



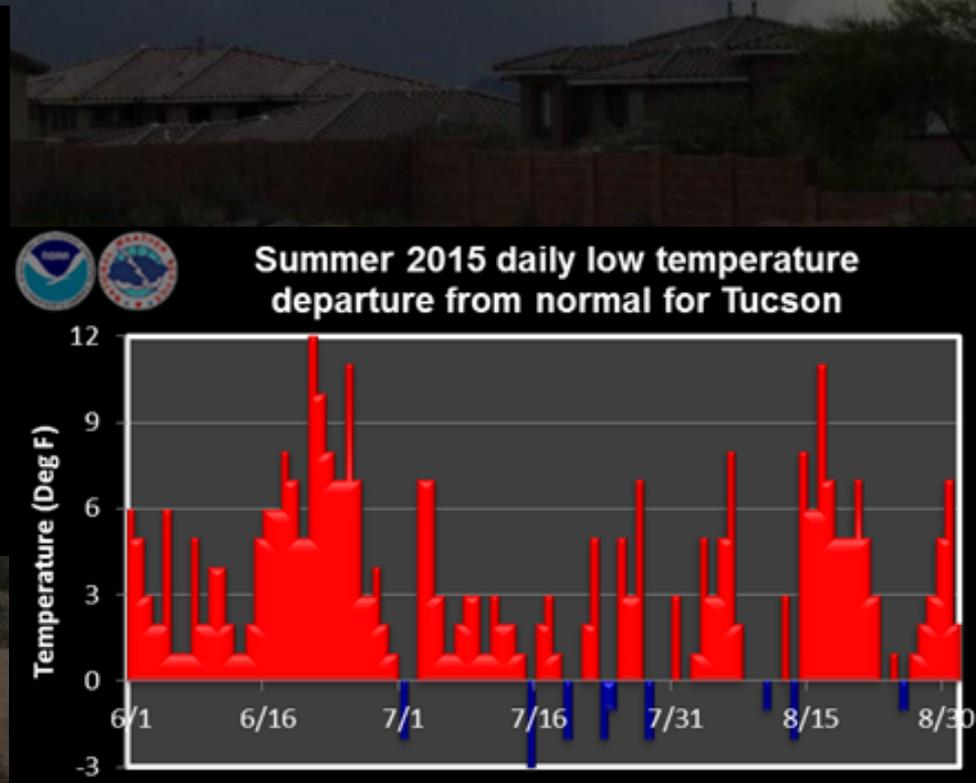
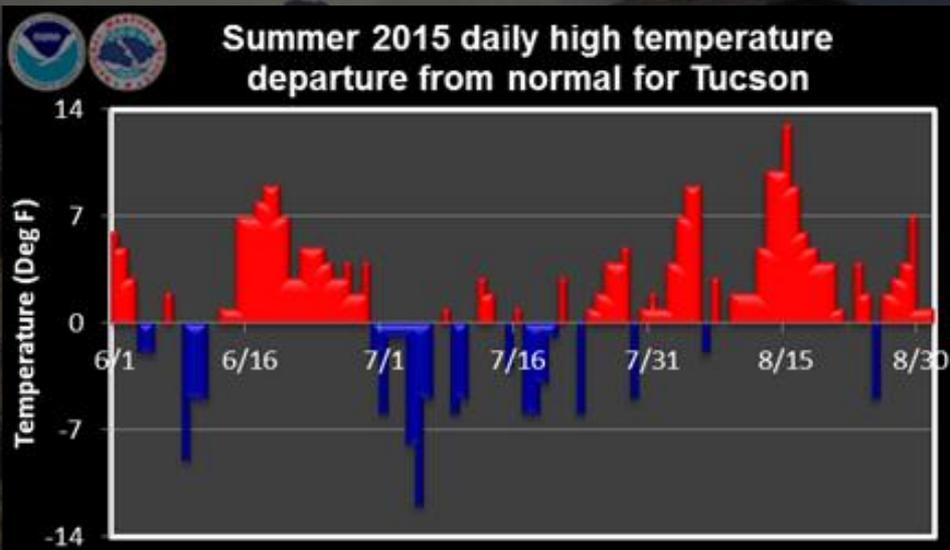
2015 Monsoon Season

National Weather Service Tucson, Arizona
Pima County Local Drought Impact Group Meeting
September 9, 2015



Tucson Summer 2015

- **2nd Hottest** on Record, tied with 2013
- Warmest average **low temperature** on record
- 7th straight Summer in the Top 10 warmest
- 4.44" rainfall at Tucson Airport, normal is 4.84"
- Rainlog & Pima Co. ALERT gages recorded 1.5"- 6"

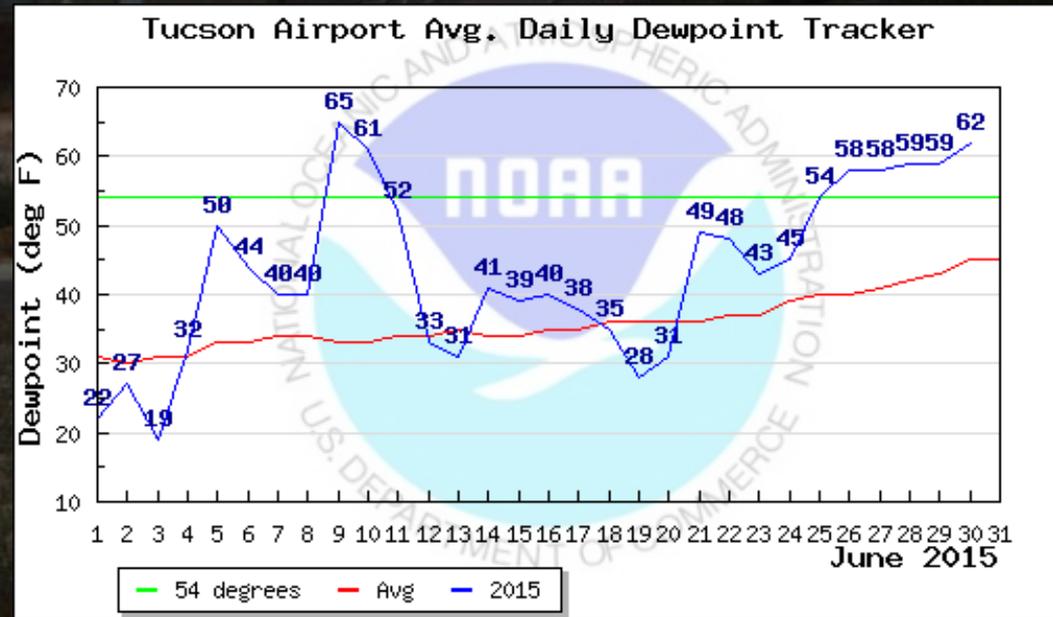




JUNE



- **4th warmest** on record (June 2014 was 3rd)
- 14th wettest with 0.56" rainfall at Tucson Airport, normal 0.20"
- 13 straight days 105°F or hotter
- Rainlog & Pima ALERT gages recorded 0.20" to 2"





June Observed Precipitation



Tucson, AZ: June, 2015 Monthly Observed Precipitation

Created on: June 12, 2015 - 06:43 UTC

Valid on: June 01, 2015 - 12:00 UTC

[What is UTC time?](#)

