

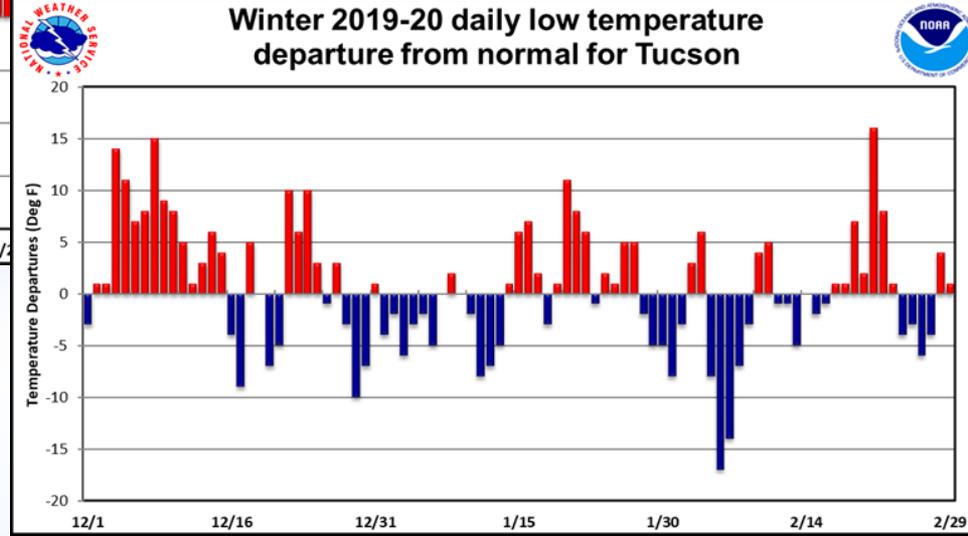
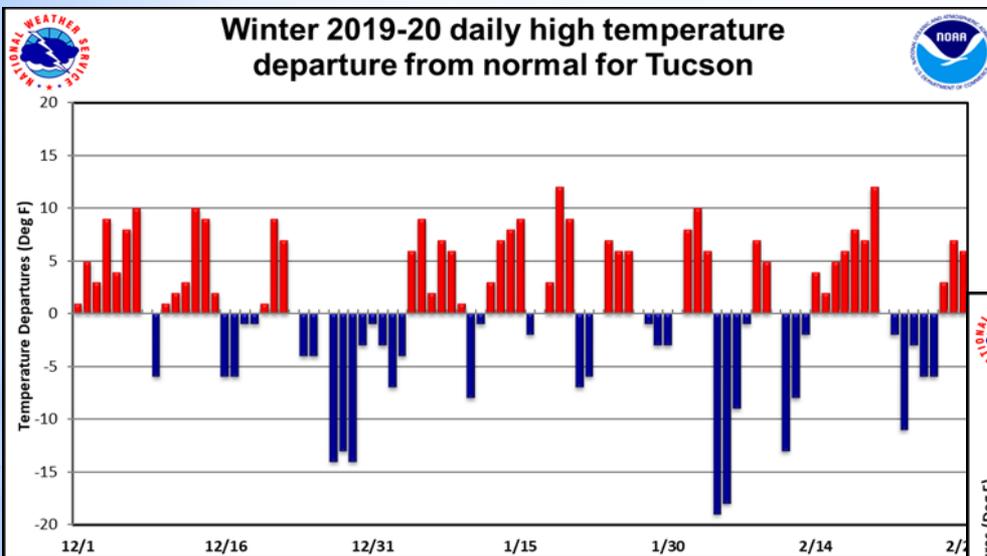
Winter 2019-2020

Erin Boyle
Service Hydrologist
NWS Tucson, Arizona
Pima County LDIG Meeting
March 11, 2020



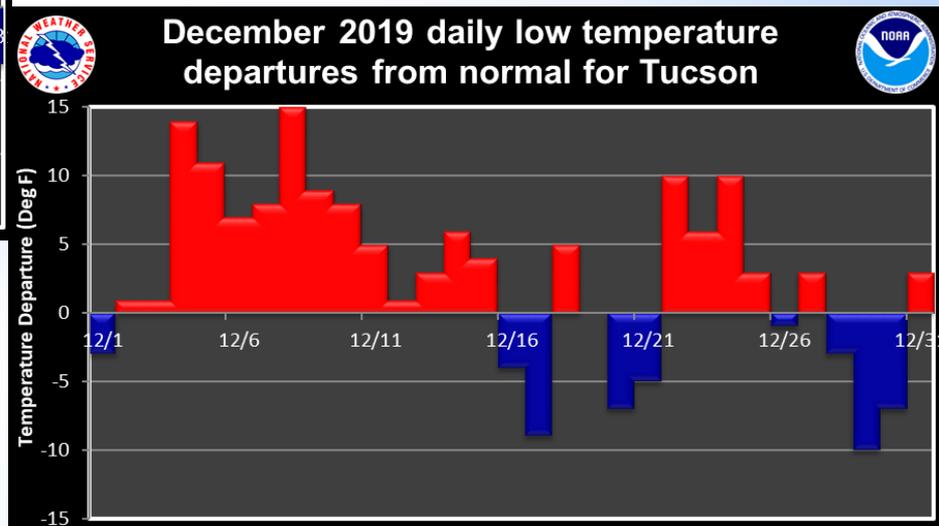
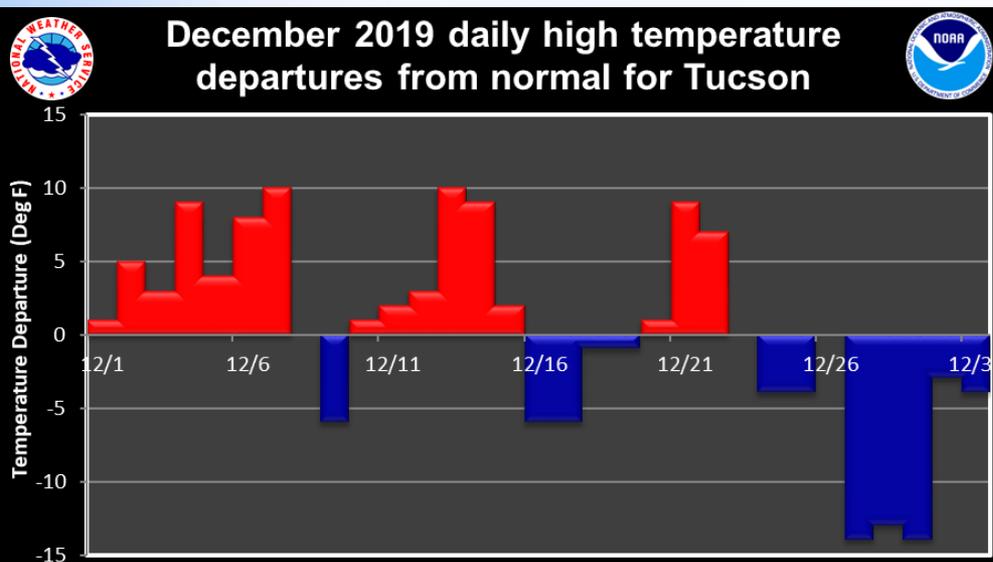
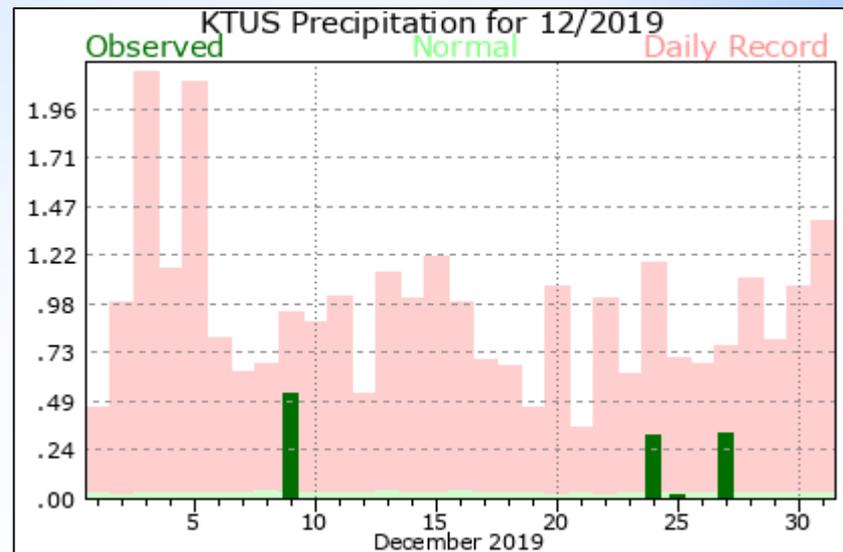
Winter 2019-2020 Highlights

