



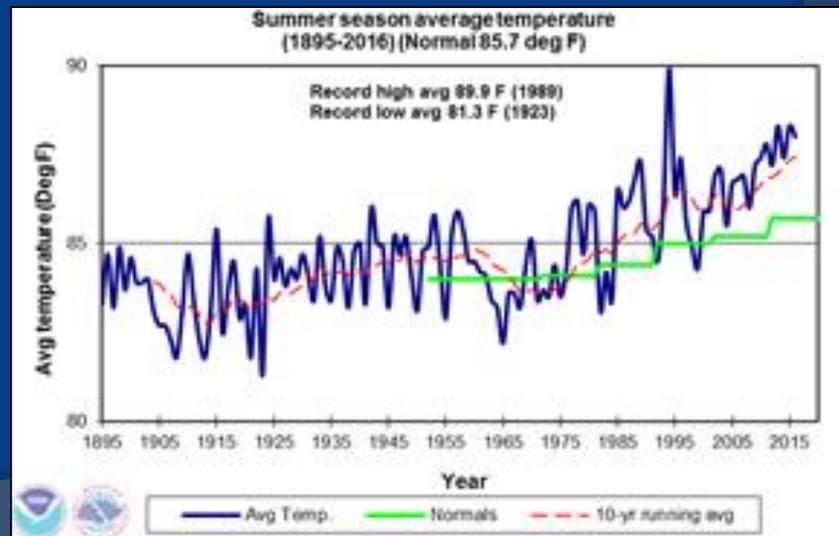
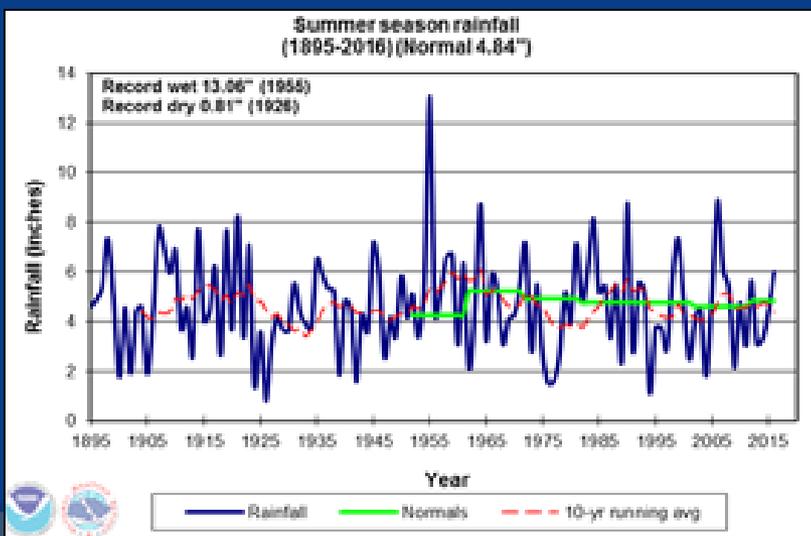
# 2016 SUMMER/MONSOON SEASON

National Weather Service Tucson, Arizona  
Pima County Local Drought Impact Group Meeting  
September 14, 2016



# Summer 2016

- **4<sup>th</sup> Hottest** for Southern AZ & 5<sup>th</sup> Warmest for US
- 8<sup>th</sup> straight Summer in the Top 10 warmest
- 6.00" rainfall at Tucson Airport, normal is 4.84"
- Rainlog & Pima Co. ALERT gages recorded 2.8" to over 11"





# JUNE

- ◎ **6<sup>th</sup> Warmest** on records
- ◎ 22 days 100°F or greater
- ◎ **2<sup>nd</sup> Wettest:** 1.59" rainfall at Tucson Airport, normal 0.20"
- ◎ 3<sup>rd</sup> wettest June day on 29<sup>th</sup> with 1.15" at the airport
- ◎ Rainlog & Pima ALERT gages recorded 0.43" to 4.0"



# June Observed Precipitation



Tucson, AZ: June, 2016 Monthly Observed Precipitation  
Valid on: July 01, 2016 12:00 UTC



Print this map

Permalink

BOOKMARK



What is UTC time?

