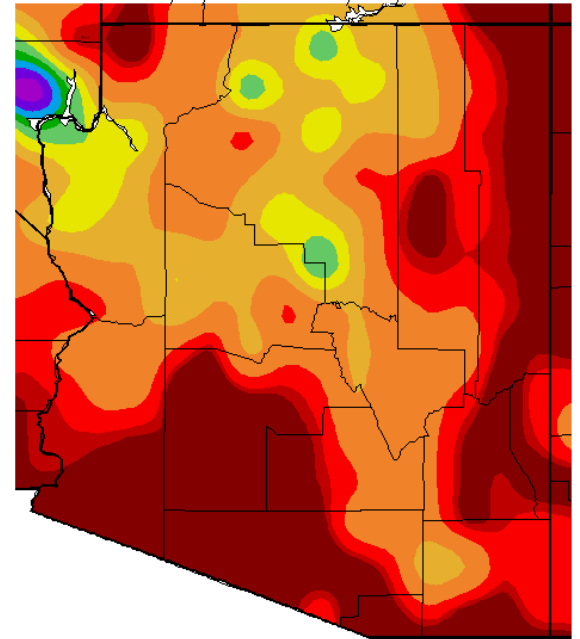
Av. Min. Temperature (deg. F)
4/1/2012 - 4/30/2012



Av. Max. Temperature (deg. F)
4/1/2012 - 4/30/2012



Total Precipitation (in.)
4/1/2012 - 4/30/2012

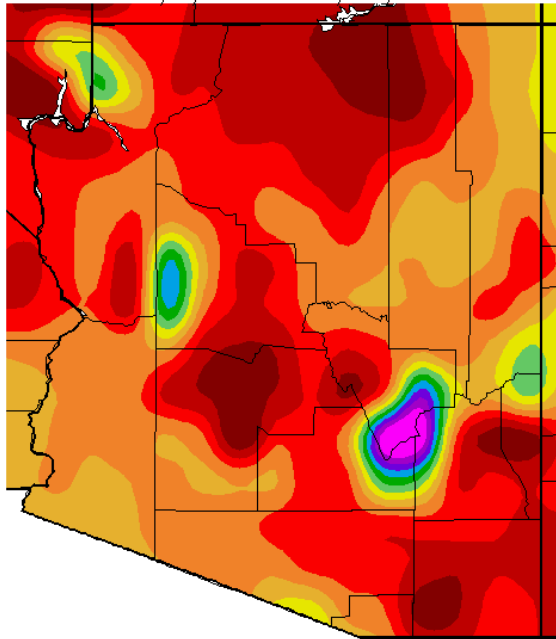


20 25 30 35 40 45 50 55 60 65 70
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60 65 70 75 80 85 90 95 100 105 110
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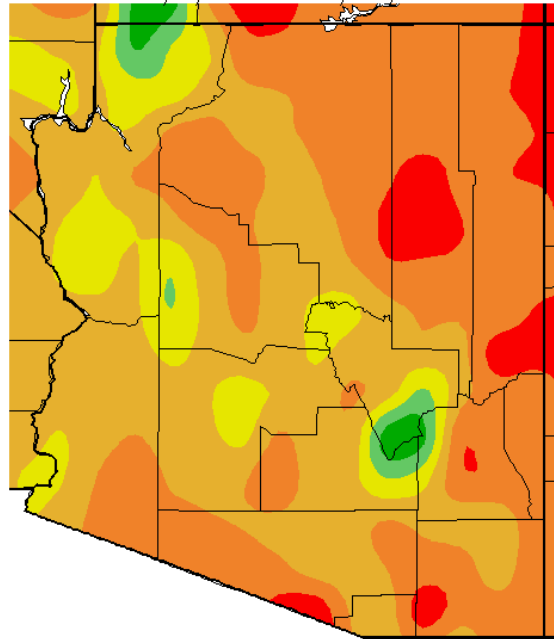
0.1 0.15 0.3 0.6 0.9 1.2 1.5 1.8 2.1 2.4 2.7
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Av. Min. Temperature dep from Ave (deg. F)
4/1/2012 - 4/30/2012



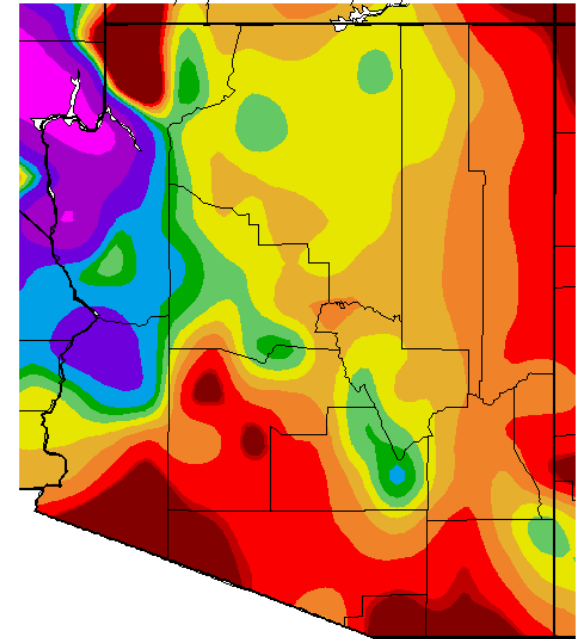
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Av. Max. Temperature dep from Ave (deg F)
4/1/2012 - 4/30/2012



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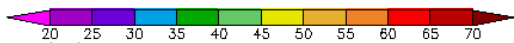
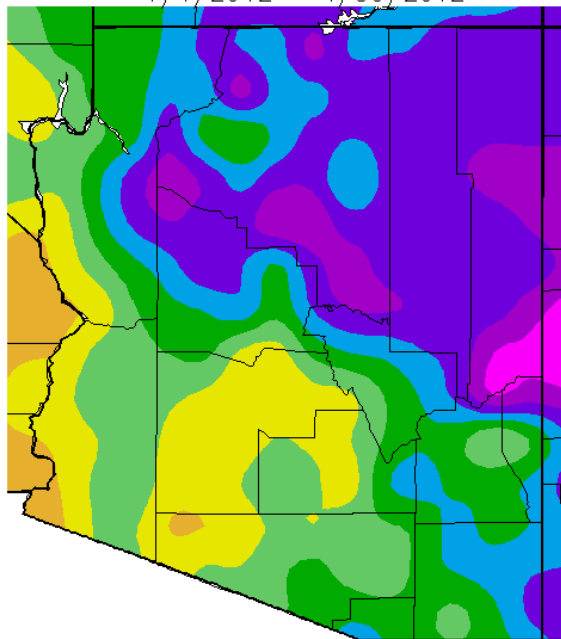
Percent of Average Precipitation (%)
4/1/2012 - 4/30/2012