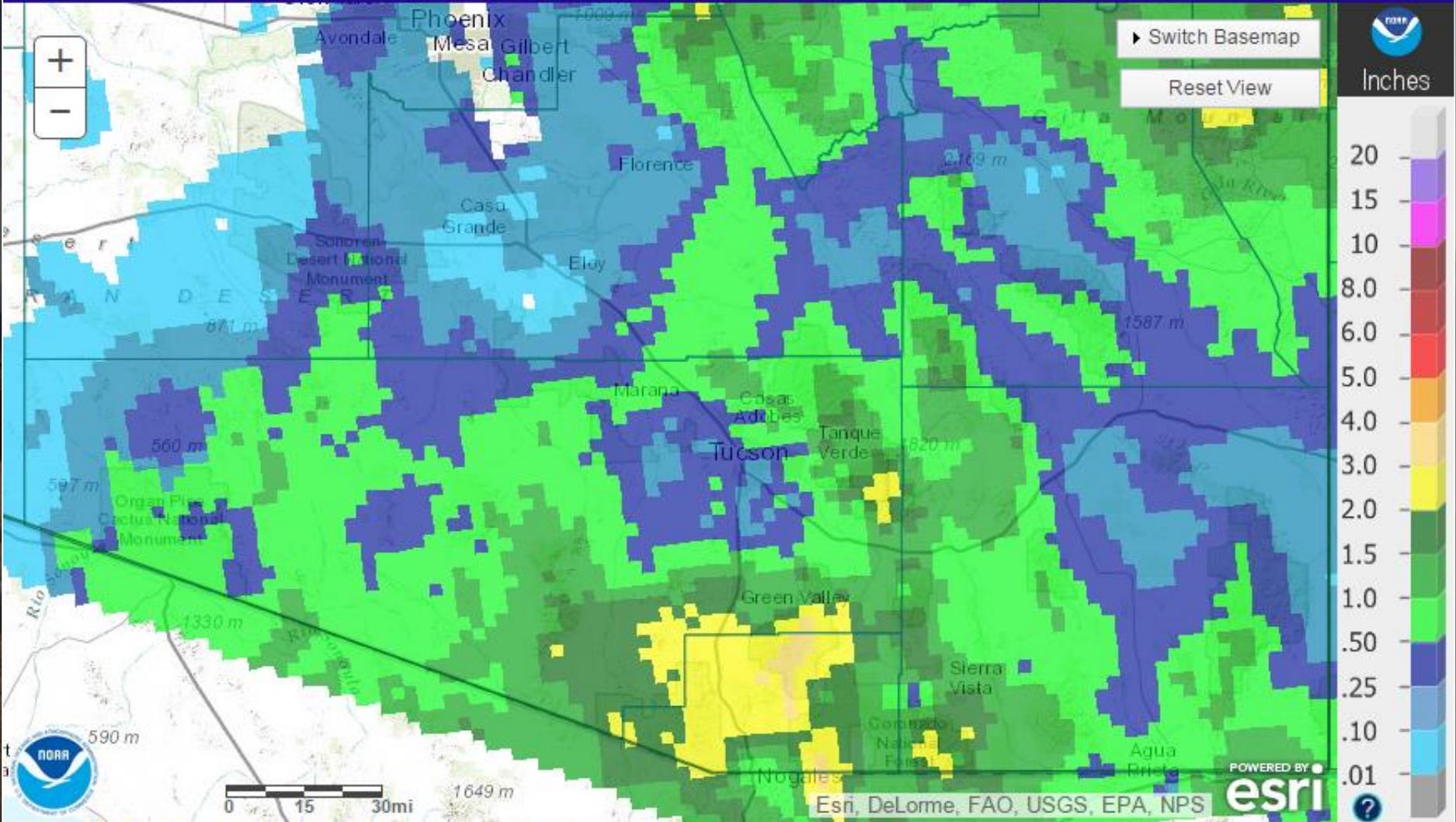
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Download the full resolution version of the current map (4000x2250 pixels)



June Departure from Normal Precipitation



Tucson, AZ: June, 2015 Monthly Departure from Normal Precipitation

Created on: June 12, 2015 - 06:42 UTC

Valid on: June 01, 2015 - 12:00 UTC

[What is UTC time?](#)

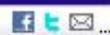
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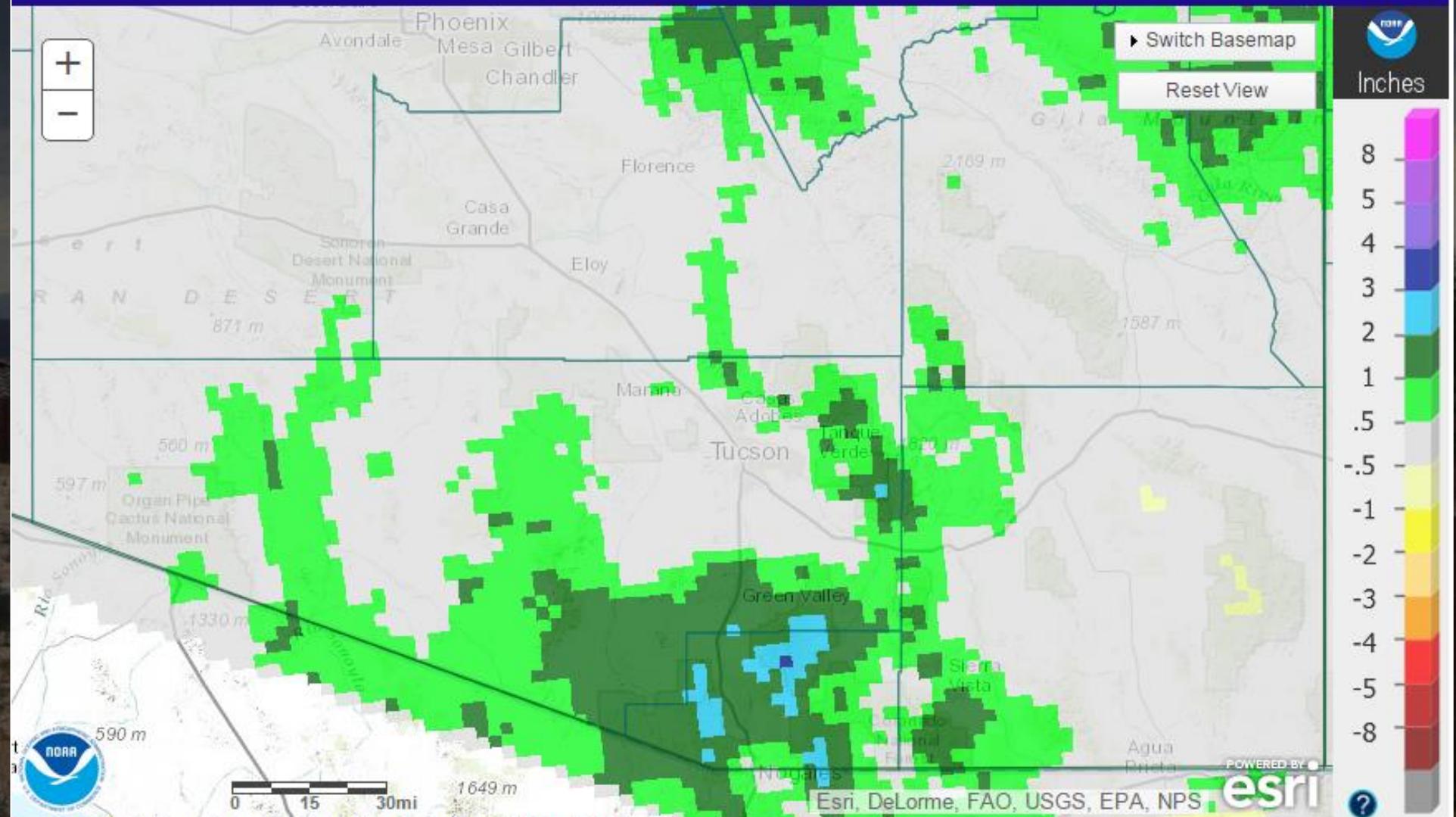
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Esri, DeLorme, FAO, USGS, EPA, NPS



