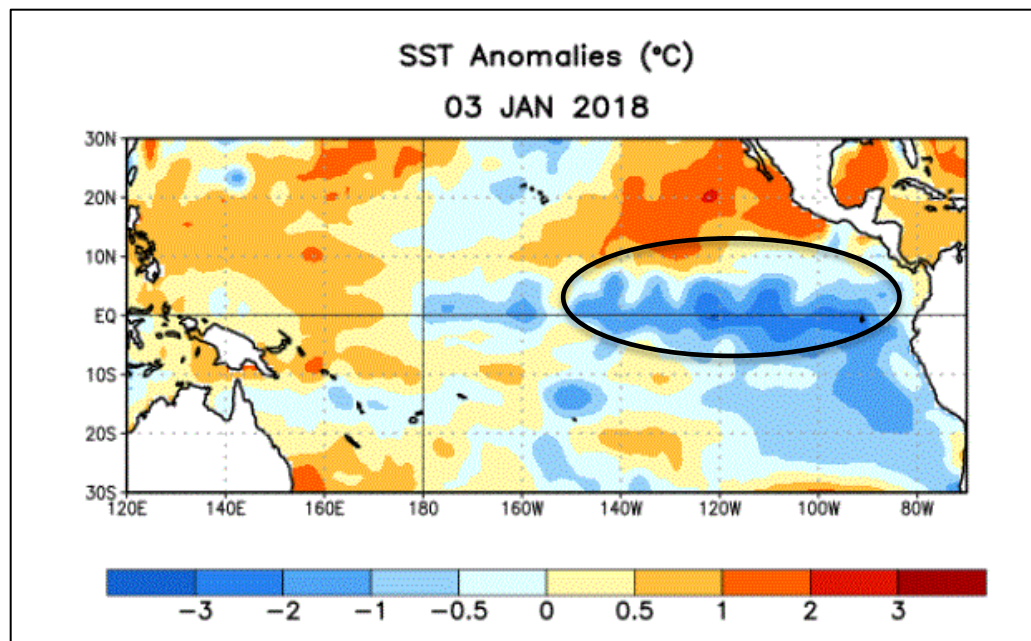


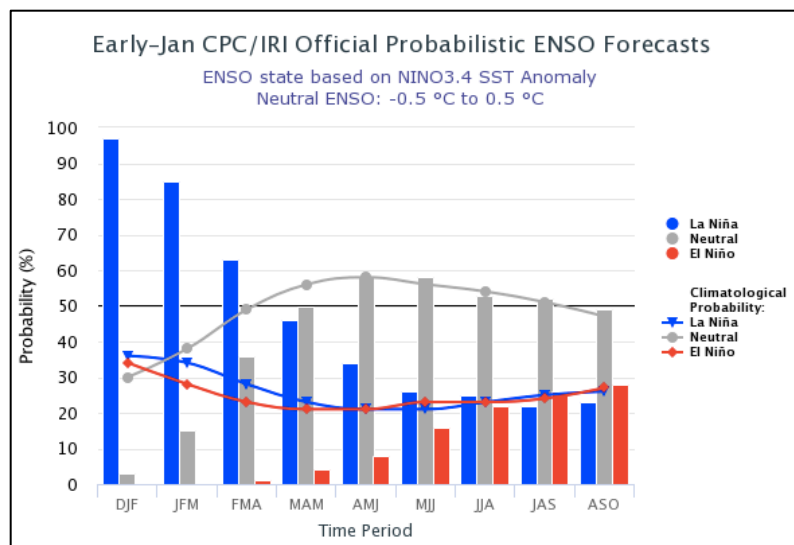
Midwinter AgroClimate Update January 2018