Map Help

Find address or location

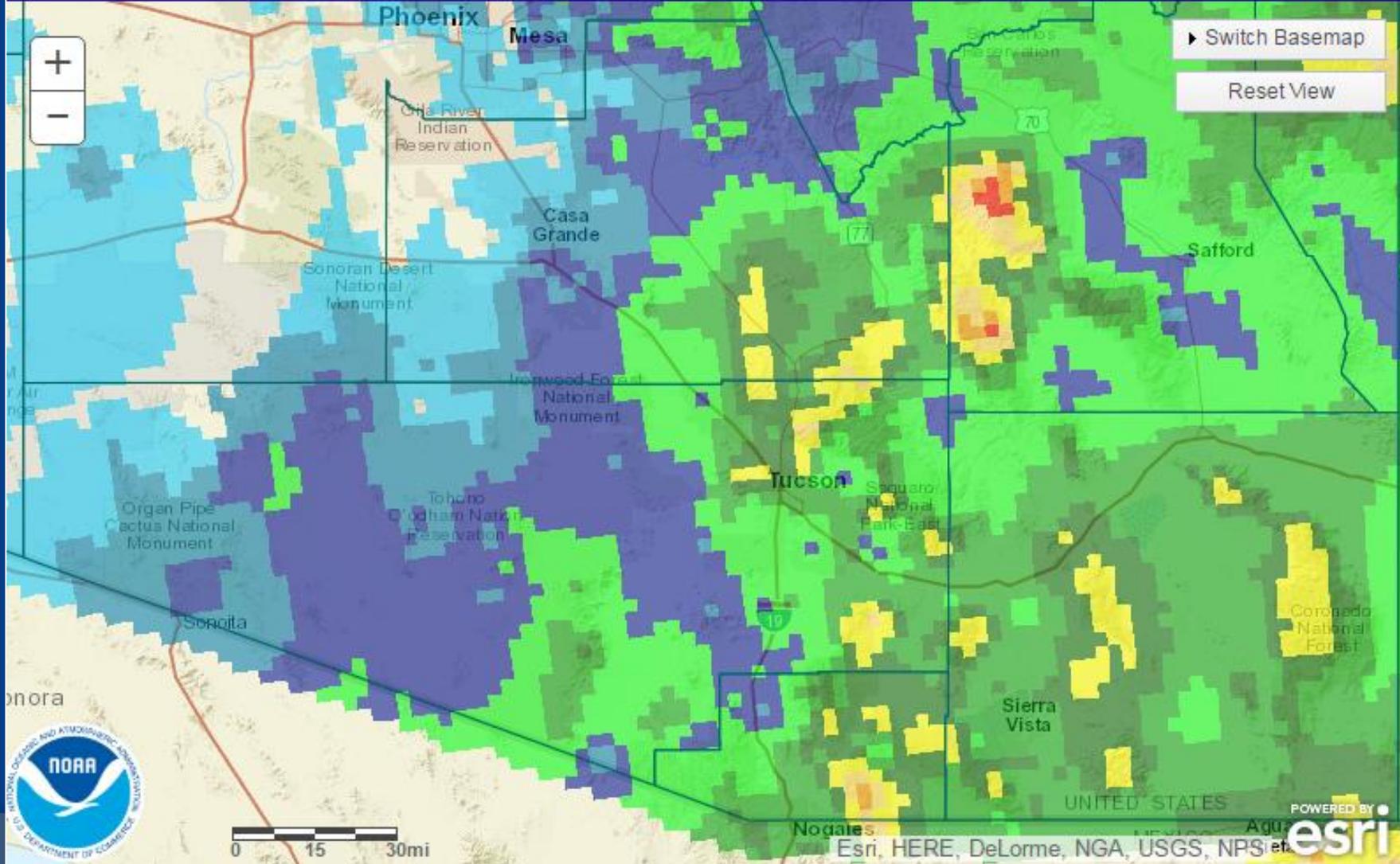


Switch Basemap

Reset View



Inches





# June Departure from Normal Precipitation

Tucson, AZ: June, 2016 Monthly Departure from Normal Precipitation  
Valid on: July 01, 2016 12:00 UTC

Print this map

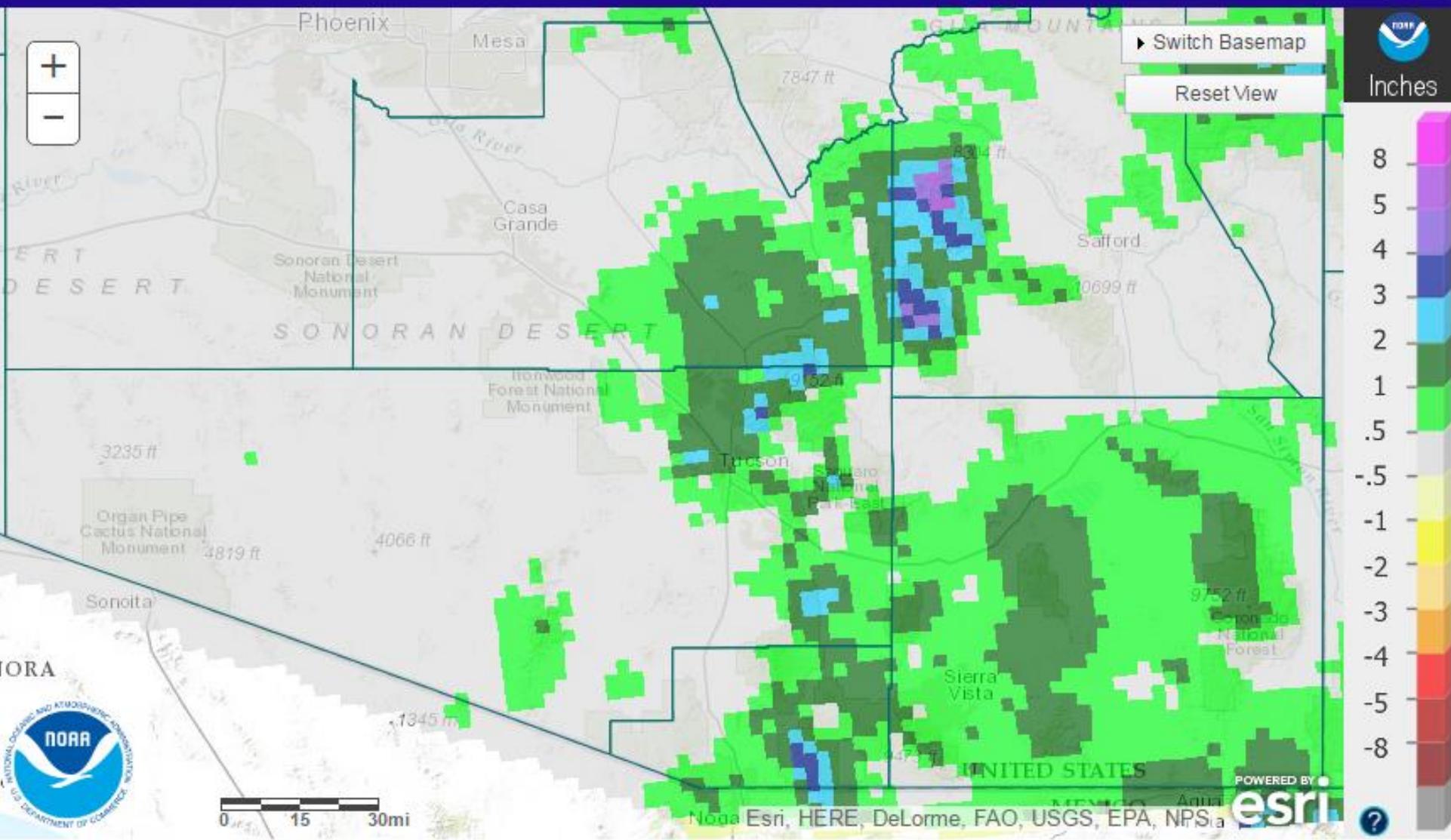
Permalink

BOOKMARK

What is UTC time?