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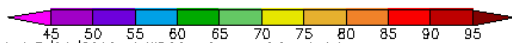
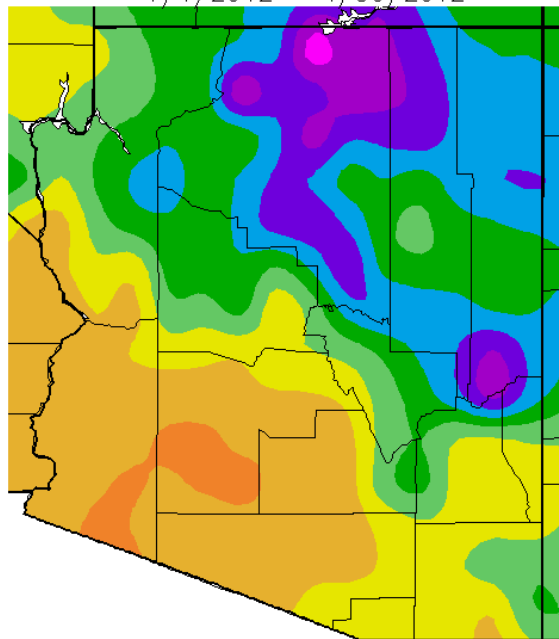
April minimum temperatures were generally 0-5°F warmer than average across most of the state, with some colder pockets in southern Gila and northeastern Pinal County. Daytime temperatures were 0-6°F warmer than normal statewide. Only two storm systems moved through the state this month. While humidities were high enough for significant cloud cover, the moisture associated with the storms was relatively low. Precipitation was well below normal in the southern and eastern counties, while La Paz and Mohave County received over 200% of normal. April is generally our last wet month until the monsoon, so the May map is not likely to show much improvement.

Av. Min. Temperature (deg. F)
1/1/2012 - 4/30/2012



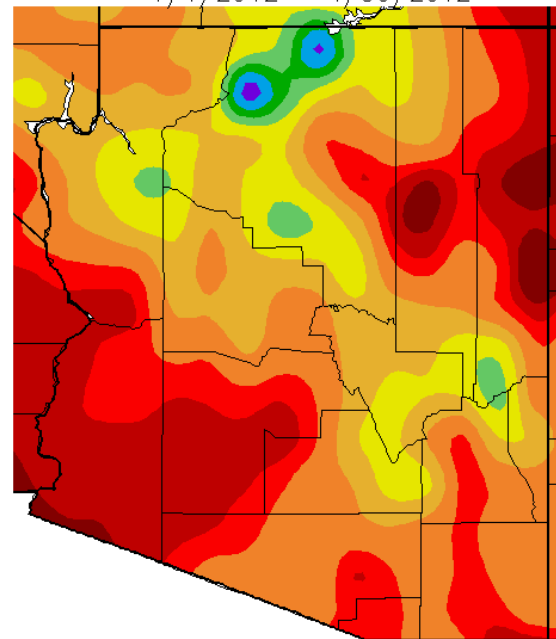
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Av. Max. Temperature (deg. F)
1/1/2012 - 4/30/2012



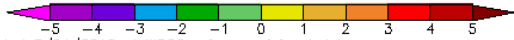
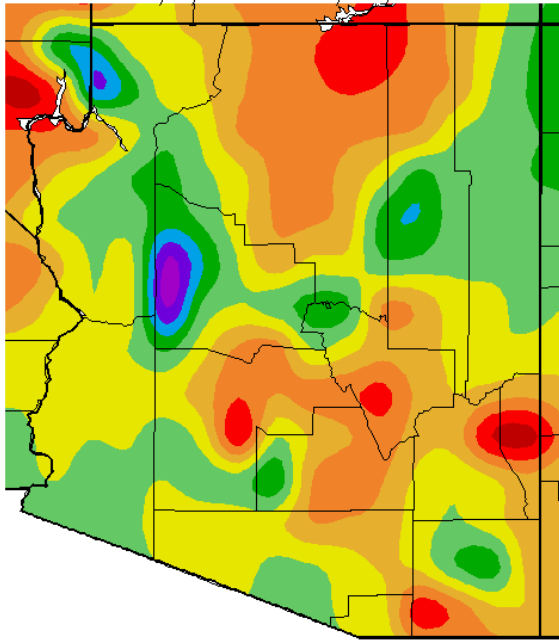
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Total Precipitation (in.)
1/1/2012 - 4/30/2012



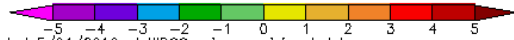
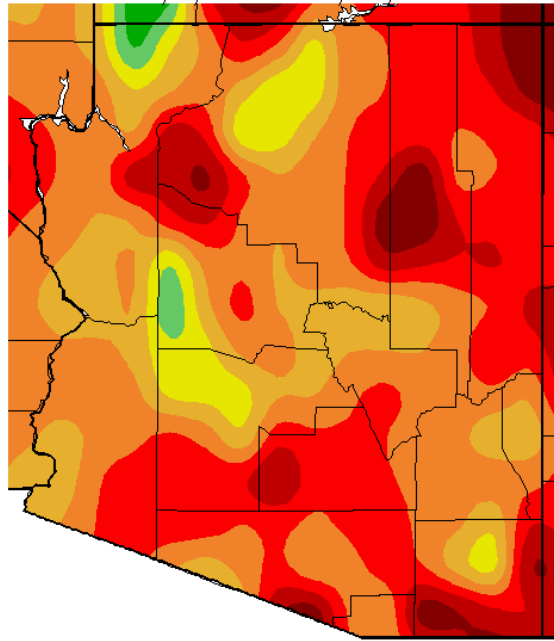
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Av. Min. Temperature dep from Ave (deg. F)
1/1/2012 – 4/30/2012



