



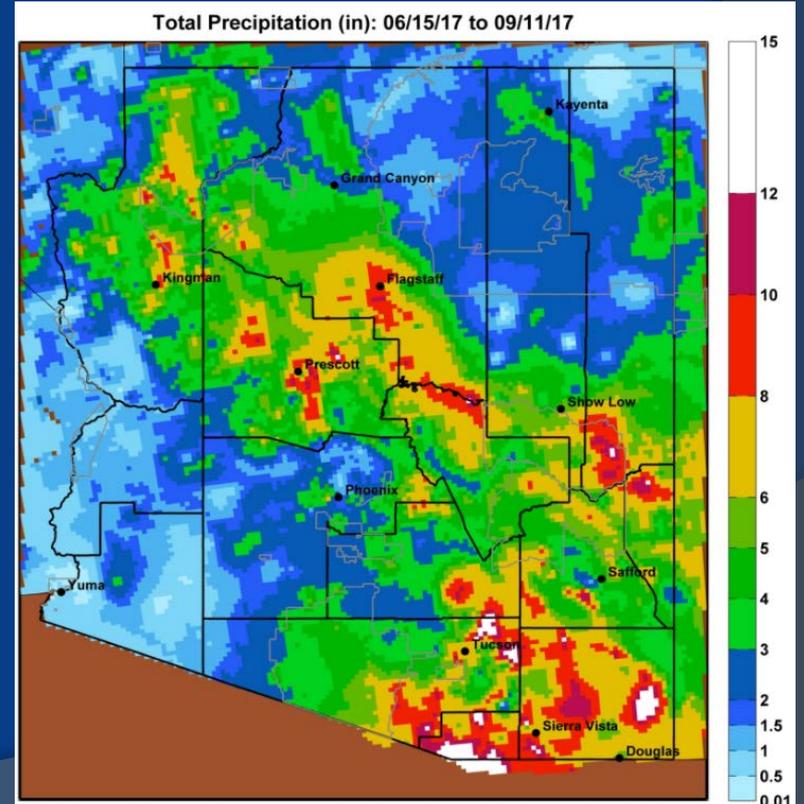
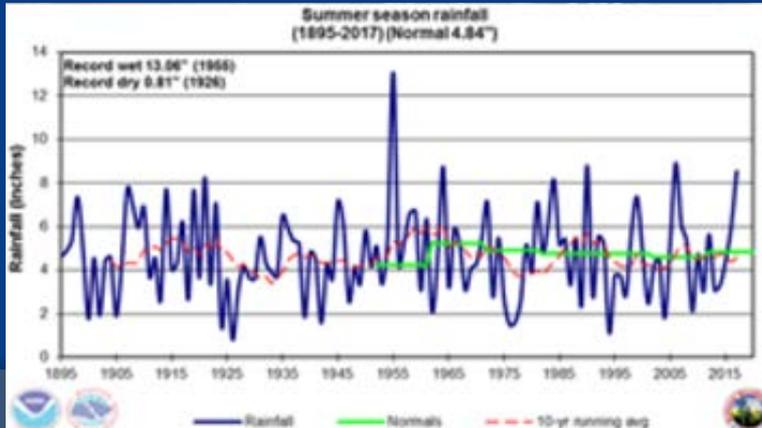
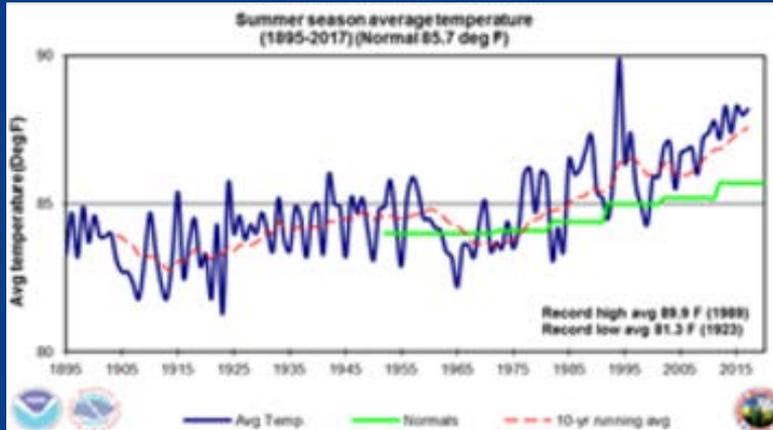
# 2017 MONSOON SEASON

National Weather Service Tucson, Arizona  
Pima County Local Drought Impact Group Meeting  
September 13, 2017



# Summer 2017

- 4<sup>th</sup> Hottest & 5<sup>th</sup> Wettest
- 5<sup>th</sup> straight Summer in top 5 hottest
- 8.54" rainfall at Tucson Airport, normal is 4.84"
- Rainlog & Pima Co. ALERT gages recorded 3.0" to over 17" in the mountains



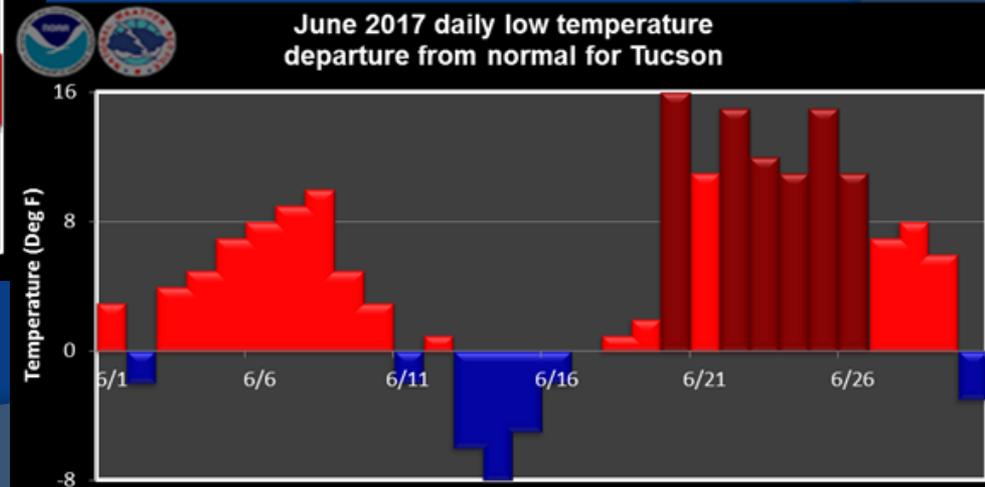
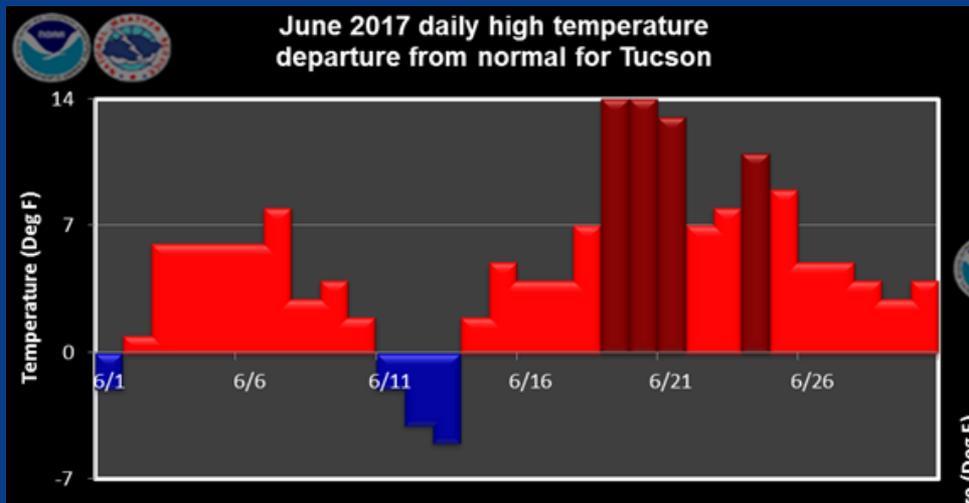
Map produced using daily total precipitation estimates from the NOAA National Weather Service Advanced Hydrologic Prediction Service (AHPS). Data information available at <http://water.weather.gov/precip/about.php>. Date created: 12-Sep-2017  
University of Arizona - <http://cais.arizona.edu/climate/>