EL Niño Southern Oscillation (ENSO) update

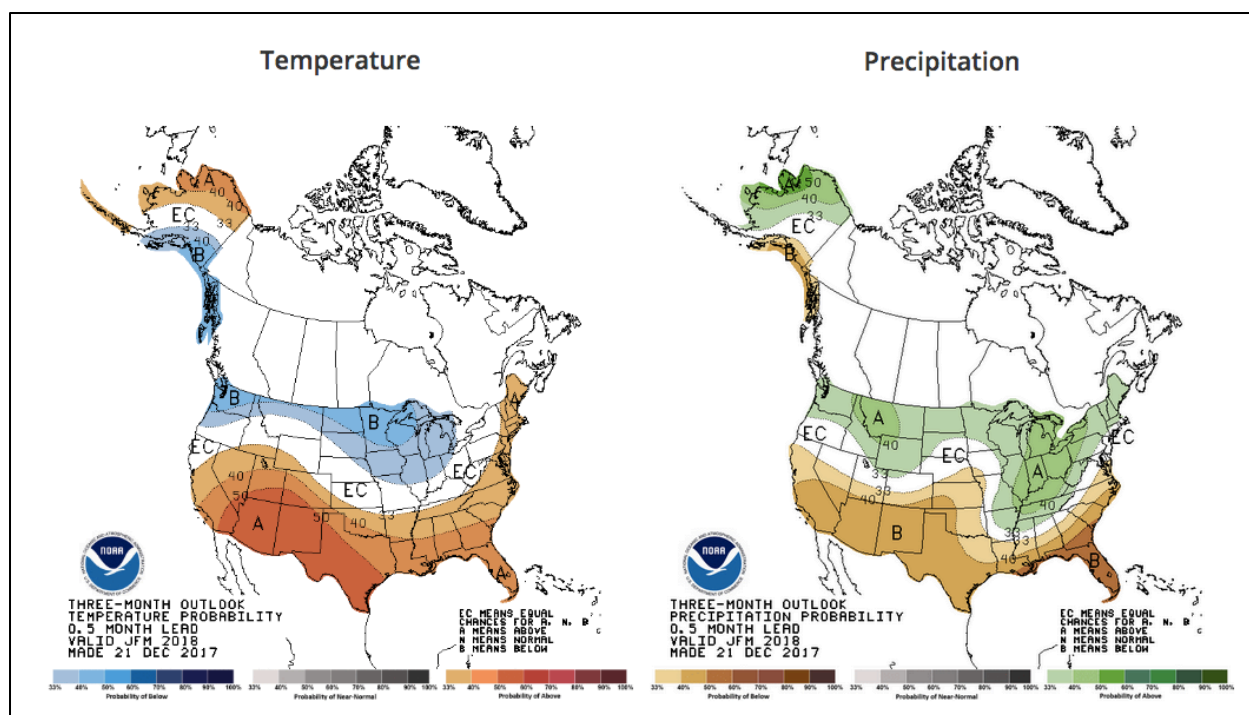
Weak to moderate **La Niña conditions** are currently present with equatorial sea surface temperatures (SSTs) below average across the central and eastern Pacific Ocean. Most ENSO prediction models indicate weak, but not far from threshold of moderate, La Niña as the most likely scenario for the Northern Hemisphere winter, followed by a return to neutral conditions during spring.



Average sea surface temperature (SST) anomalies (°C). Temperatures in the central and eastern equatorial Pacific Ocean are 1 to 2 degrees below average (Source: NOAA CPC).