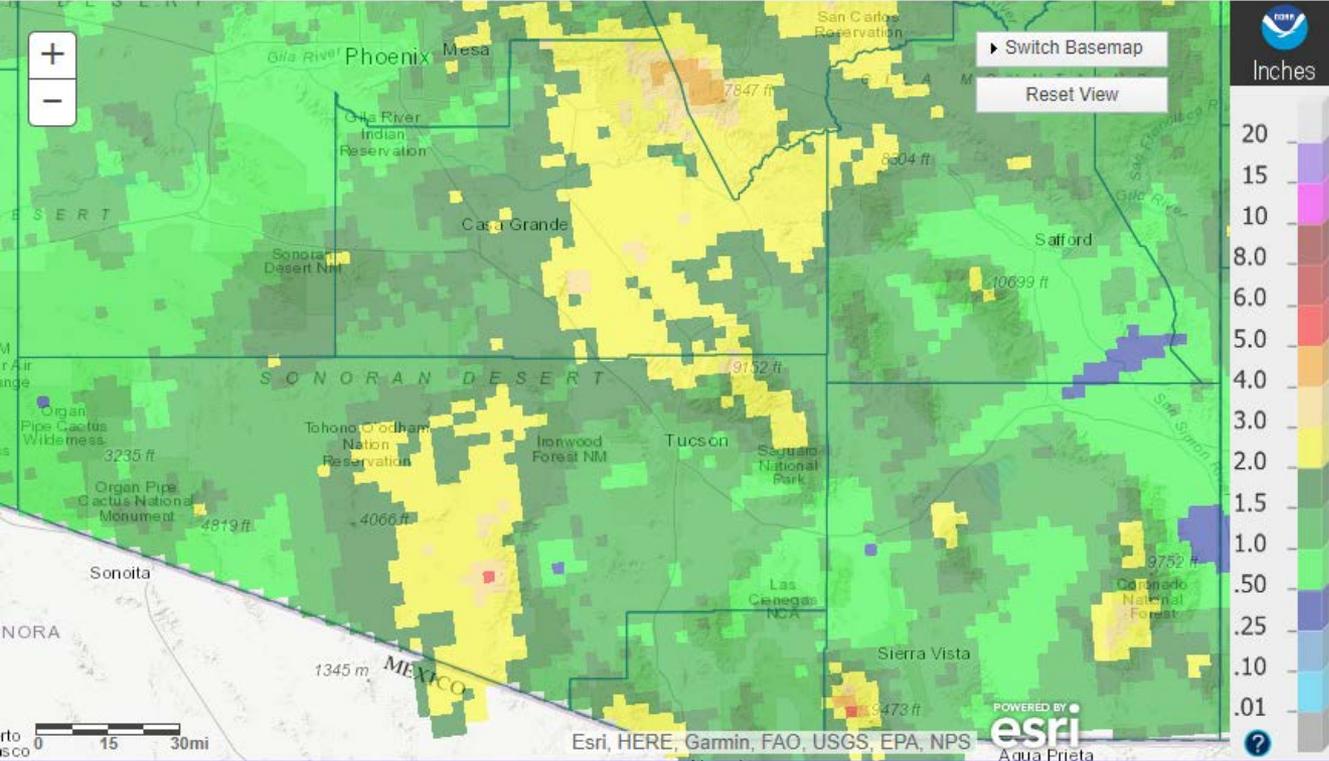
- * 50th Wettest, and 26th Warmest
- * 2.52" Precipitation (Normal 2.73")
- * Summerhaven averaged 30" snow
- * 11 of last 15 Winters had below normal precipitation
- * Water Year precipitation Oct-Feb 4.85" (Normal 4.19" and Oct 2018-Feb 2019 7.56")



DECEMBER 2019

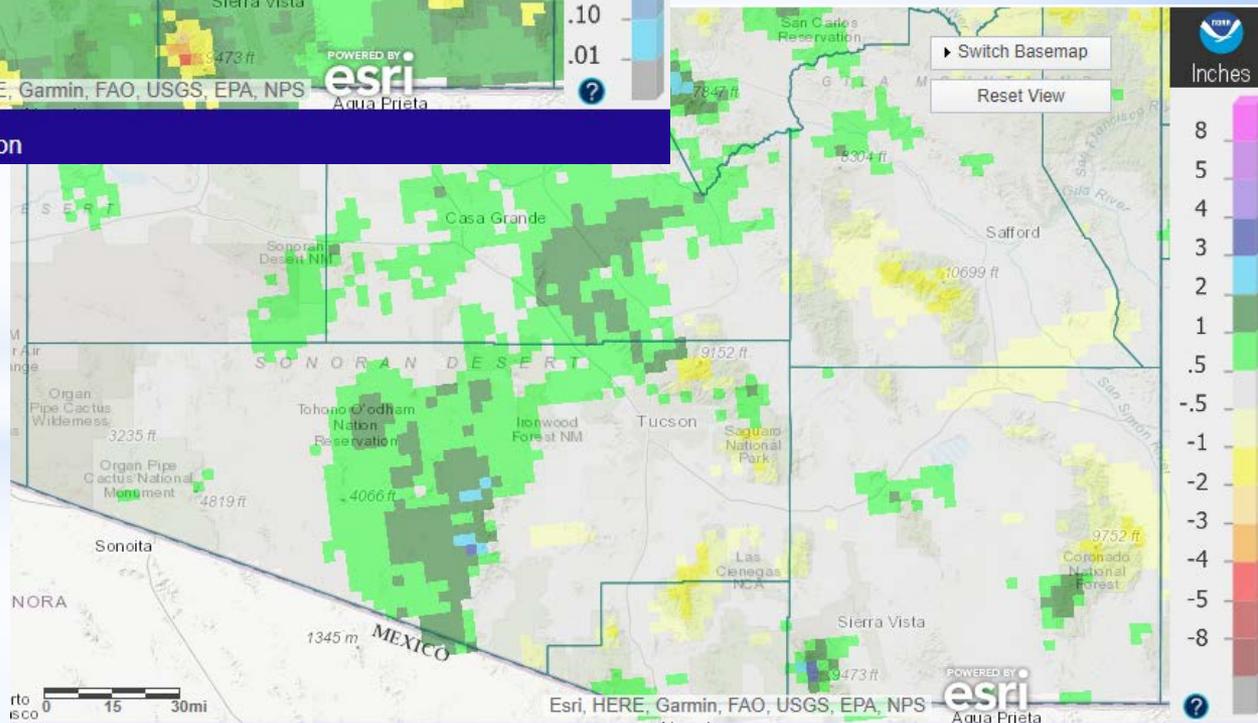
- * 37th Wettest and 29th Warmest
- * 1.20" Rainfall (Normal 0.93")
- * Rainlog & Pima ALERT gages recorded 0.75" up to 3" in localized areas