Map Help

Find address or location



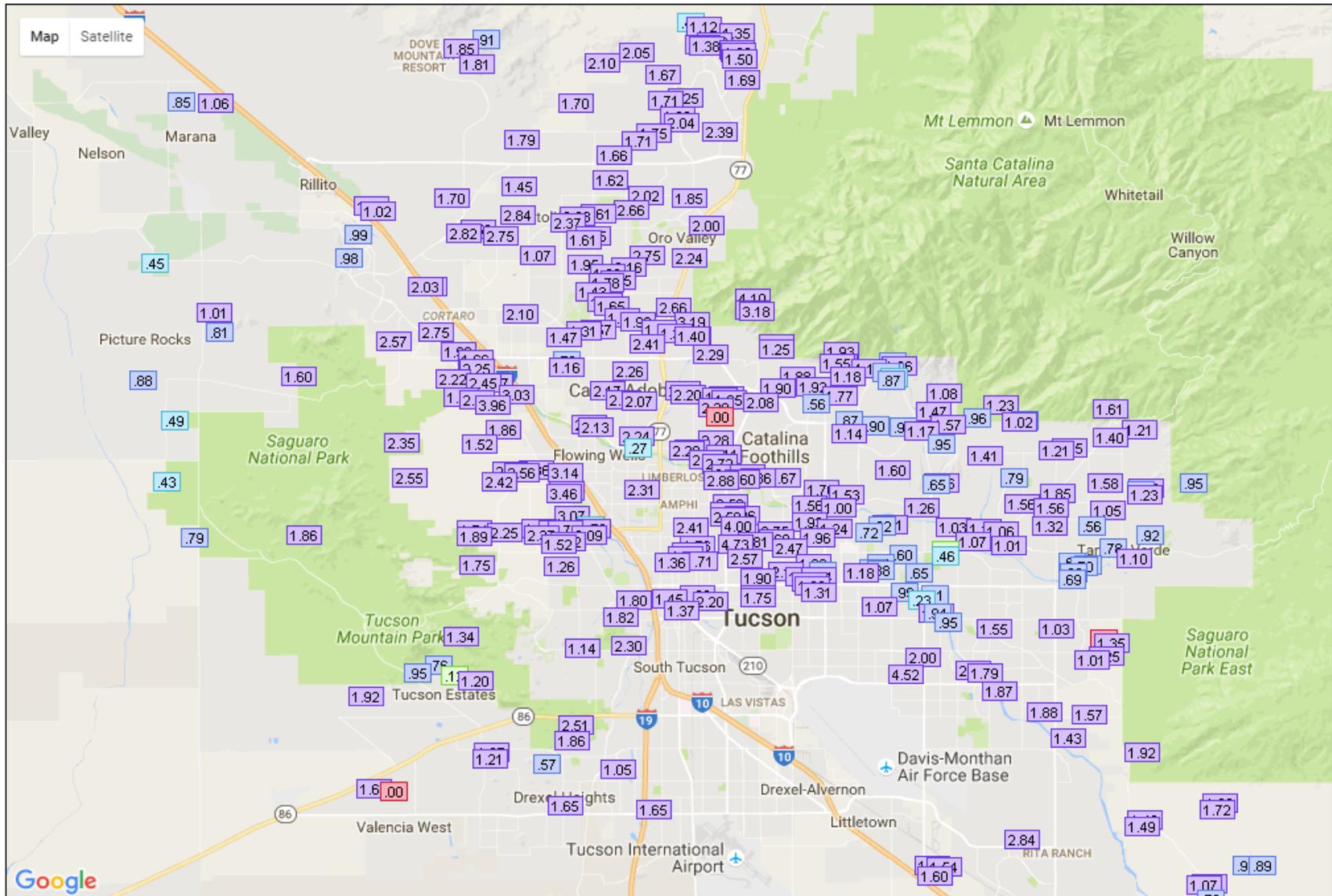


# Tucson Area June Precipitation Totals

Source: <http://rainlog.org>



Report of Rainfall Data for 6/2016



Google



# JULY

- **3<sup>rd</sup> Hottest**
- 25 days 100°F or greater
- 24<sup>th</sup> Wettest: 3.32" rainfall at Tucson Airport, normal is 2.25"
- 15 consecutive days with no rain at the airport
- Rainlog & Pima ALERT gages recorded 0.80" to over 6.0"