# JUNE

- **HOTTEST** on record with record highs & lows
- 18 days of 105<sup>0</sup>F or greater
- 16<sup>th</sup> Driest: Trace of rainfall at Tucson Airport, normal 0.20"
- Rainlog & Pima ALERT gages recorded zero to 0.2"





# June Observed Precipitation

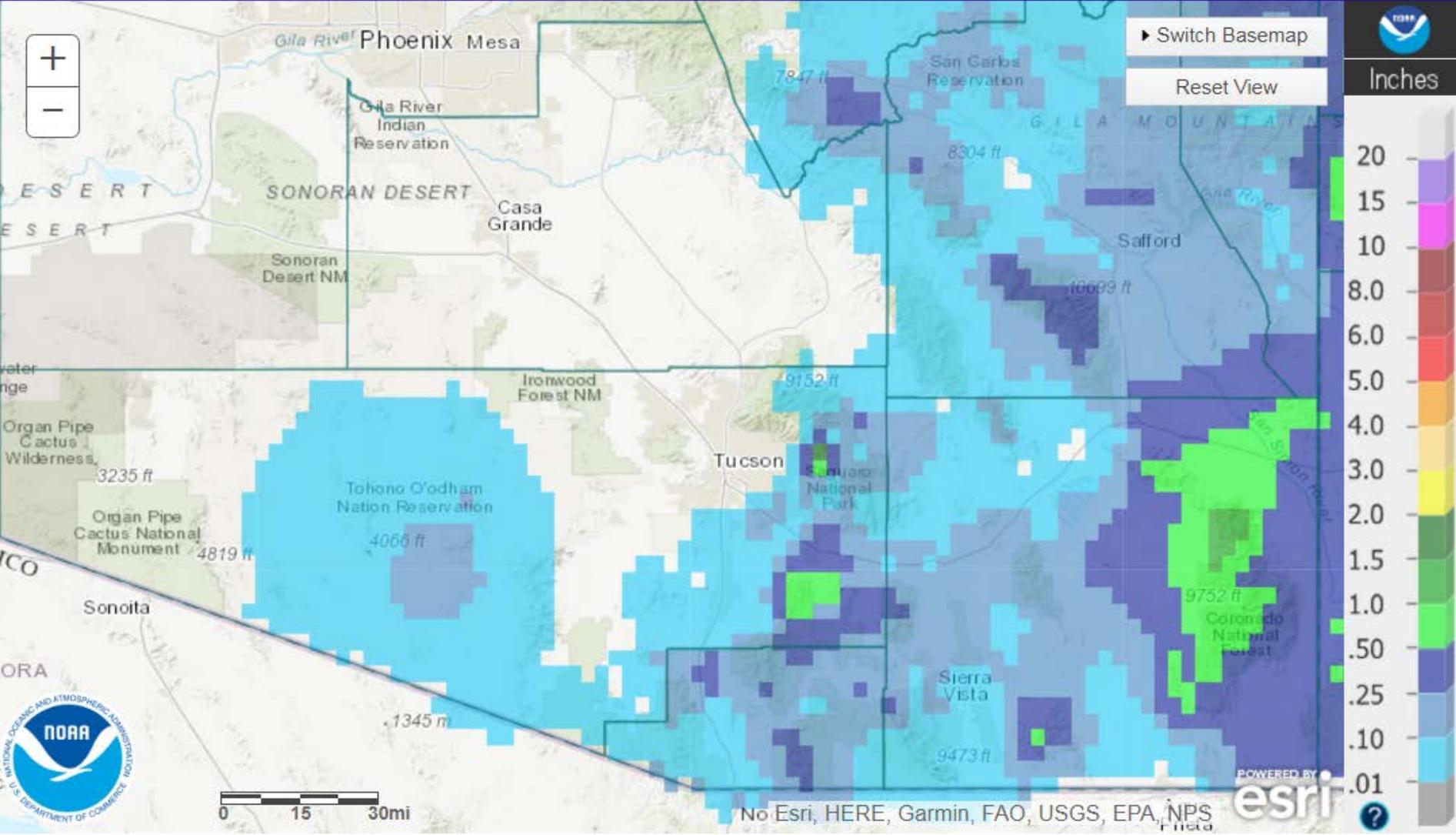


Tucson, AZ: June, 2017 Monthly Observed Precipitation  
Valid on: July 01, 2017 12:00 UTC

Print this map [Permalink](#) [BOOKMARK](#) [f](#) [t](#) [e](#) [...](#)

[What is UTC time?](#) [Map Help](#)

Find address or location

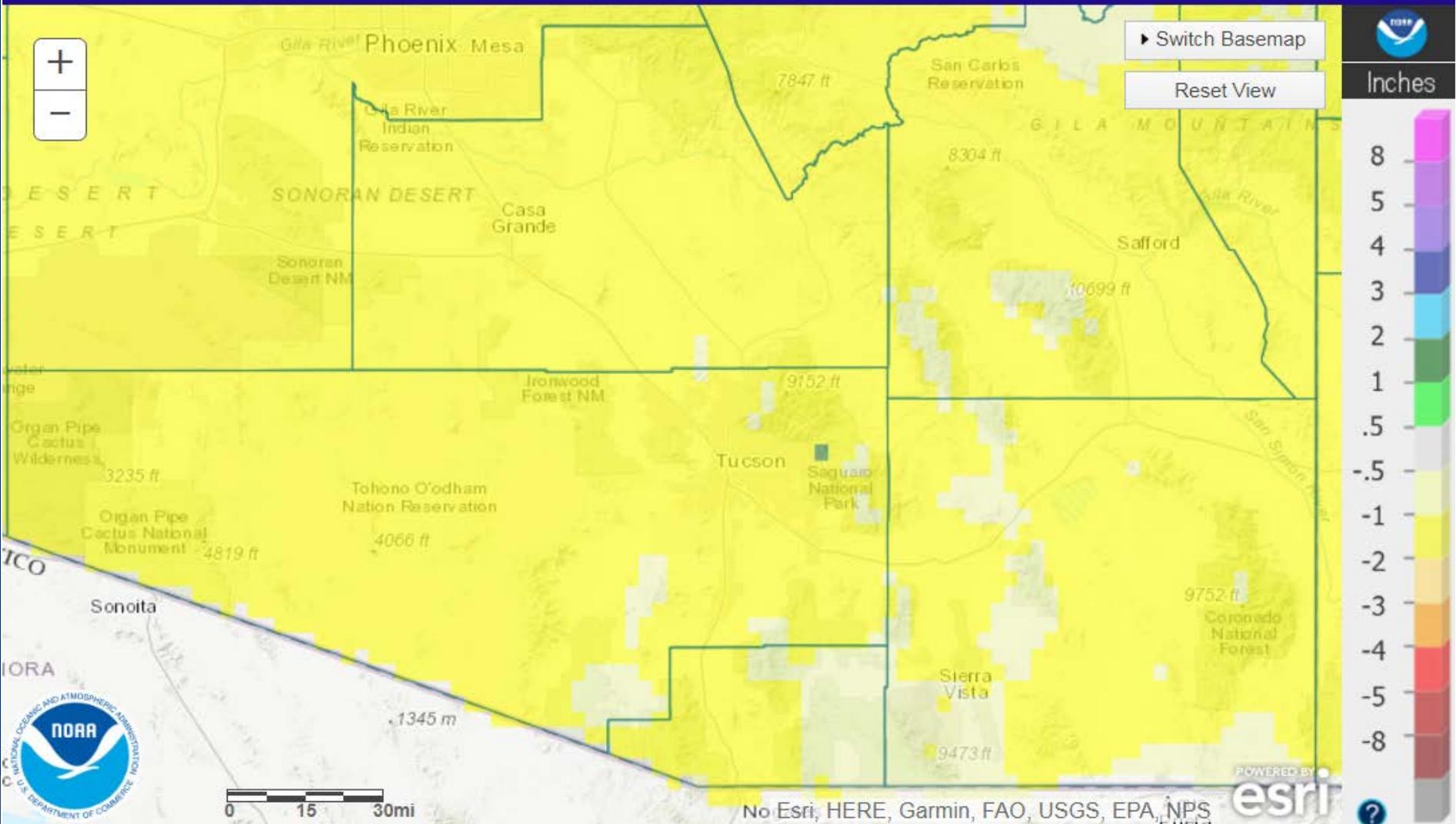




# June Departure from Normal Precipitation

Tucson, AZ: June, 2017 Monthly Departure from Normal Precipitation  
Valid on: July 01, 2017 12:00 UTC

