



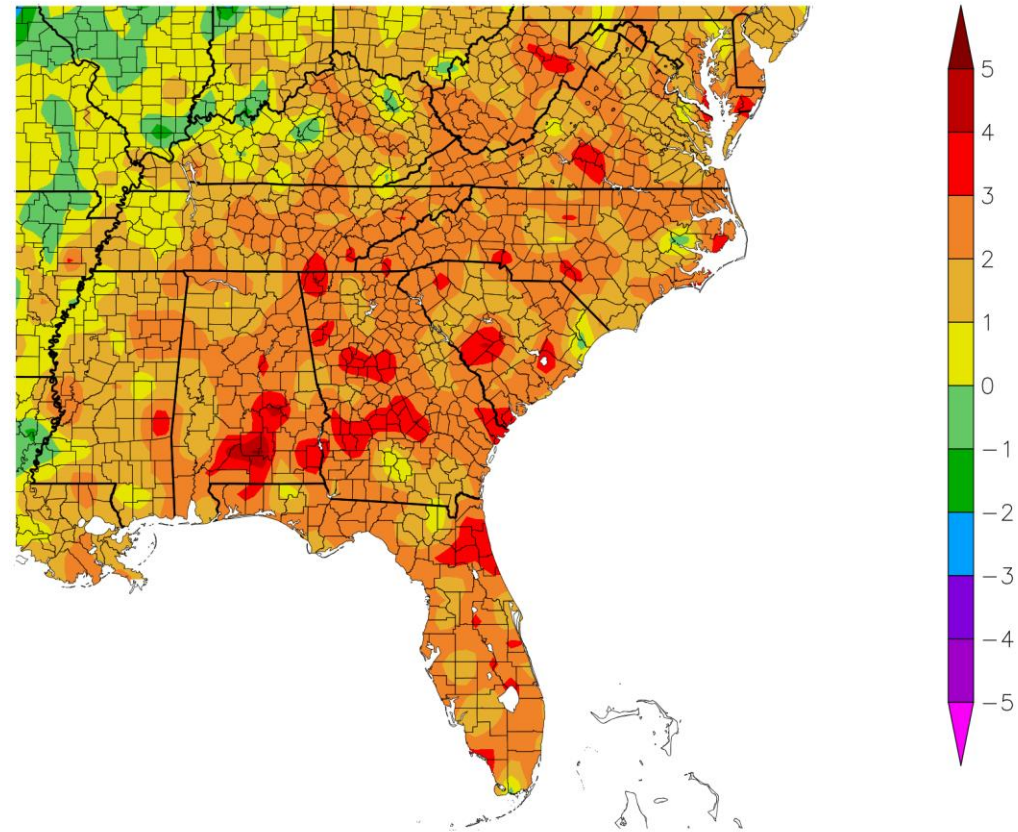
# Southeast Spring Climate Outlook

PAM KNOX

DIRECTOR, UGA WEATHER NETWORK AND AGRICULTURAL CLIMATOLOGIST

# Climate summary for 2019

Departure from Normal Temperature (F)  
1/1/2019 – 12/31/2019

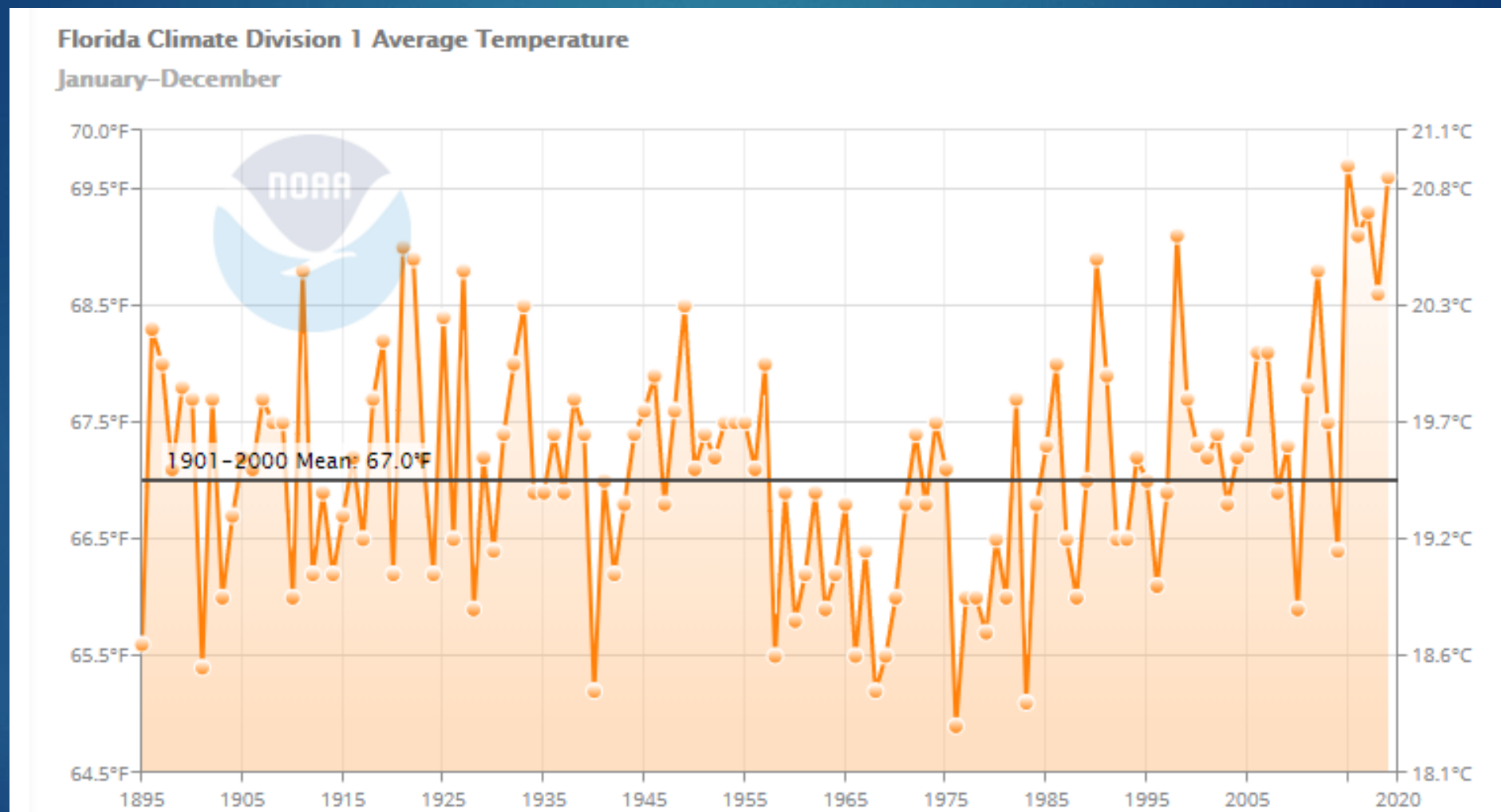


Generated 1/20/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

<https://hprcc.unl.edu/maps.php?map=ACISClimateMaps>

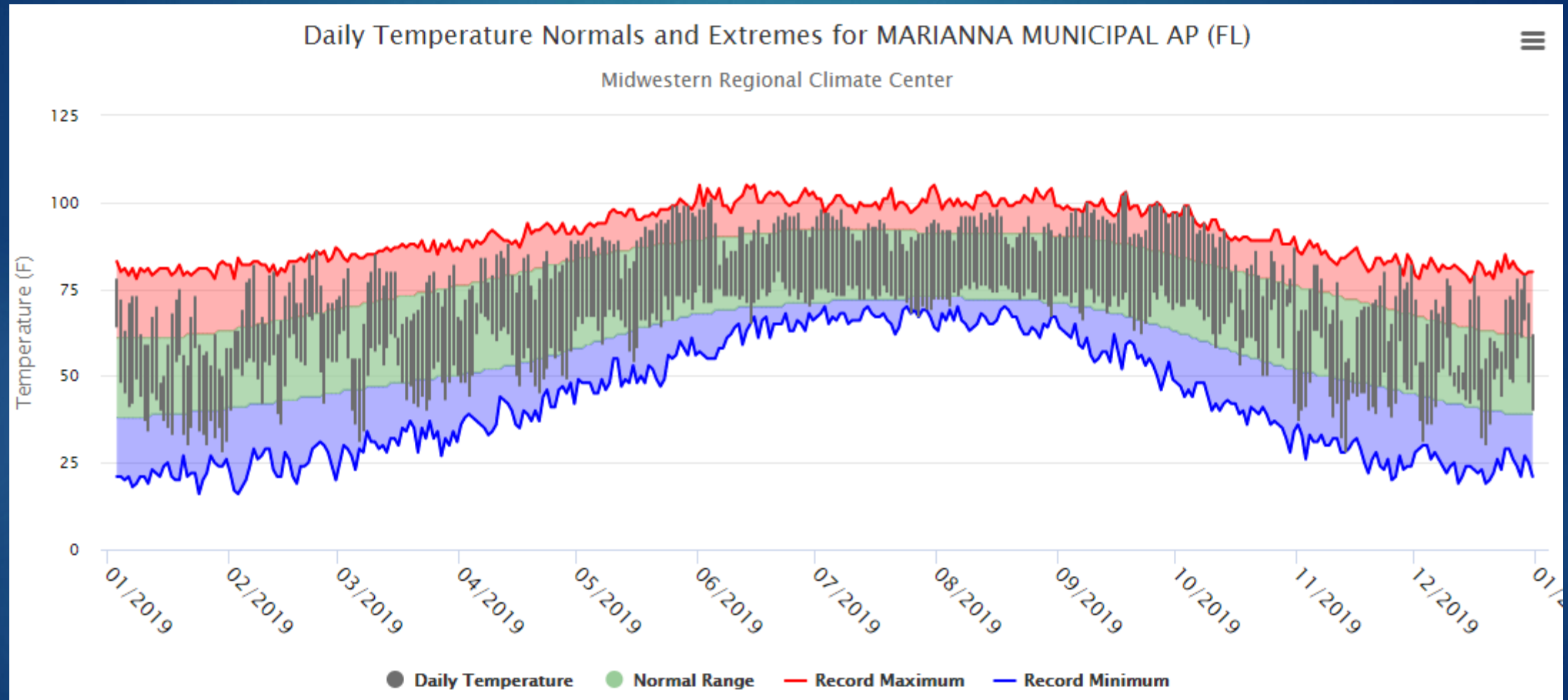
# Annual Temperature for NW Florida



Second  
warmest  
year on  