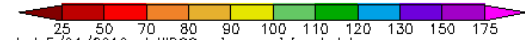
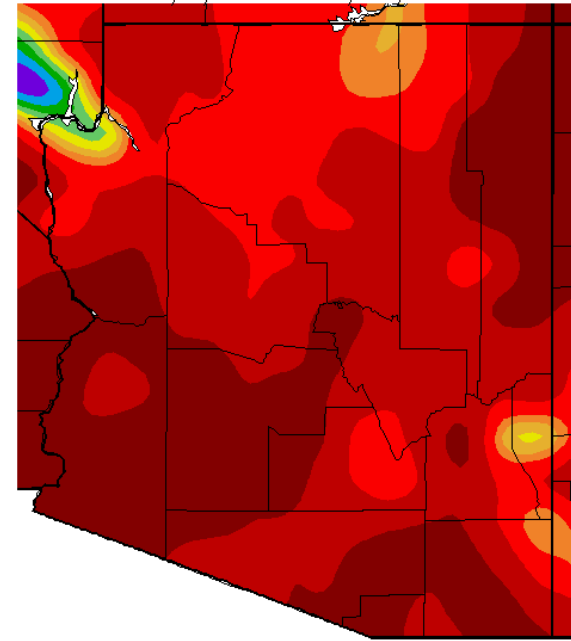
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Av. Max. Temperature dep from Ave (deg F)
1/1/2012 – 4/30/2012



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Percent of Average Precipitation (%)
1/1/2012 – 4/30/2012



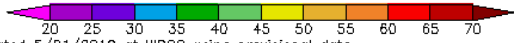
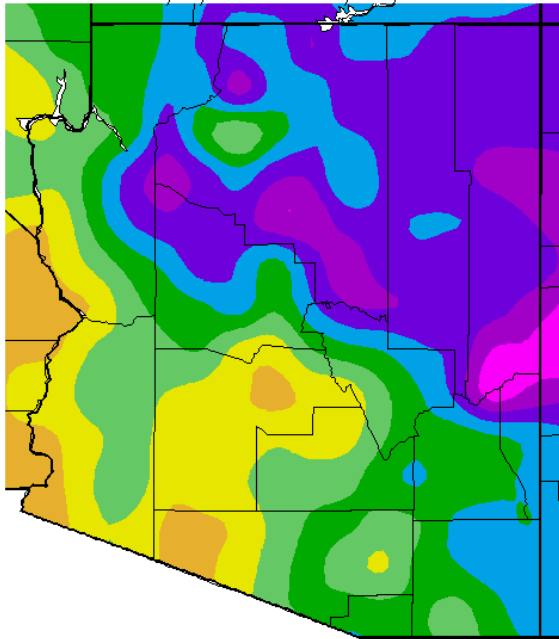
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Calendar Year 2012

Since January, nighttime temperatures have ranged from 3 degrees colder than normal to 3 degrees warmer than normal. Maricopa, Pinal and Gila counties were the warmest and Yavapai, Apache and central Navajo counties were the coolest. The pattern is quite localized. Daytime temperatures have generally been 1 to 5°F warmer than normal across most of the state with the warmest spots in central Navajo, western Coconino and northeastern Apache counties.

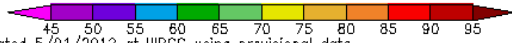
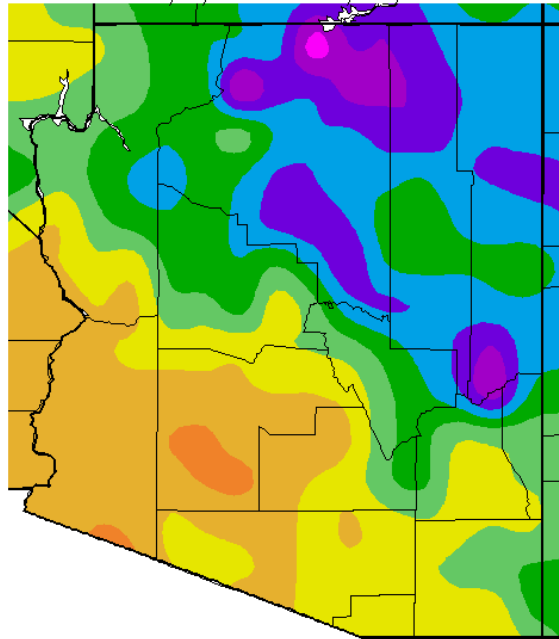
The warm conditions across the north are a bit unusual as the northern counties have had more frequent cold fronts passing through, though not much precipitation has resulted from those storms. Precipitation since the first of the year has been virtually non-existent. Only the southern White Mountains have had near average precipitation. Most of the state has had less than 70% of normal and the southwest deserts have received less than 25% of normal precipitation.

Av. Min. Temperature (deg. F)
10/1/2011 - 4/30/2012



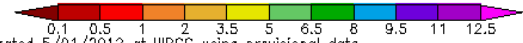
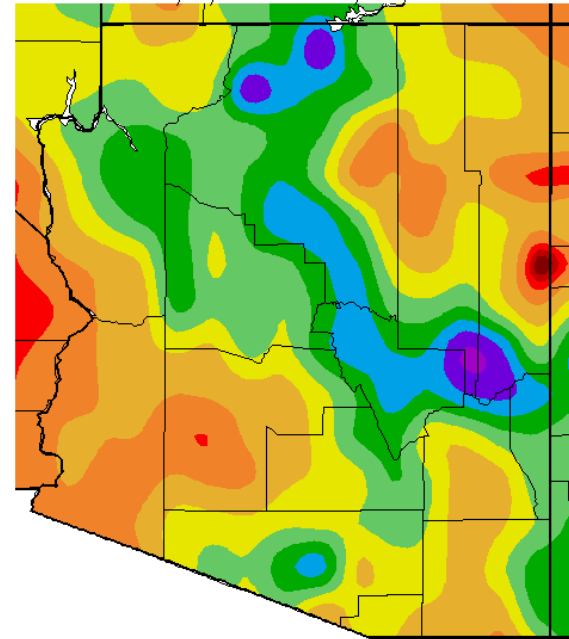
Generated 5/01/2012 at WRCC using provisional data.
NOAA Regional Climate Centers