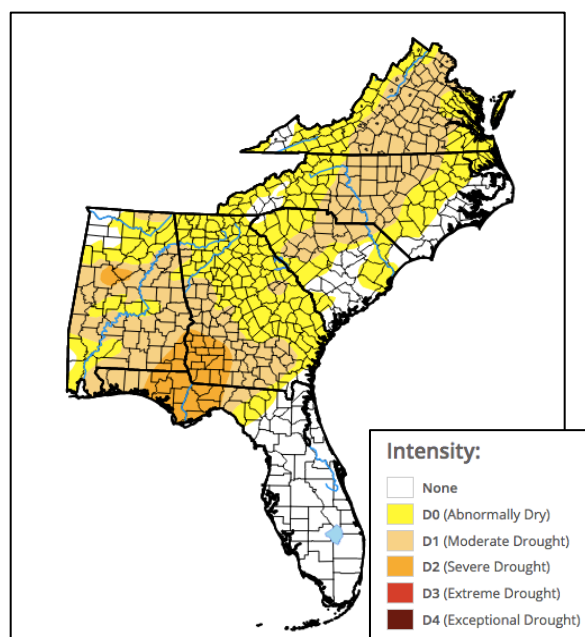
La Niña is anticipated to affect temperature and precipitation across the United States during the upcoming months. The outlooks generally favor above-average temperatures and below-median precipitation across the southern tier of the United States, and below-average temperatures and above-median precipitation across the northern tier of the United States.



NOAA-CPC 3-month outlooks (Jan-Feb-Mar) indicating above average temperature (left) and below average precipitation (right) for Florida during the next 3 months:

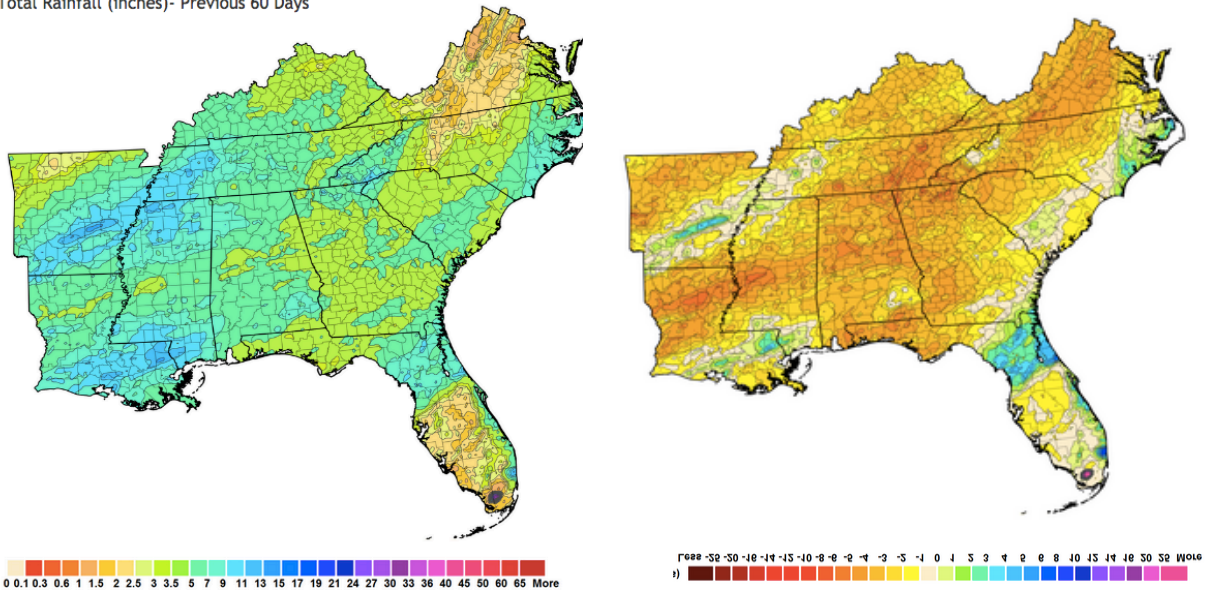
<http://agroclimate.org/forecasts/seasonal-forecast/>