record  
for NW FL

<https://www.ncdc.noaa.gov/cag>

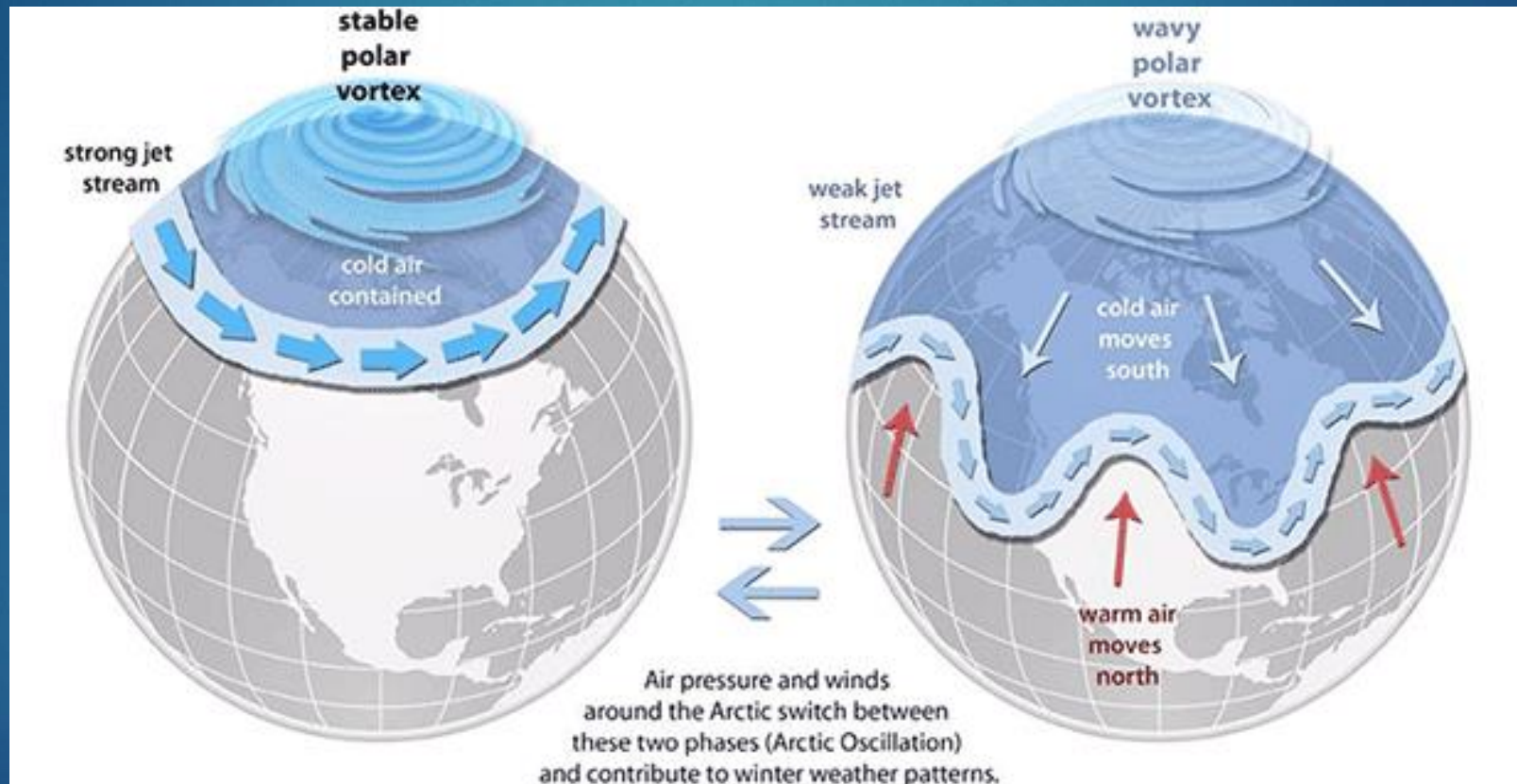
# Marianna FL daily temperatures



<https://mrcc.illinois.edu/CLIMATE/>

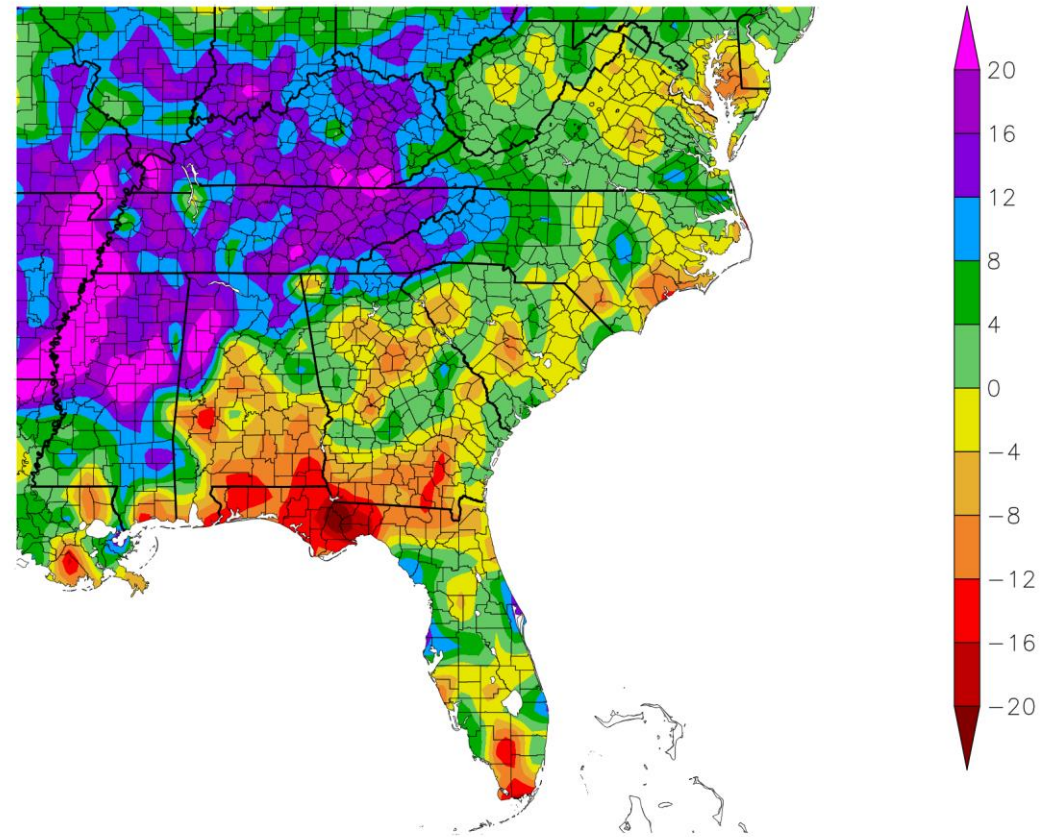


# Strong Polar Vortex has kept cold air bottled up near North Pole



# Climate summary for 2019

Departure from Normal Precipitation (in)  
1/1/2019 – 12/31/2019

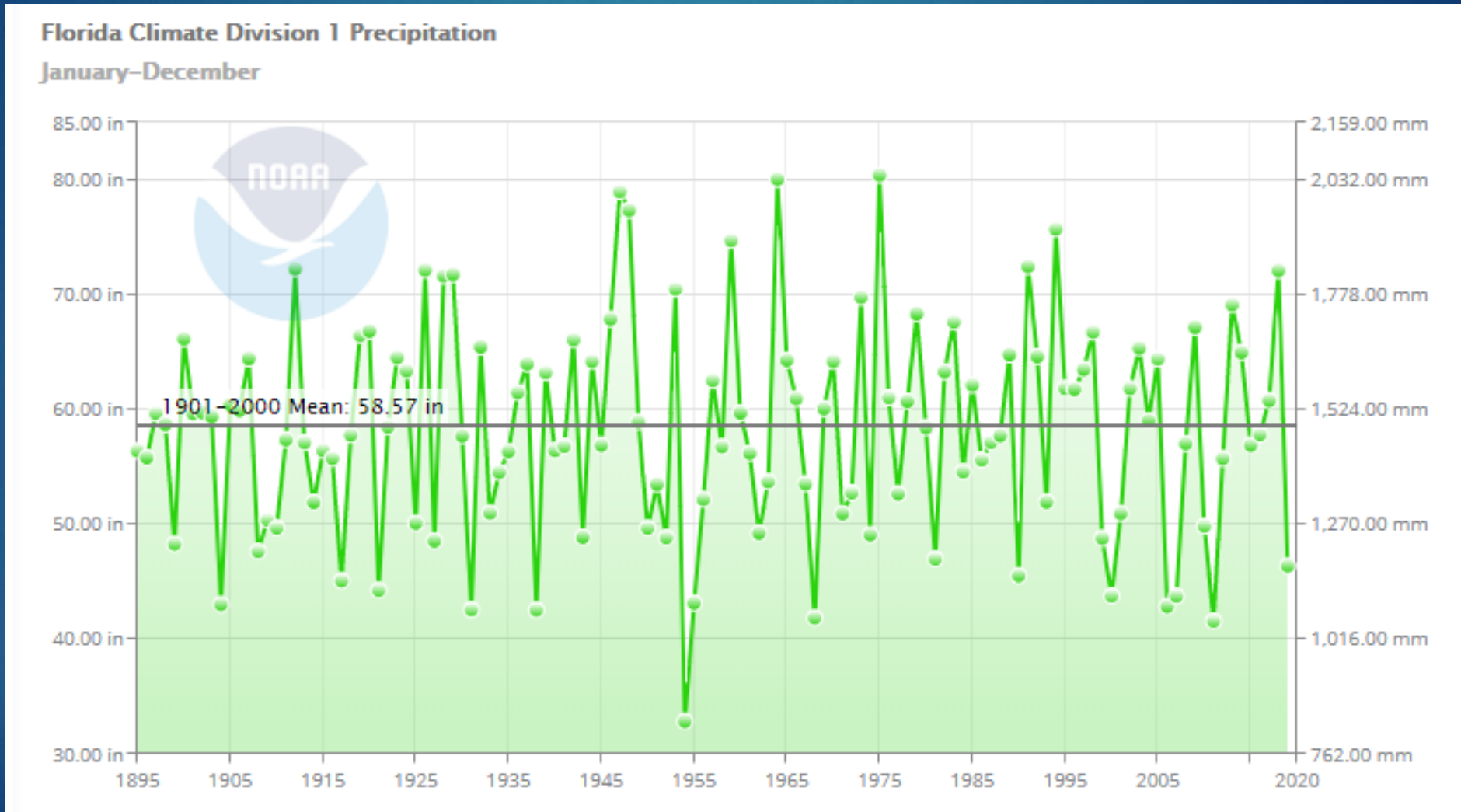


Generated 1/20/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