Av. Max. Temperature (deg. F)
10/1/2011 - 4/30/2012



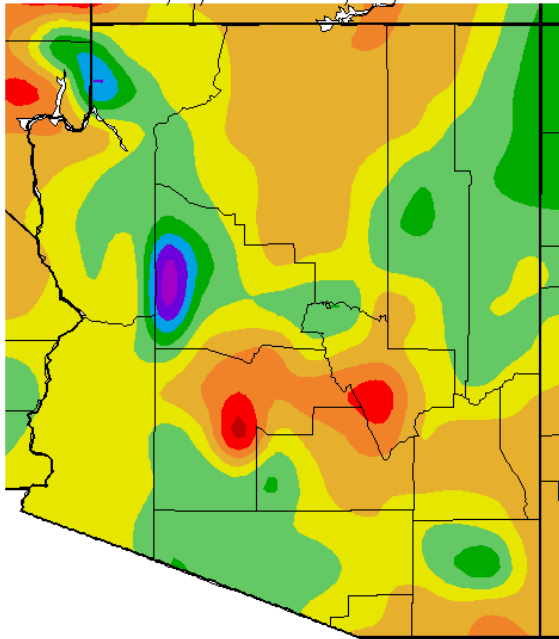
Generated 5/01/2012 at WRCC using provisional data.
NOAA Regional Climate Centers

Total Precipitation (in.)
10/1/2011 - 4/30/2012



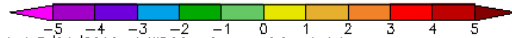
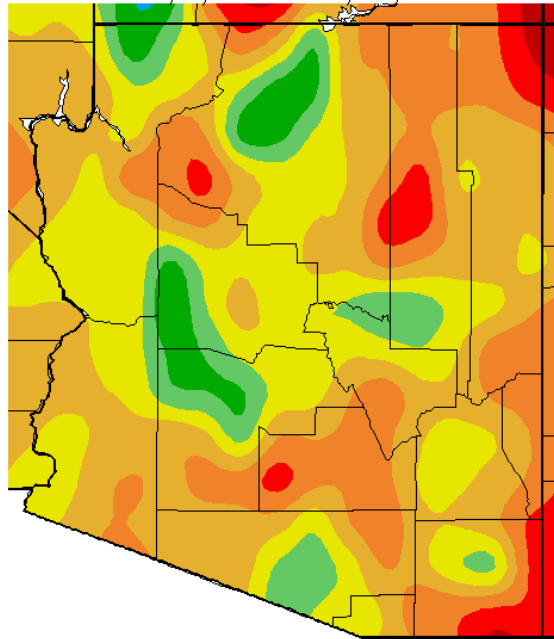
Generated 5/01/2012 at WRCC using provisional data.
NOAA Regional Climate Centers

Av. Min. Temperature dep from Ave (deg. F)
10/1/2011 – 4/30/2012



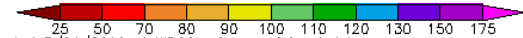
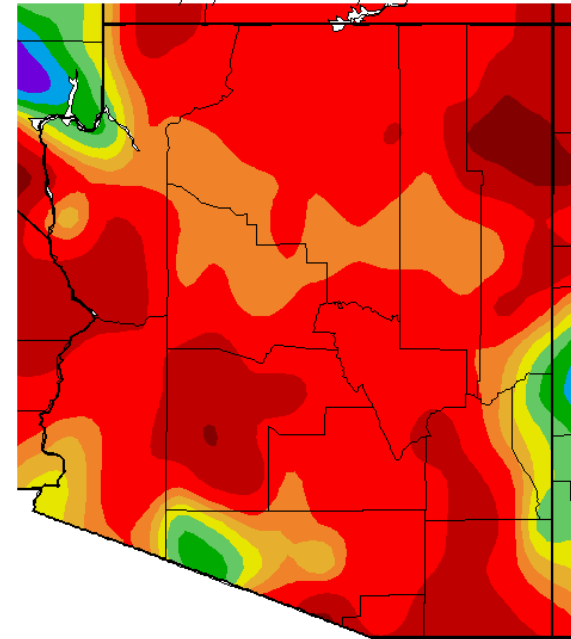
Generated 5/01/2012 at WRCC using provisional data.
NOAA Regional Climate Centers

Av. Max. Temperature dep from Ave (deg F)
10/1/2011 – 4/30/2012



Generated 5/01/2012 at WRCC using provisional data.
NOAA Regional Climate Centers