Print this map

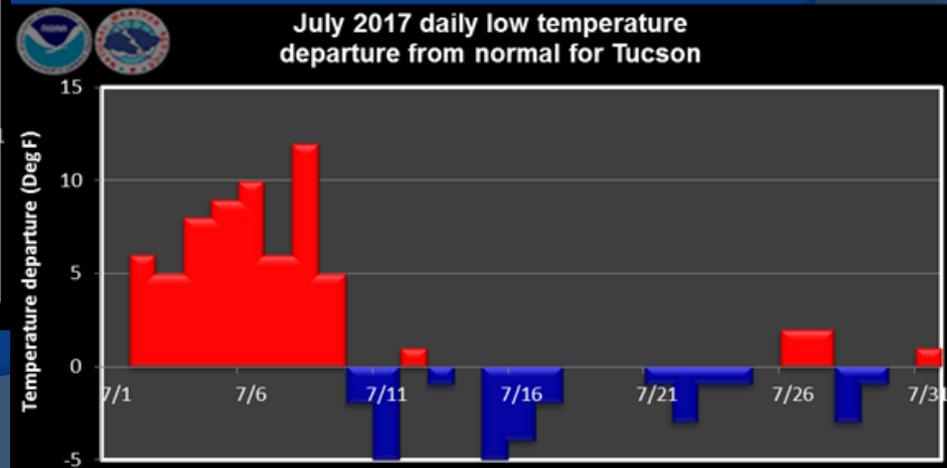
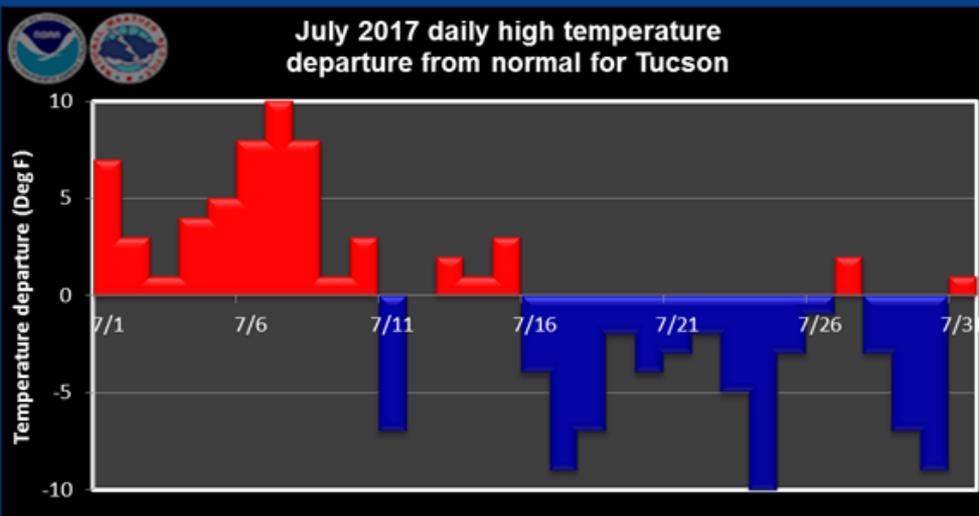




# JULY



- 59<sup>th</sup> Coolest
- WETTEST on record: 6.80" rainfall at Tucson Airport, normal is 2.25"
- 2<sup>nd</sup> wettest calendar month on record
- 17 days with measurable rain at the airport
- Rainlog & Pima ALERT gages recorded 1.00" to over 10.0"





# July Observed Precipitation

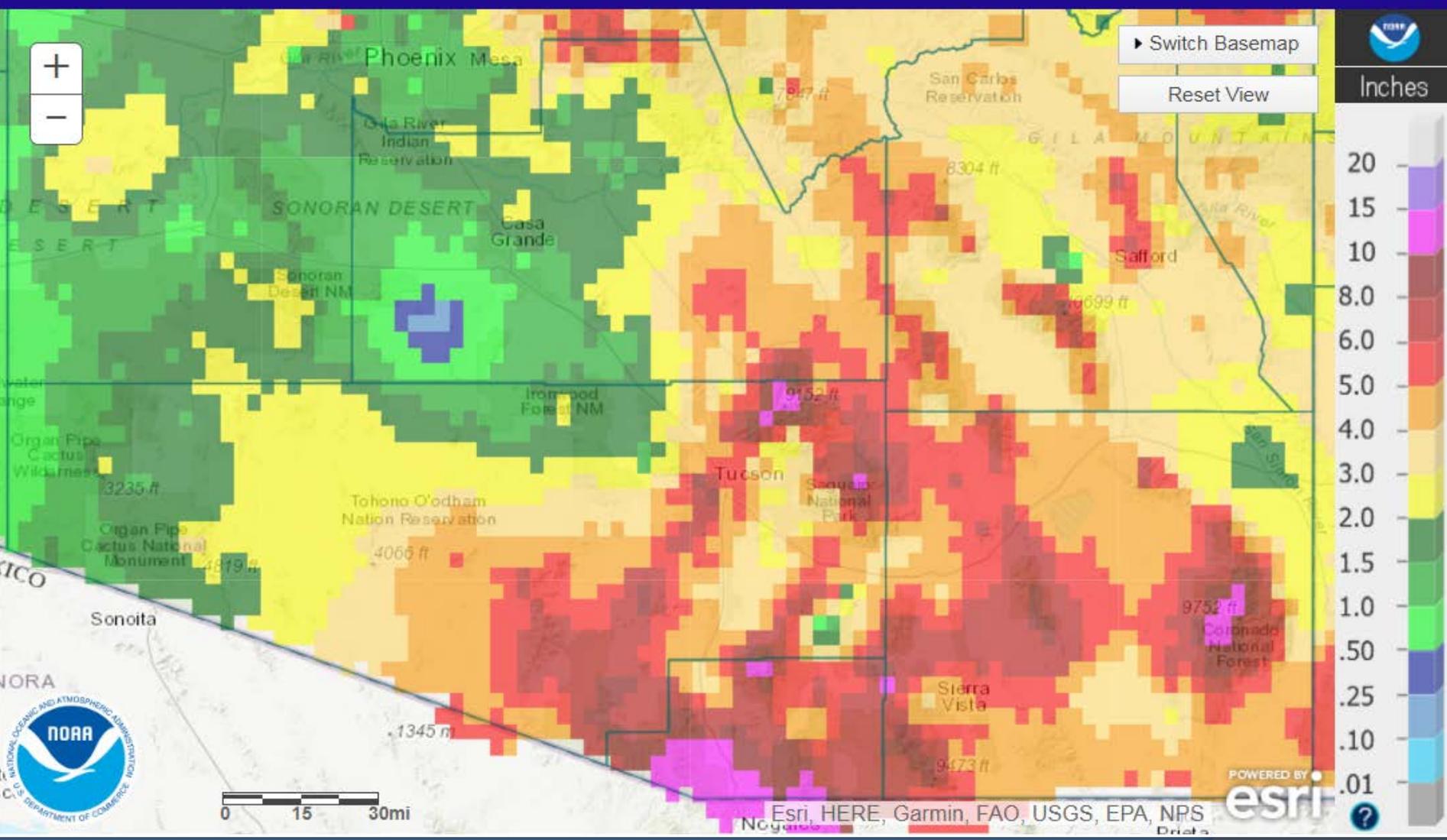


Tucson, AZ: July, 2017 Monthly Observed Precipitation  
Valid on: August 01, 2017 12:00 UTC