<https://hprcc.unl.edu/maps.php?map=ACISClimateMaps>

# Annual Precipitation for NW Florida

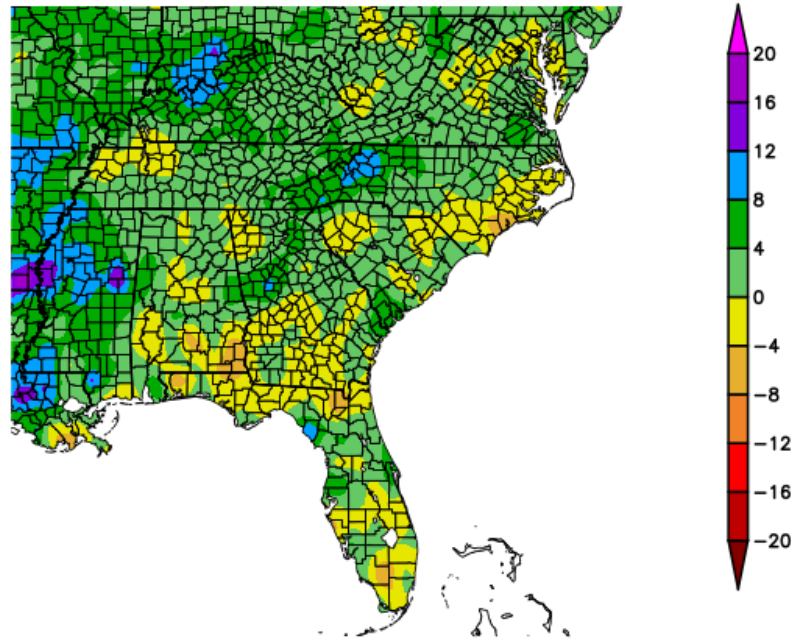


14<sup>th</sup> driest  
year on  
record for  
NW FL



# Climate summary for 2019

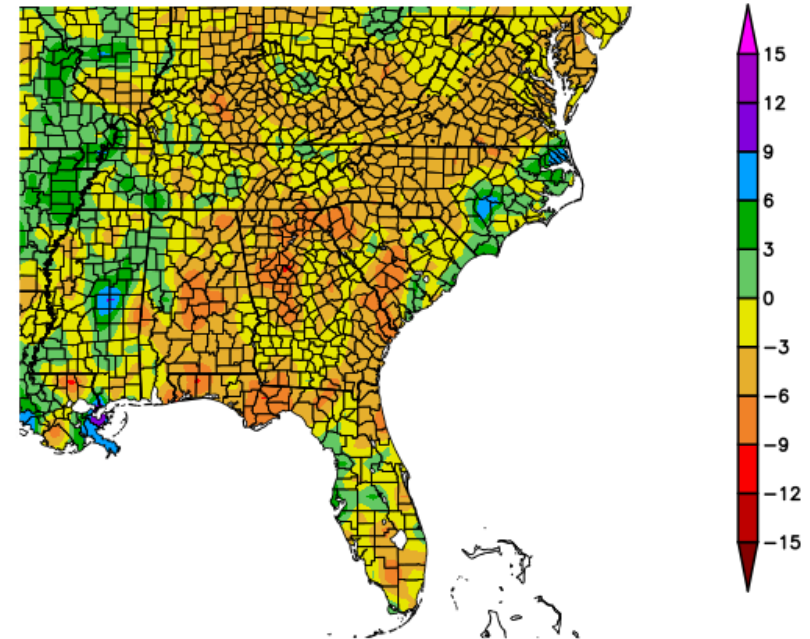
Departure from Normal Precipitation (in)  
4/1/2019 – 6/30/2019



Generated 7/20/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Precipitation (in)  
7/1/2019 – 9/30/2019



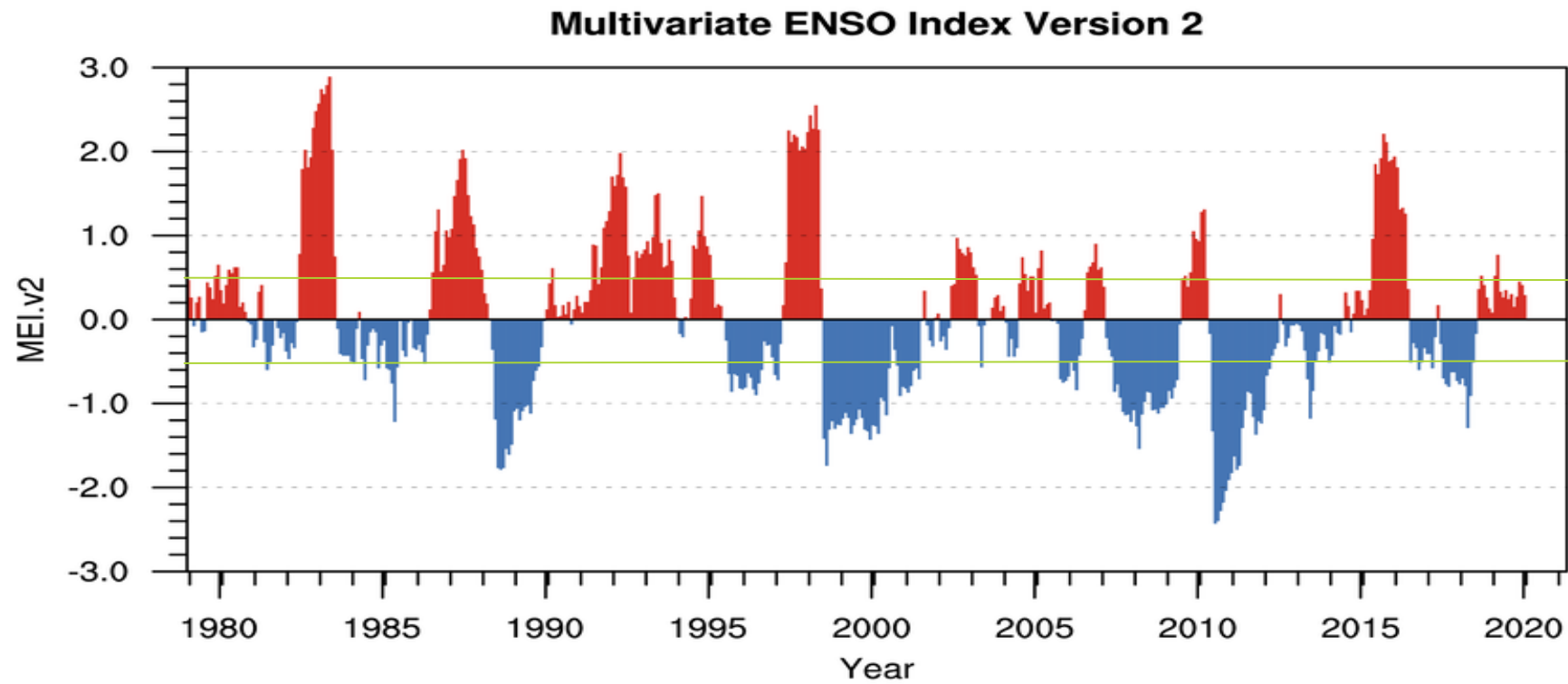
Generated 10/20/2019 at HPRCC using provisional data.