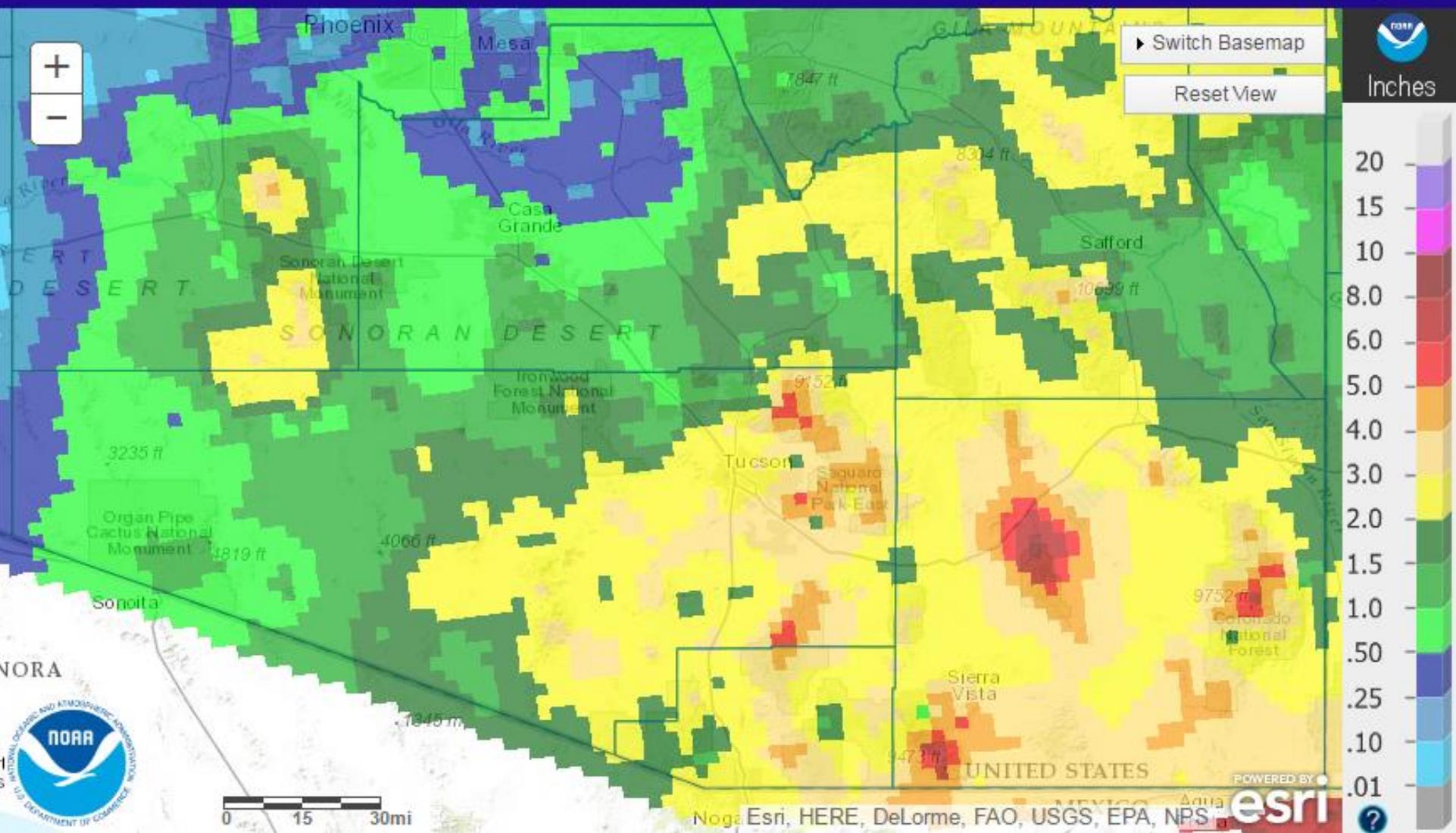
# July Observed Precipitation



Tucson, AZ: July, 2016 Monthly Observed Precipitation  
Valid on: August 01, 2016 12:00 UTC

Print this map

Find address or location









# AUGUST



- 36<sup>th</sup> Warmest
- 26<sup>th</sup> Driest & 10<sup>th</sup> straight August with below normal rainfall
- 1.09" rain at Tucson Airport, normal is 2.39"
- Rainlog & Pima ALERT gages recorded 0.48" to over 4"
- Tucson Airport Rainfall through August  
Calendar Year = 8.53" (7.91" Normal)  
Water Year = 11.41" (10.30" Normal)

Year	Rainfall
2007	0.90"
2008	1.70"
2009	0.33"
2010	2.04"
2011	1.35"
2012	1.17"
2013	0.48"
2014	1.89"
2015	1.80"
2016	1.09"
<b>Normal</b>	<b>2.39"</b>



# August Observed Precipitation

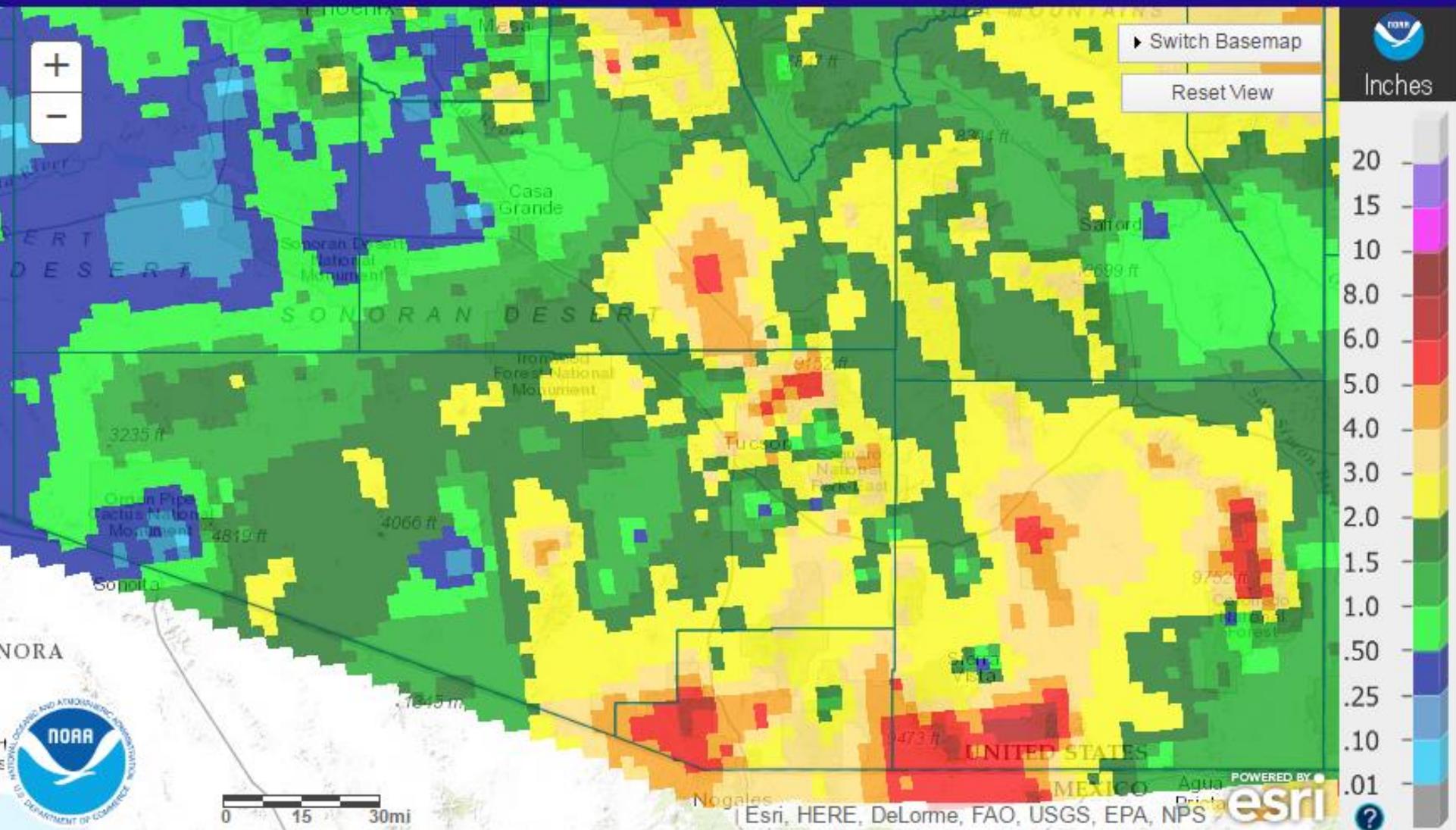


Tucson, AZ: August, 2016 Monthly Observed Precipitation  
Valid on: September 01, 2016 12:00 UTC

Print this map Permalink BOOKMARK f t e ...