Percent of Average Precipitation (%)
10/1/2011 – 4/30/2012

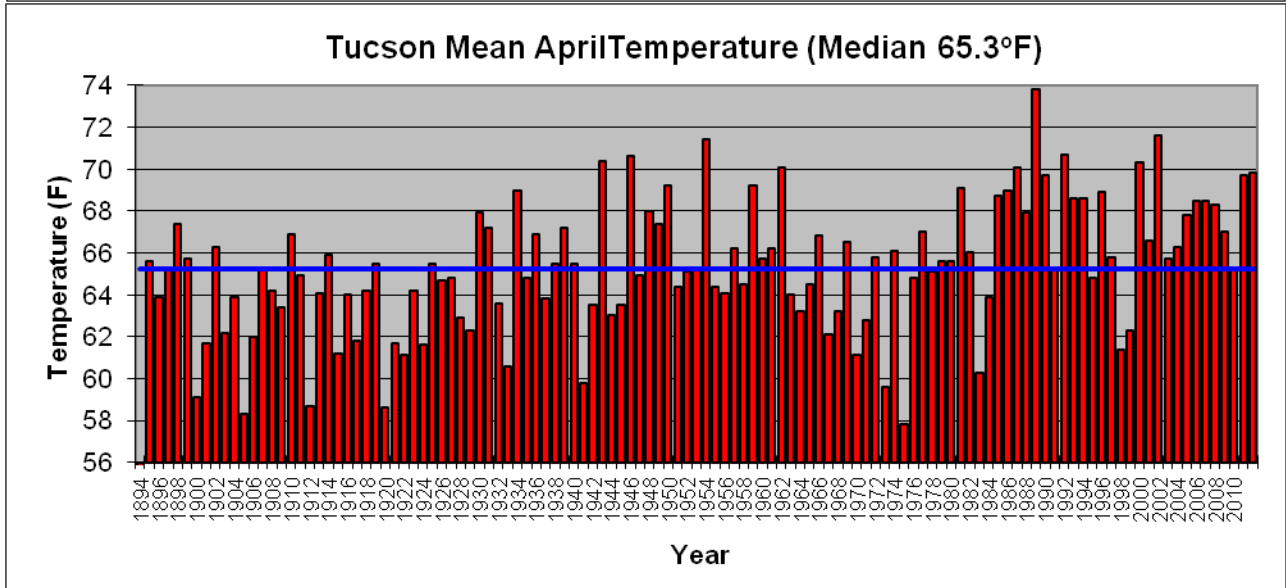
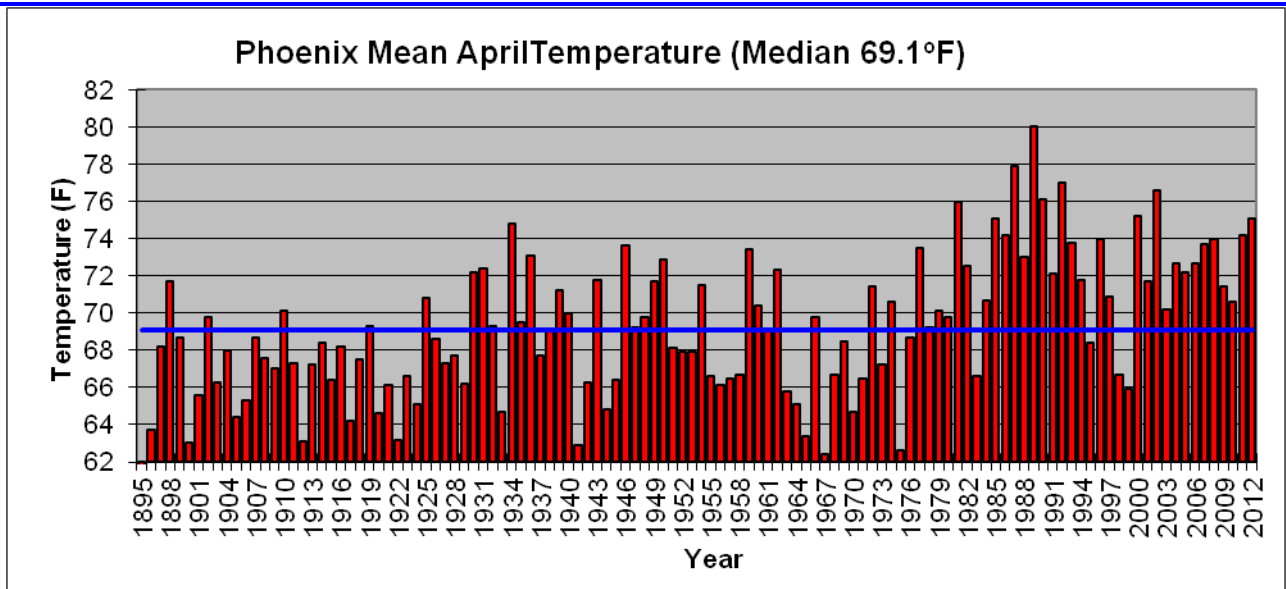
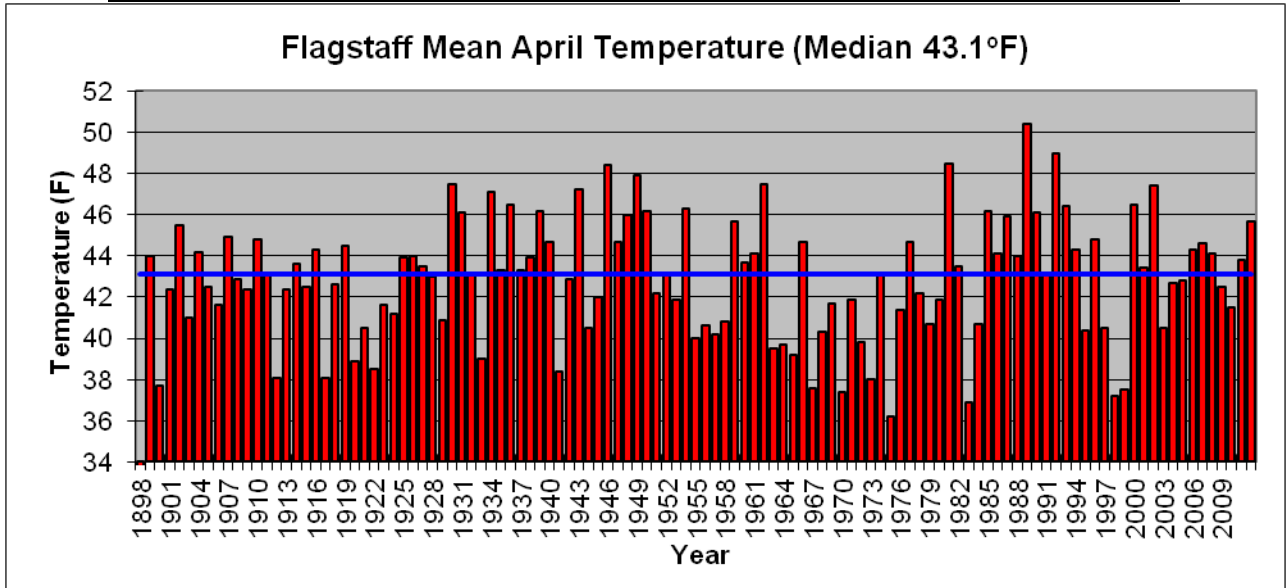