NOAA Regional Climate Centers

<https://hprcc.unl.edu/maps.php?map=ACISClimateMaps>

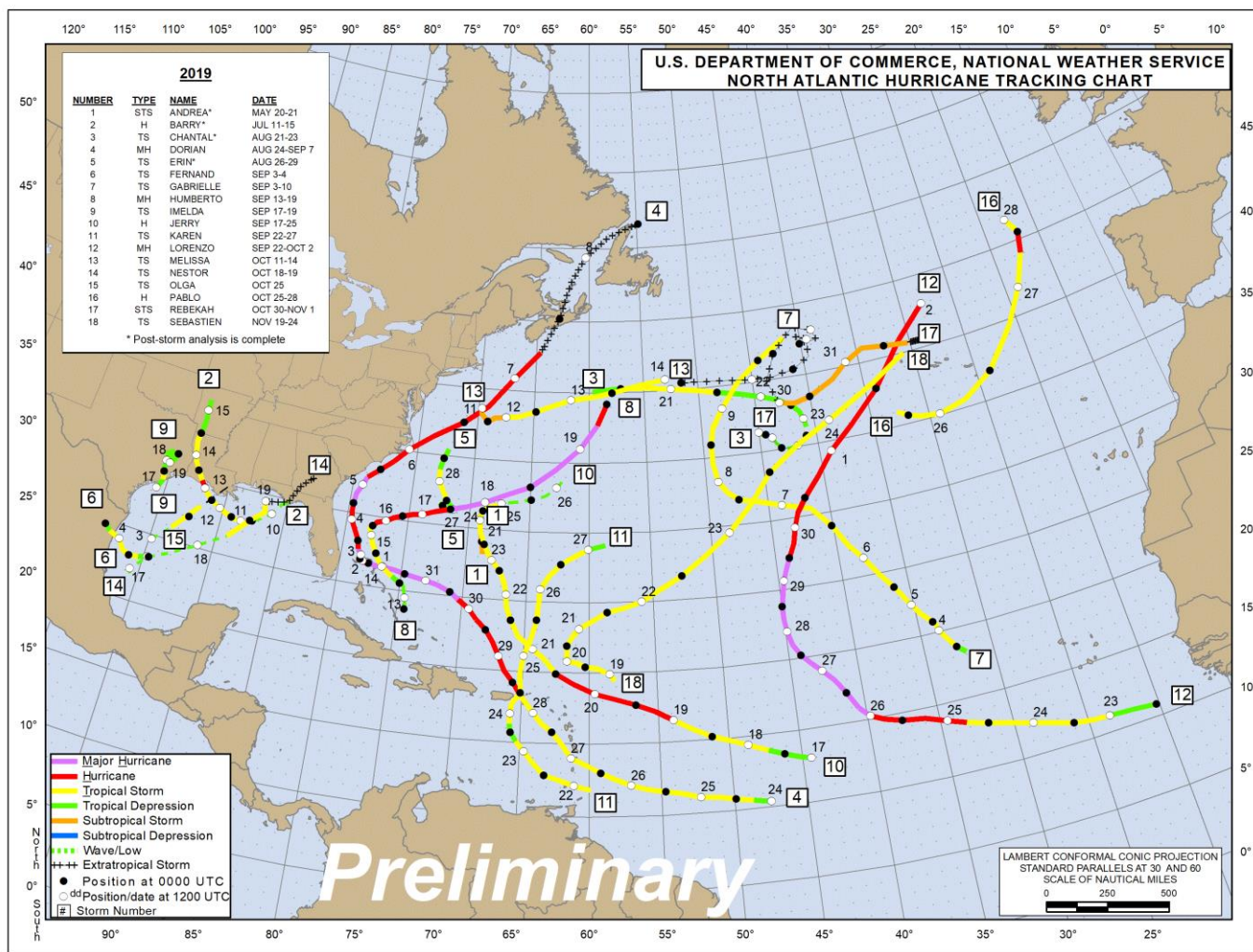


# ENSO was neutral in 2019



<https://www.esrl.noaa.gov/psd/enso/mei/>

# 2019 Atlantic Tropical Season

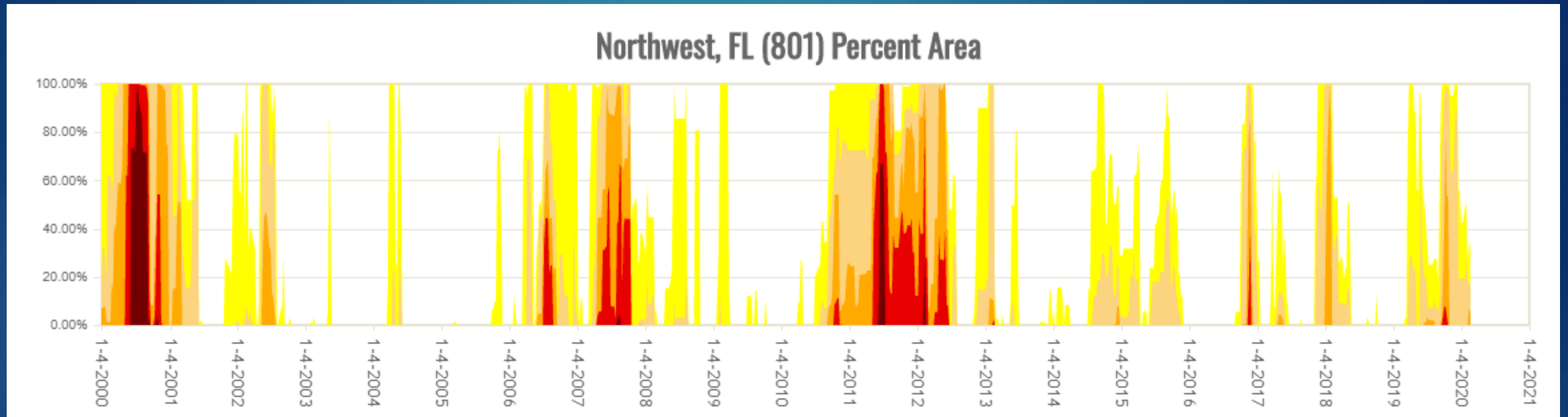


An active season overall but not much impact on the Southeast

Hurricane Dorian brought rain and wind to the East Coast

TS Nestor brought rain to southern Georgia and parts of AL and FL

# 2019 Drought



<https://droughtmonitor.unl.edu/Data/Timeseries.aspx>





# 2019 Drought

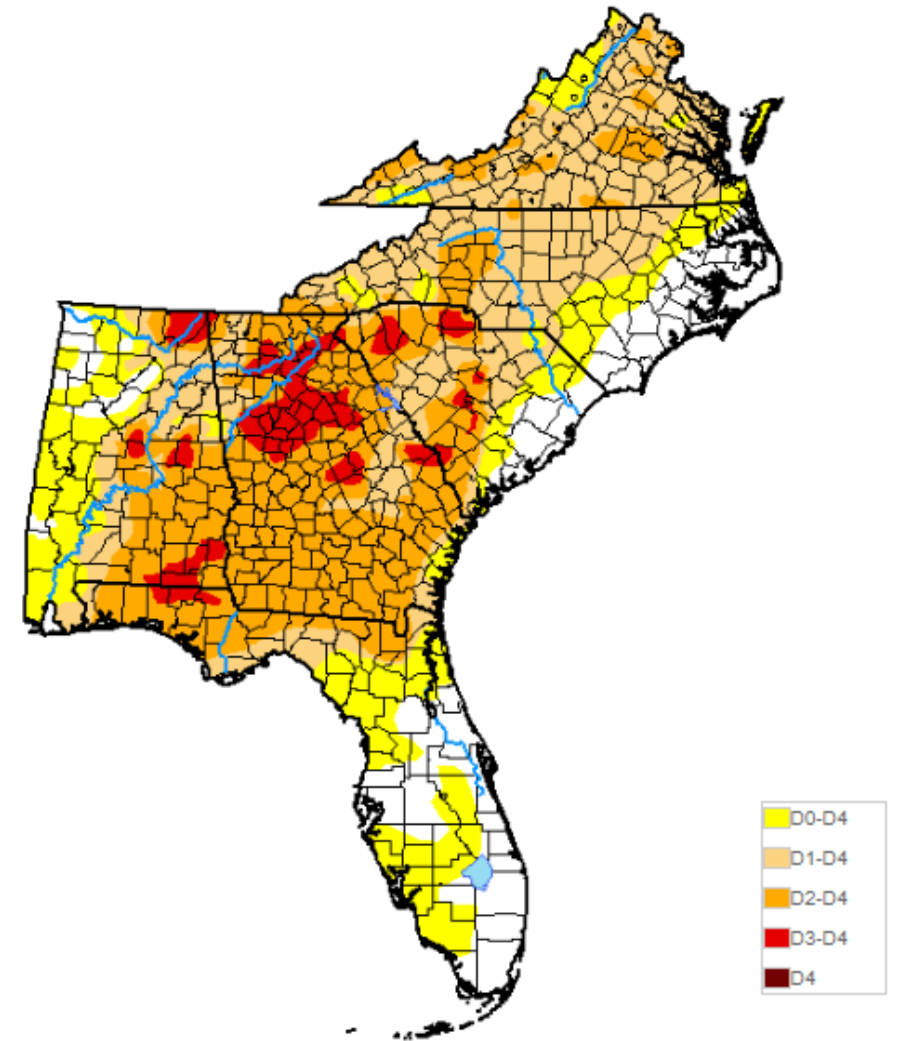
Dry conditions started in late spring 2019 but disappeared in summer in many locations. SE AL had continuing drought through summer.

Rainfall deficits increased dramatically after Labor Day and temperatures set new records.

Rainfall in mid-October moistened soil and reduced drought over the next month.

<https://droughtmonitor.unl.edu/Maps/MapArchive.aspx>

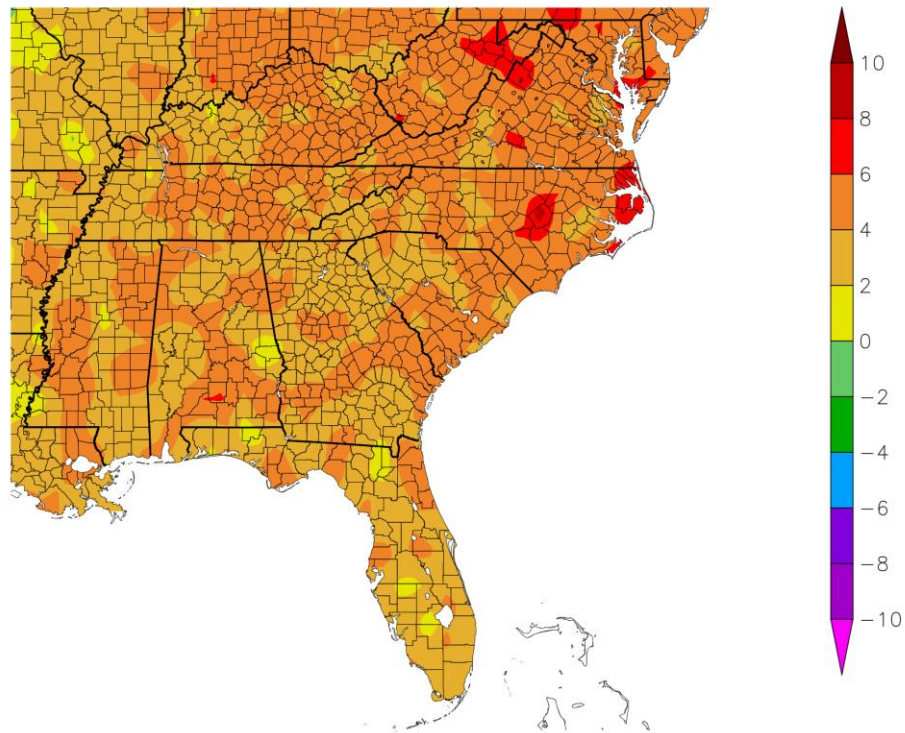
## *U.S. Drought Monitor* **Southeast**





# 2020 so far

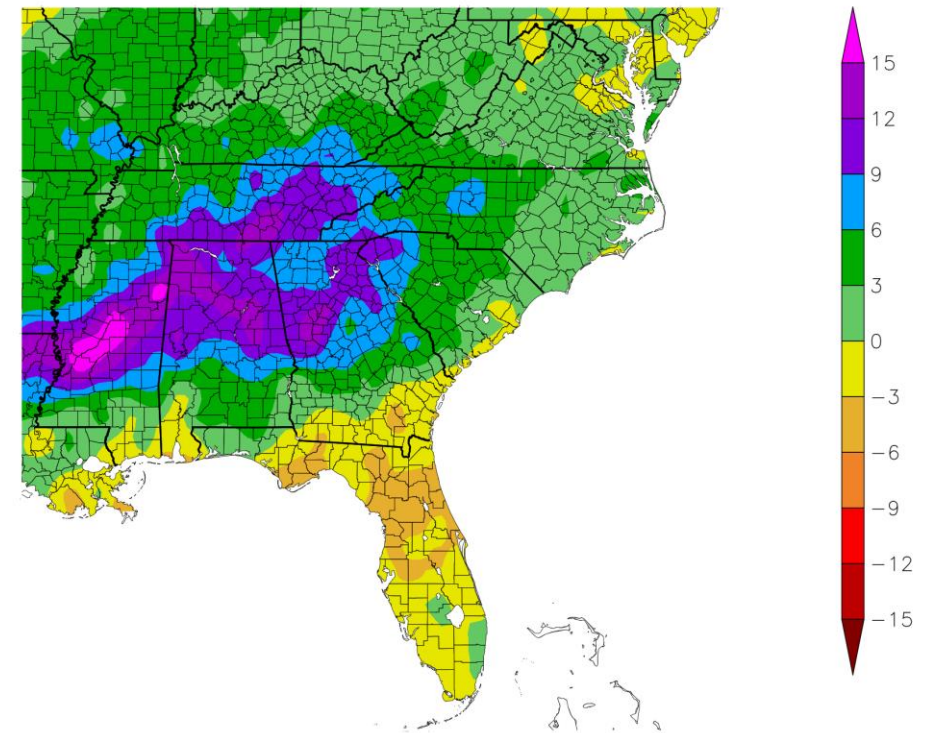
Departure from Normal Temperature (F)  
1/1/2020 – 3/3/2020



Generated 3/4/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Precipitation (in)  
1/1/2020 – 3/3/2020