What is UTC time? Map Help

Find address or location





# August Departure from Normal Precipitation

Tucson, AZ: August, 2016 Monthly Departure from Normal Precipitation  
Valid on: September 01, 2016 12:00 UTC



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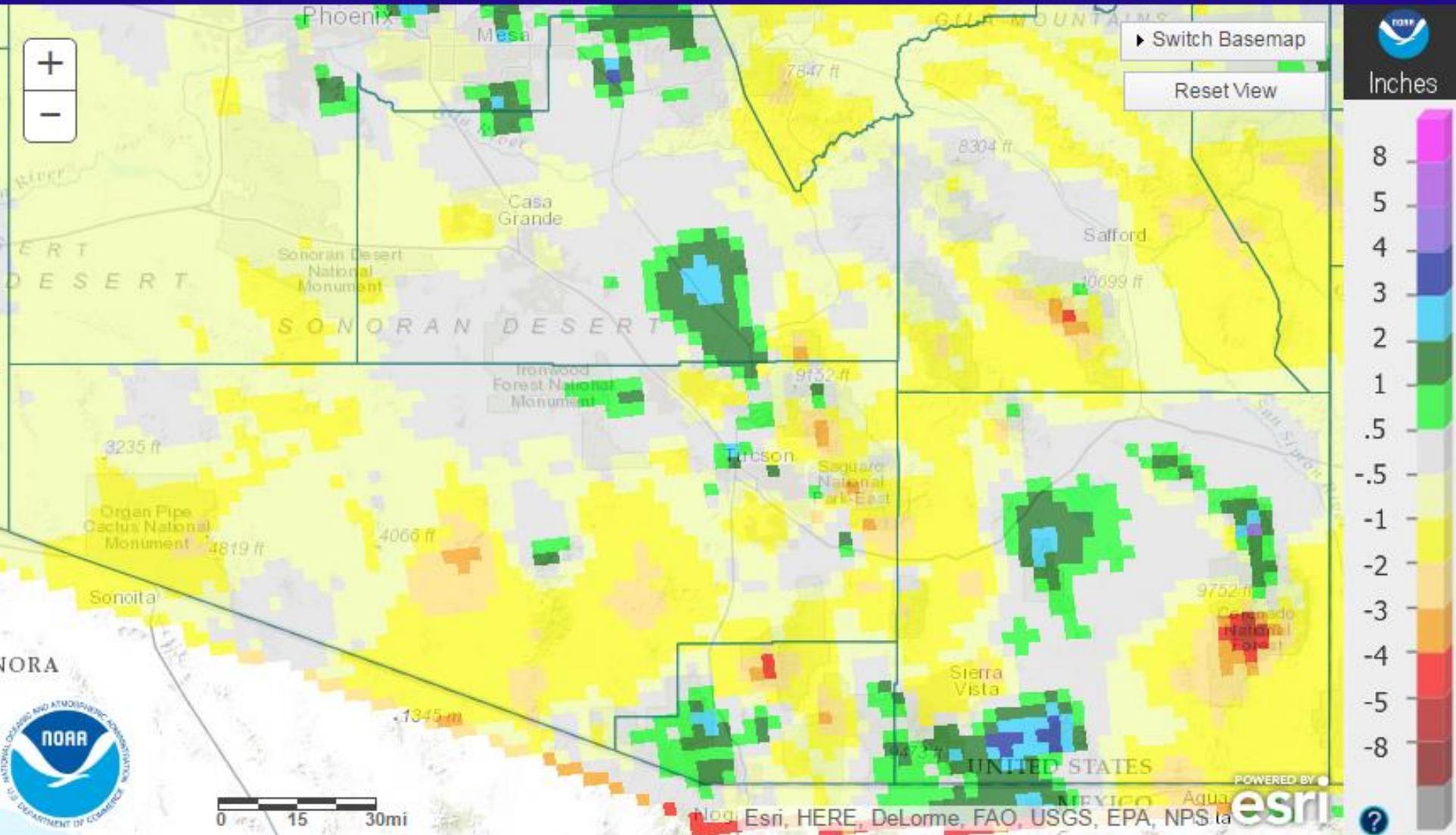
BOOKMARK



What is UTC time?