Generated 5/01/2012 at WRCC using provisional data.
NOAA Regional Climate Centers

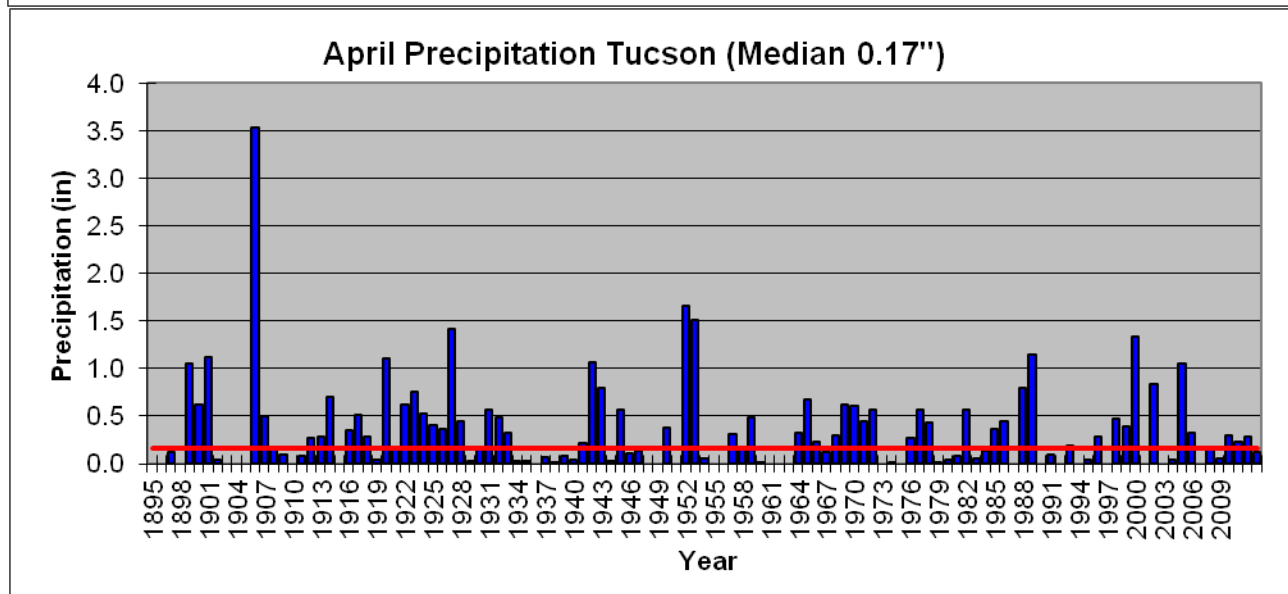
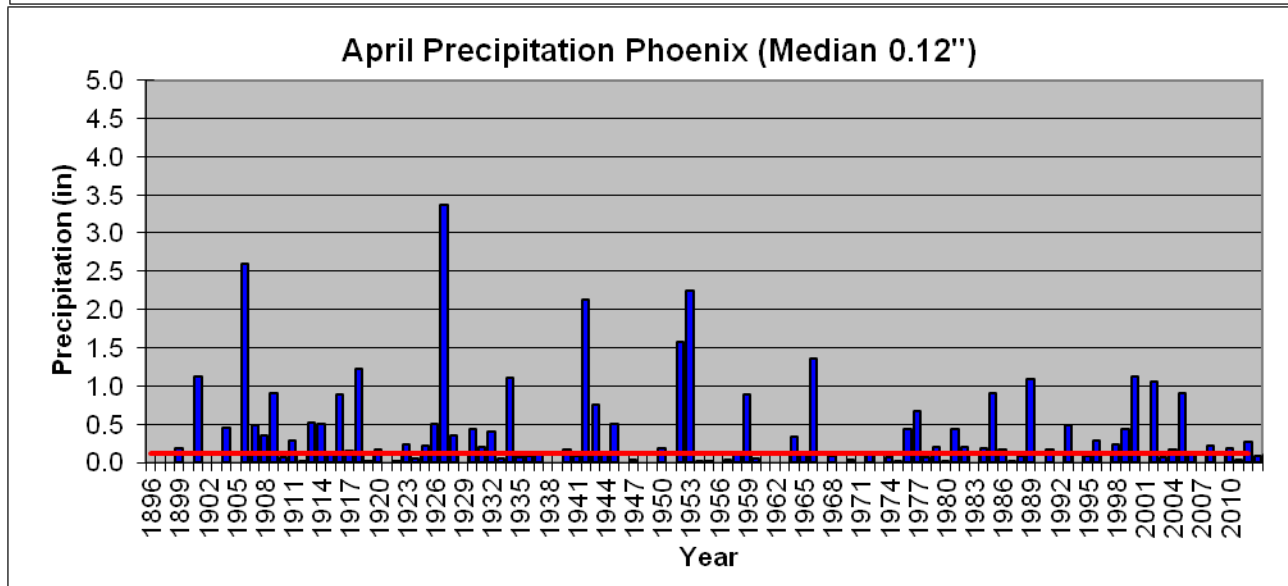
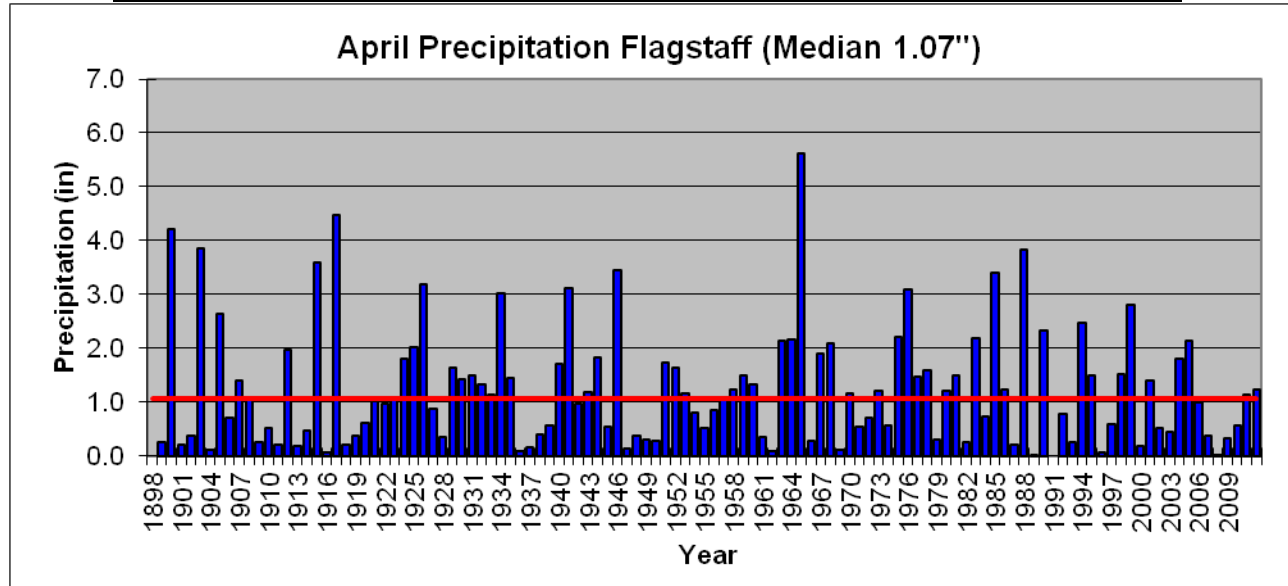
Water Year 2012 (Oct 1 2011 – Sep 30 2012)