DECEMBER 2019

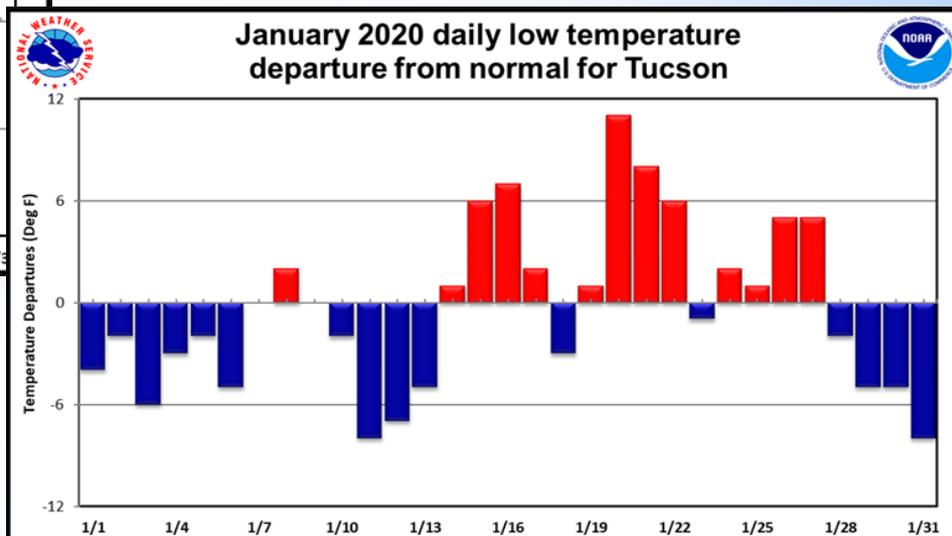
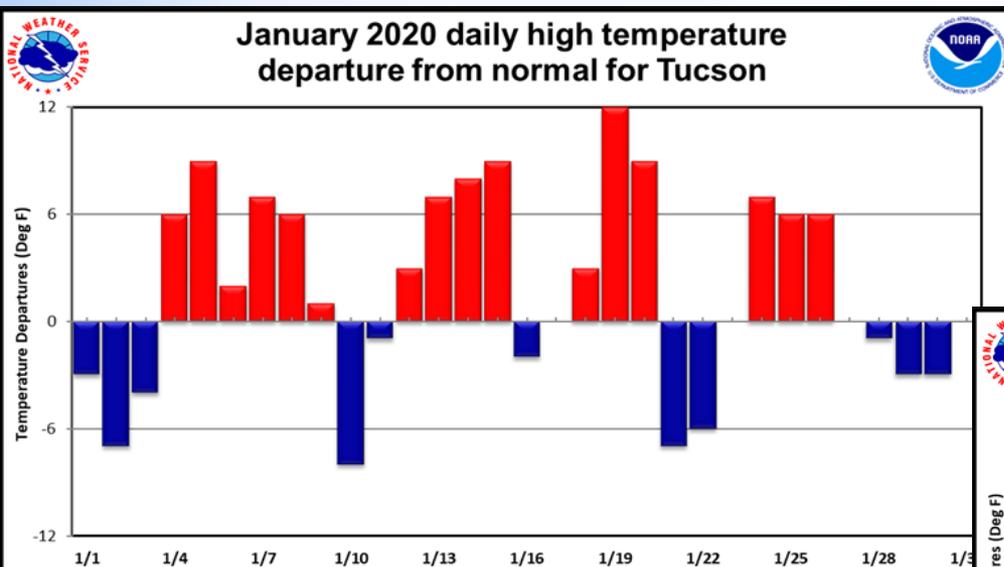
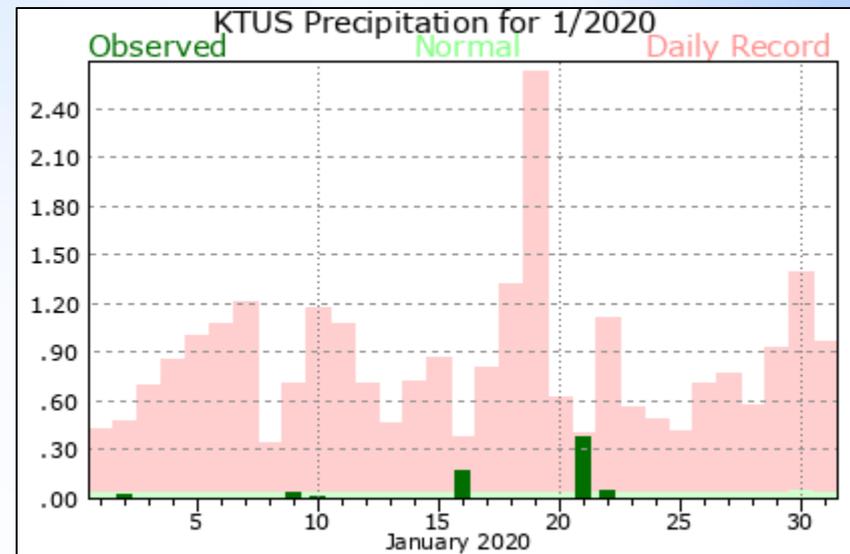
Tucson, AZ: December, 2019 Monthly Observed Precipitation