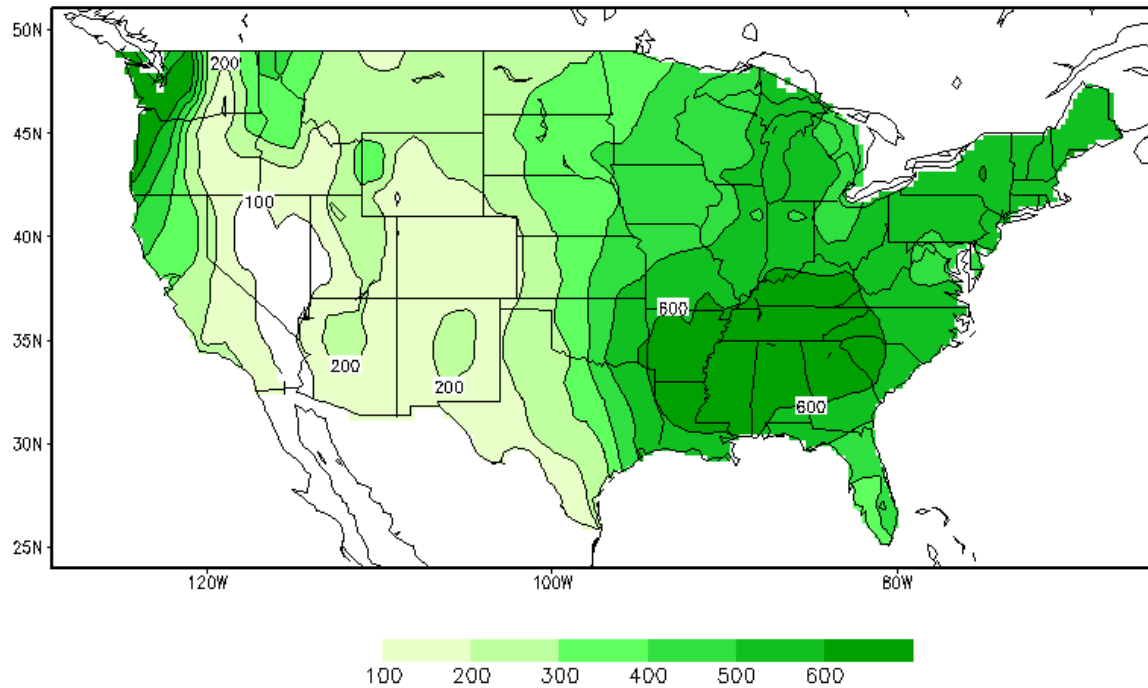


Generated 3/4/2020 at HPRCC using provisional data.

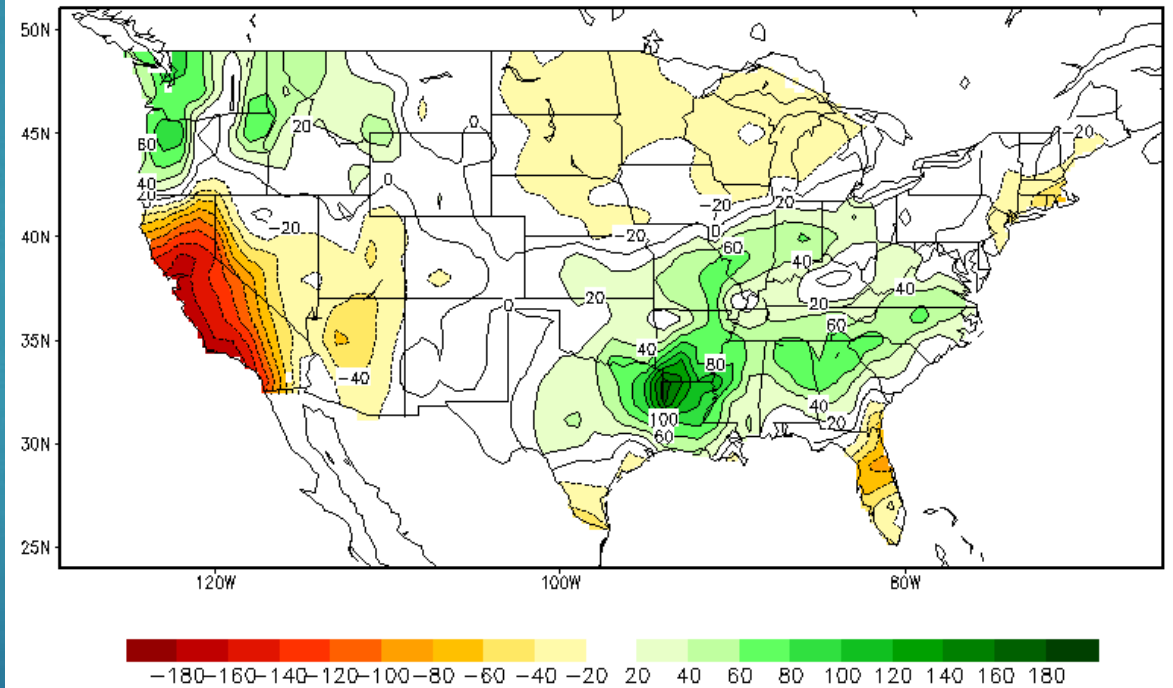
NOAA Regional Climate Centers

# Current Conditions

Calculated Soil Moisture (mm)  
MAR 01, 2020



Calculated Soil Moisture Anomaly Change  
MAR 01, 2020 from DEC.31

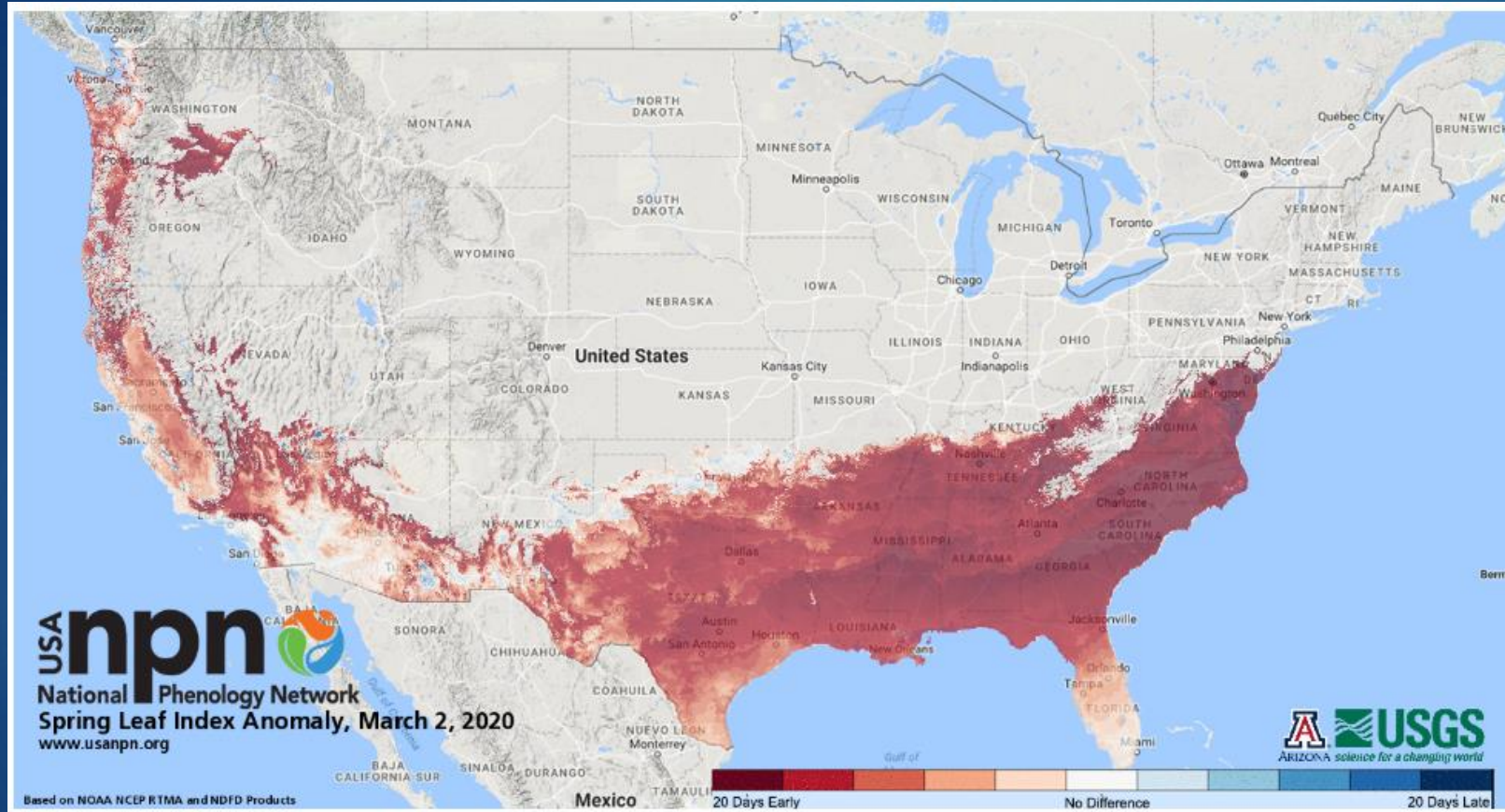


[https://www.cpc.ncep.noaa.gov/products/Soilmst\\_Monitoring/US/Soilmst/Soilmst.shtml](https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml)

#



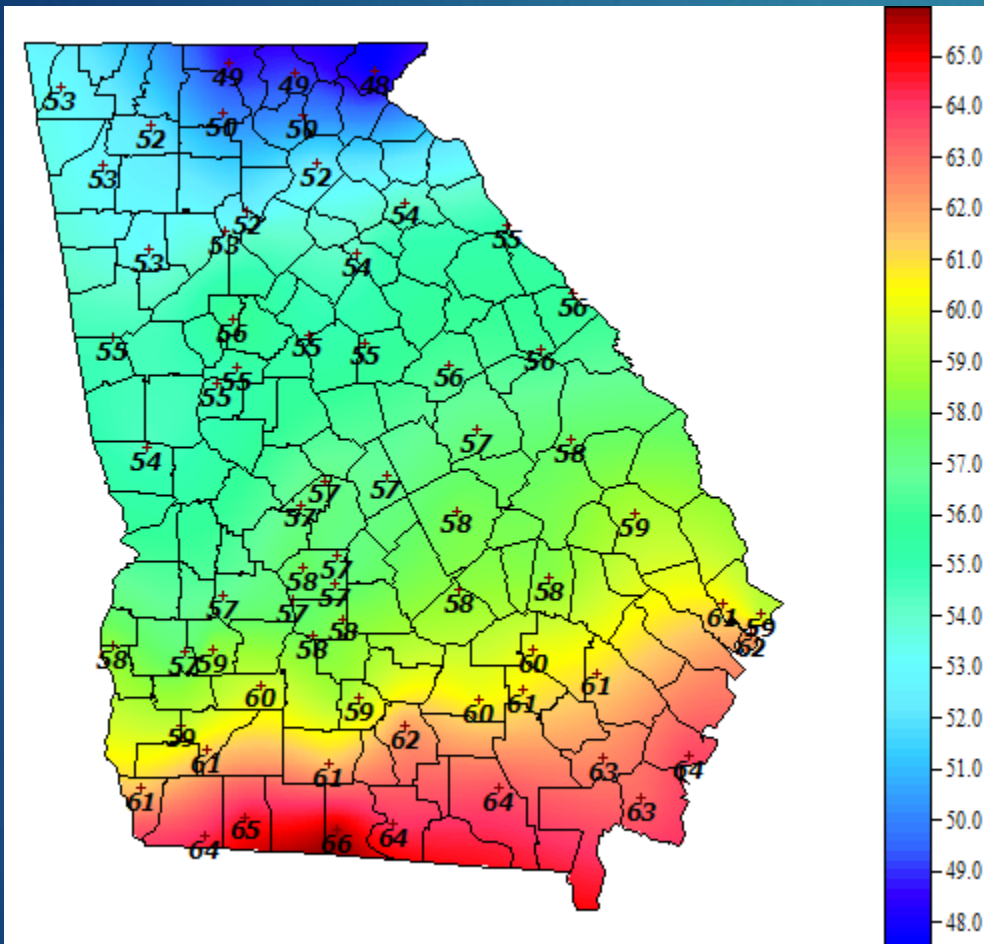
# How early is spring this year?