While the early part of the water year was cold and wet, conditions since January have continued to be warm and dry, resulting in patches of colder than average temperatures as well as warmer than average temperatures. Both nighttime lows and daytime highs have been quite variable around the state, 0 to 3 degrees colder than normal or 0 to 3 degrees warmer than normal. Precipitation has been scarce for the water year, with most of the state at less than 70% of average. Maricopa, southern Mohave, Cochise, and northern Apache counties have received less than 50% of average precipitation since October. These dry conditions could result in an active wildfire season as we enter the normal dry spring season from May through June.

April Mean Temperature Graphs – Flagstaff, Phoenix, and Tucson 1895-2012:

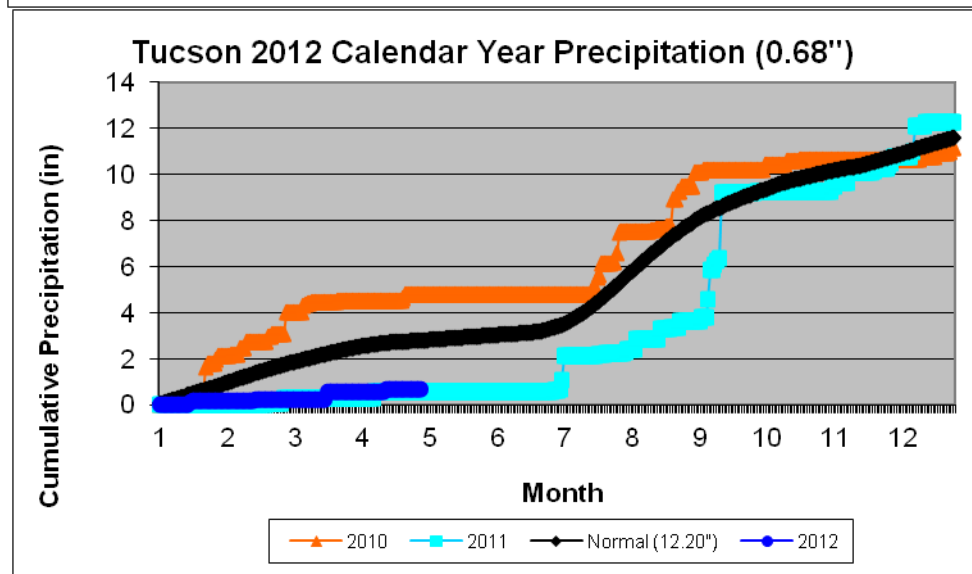
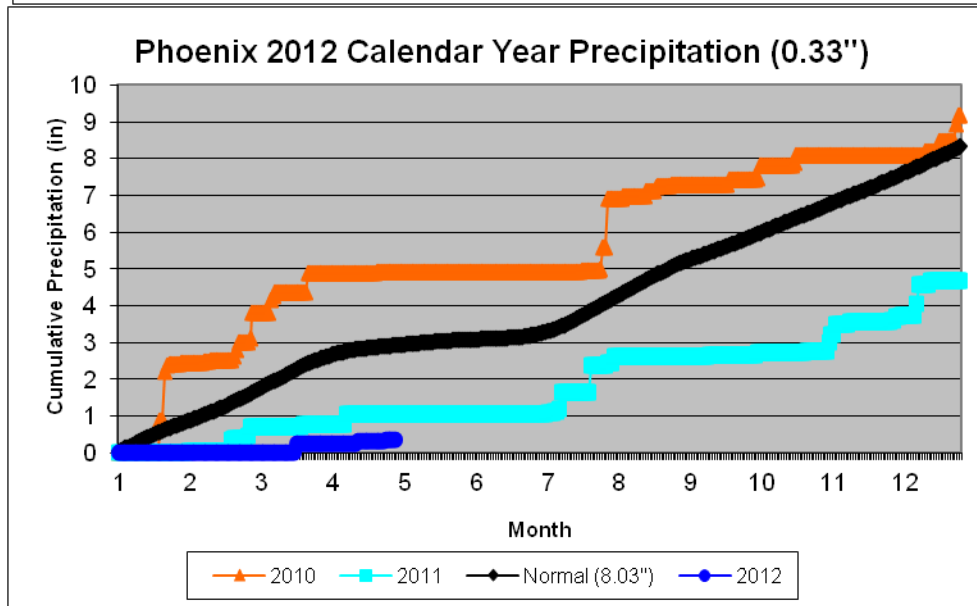
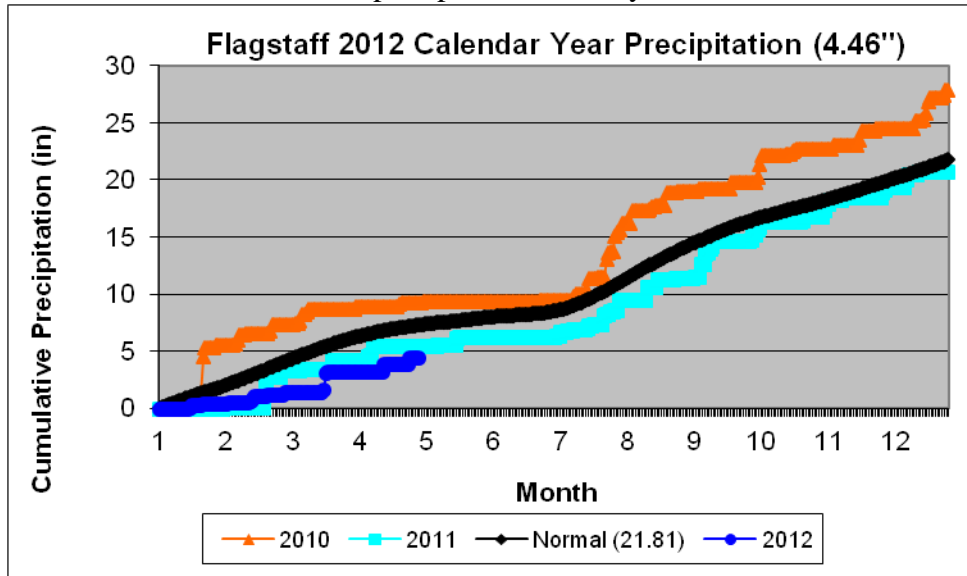