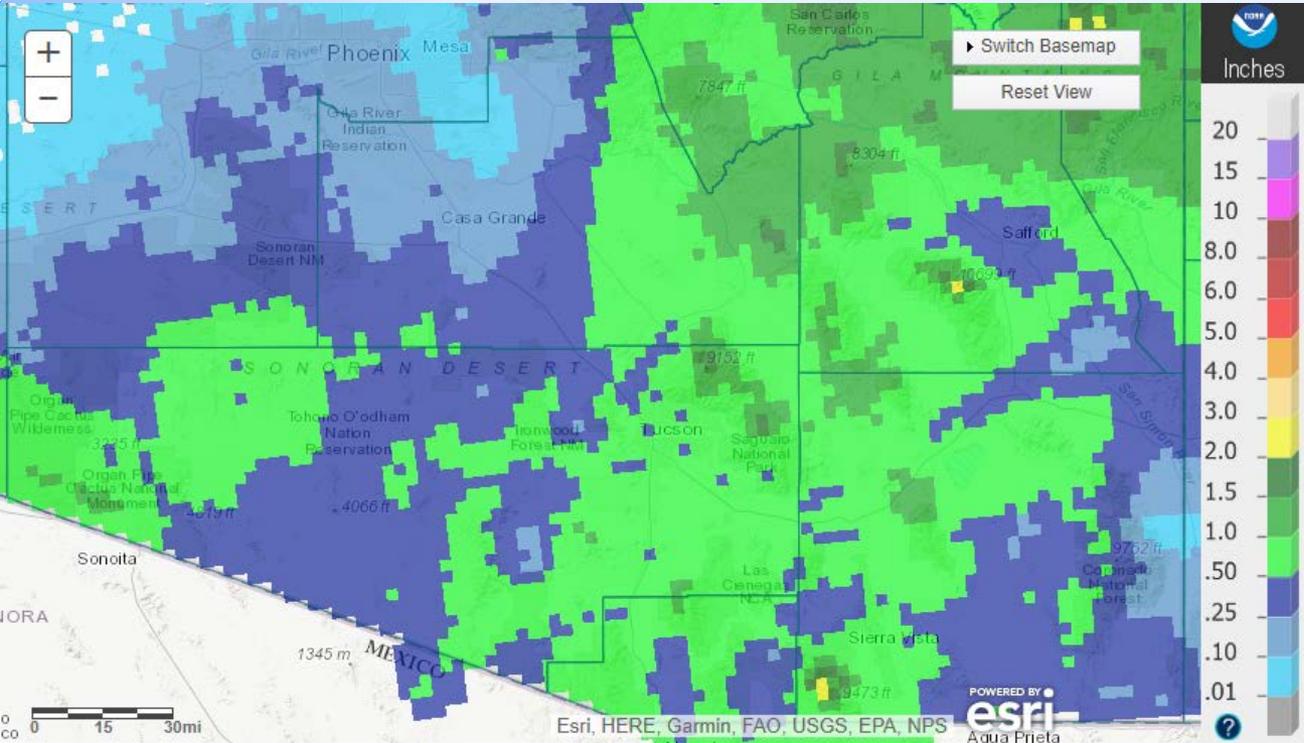


Tucson, AZ: December, 2019 Monthly Departure from Normal Precipitation

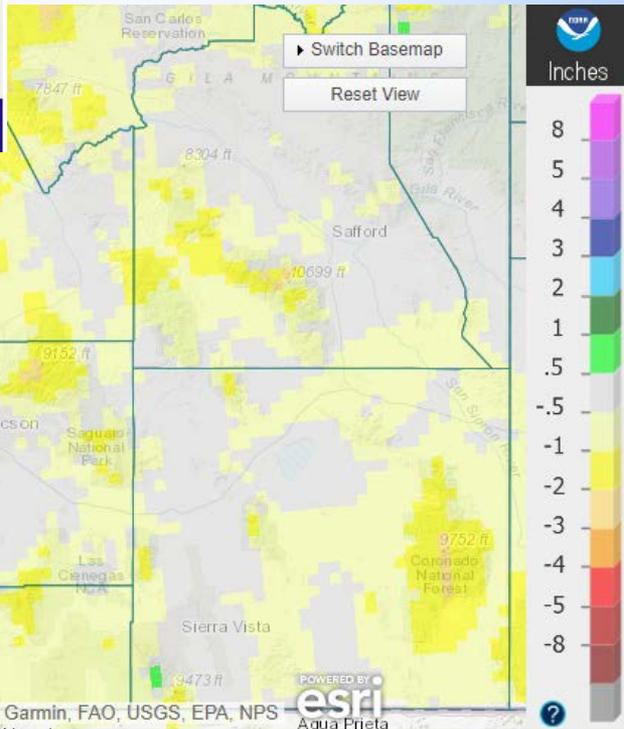
JANUARY 2020

- * 62nd Driest and 30th Warmest
- * 0.65" Rainfall (Normal 0.94")
- * Rainlog & Pima ALERT gages recorded 0.4" to 1"





JANUARY 2020

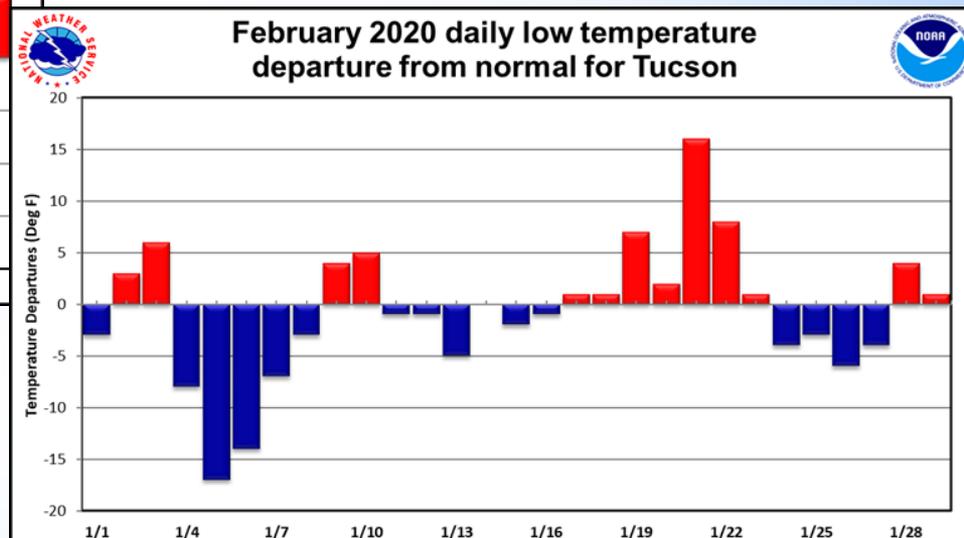
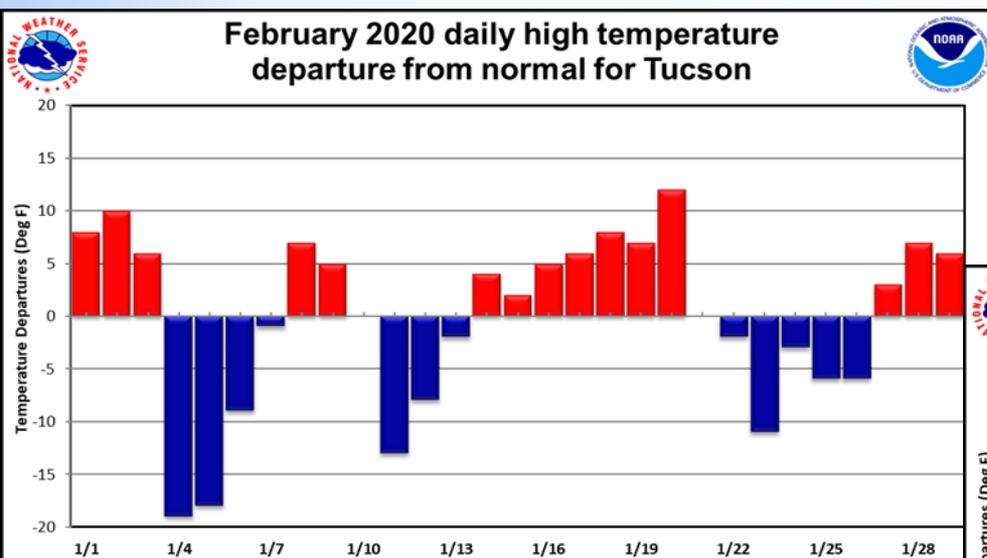
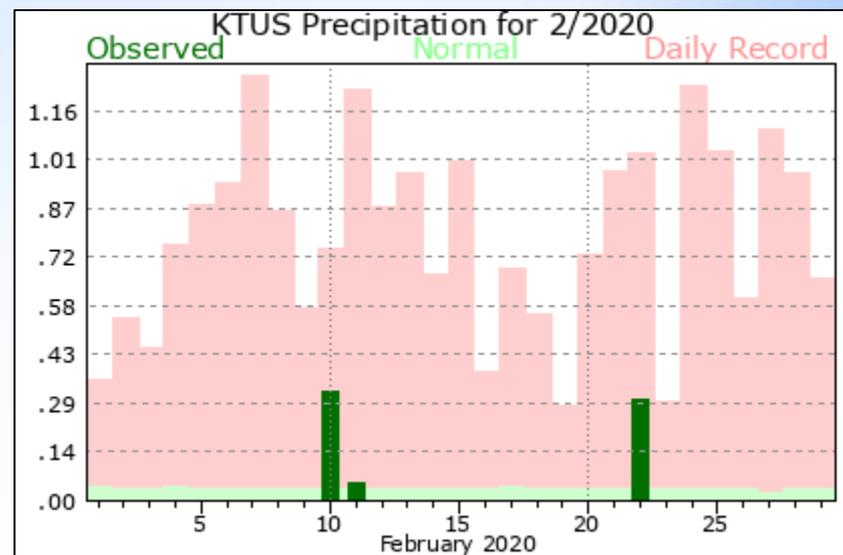