Map Help

Find address or location



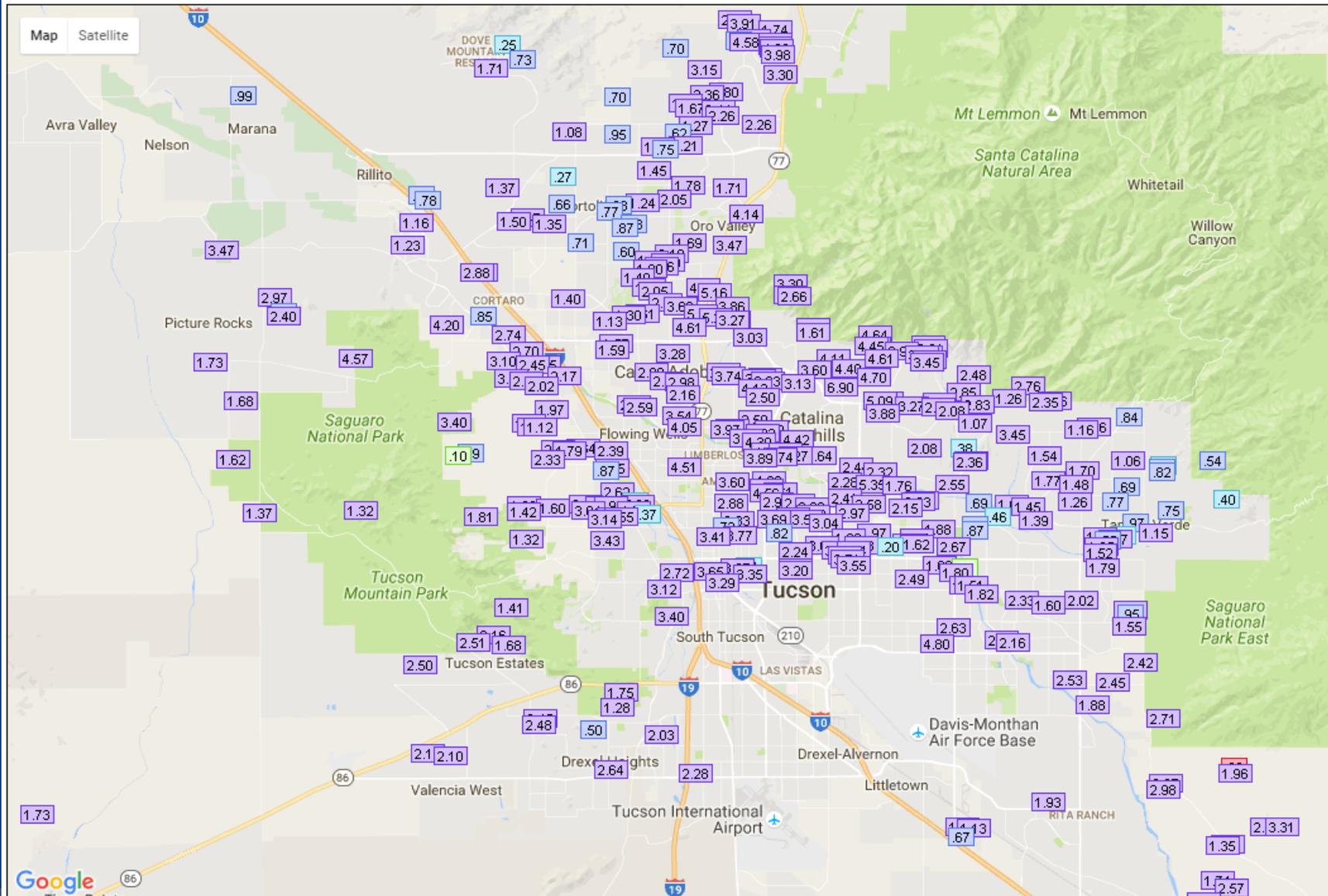


# Tucson Area precipitation totals for August

Source: <http://rainlog.org>



Report of Rainfall Data for 8/2016



Map Legend (all amounts in inches)

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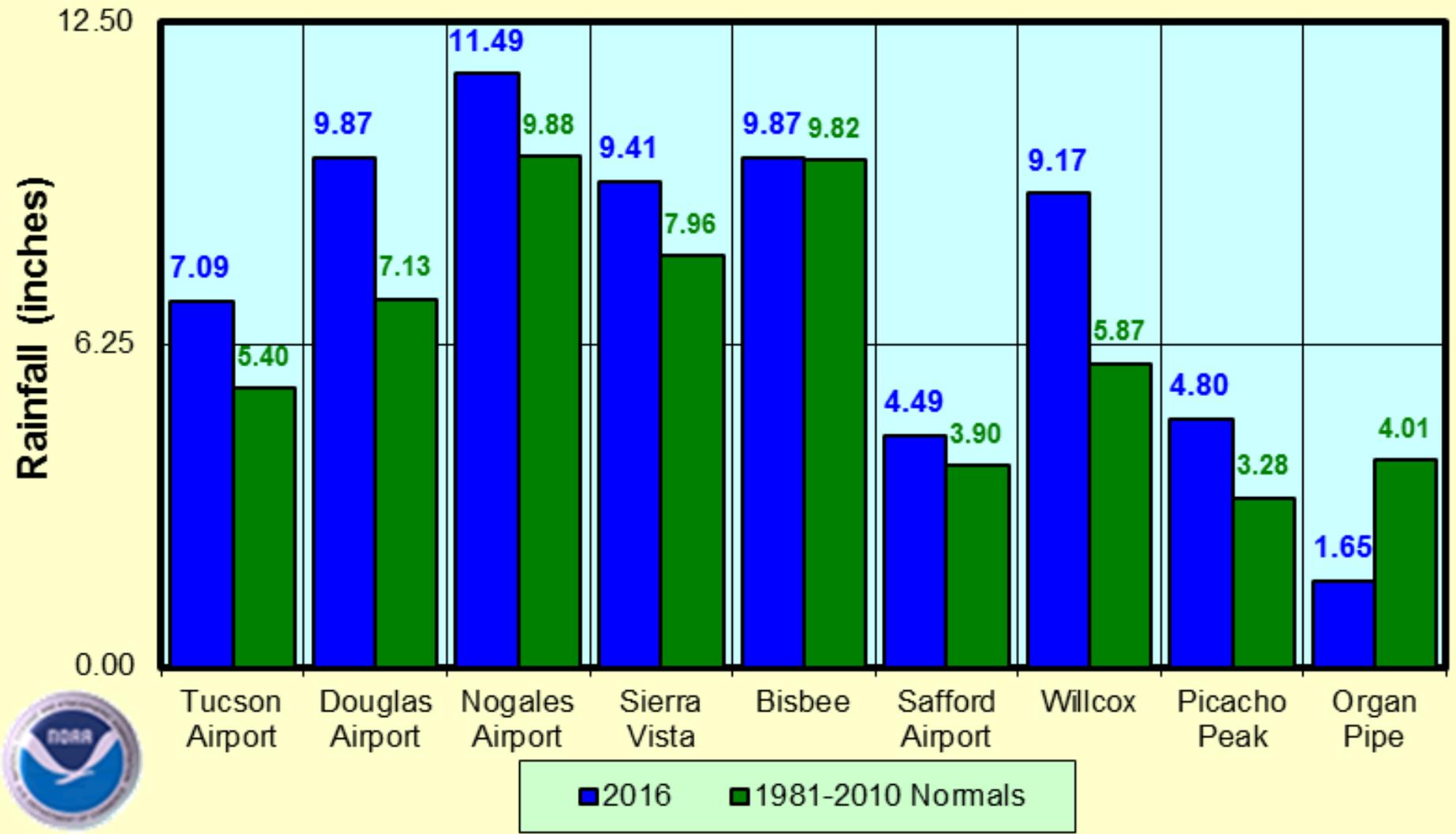