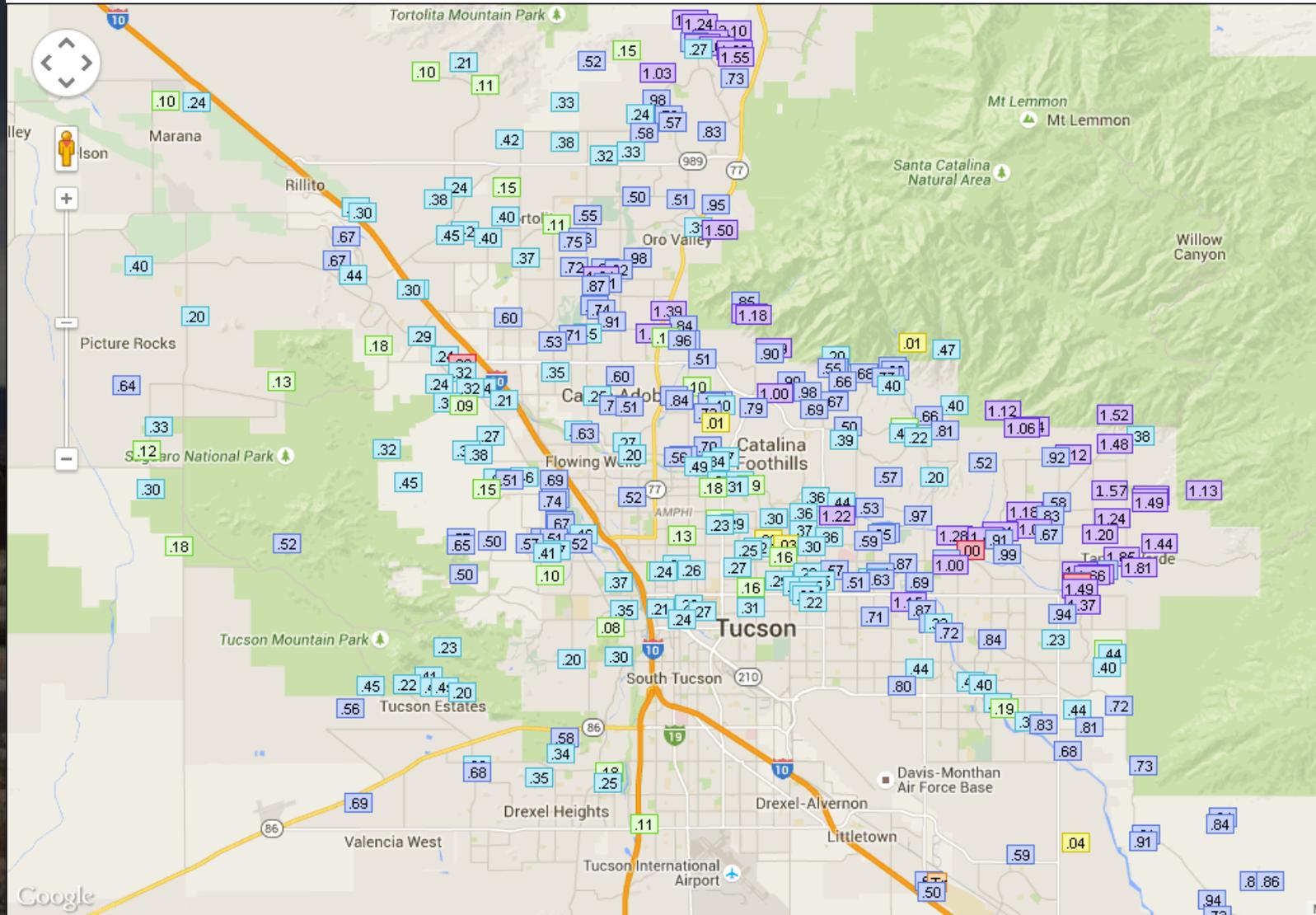


Tucson Area June Precipitation Totals

Source: <http://rainlog.org>



Report of Rainfall Data for 6/2015



Map Legend (all amounts in inches)

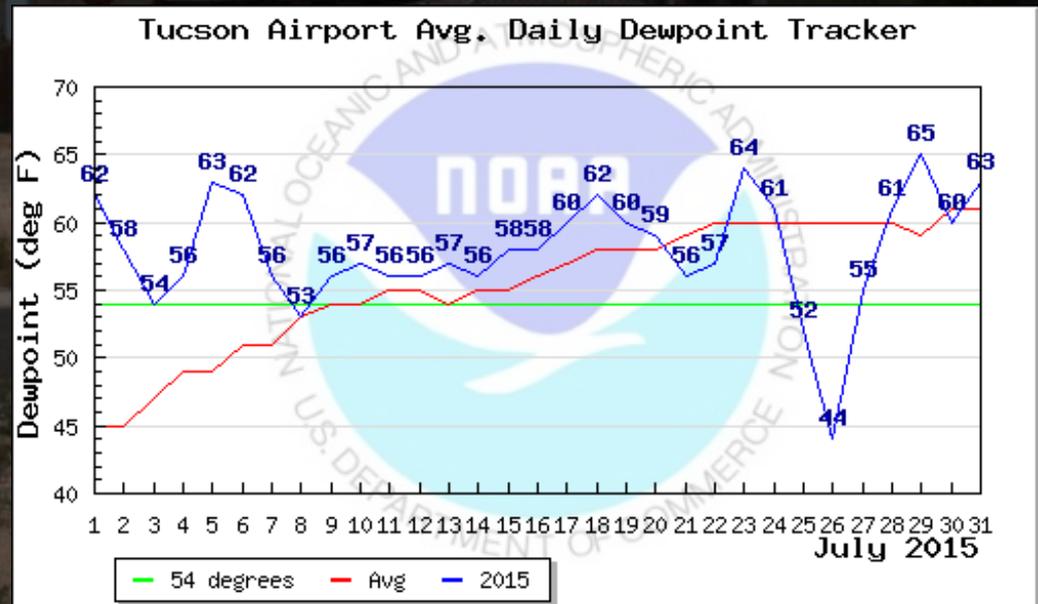
No rain	Trace	.01 - .05	.06 - .19	.20 - .49	.50 - .99	1.00+
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JULY



- 40th Warmest & 52nd Wettest
- 2.08" rainfall at Tucson Airport, normal is 2.25"
- Rainlog & Pima ALERT gages recorded 0.25" to 3.5"





July Observed Precipitation



Tucson, AZ: July, 2015 Monthly Observed Precipitation

Created on: July 03, 2015 - 22:14 UTC

Valid on: July 01, 2015 - 12:00 UTC

[What is UTC time?](#)

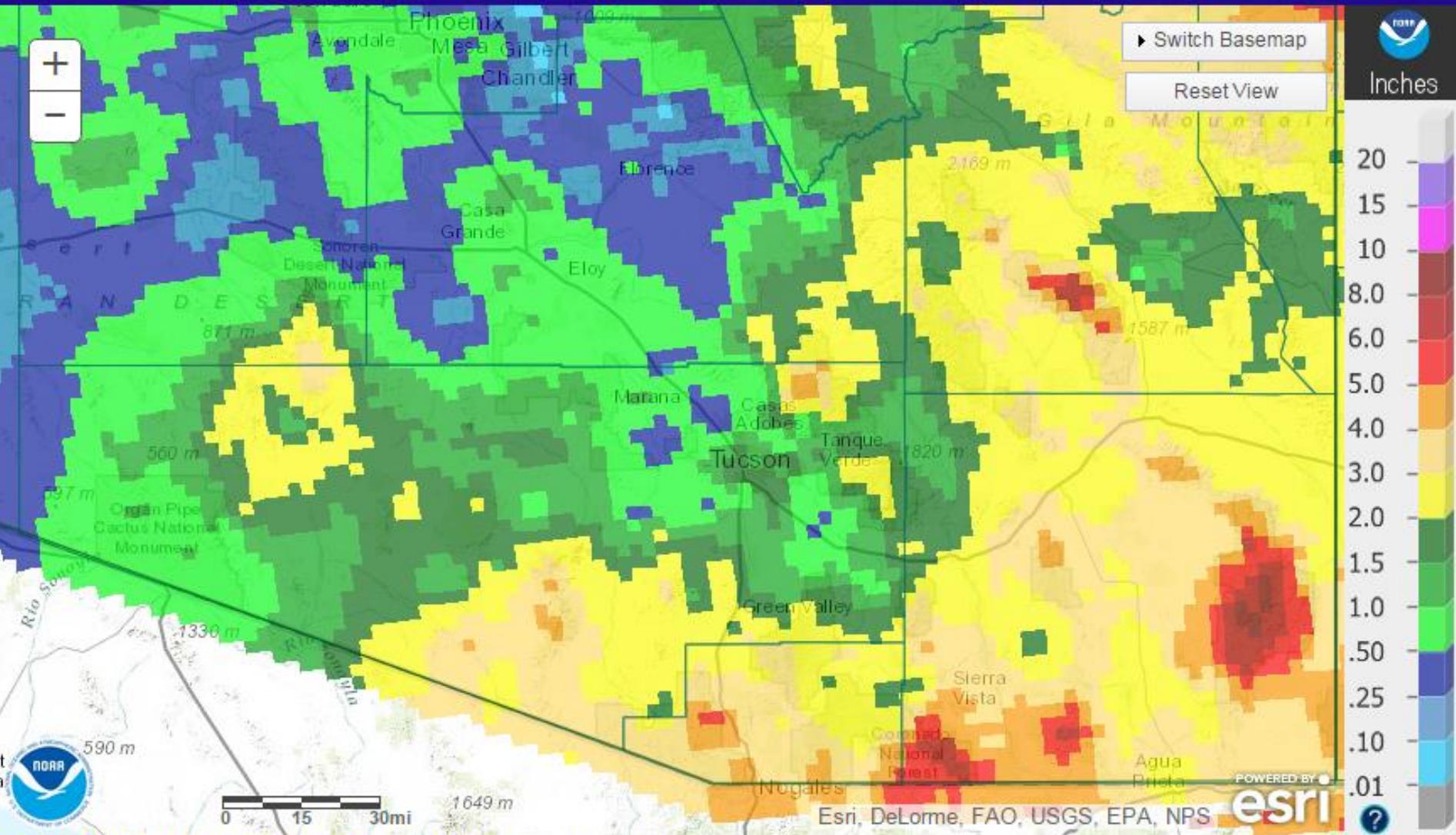
[Map Help](#)

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[Permalink](#)

BOOKMARK

Find your location by address or ZIP code:



Download the full resolution version of the current map (4000x3350 pixels)