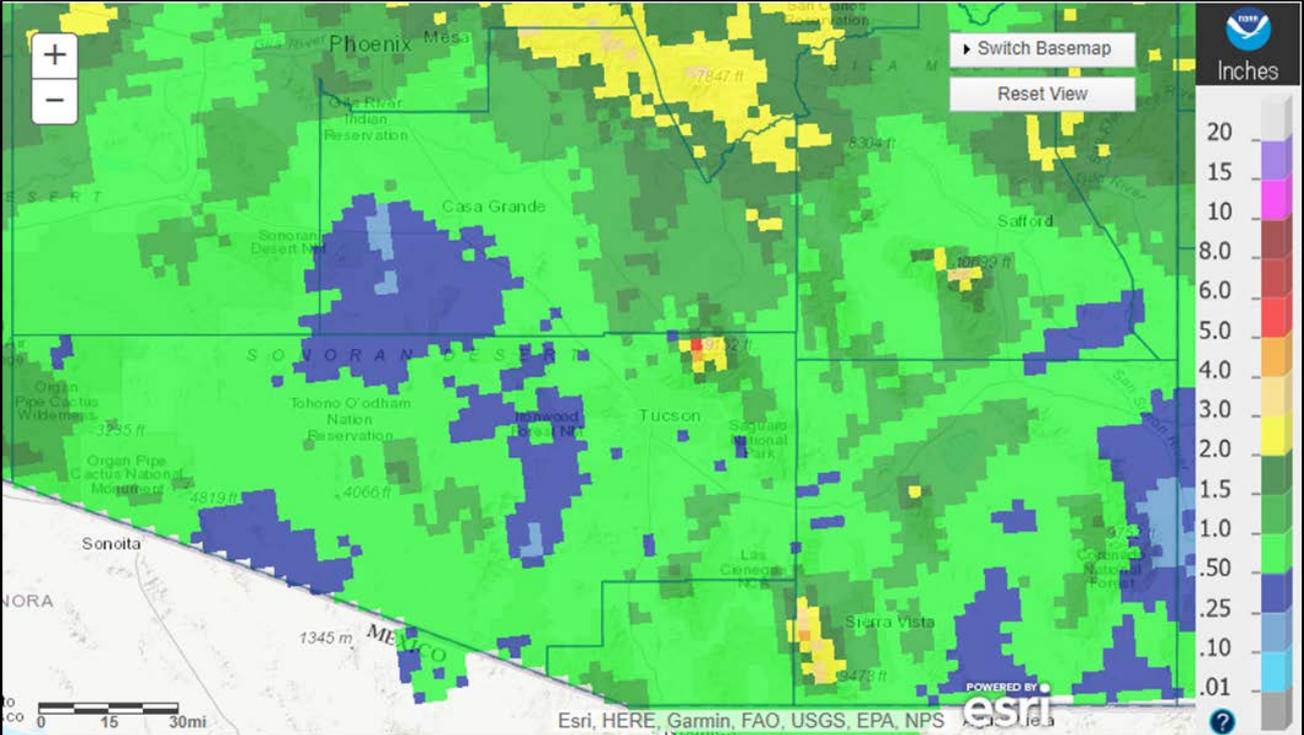
Tucson, AZ: January, 2020 Monthly Observed Precipitation

Tucson, AZ: January, 2020 Monthly Departure from Normal Precipitation

FEBRUARY 2020

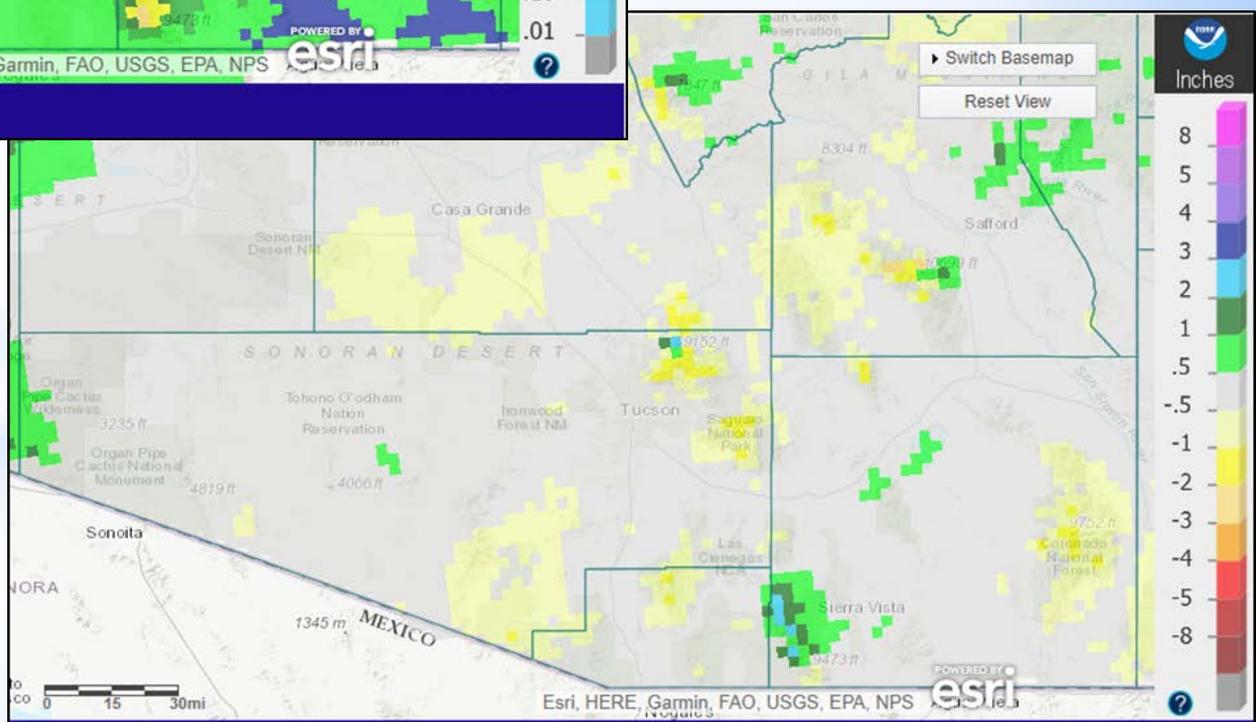
- * 56th Wettest, and 51st Warmest
- * 0.67" Precipitation (0.86" Normal)
- * Rainlog & Pima ALERT gages recorded 0.4" to 1.4"





FEBRUARY 2020

Tucson, AZ: February, 2020 Monthly Observed Precipitation



Tucson, AZ: February, 2020 Monthly Departure from Normal Precipitation

Winter
2019-2020

Drought Classification

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

December 3, 2019

March 3, 2020

Drought Conditions

Winter
2018-
2019

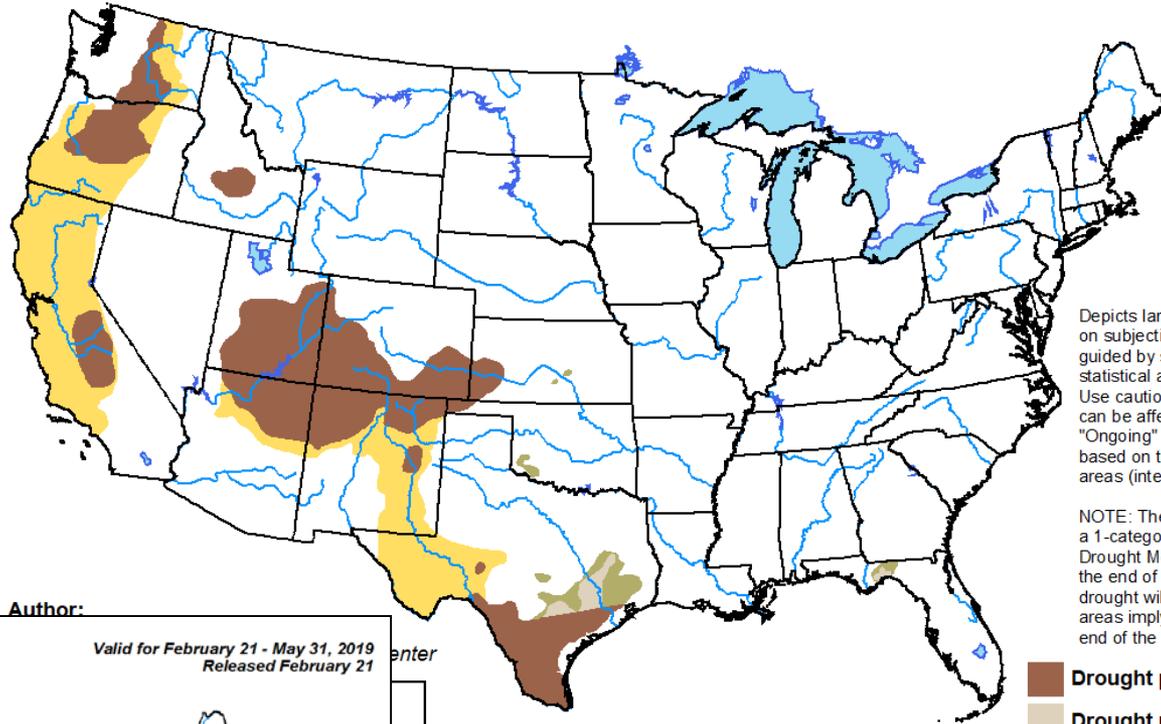
December 4, 2018

March 5, 2019

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for February 20 - May 31, 2020
Released February 20



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).