Midwinter conditions in the Southeast USA



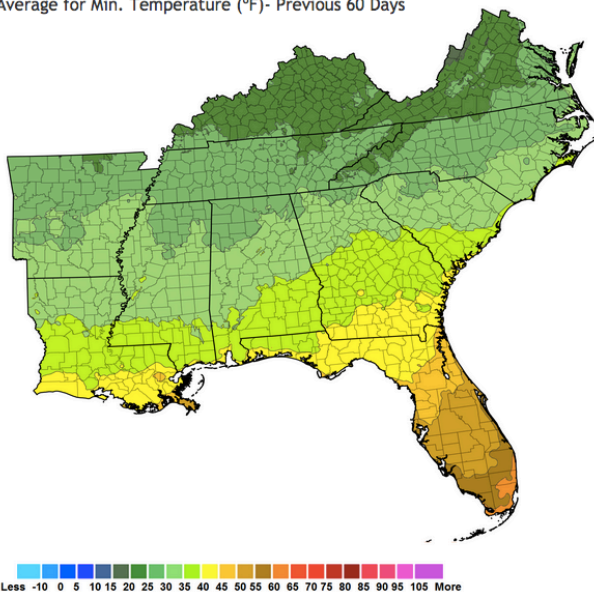
According to the latest Drought monitor map (<http://droughtmonitor.unl.edu/CurrentMap.aspx>) released on January 18, 2018, most of the Florida peninsula is under normal conditions while parts of the panhandle are under moderate to severe drought conditions. Much of the southeast region recorded at least some precipitation this week, with isolated pockets of greater amounts in western North Carolina, western Virginia, and eastern Georgia. Even with the precipitation in Alabama, most of the state ended the week below normal, and this allowed for further degradation in the state. In areas of southwestern Georgia and the Florida Panhandle, severe drought was expanded, and moderate drought was expanded in southeastern Georgia.

Total Rainfall (inches)- Previous 60 Days

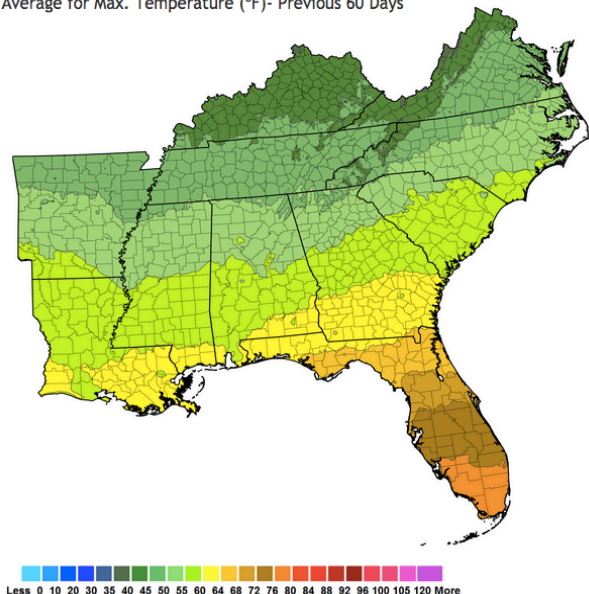


Total precipitation (in) observed in the Southeast during the last 60 days (Nov 17 - Jan 17) (left) and deviation from long-term averages (right). Source AgroClimate: <http://agroclimate.org/tools/rainfall-and-temp-monitoring/>