Early spring means plants come out of dormancy early, increased water use from evapotranspiration

<https://www.usanpn.org/news/spring>

# Soil temperatures at 4 inches



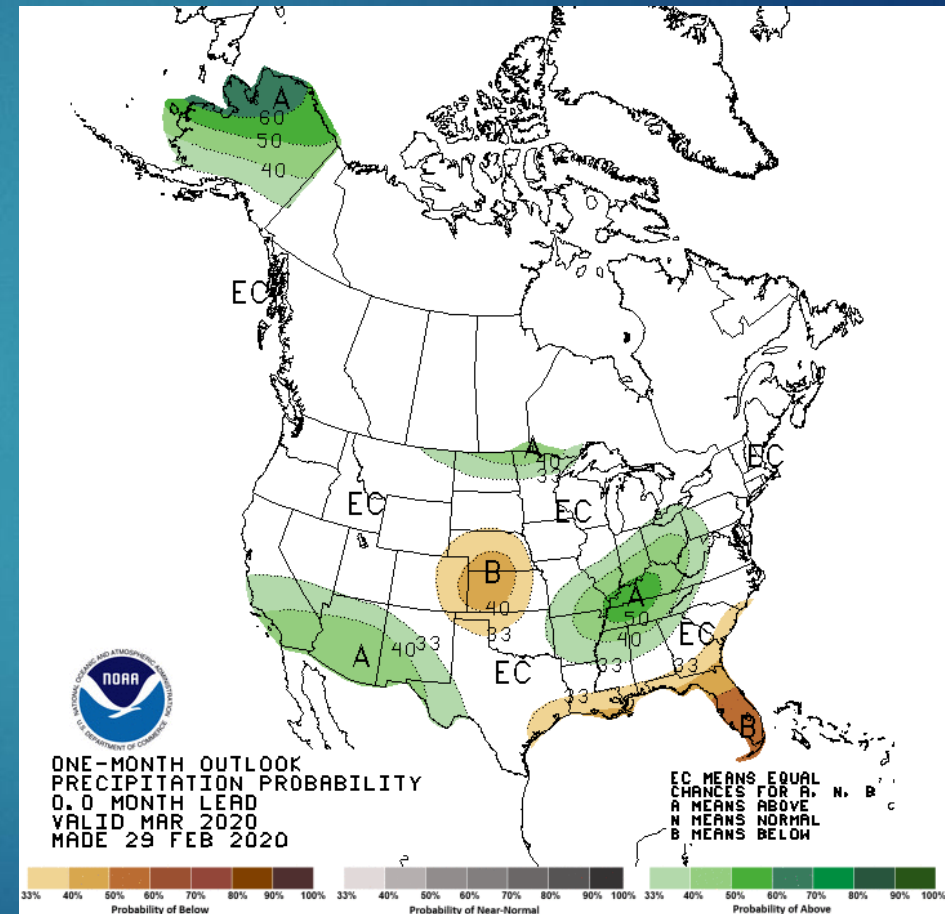
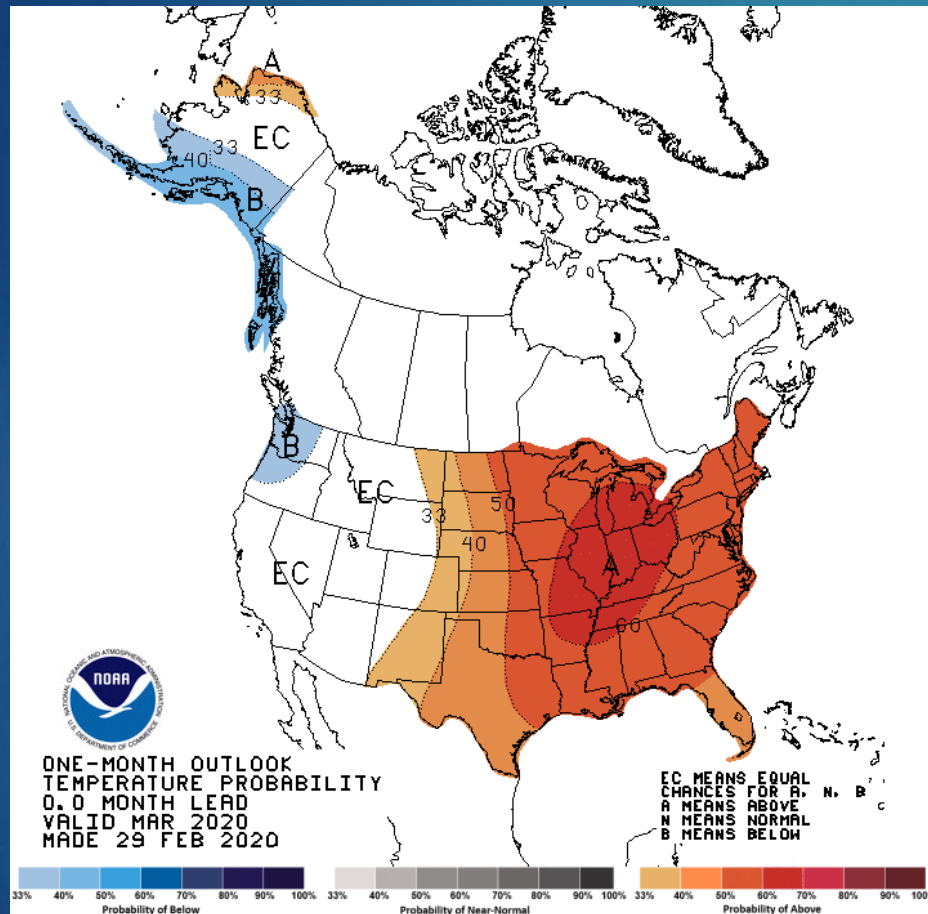
Soil temperatures will rise more slowly in places where the soil is very wet

FAWN has soil temperature data for Florida but I could not find a map version, just tables

<https://fawn.ifas.ufl.edu/>

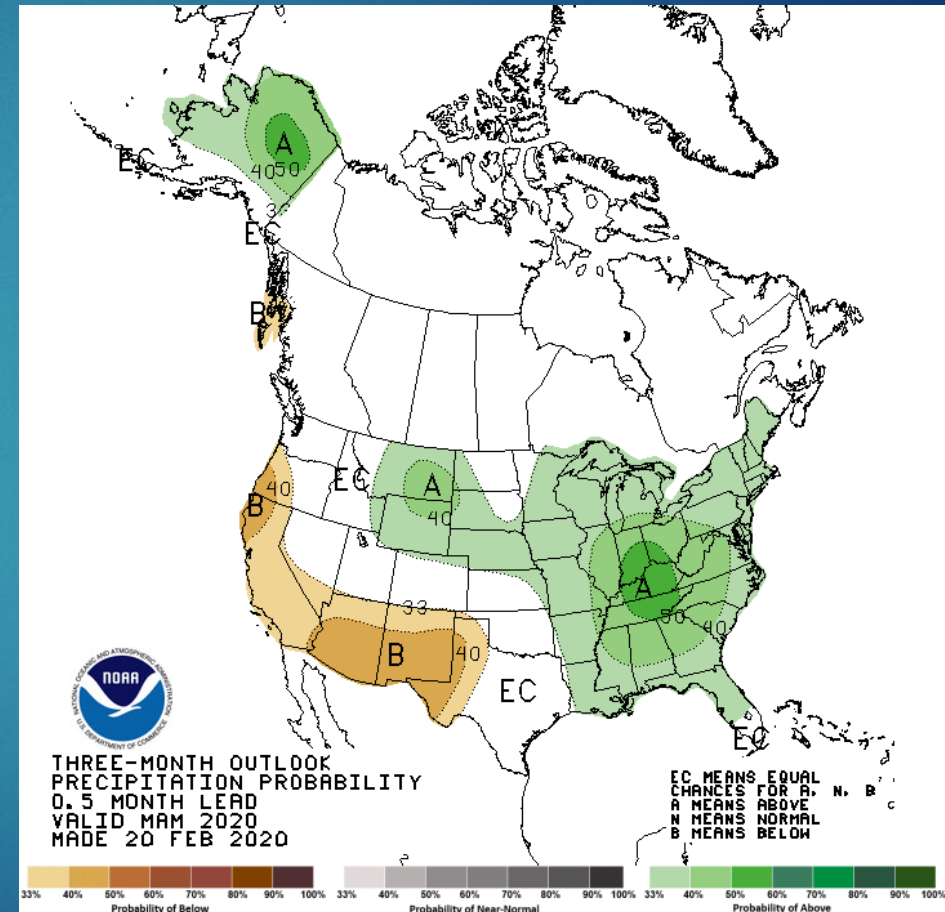
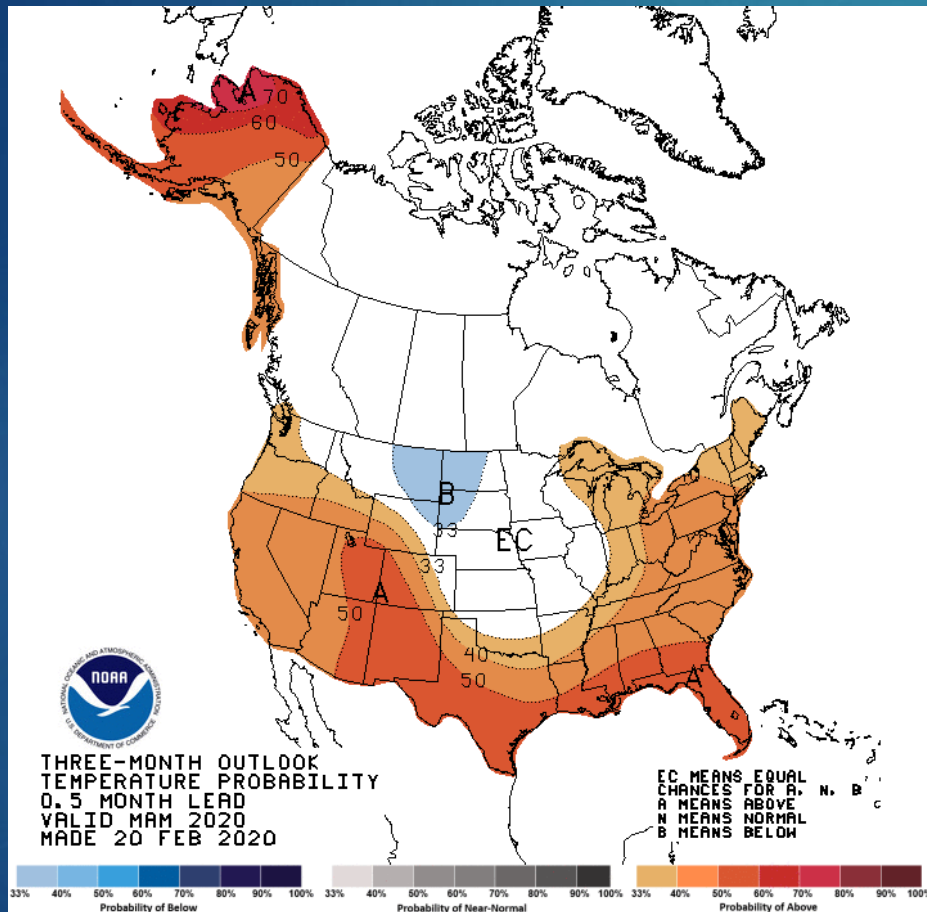