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



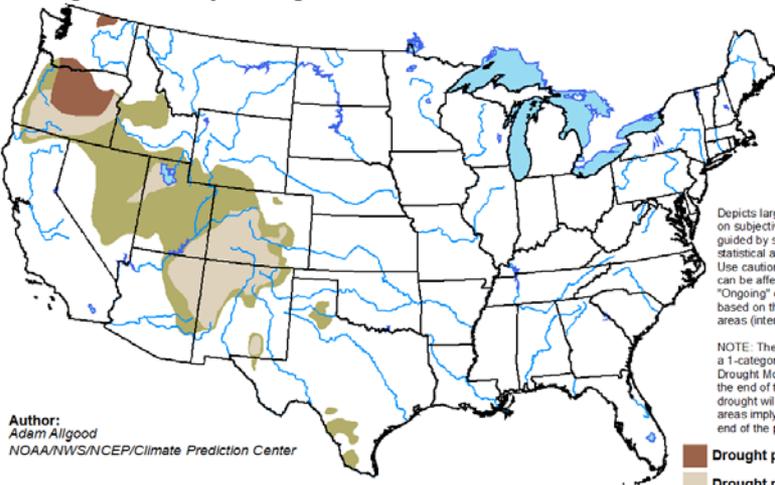
<http://go.usa.gov/3eZ73>

Author:

U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for February 21 - May 31, 2019
Released February 21



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).

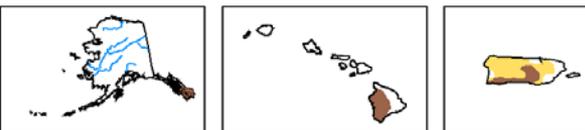
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

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

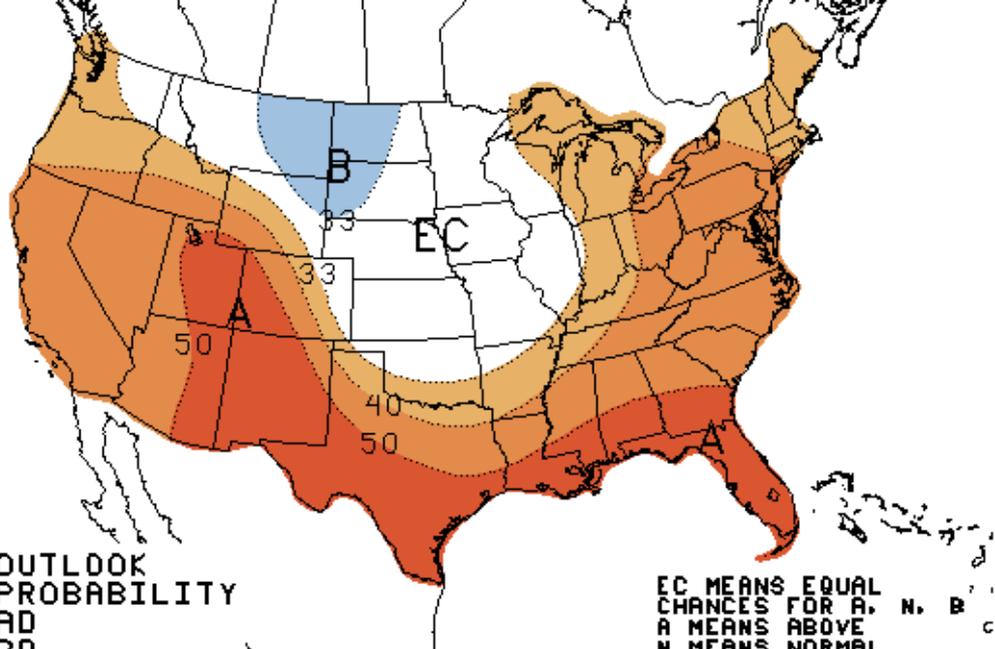


<http://go.usa.gov/3eZ73>

Author:
Adam Allgood
NOAA/NWS/NCEP/Climate Prediction Center

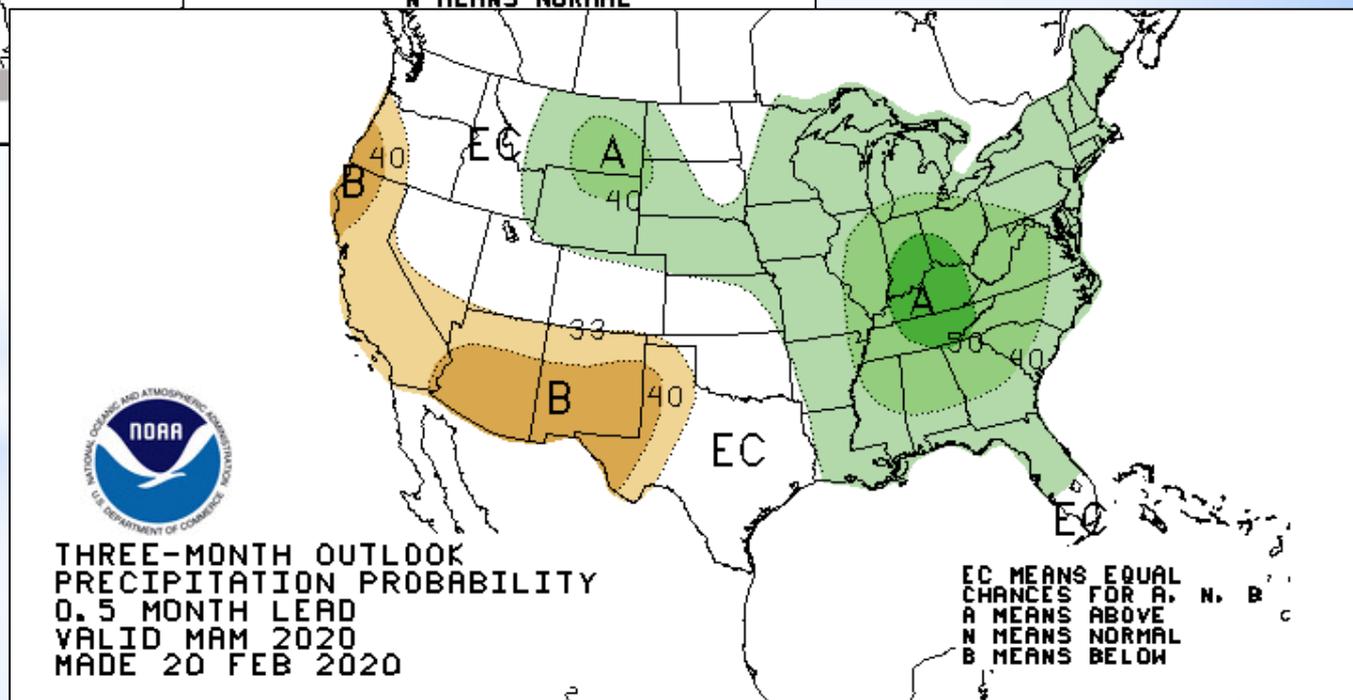
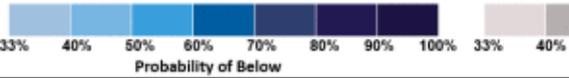