Esri, DeLorme, FAO, USGS, EPA, NPS



July Departure from Normal Precipitation



Tucson, AZ: July, 2015 Monthly Departure from Normal Precipitation

Created on: July 03, 2015 - 22:15 UTC

Valid on: July 01, 2015 - 12:00 UTC

[What is UTC time?](#)

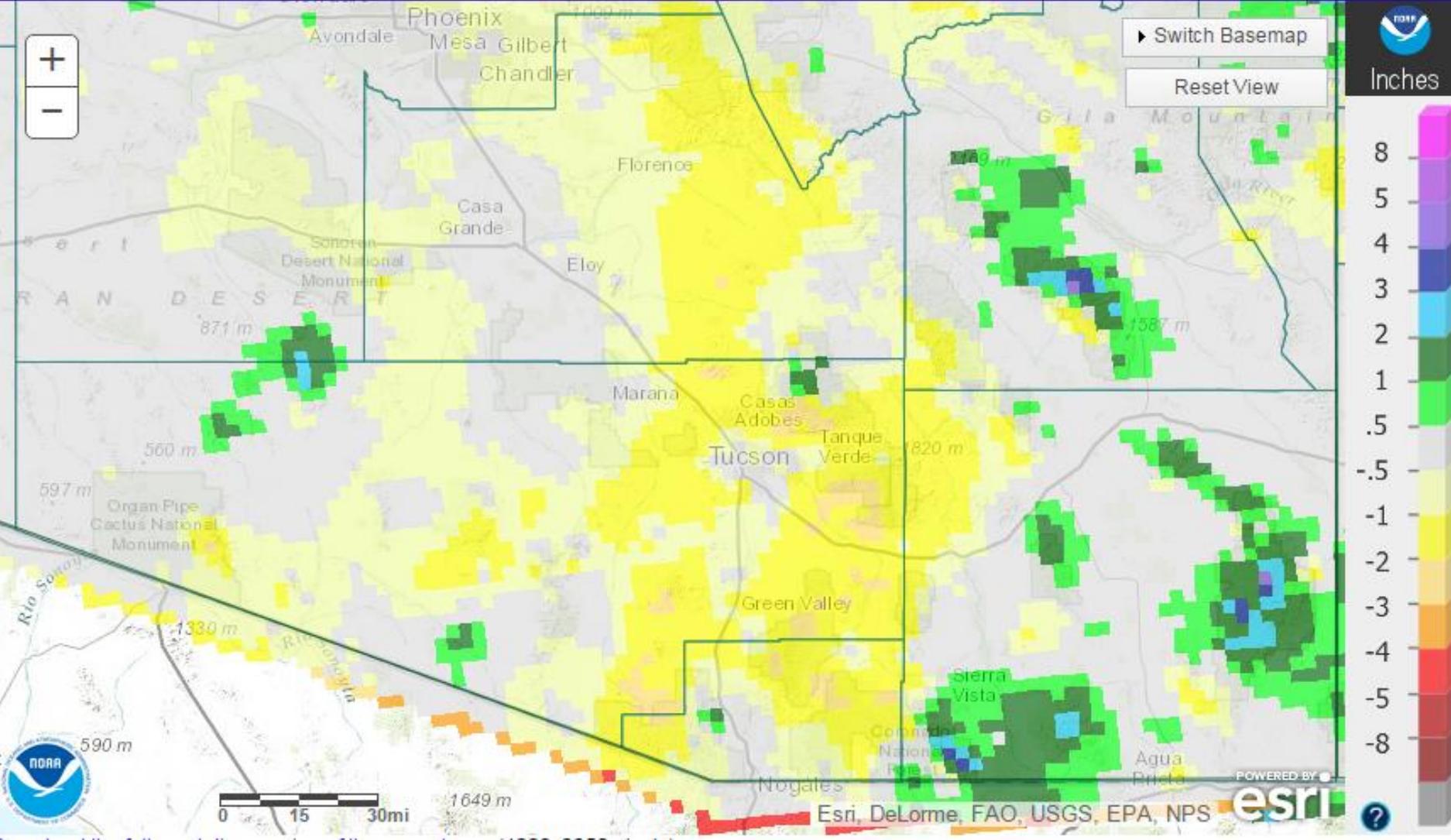
[Map Help](#)

Print this map

[Permalink](#)

BOOKMARK

Find your location by address or ZIP code:



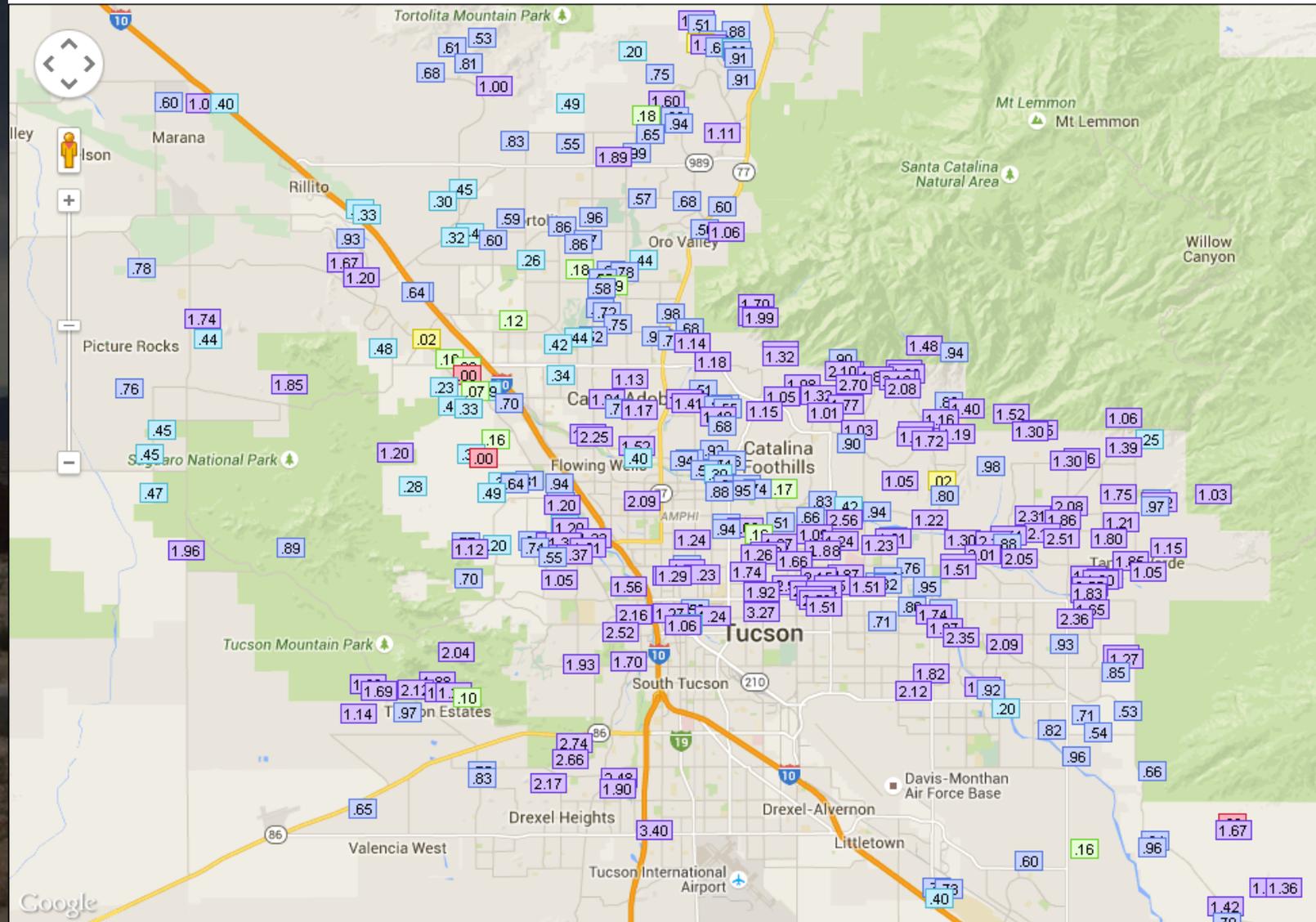


Tucson Area July Precipitation Totals

Source: <http://rainlog.org>



Report of Rainfall Data for 7/2015



Map Legend (all amounts in inches)