# Climate Prediction Center— March 2020

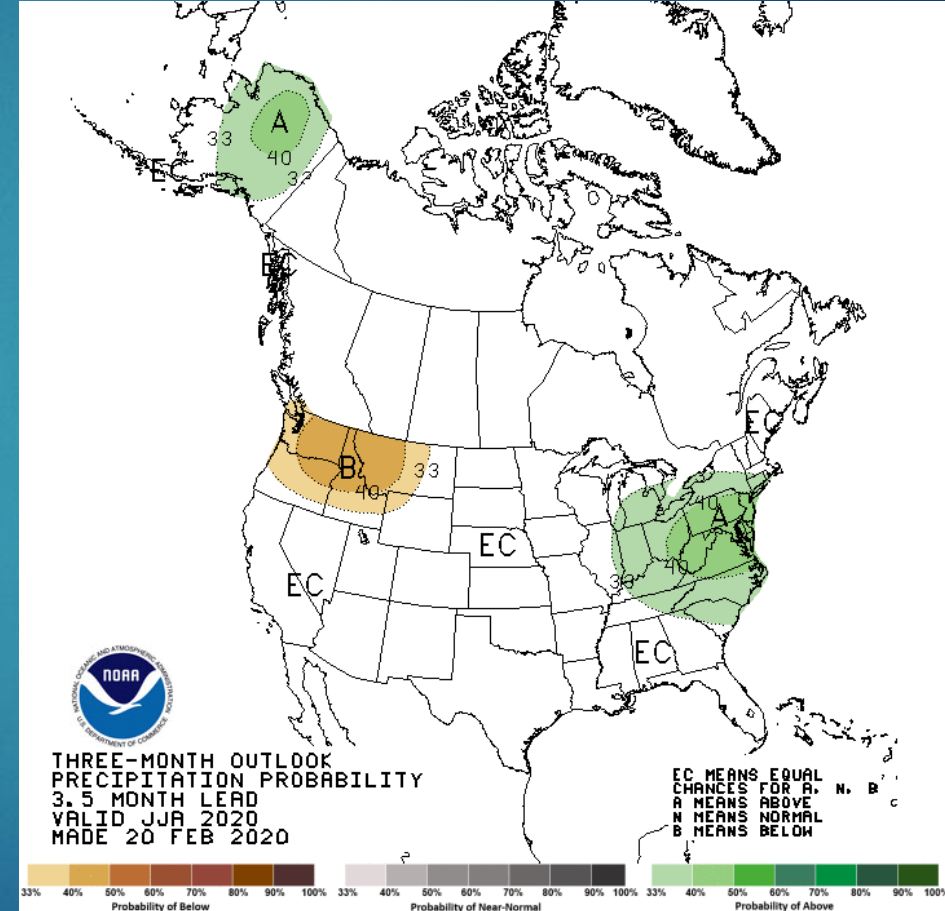
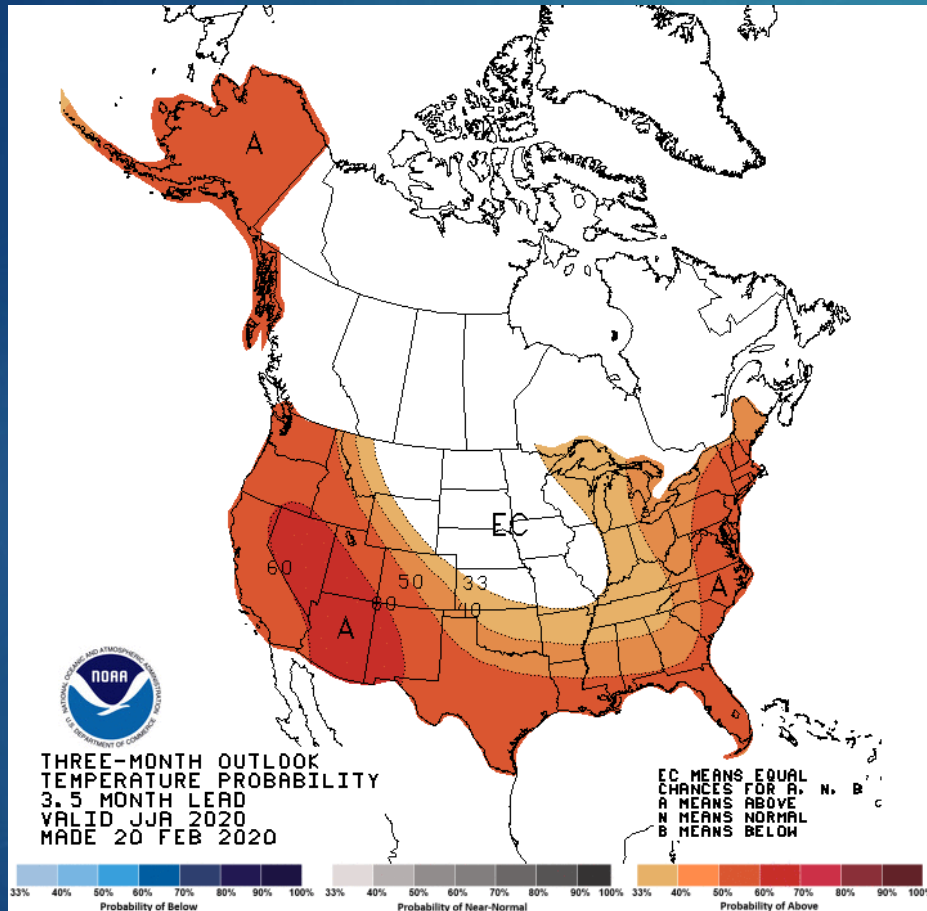


<https://www.cpc.ncep.noaa.gov/>

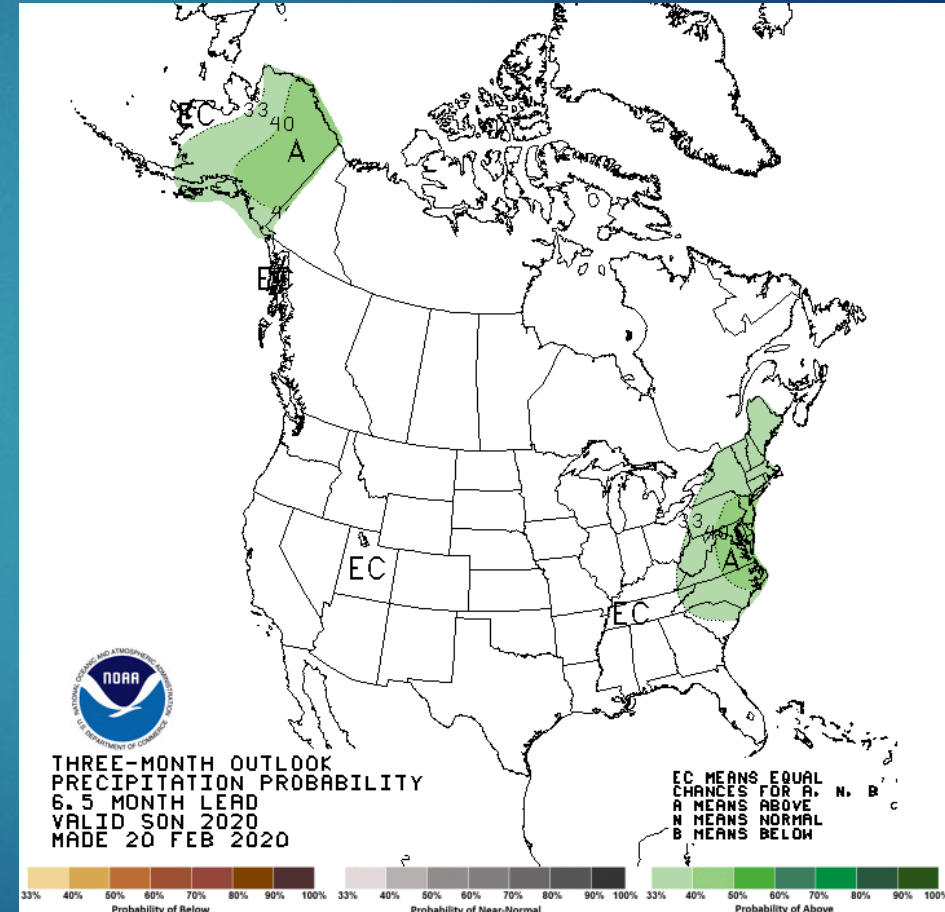
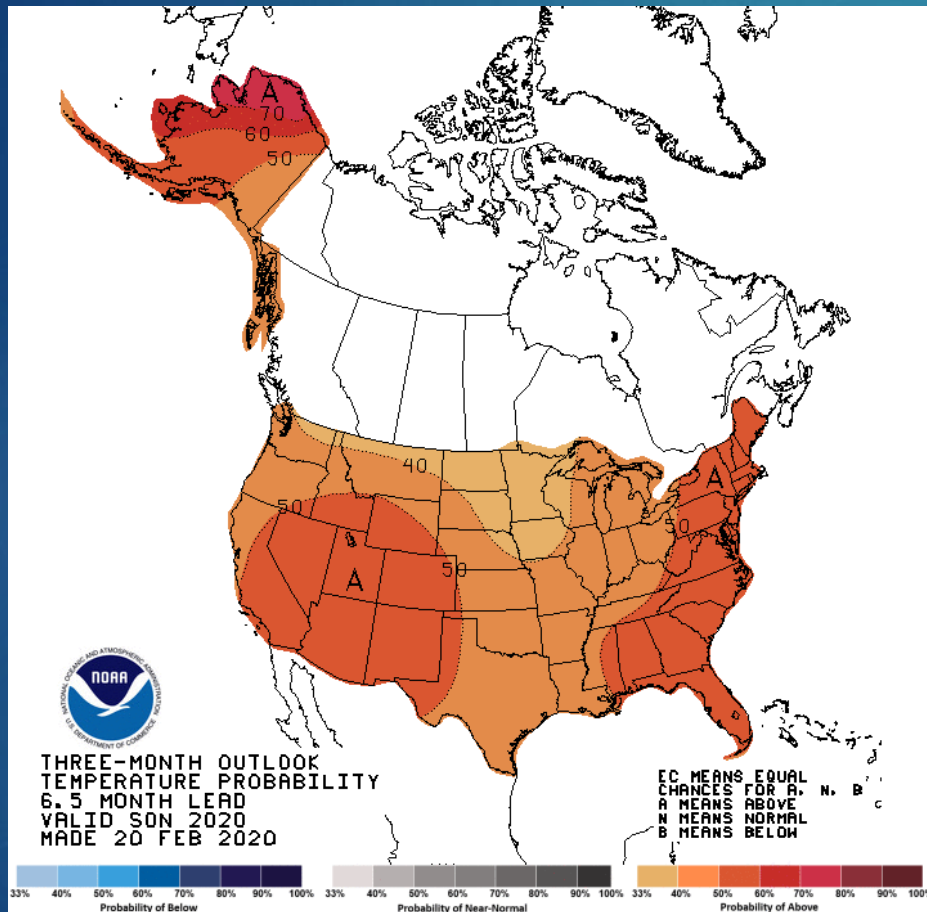
# Climate Prediction Center— March-May 2020