Print this map Permalink BOOKMARK

What is UTC time? Map Help

Find address or location





# July Departure from Normal Precipitation

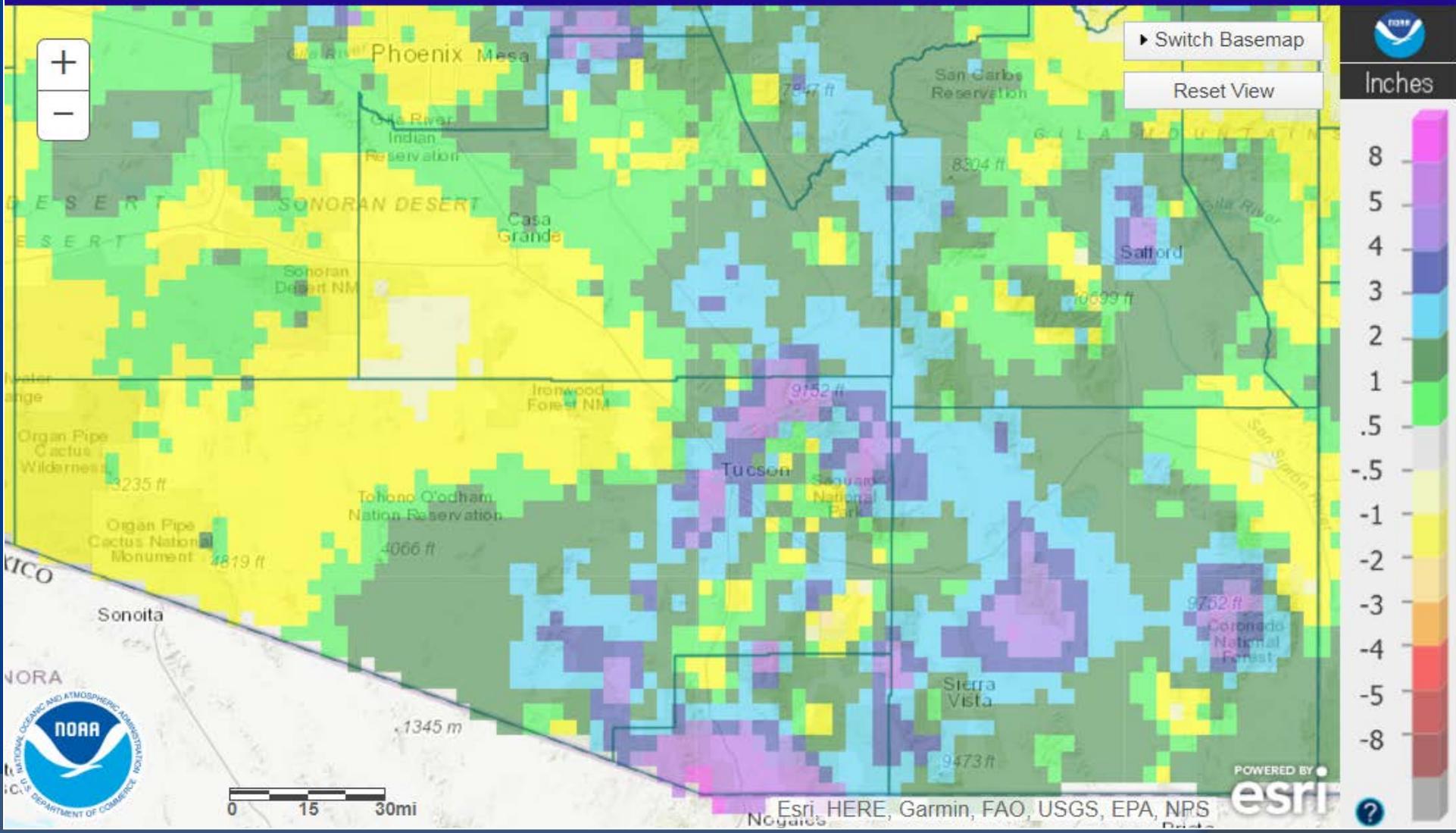


Tucson, AZ: July, 2017 Monthly Departure from Normal Precipitation  
Valid on: August 01, 2017 12:00 UTC

Print this map Permalink BOOKMARK

What is UTC time? Map Help

Find address or location

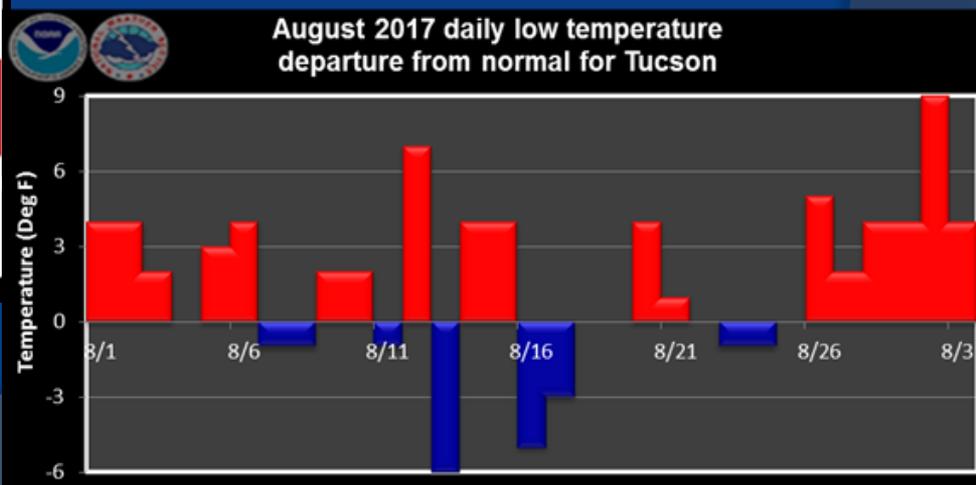
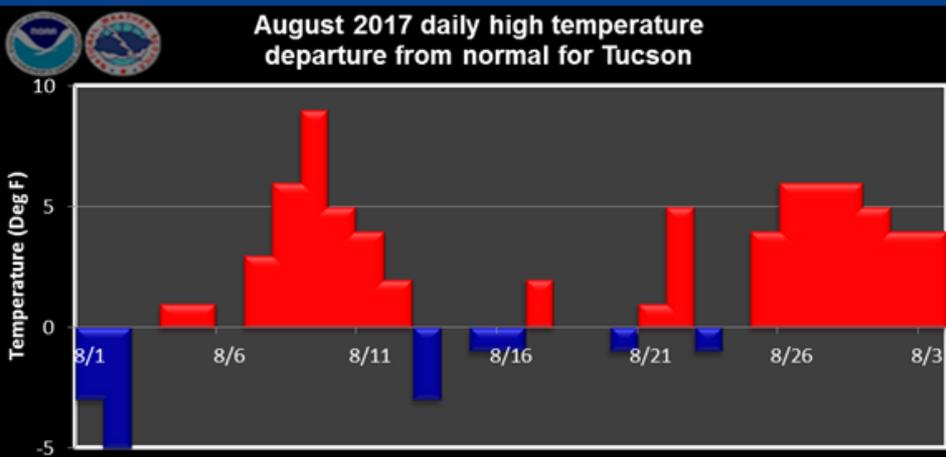




# AUGUST



- 8<sup>th</sup> Hottest & 52<sup>nd</sup> Driest
- 1.74" rainfall at Tucson Airport, normal is 2.39"
- Rainlog & Pima ALERT gages recorded 0.48" to over 4"
- Tucson Airport Rainfall through August  
Calendar Year = 10.15" (7.91" Normal)  
Water Year = 11.83" (10.30" Normal)