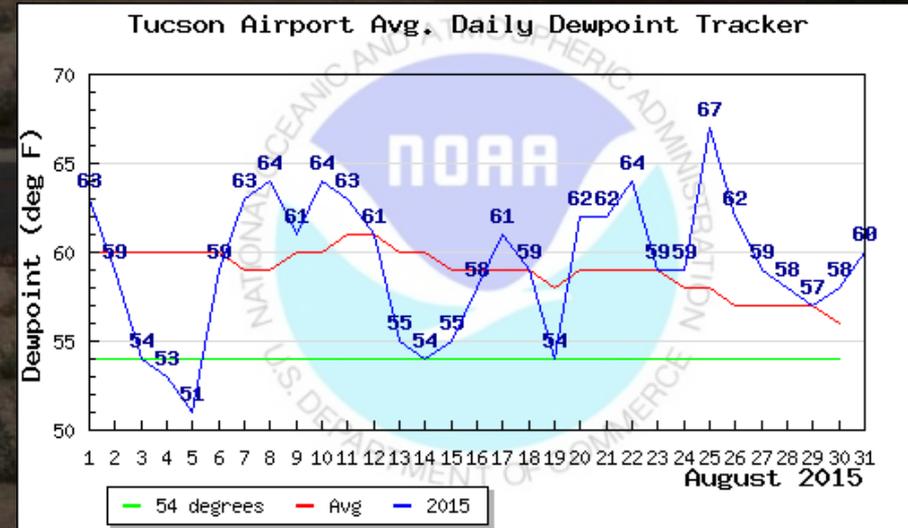
No rain	Trace	.01 - .05	.06 - .19	.20 - .49	.50 - .99	1.00+
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AUGUST



- **3rd Hottest** on Record
- 9th straight August with below normal rainfall & 53rd Driest
- 1.80" rain at Tucson Airport, normal is 2.39"
- Rainlog.org & Pima CO ALERT gages recorded 1.0"-3.5", 5" isolated areas
- Tucson Airport Rainfall through August
Calendar Year = 8.14" (7.91" Normal)
Water Year = 11.64" (10.30" Normal)





August Observed Precipitation



Tucson, AZ: August, 2015 Monthly Observed Precipitation

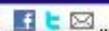
Valid on: September 01, 2015 12:00 UTC



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BOOKMARK



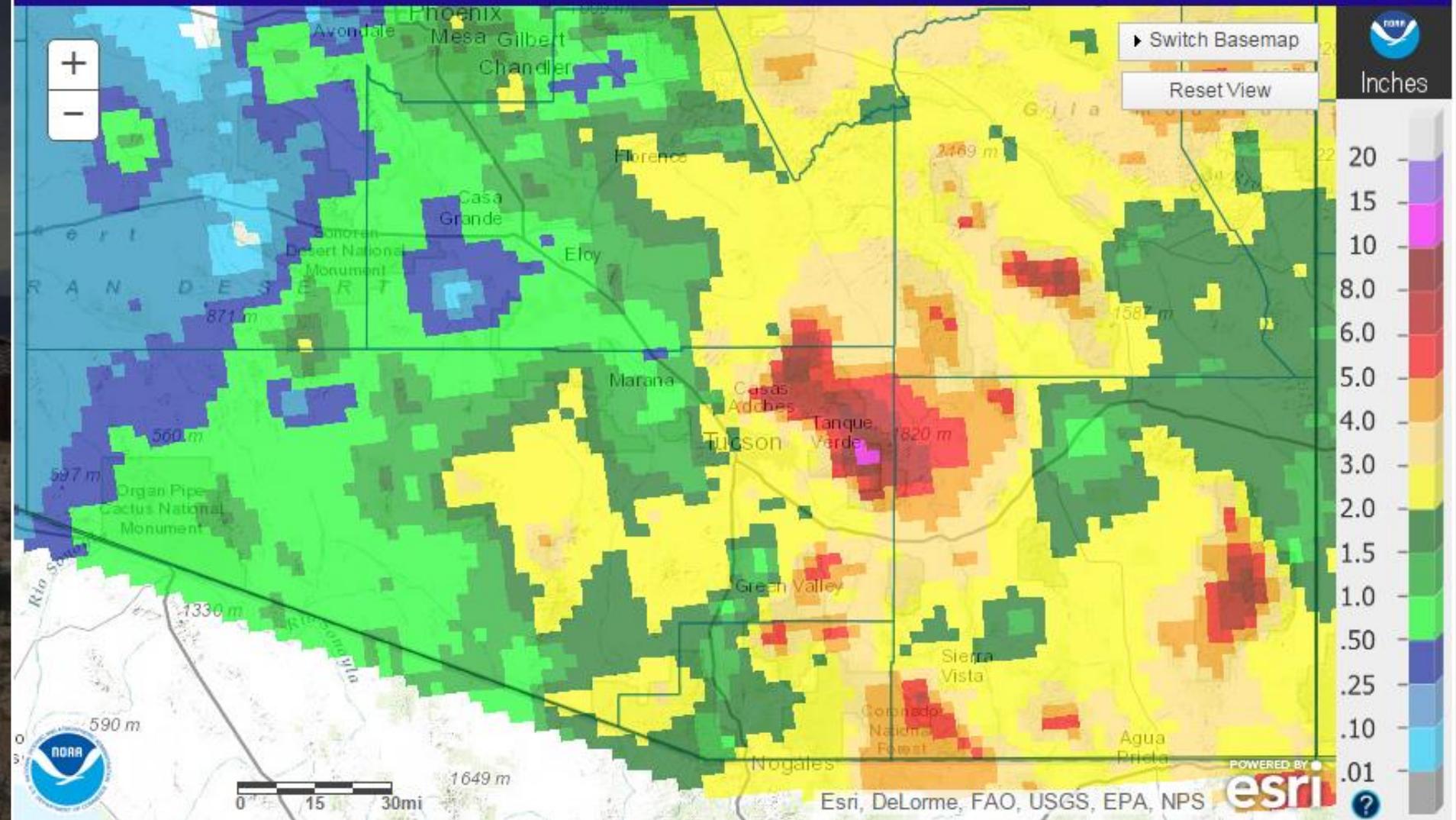
What is UTC time?

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Enter Location Here

Go





August Departure from Normal Precipitation

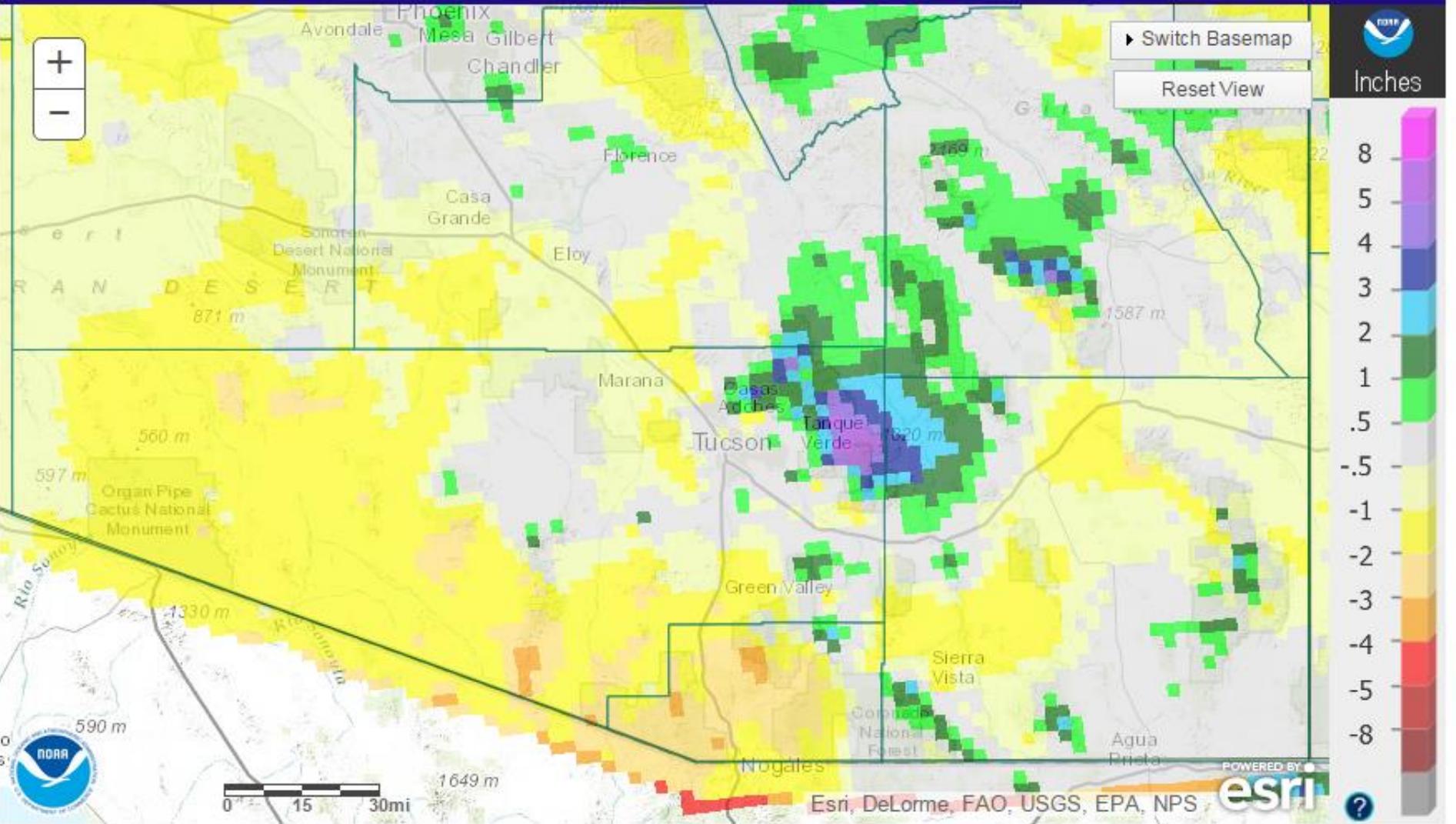


Tucson, AZ: August, 2015 Monthly Departure from Normal Precipitation
Valid on: September 01, 2015 12:00 UTC