March - May Outlook



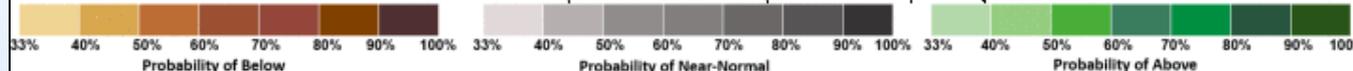
THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID MAM 2020
MADE 20 FEB 2020

EC MEANS EQUAL CHANCES FOR A. N. B.
A MEANS ABOVE
N MEANS NORMAL



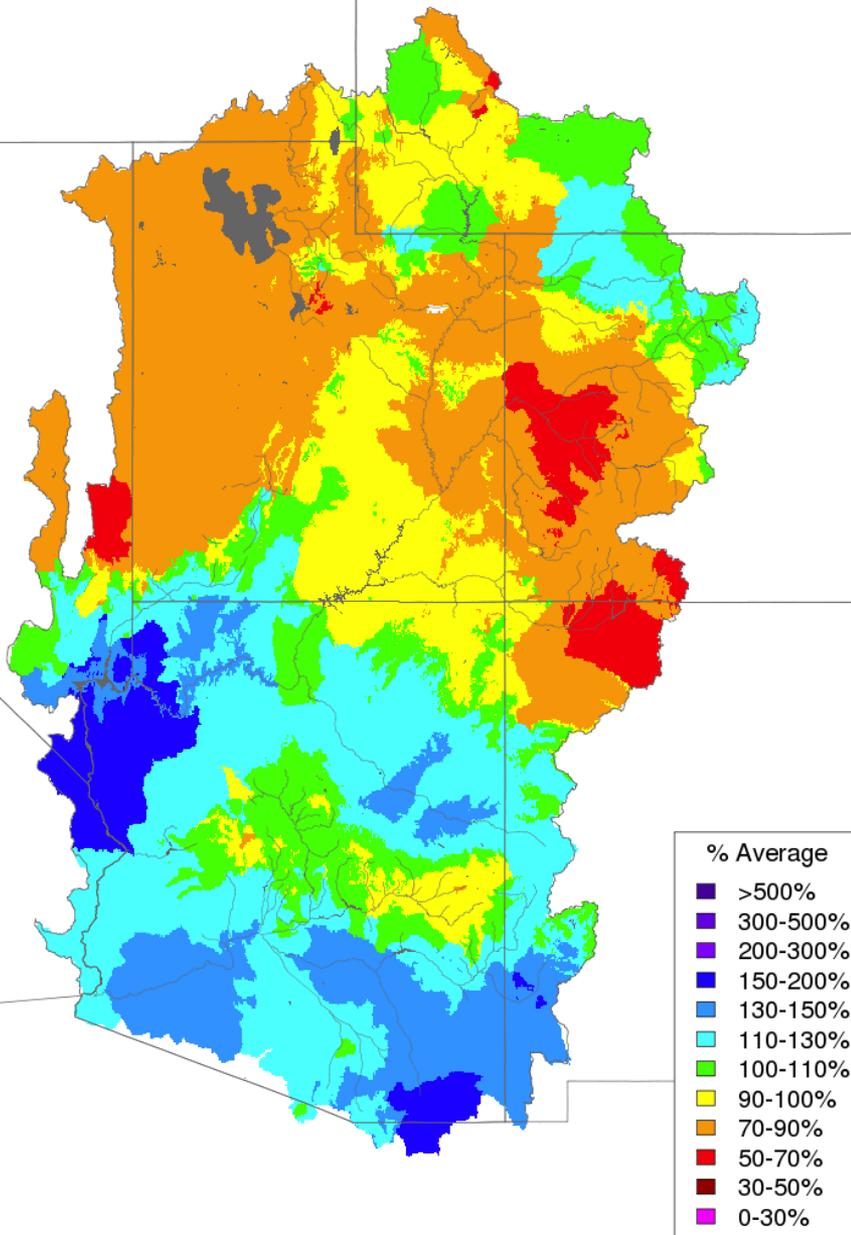
THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID MAM 2020
MADE 20 FEB 2020

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



Water Year Precipitation, October 2019 - February 2020

Averaged by Basin

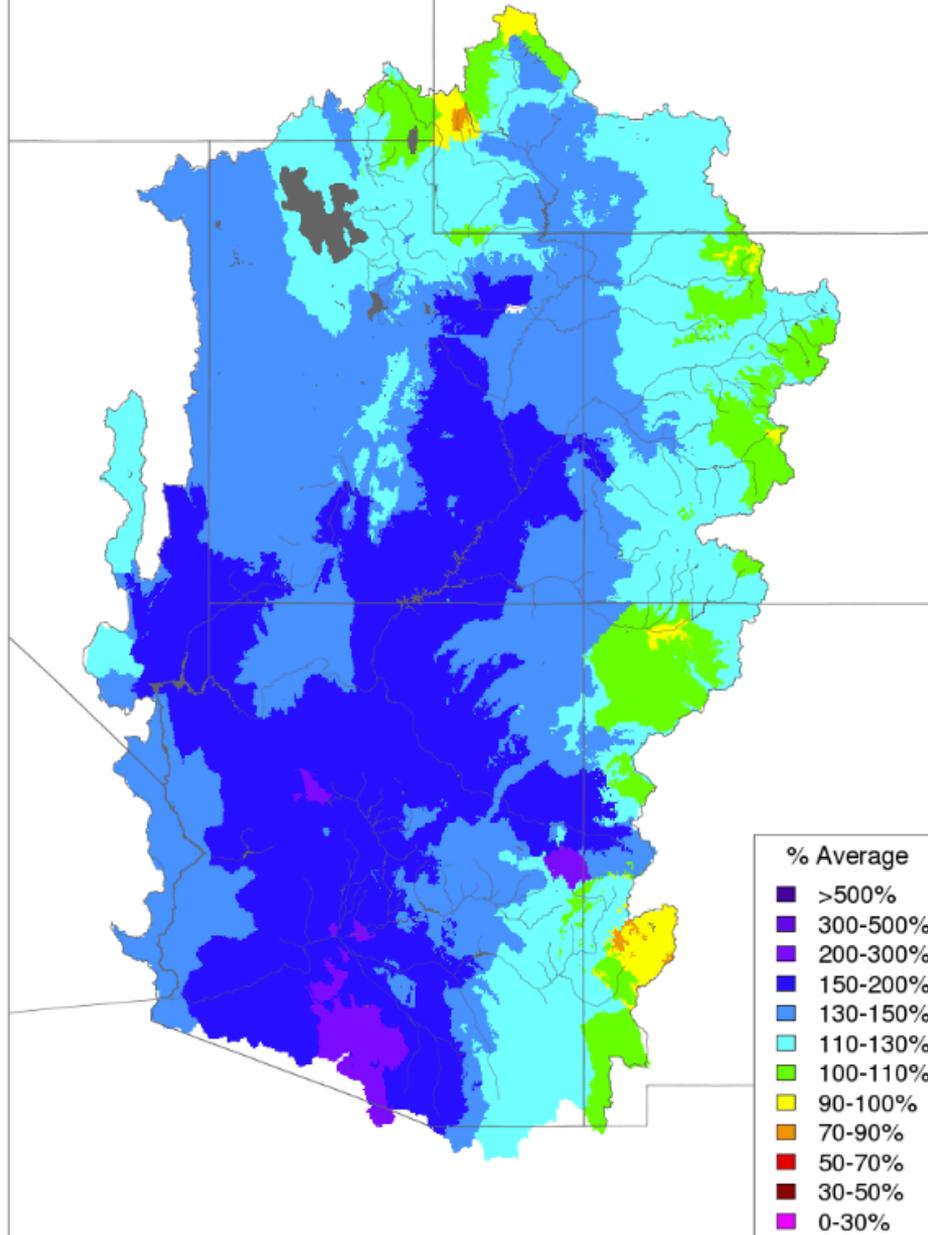


% Average

- >500%
- 300-500%
- 200-300%
- 150-200%
- 130-150%
- 110-130%
- 100-110%
- 90-100%
- 70-90%
- 50-70%
- 30-50%
- 0-30%