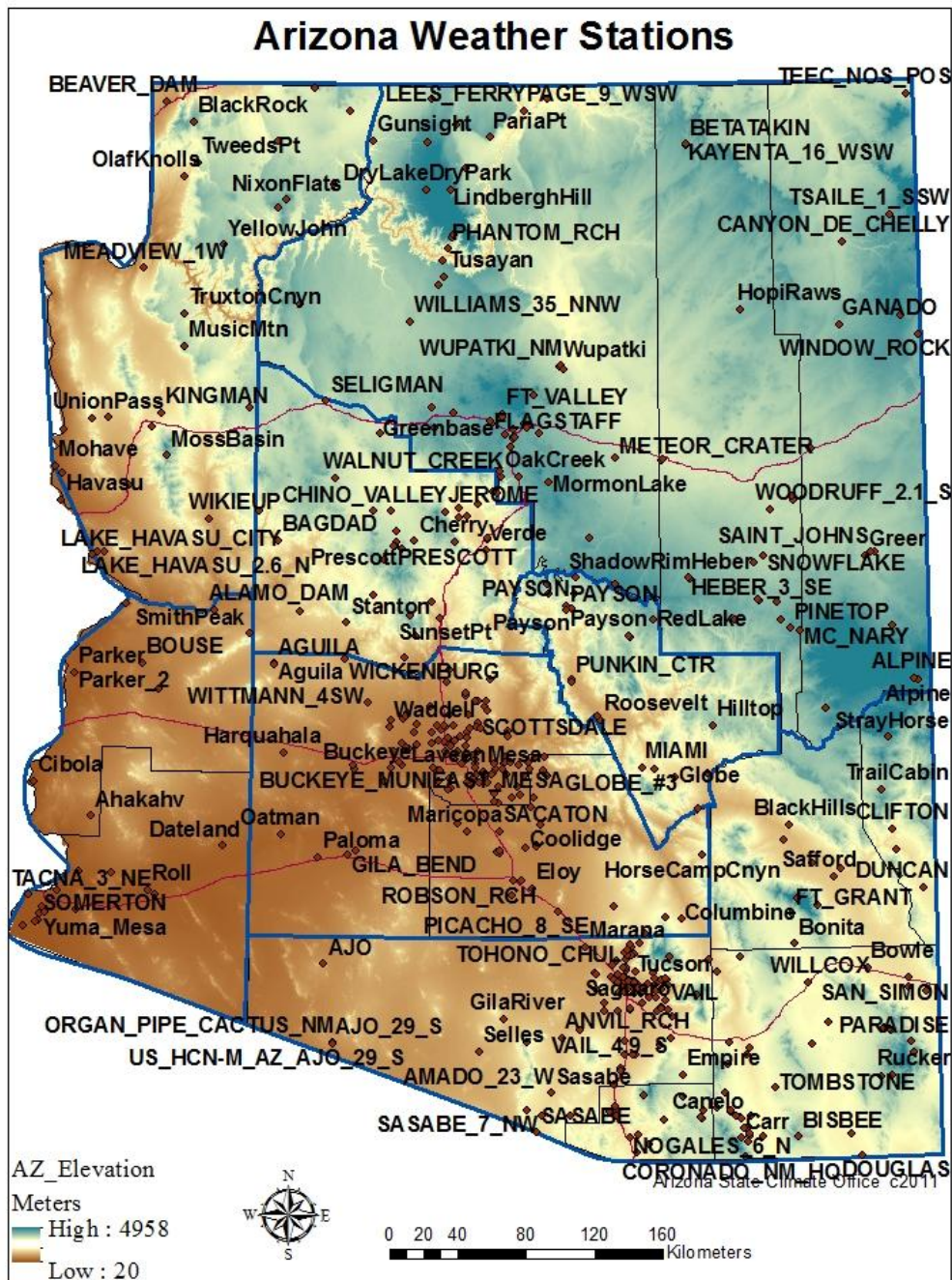
April Mean Precipitation Graphs – Flagstaff, Phoenix, and Tucson 1895-2012:



2012 Cumulative Precipitation Graphs – Flagstaff, Phoenix and Tucson:

Flagstaff and Tucson have similar cumulative precipitation to last year, while Phoenix is much drier than 2011.





The downloadable normals and extremes calendars use the following abbreviations:

NORM = 30 year (1981-2010) 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)