Print this map Permalink BOOKMARK

What is UTC time? Map Help

Find your location by address or ZIP code: Enter Location Here Go





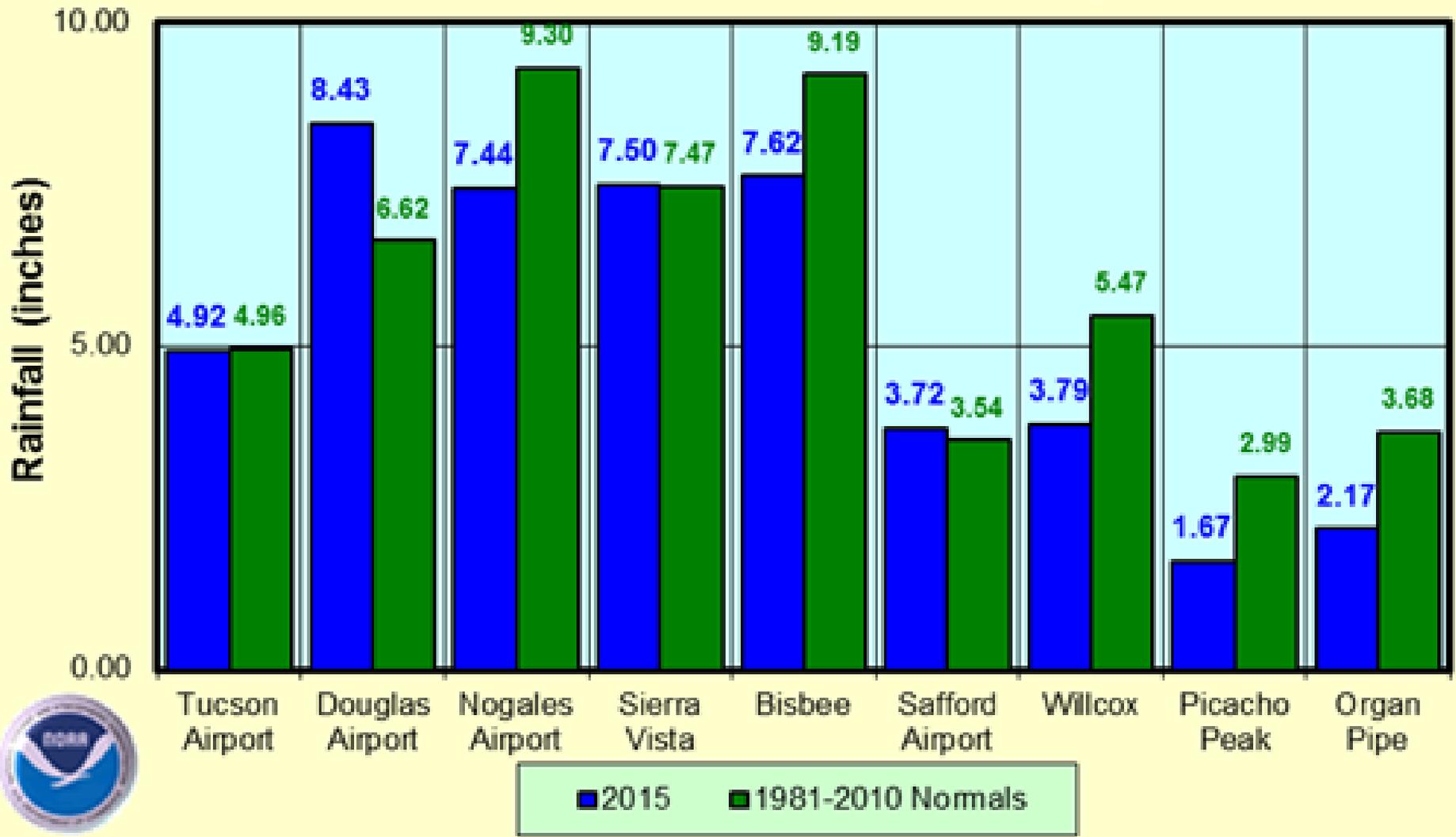
SEPTEMBER

(As of Sept 3)

- 0.69" rain at Tucson Airport, monthly normal is 1.29"
- Rainlog.org & Pima Co. ALERT gages recorded 0.12" – 3.62"

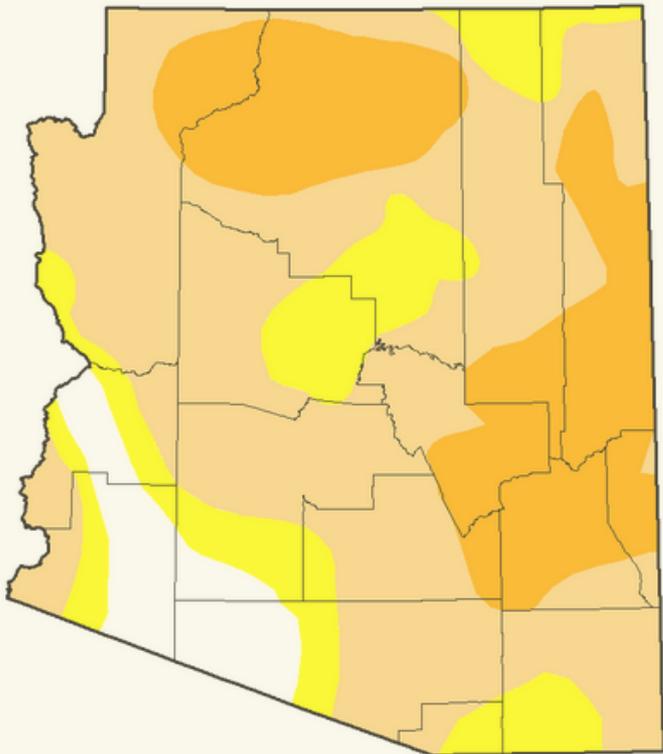


Preliminary 2015 Monsoon rainfall totals versus normal for selected sites in southeast Arizona. (thru September 3rd)

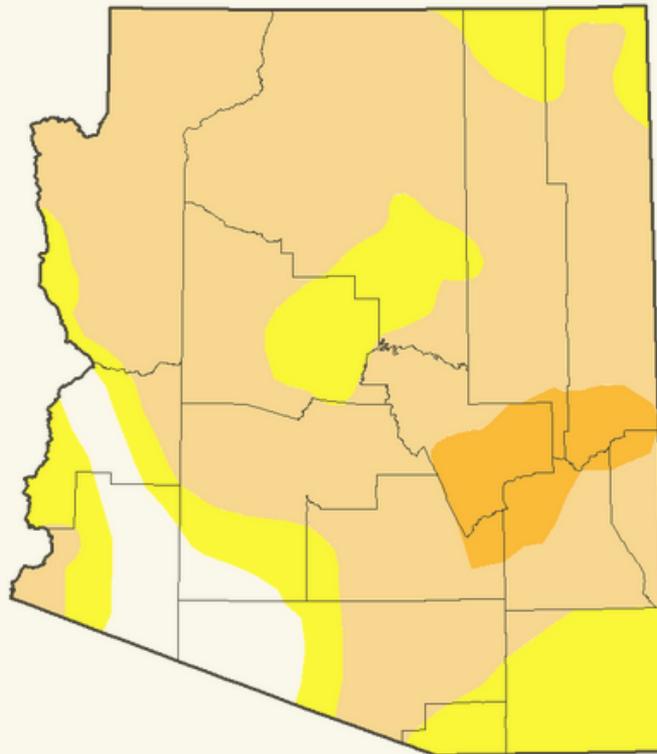




Drought Conditions start of Monsoon & Current



June 16, 2015



September 1, 2015

U.S. Drought Monitor Legend

Drought Severity

- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)