# August Observed Precipitation



Tucson, AZ: August, 2017 Monthly Observed Precipitation

Valid on: September 01, 2017 12:00 UTC



Print this map

Permalink

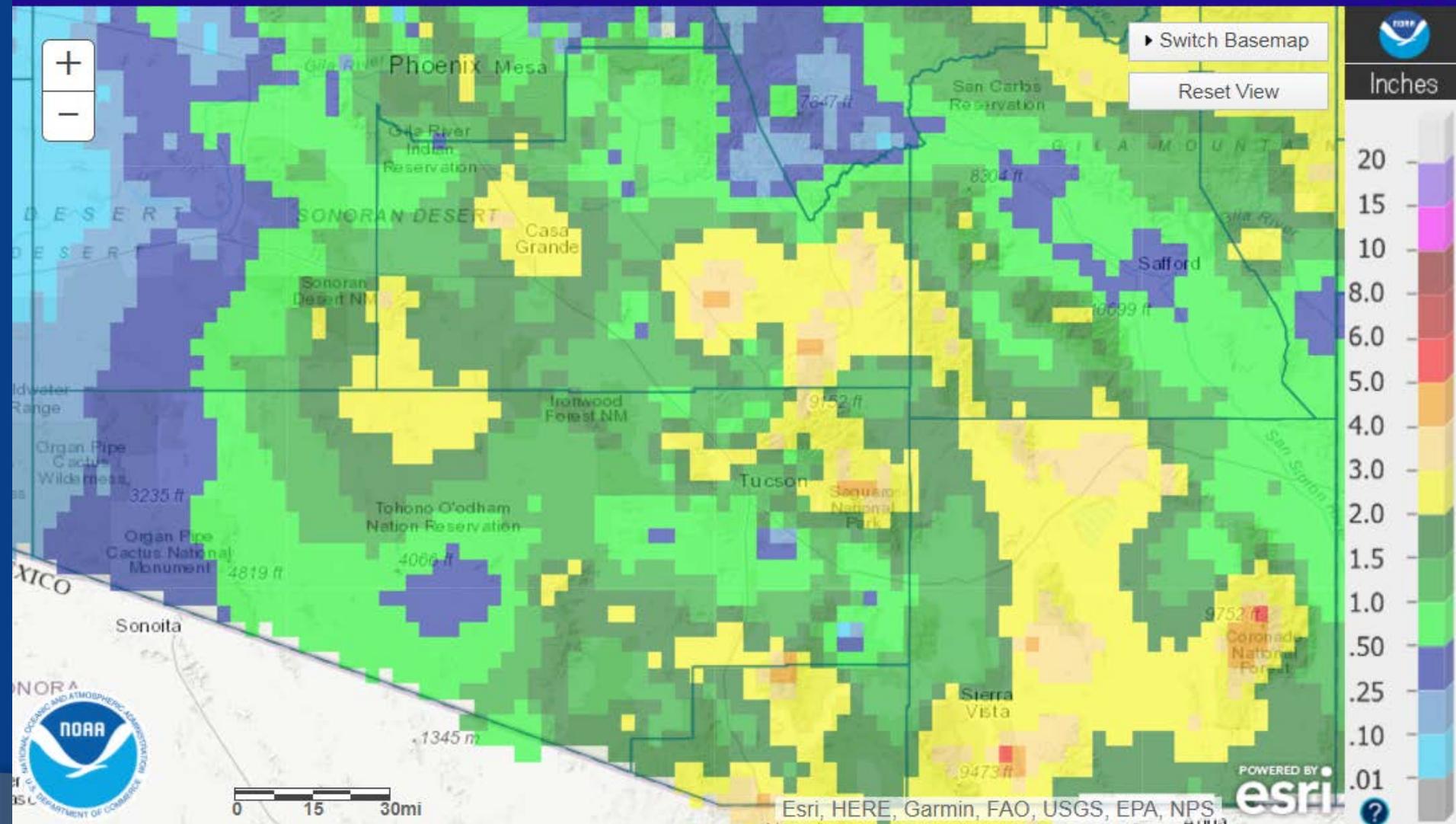
BOOKMARK



What is UTC time?

Map Help

Find address or location





# August Departure from Normal Precipitation

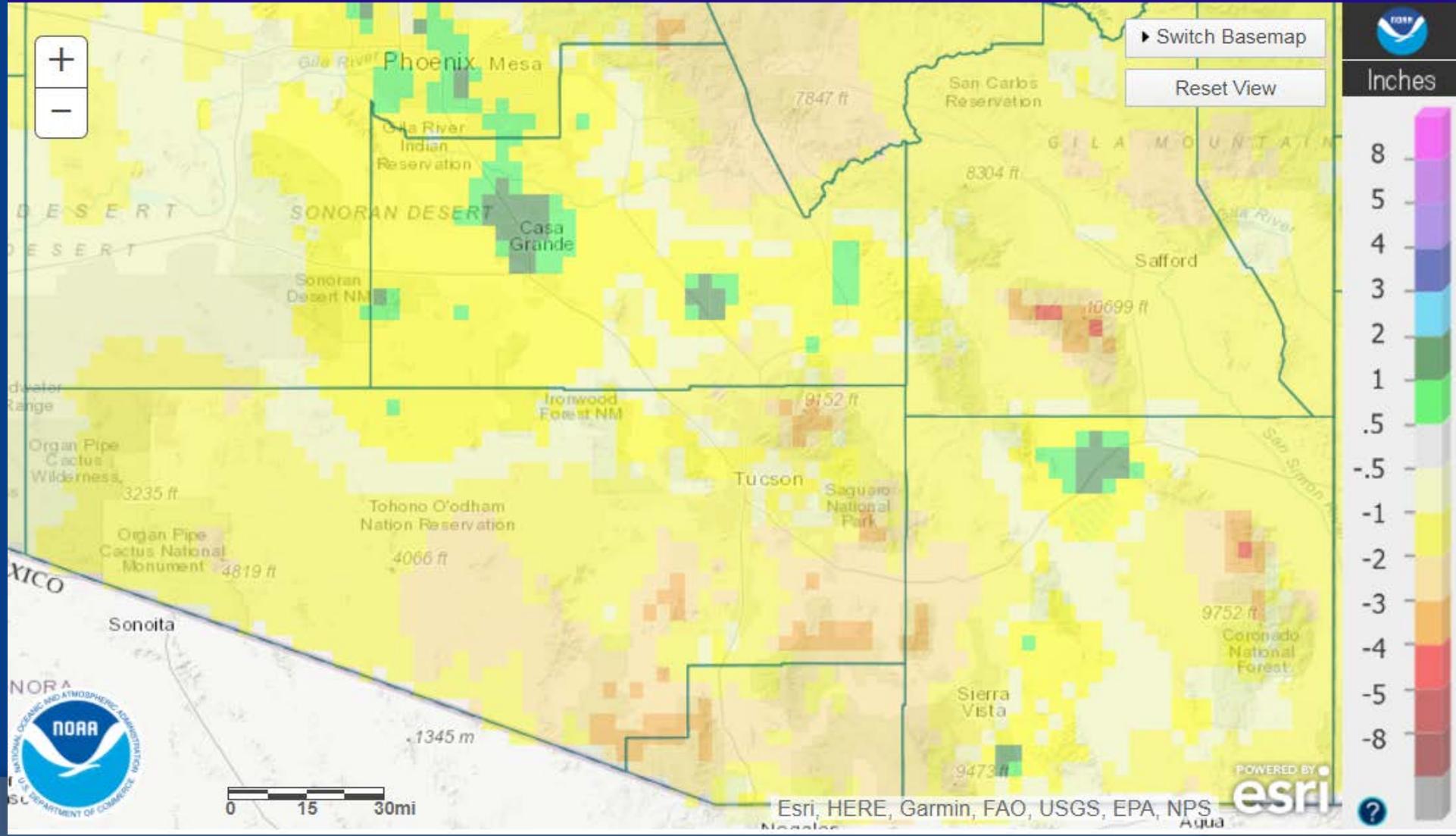


Tucson, AZ: August, 2017 Monthly Departure from Normal Precipitation  
Valid on: September 01, 2017 12:00 UTC

Print this map Permalink BOOKMARK

What is UTC time? Map Help

Find address or location





# SEPTEMBER 1<sup>st</sup> - 12<sup>th</sup>

0.03" rain at Tucson Airport, monthly normal is 1.29"

