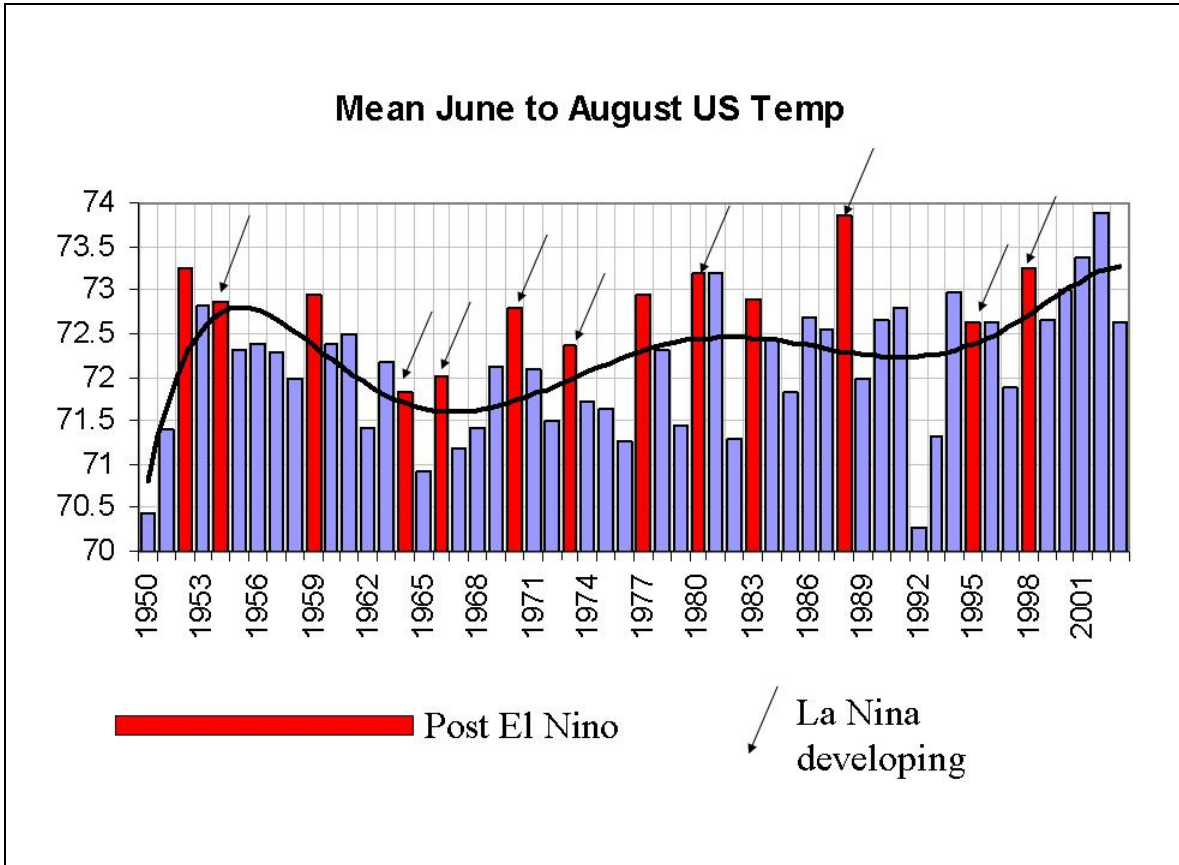
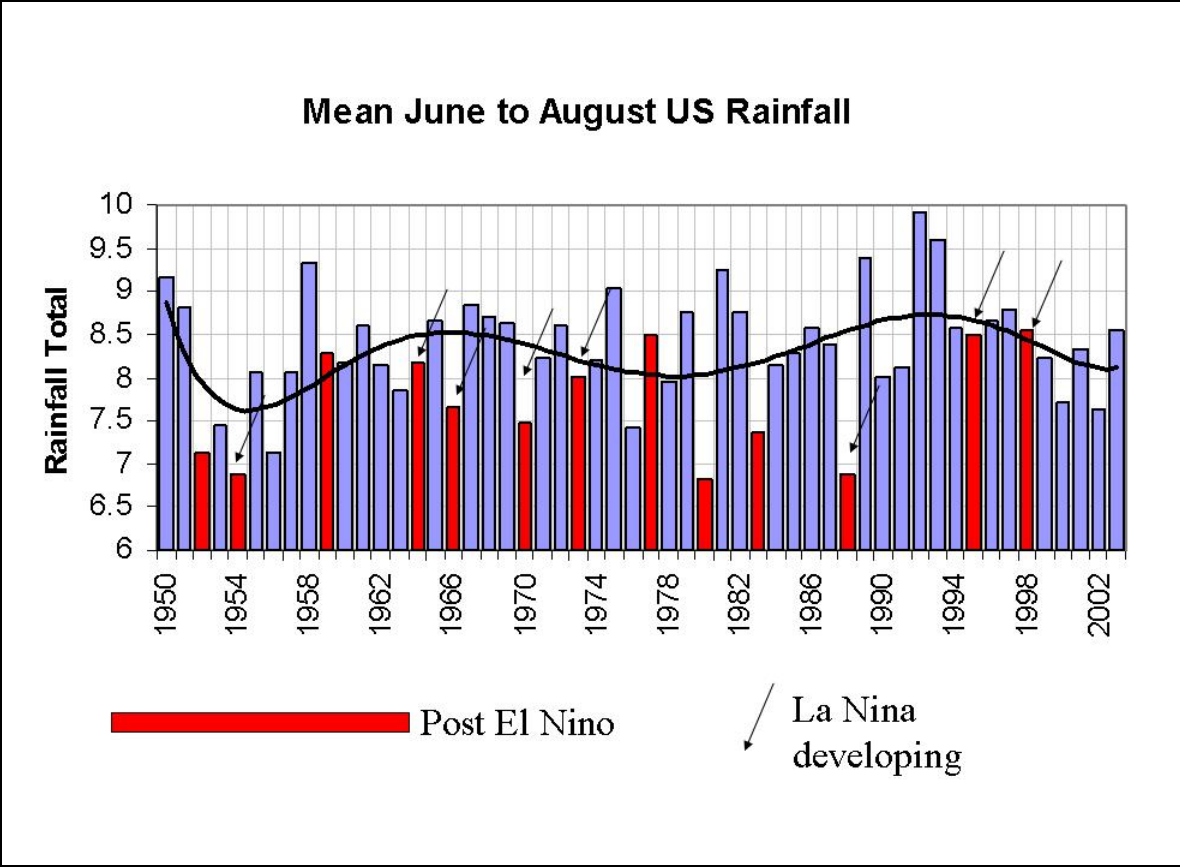