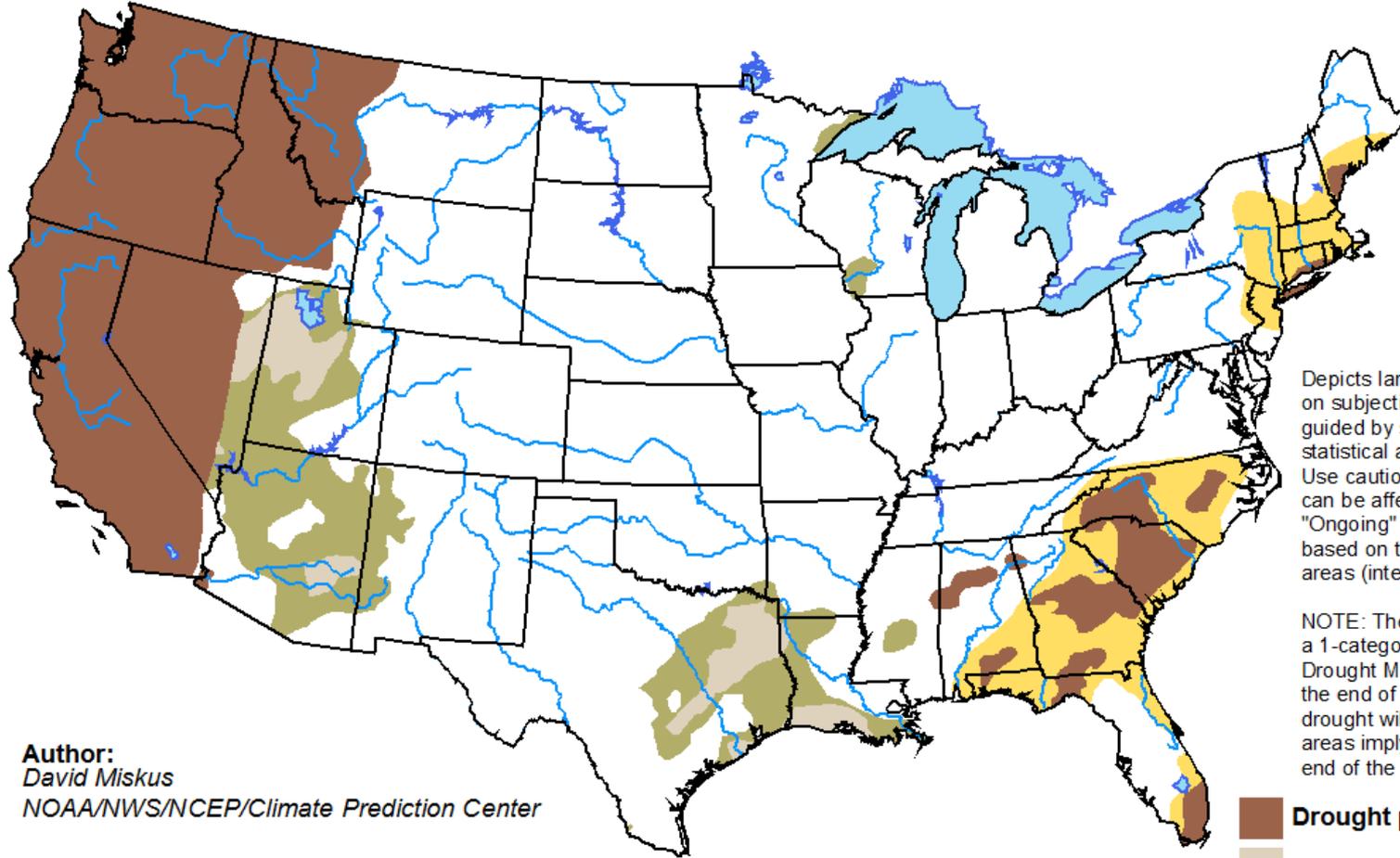
Statistics Comparison

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2015-06-16	7.04	92.96	76.84	24.80	0.00	0.00
2015-09-01	7.04	92.96	70.79	5.57	0.00	0.00

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for August 20 - November 30, 2015
Released August 20, 2015

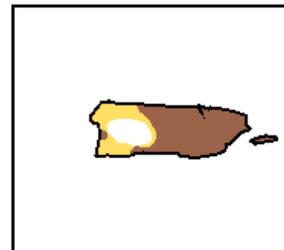
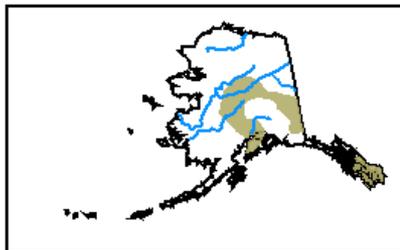


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:
David Miskus
NOAA/NWS/NCEP/Climate Prediction Center

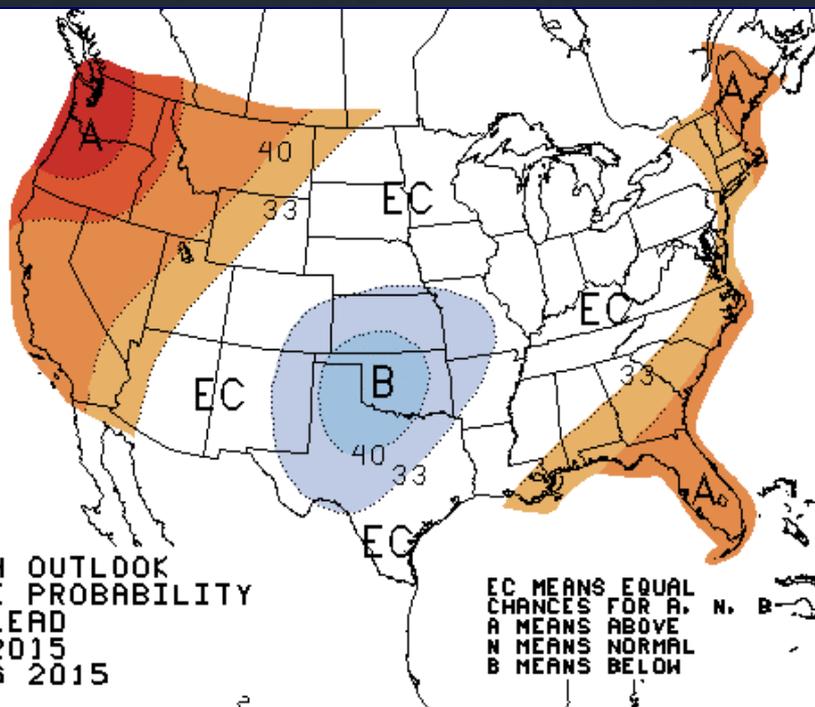
-  Drought persists/intensifies
-  Drought remains but improves
-  Drought removal likely
-  Drought development likely



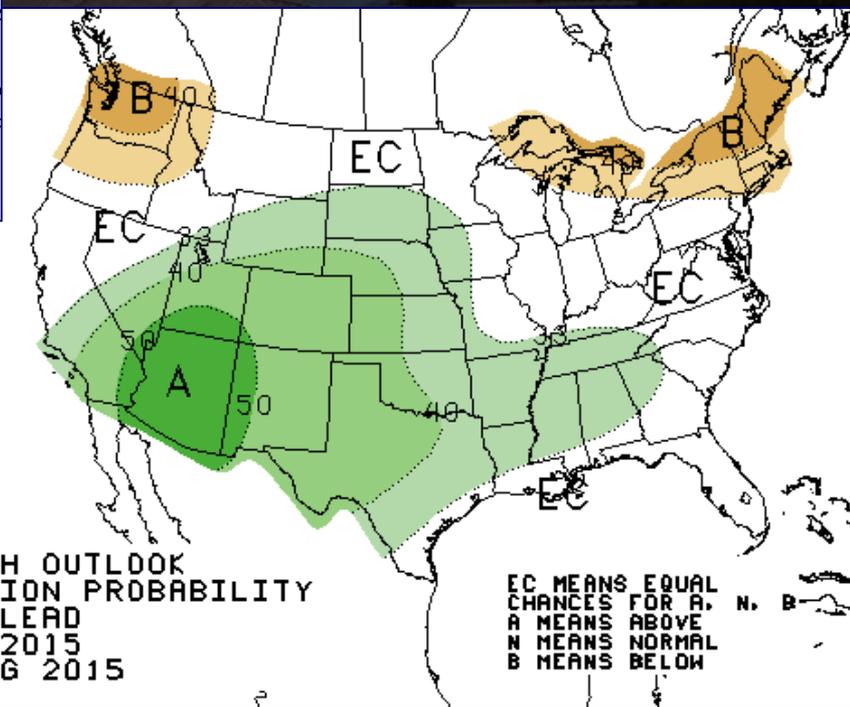
<http://go.usa.gov/hHTe>



September - November Outlook



THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID SON 2015
MADE 20 AUG 2015



THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID SON 2015
MADE 20 AUG 2015

El Niño

- El Niño conditions are present
- Positive equatorial sea surface temperature (SST) anomalies continue across most of the central and eastern Pacific.
- Greater than 90% chance will continue through winter 2015-16, and 85% chance it will last into early spring 2016.
- Normally means a wet and cooler winter for Arizona.