Average for Min. Temperature (°F)- Previous 60 Days



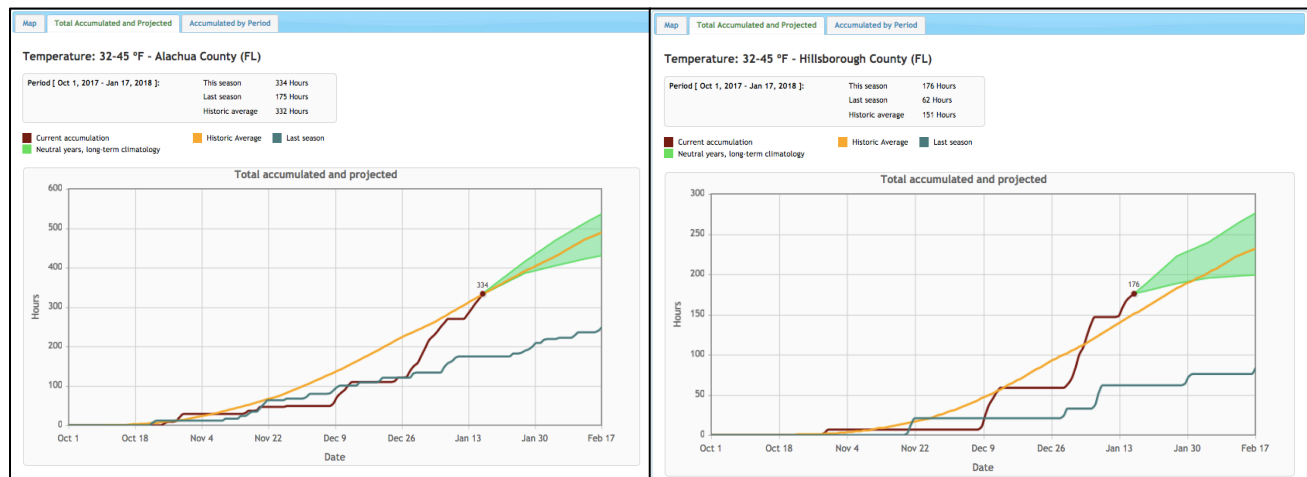
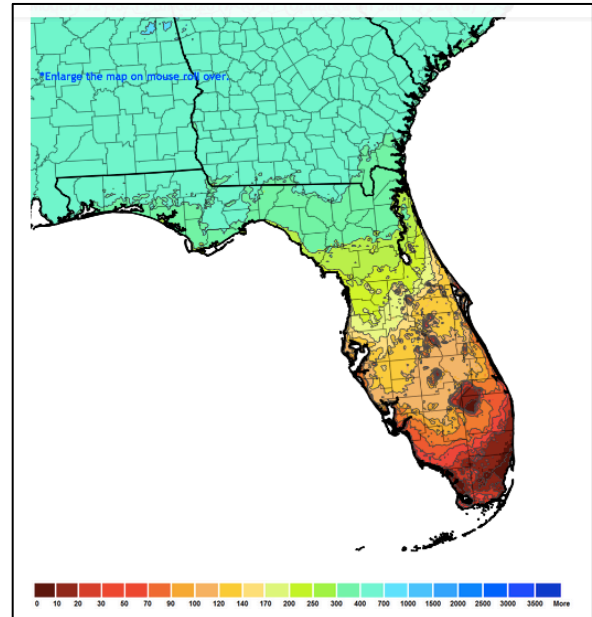
Average for Max. Temperature (°F)- Previous 60 Days



Average minimum temperature (°F) during the last 60 days ranging from 55°F to 60°F in the southern part of the Florida peninsula to 40°F to 45°F in north FL (left) and average maximum temperature ranging from 76°F to 80°F in the southern peninsula to 64°F to 68°F in the north FL (right). Source AgroClimate: <http://agroclimate.org/tools/rainfall-and-temp-monitoring/>.

Chill hours (32°F - 45°F) accumulated since October 1, 2017 range from the low teens in the extreme south of the peninsula to about 400 hours in the northern region of the state

(<http://agroclimate.org/tools/chill-hours-monitoring/>). Total accumulation observed at the Alachua FAWN station until January 17th amounts to 334 hours and in Dover (Hillsborough County) to 176 hours (<http://agroclimate.org/tools/chill-hours-calculator/>). These totals are close to the long-term average due to the recent cold weather and well above the accumulation last year. However chill hours accumulated until Christmas in most of the state were similar to last year's due to above average temperatures.



Chill hours accumulation accumulated this year (brown line) and last year (blue line) compared to the long-term average (yellow line) in Alachua (left) and Hillsborough (right) counties. Source AgroClimate.

Summary

La Niña conditions are expected to persist during the remaining of the winter and transition to ENSO-Neutral in the spring. Current dry conditions in the panhandle may continue to deteriorate; producers should plan for these conditions and take precautions such as kill cover crops earlier in order to preserve more moisture in the soil.