## Eastern North Pacific 2-Day Graphical Tropical Weather Outlook

Live Outlooks

GIS Shape

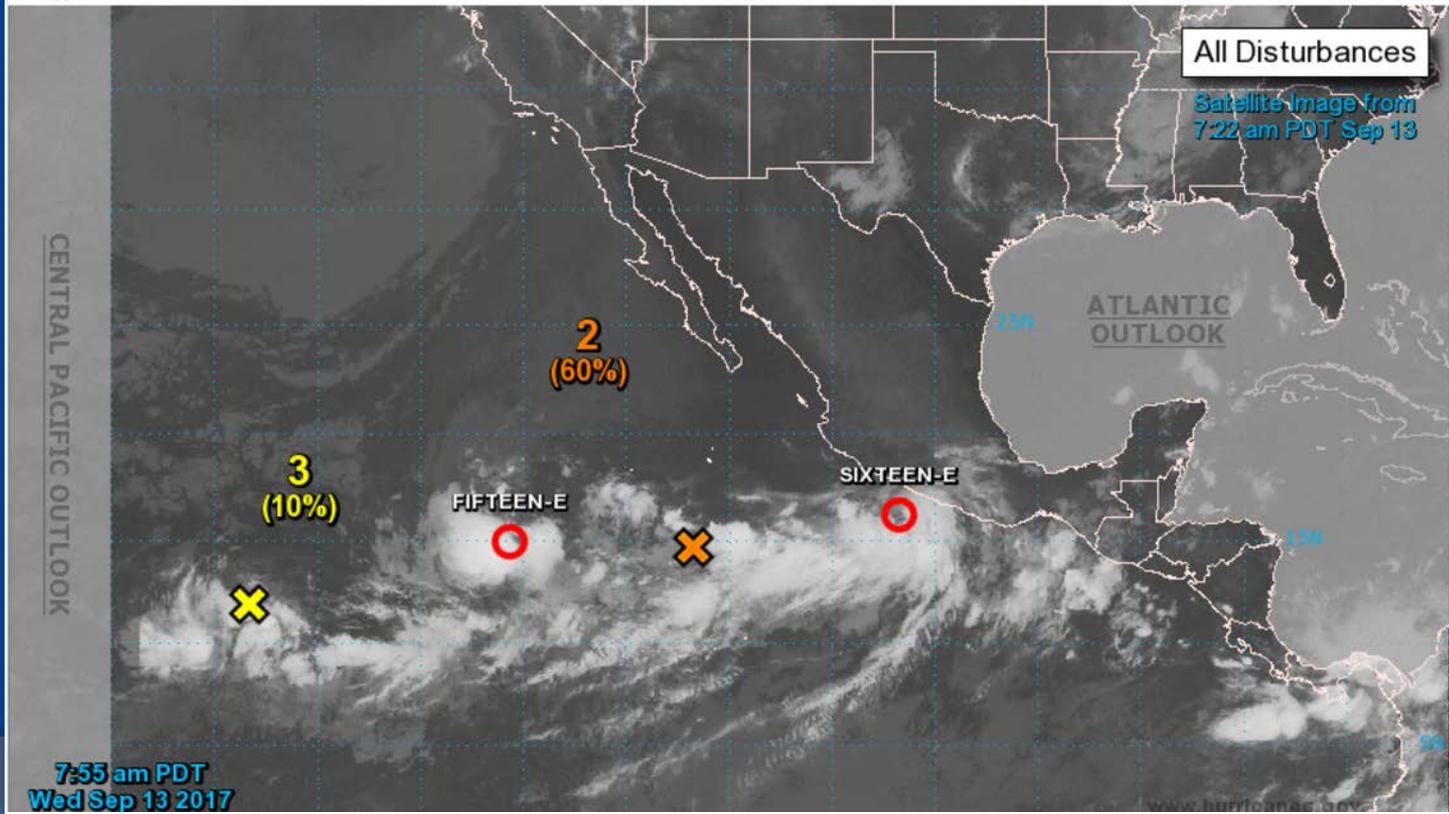
Eastern North Pacific

Atlantic

Disturbances: ALL [2] [3]