# SEPTEMBER 1<sup>st</sup> - 13<sup>th</sup>

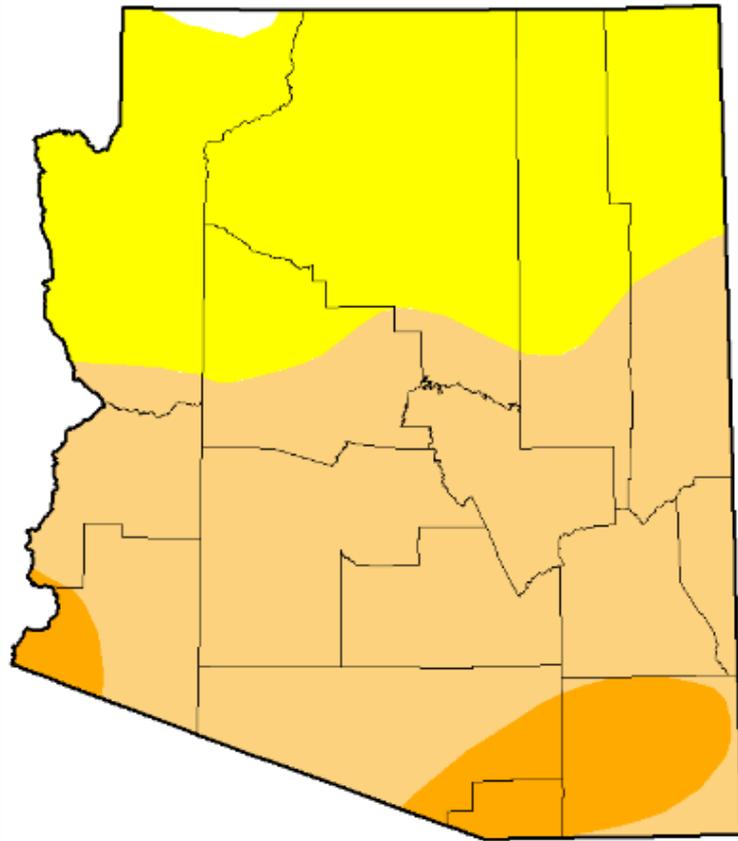
- ⦿ 1.29" rain at Tucson Airport, monthly normal is 1.29"
- ⦿ Hurricane Newton Sept 7<sup>th</sup> with 1.25" at the airport
- ⦿ Rainlog.org & Pima Co. ALERT gages recorded 0.12" – 3.62"



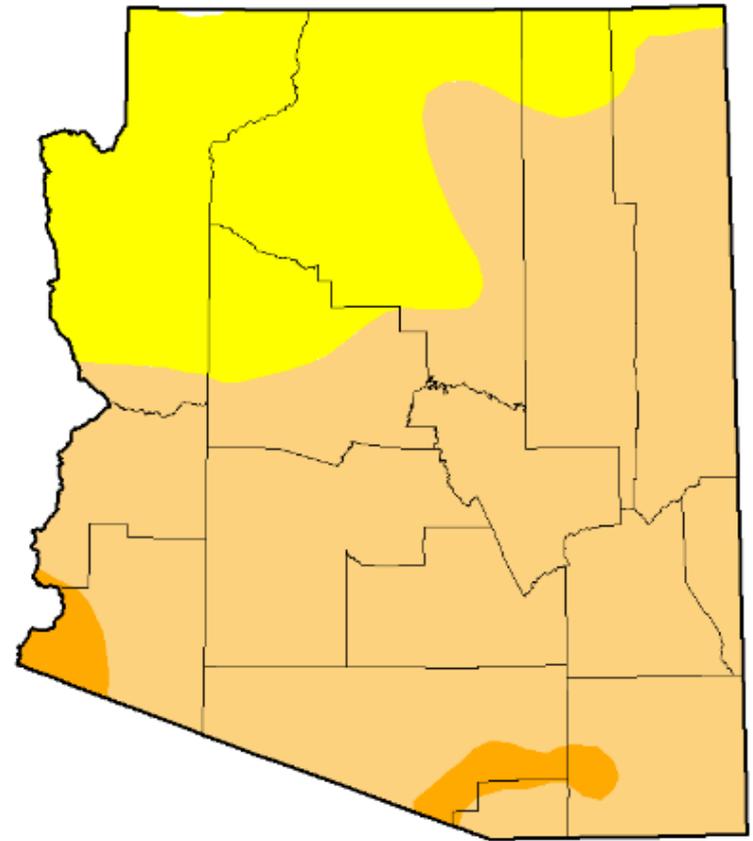
### Preliminary 2016 Monsoon rainfall totals versus normal for selected sites in southeast Arizona. (thru September 12th)