Water Year Precipitation, October 2018 - February 2019

(Averaged by Basin)

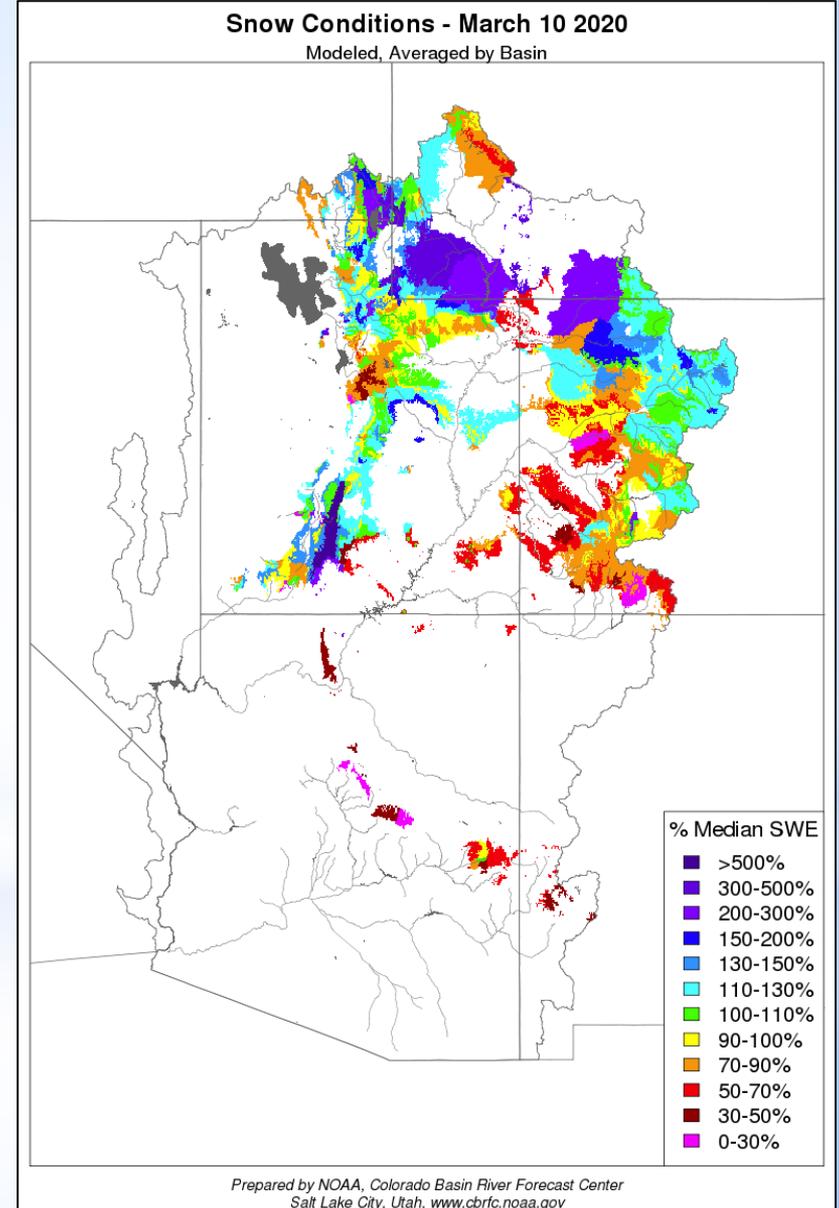
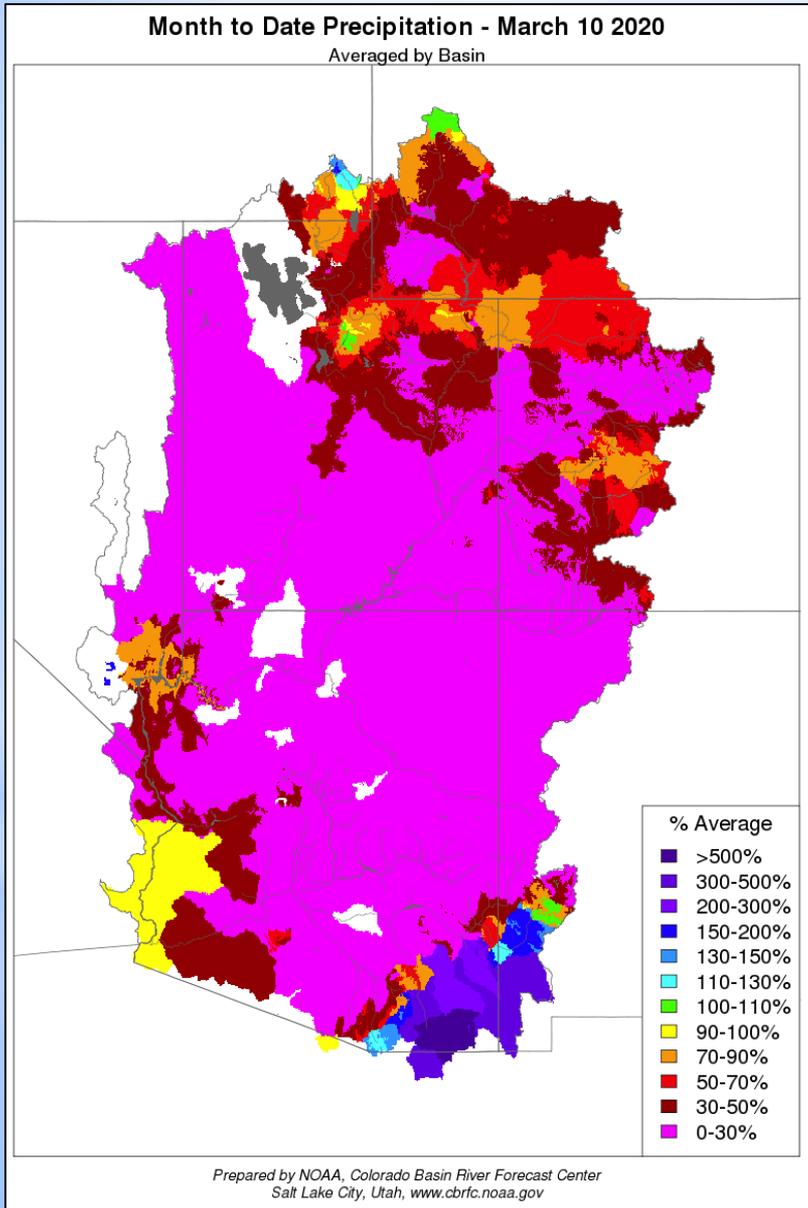


% Average

- >500%
- 300-500%
- 200-300%
- 150-200%
- 130-150%
- 110-130%
- 100-110%
- 90-100%
- 70-90%
- 50-70%
- 30-50%
- 0-30%

March 1-10

* 0.22" of Precipitation (0.73" Normal for month)



Short-term Forecast

CBRFC: March 12-16

Extended Forecast for Tucson AZ

Today	Tonight	Thursday	Thursday Night	Friday	Friday Night
					
40%	40%	90%	90%	50%	
Chance Showers	Chance Showers	Showers	Showers	Chance Showers	Mostly Clear
High: 73 °F	Low: 57 °F	High: 70 °F	Low: 51 °F	High: 65 °F	Low: 45 °F