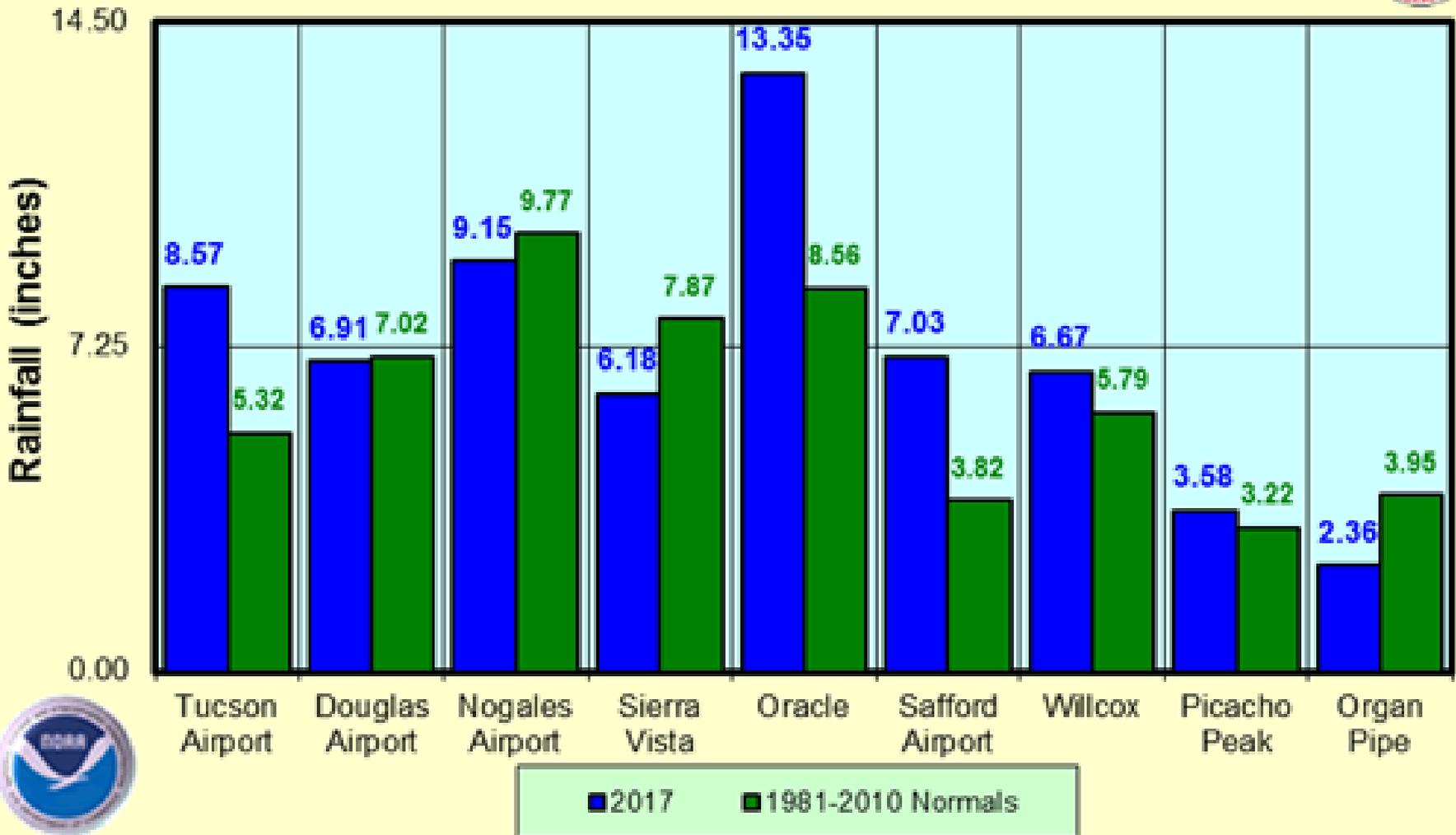


### Two-Day Graphical Tropical Weather Outlook National Hurricane Center Miami, Florida

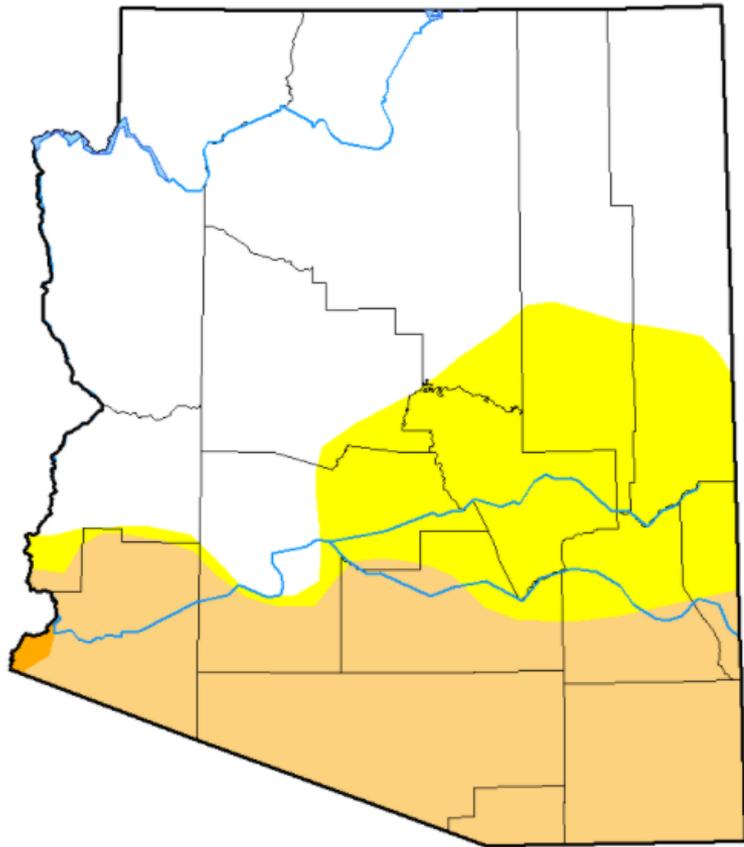




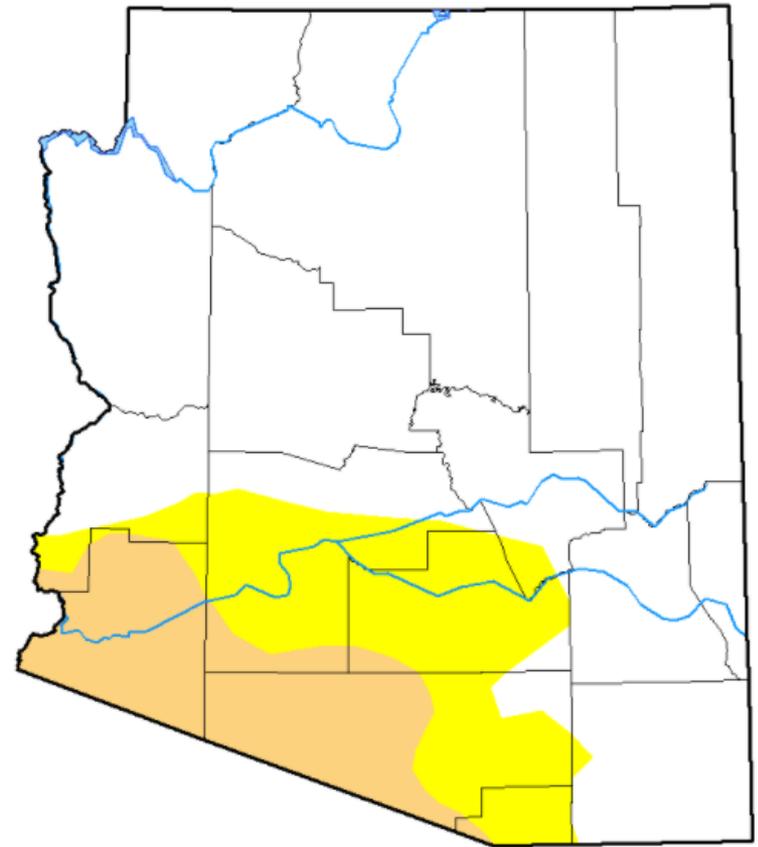
**Preliminary 2017 Monsoon rainfall totals versus normal for selected sites in southeast Arizona. thru September 10th**



# Change in Drought Conditions



June 13, 2017



September 5, 2017

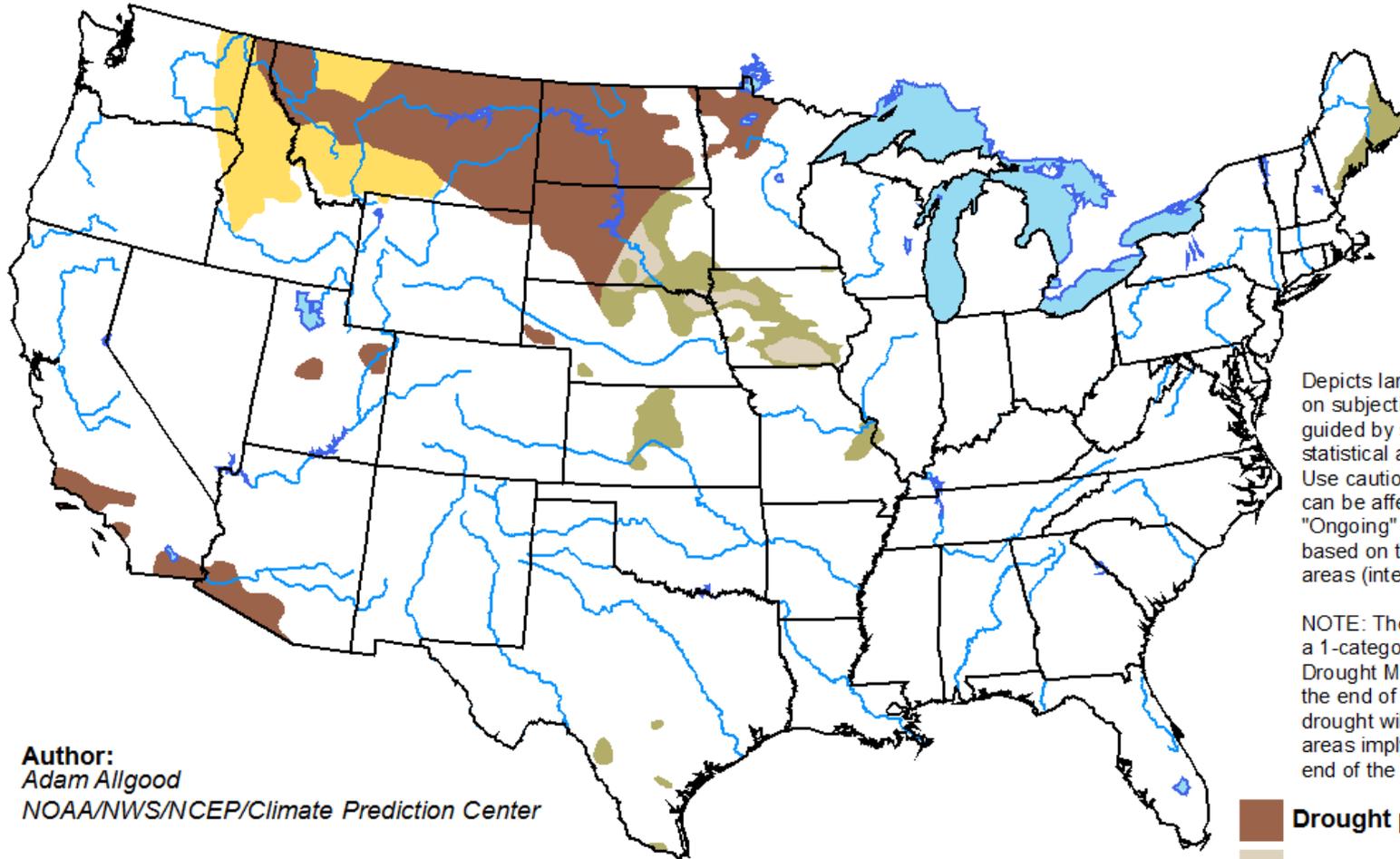
## Statistics Comparison

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
2017-06-13	52.14	47.86	27.83	0.23	0.00	0.00
2017-09-05	75.16	24.84	10.69	0.00	0.00	0.00

# U.S. Seasonal Drought Outlook

## Drought Tendency During the Valid Period

Valid for August 17 - November 30, 2017  
Released August 17, 2017

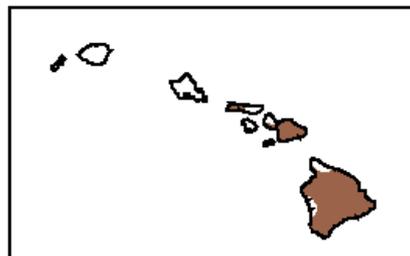
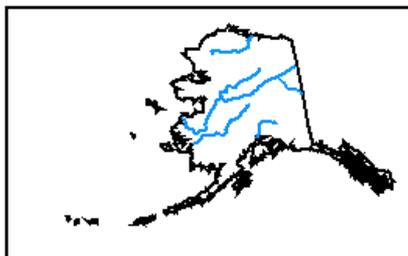


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to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