# Climate Prediction Center— June-Aug 2020



# Climate Prediction Center— Sept-Nov 2020

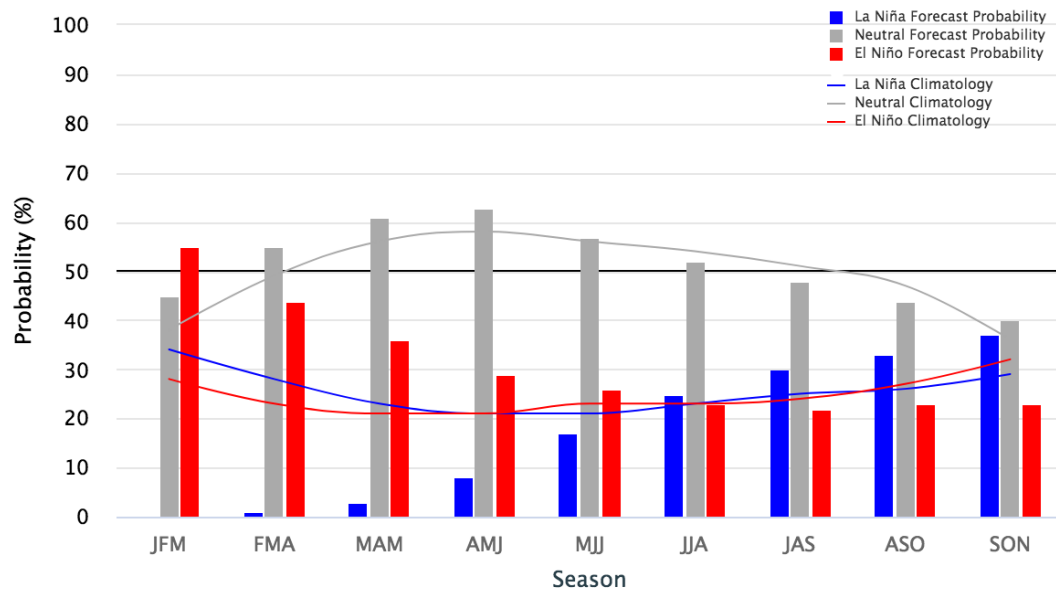




# Current ENSO forecasts

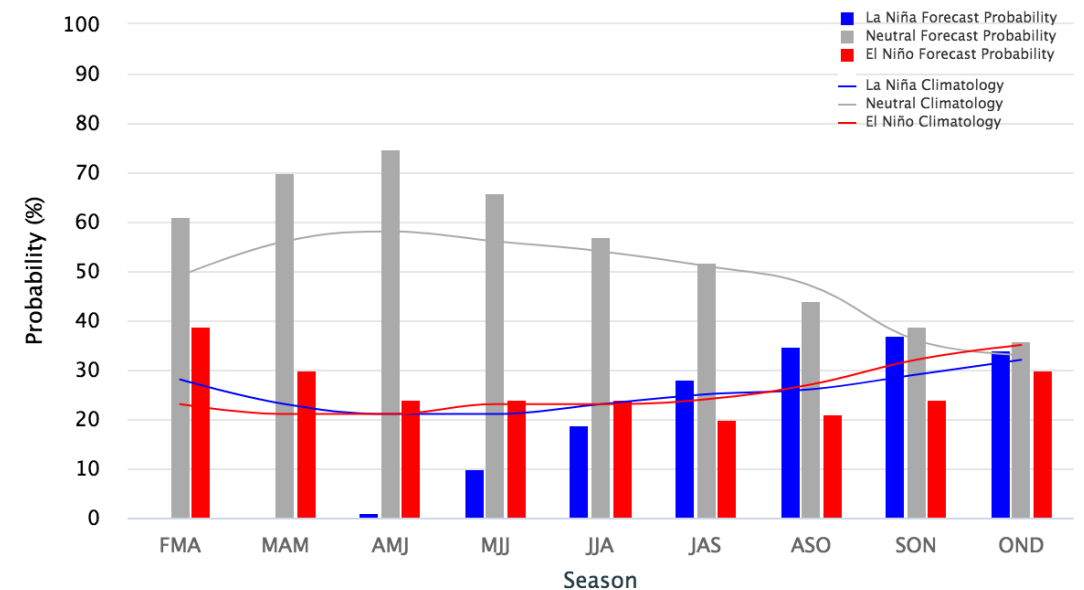
Early-February 2020 CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly  
Neutral ENSO:  $-0.5^{\circ}\text{C}$  to  $0.5^{\circ}\text{C}$

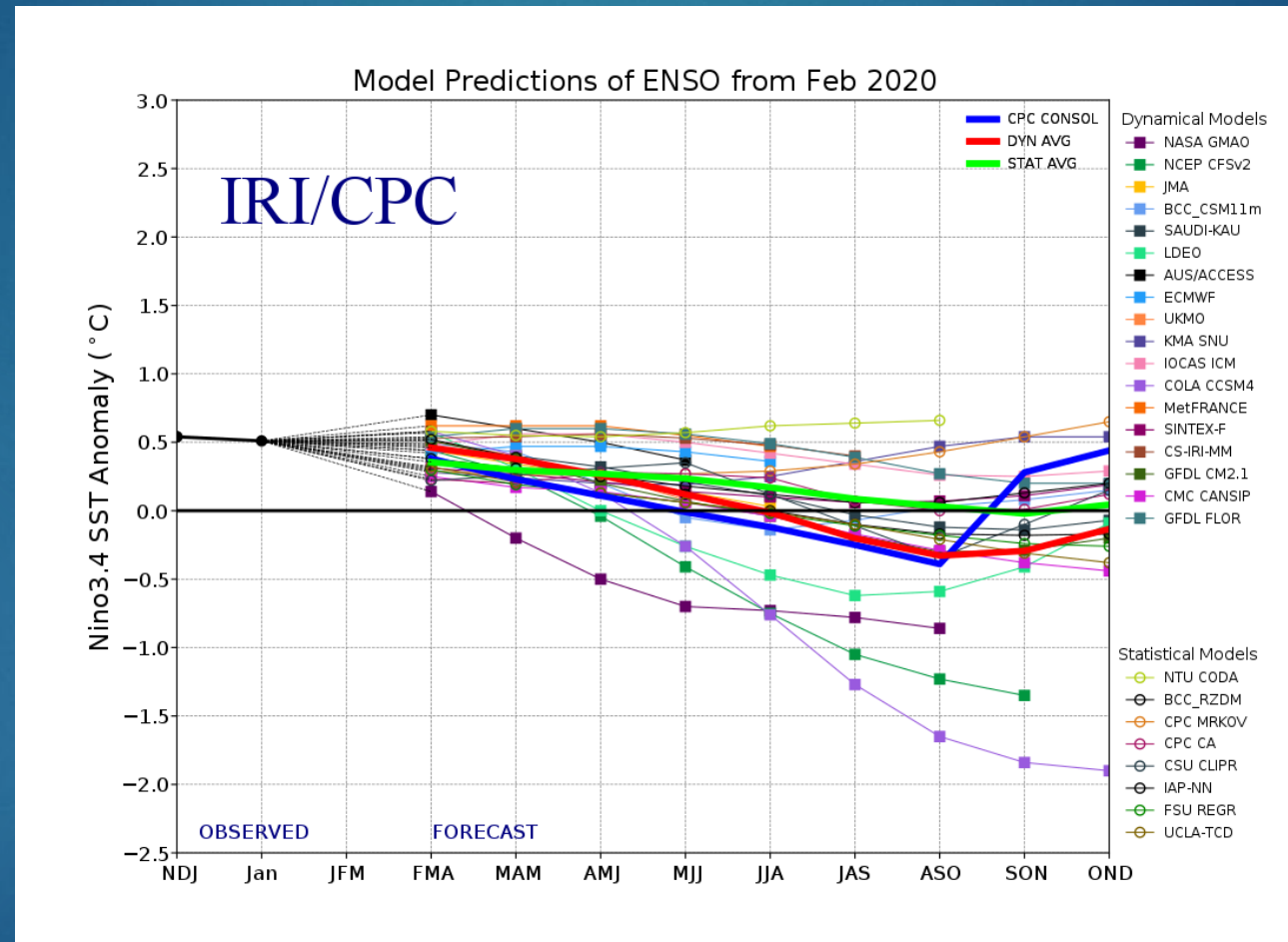


Mid-February 2020 IRI/CPC Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly  
Neutral ENSO:  $-0.5^{\circ}\text{C}$  to  $0.5^{\circ}\text{C}$



# Current ENSO forecasts



<https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/>

# Summary of Outlook

- Current conditions are generally moist across the region
- Early start to growing season (up to 3 weeks in some areas) has increased water demand
- Warmer than normal temperatures have contributed to water needs
- No big pattern shift is seen in near term
- Warmer than normal conditions expected to continue due to long-term warming trends across the region
- Precipitation pattern shows tendency towards wetter than normal conditions through spring; after that equal chances (no idea)
- Increased chance of La Nina could mean another active Atlantic tropical season
- La Nina next winter could mean increased potential for drought in 2021 due to dry and warm winter conditions (that's a big IF)

# Thank you! Contact me at:

Pam Knox

[pknox@uga.edu](mailto:pknox@uga.edu)

706-310-3467

<http://site.extension.uga.edu/climate>



SEAgClimate



@SE\_AgClimate

UGA Weather Network:  
<http://georgiaweather.net>