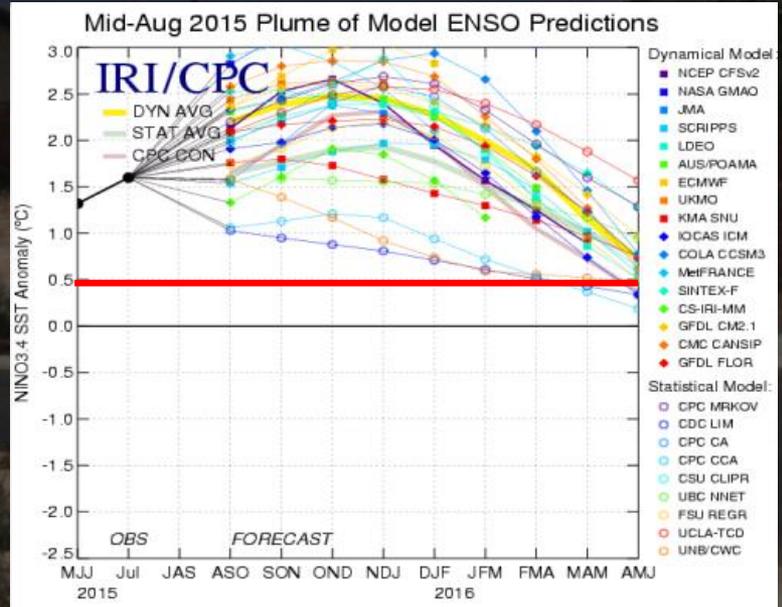
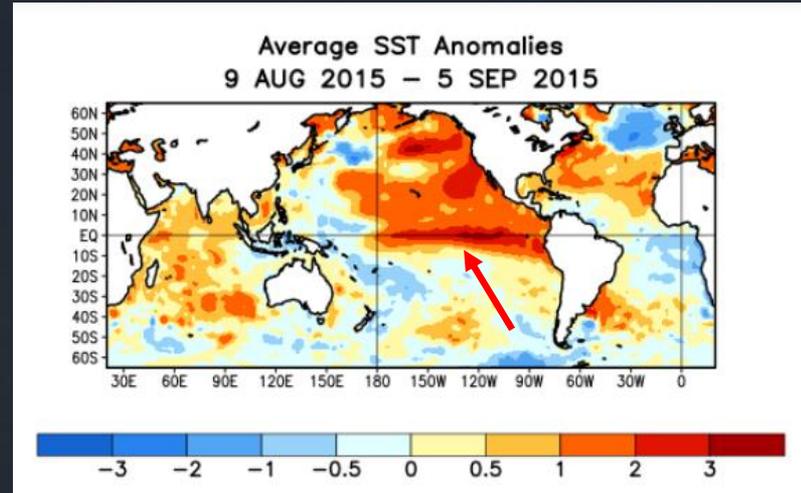
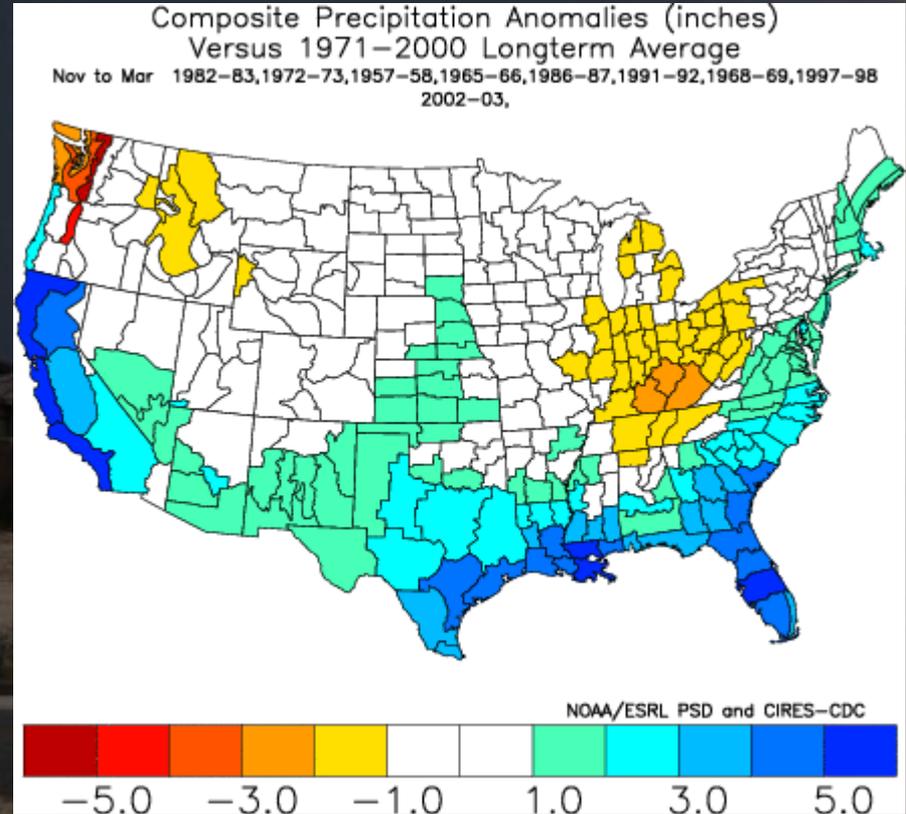
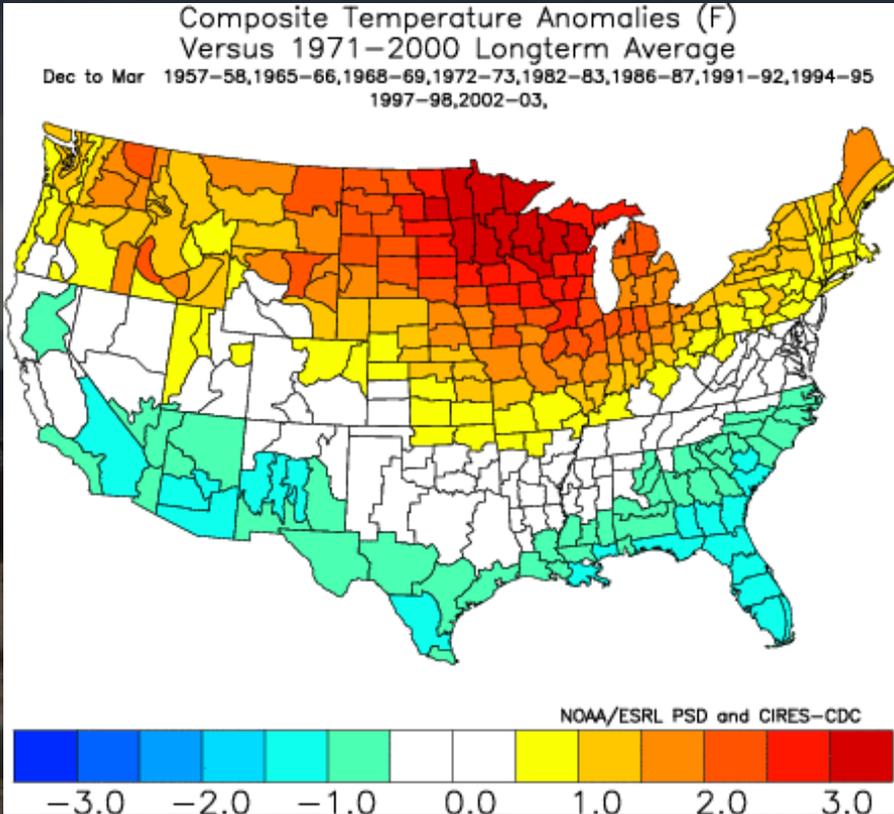


Figure provided by the International Research Institute (IRI) for Climate and Society (updated 18 August 2015).

El Niño Outlook





75th Anniversary Open House



*October
17th

*10 AM
to 3 PM

*Lots of fun
planned!
More details
as we get
closer!

National Weather Service
Tucson

75
Years



National Weather Service Tucson, AZ | weather.gov/tucson



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