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



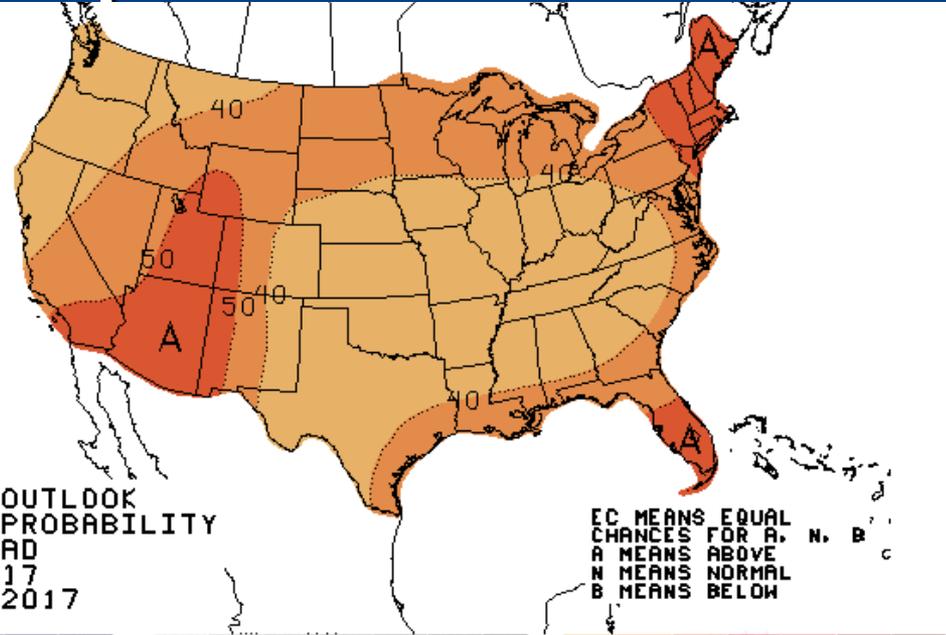
<http://go.usa.gov/3eZ73>



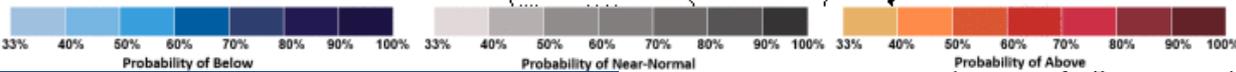
# September - November Outlook



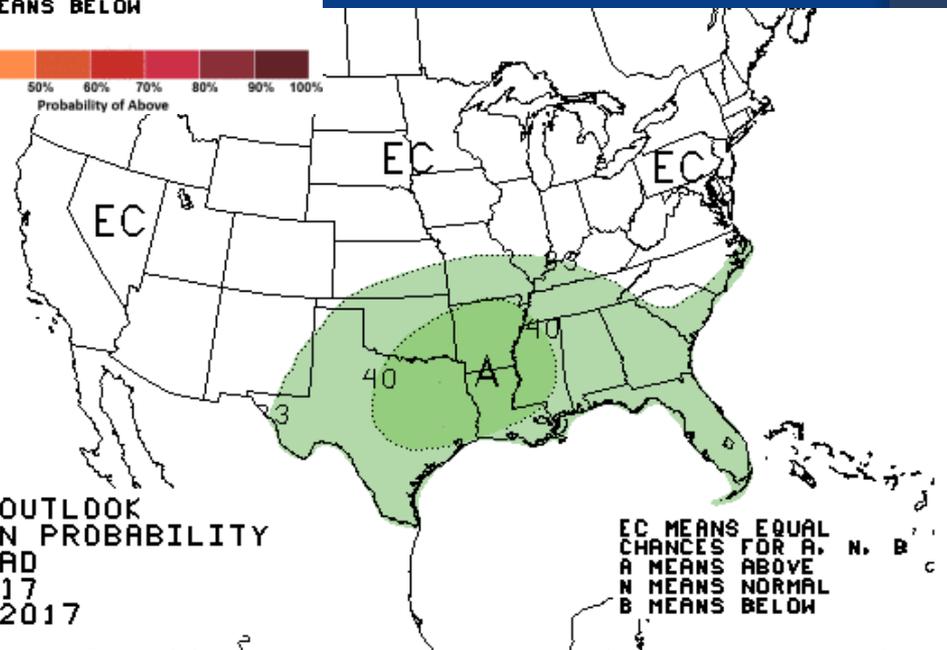
THREE-MONTH OUTLOOK  
TEMPERATURE PROBABILITY  
0.5 MONTH LEAD  
VALID SON 2017  
MADE 17 AUG 2017



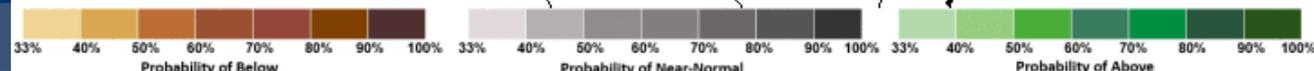
EC MEANS EQUAL  
CHANCES FOR A, N, B  
A MEANS ABOVE  
N MEANS NORMAL  
B MEANS BELOW



THREE-MONTH OUTLOOK  
PRECIPITATION PROBABILITY  
0.5 MONTH LEAD  
VALID SON 2017  
MADE 17 AUG 2017



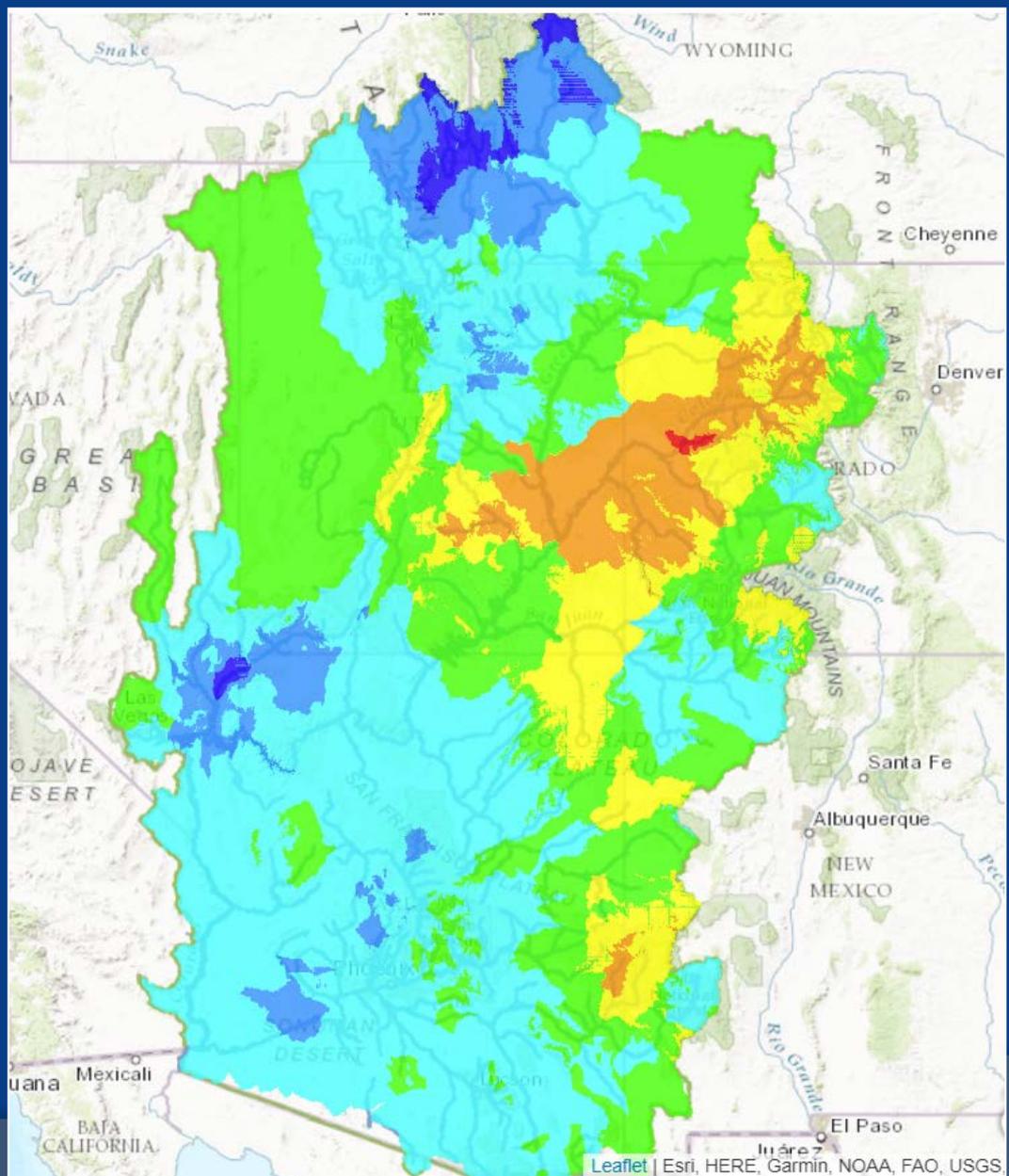
EC MEANS EQUAL  
CHANCES FOR A, N, B  
A MEANS ABOVE  
N MEANS NORMAL  
B MEANS BELOW





# COLORADO BASIN RIVER FORECAST CENTER

NATIONAL WEATHER SERVICE / NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

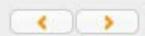


## Monthly Precipitation

### Precipitation

Show

[Help](#)



October - August 2017 (Water Year)

August 2017 (Monthly)

September 1 - 11 2017 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%
- 0-30%