# Drought Conditions start of Monsoon & Current



June 14, 2016



September 6, 2016

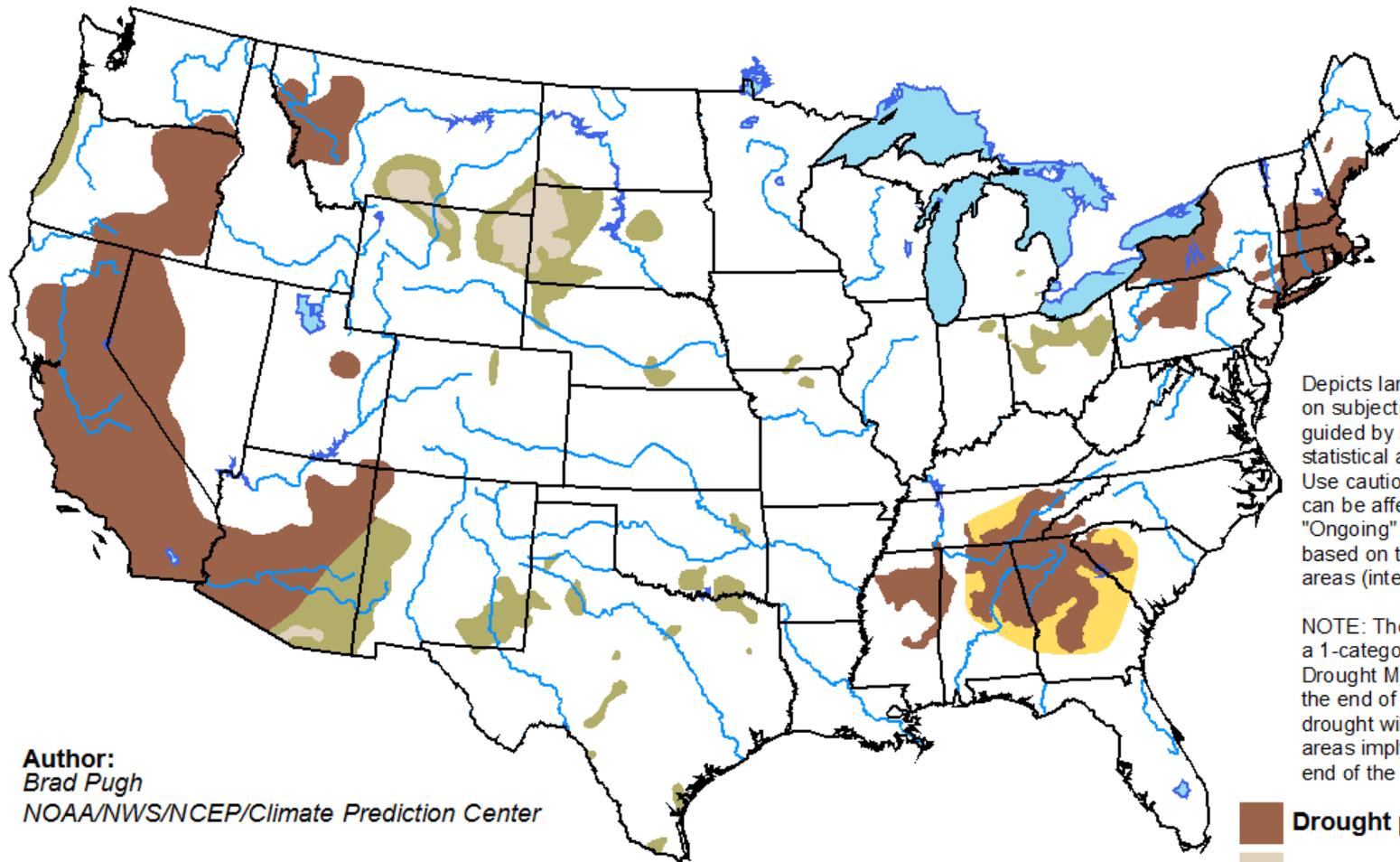
## Statistics Comparison

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2016-06-14	0.41	99.59	59.42	7.99	0.00	0.00
2016-09-06	0.07	99.93	71.85	2.84	0.00	0.00

# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period

Valid for August 18 - November 30, 2016  
Released August 18, 2016

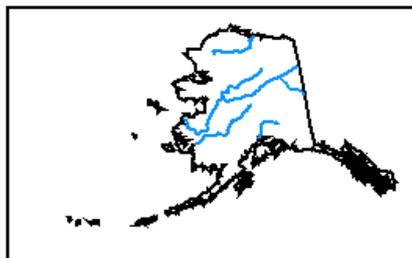


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to 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:  
Brad Pugh  
NOAA/NWS/NCEP/Climate Prediction Center

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



<http://go.usa.gov/3eZ73>



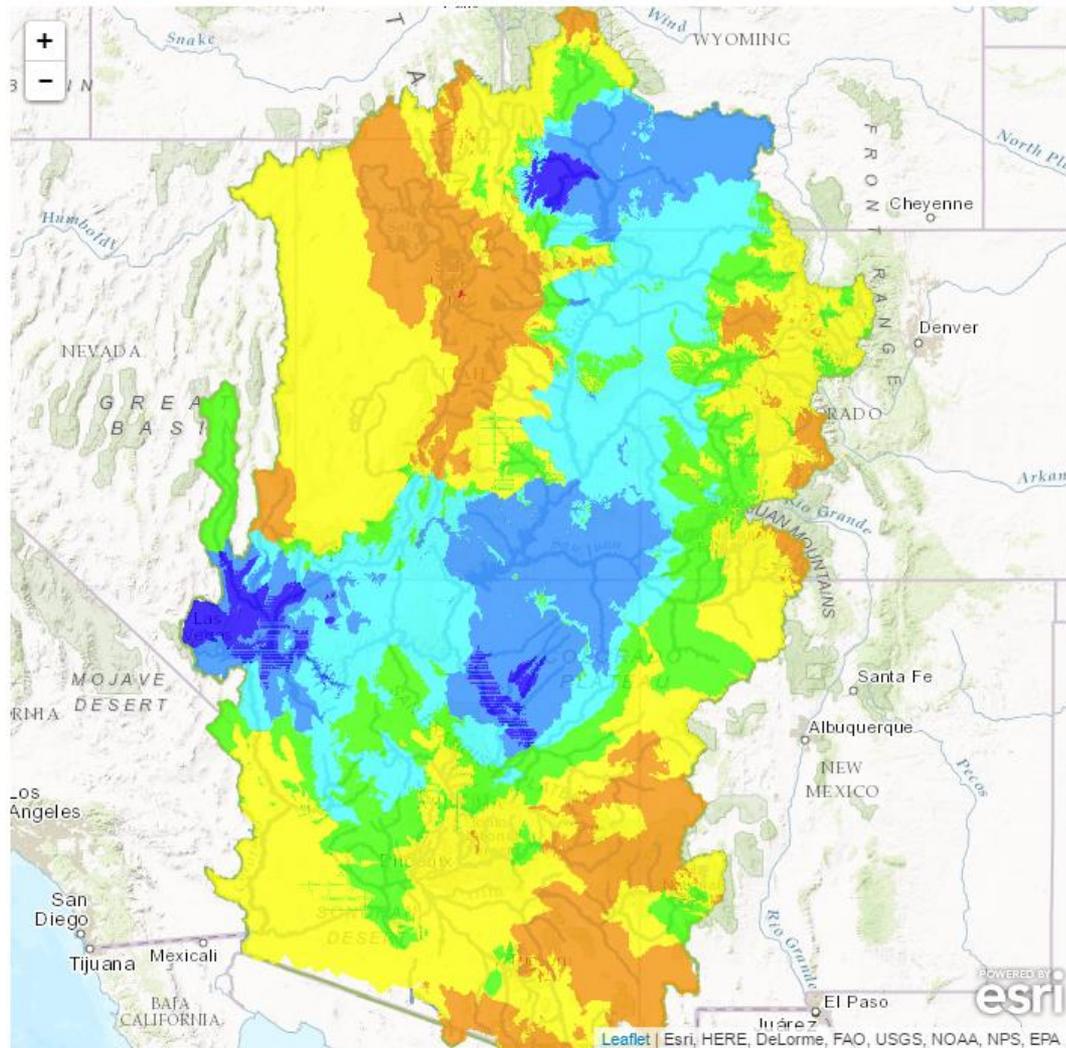


## News

Most recent presentations of Water Supply Briefings can be found here: [Read More...](#)

## Conditions Map

[Help](#)



Lat: 37.6 Lng: -110.5, Zoom: 6

Leaflet | Esri, HERE, DeLorme, FAO, USGS, NOAA, NPS, EPA

[River Conditions](#)

[Snow Conditions](#)

[Water Supply Forecasts](#)

[Peak Flood Probability](#)

[Reservoir Conditions](#)

[Daily Precipitation](#)

[Monthly Precipitation](#)

### Precipitation

Show

[Help](#)



October - August 2016 (Water Year)

August 2016 (Monthly)

September 1 - 14 2016 12Z (Month to Date)

### % Average

>500%

300-500%

200-300%

150-200%

130-150%

110-130%

100-110%

90-100%

70-90%

50-70%

30-50%