WHY HEAT AND DROUGHT COULD BE IN THE CARDS THIS SUMMER

As La Nina comes on, the prospects of a droughty and hot summer are increasing. Historically this has especially been the case after El Nino winters as shown below.

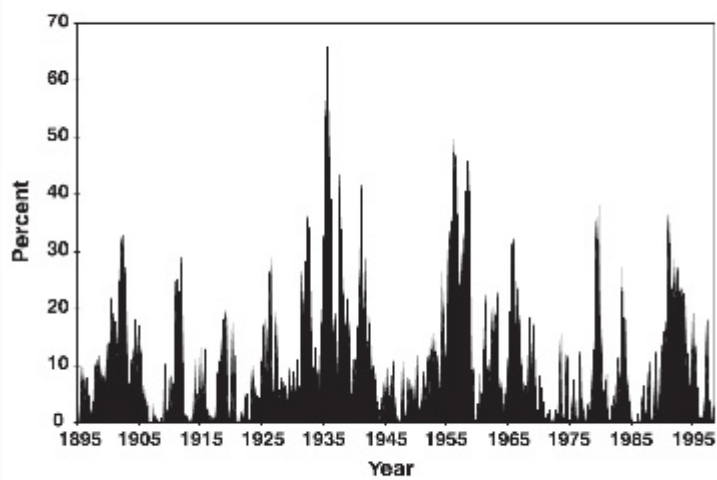




In virtually every case, that scenario has produced a hot and drier than normal summer.

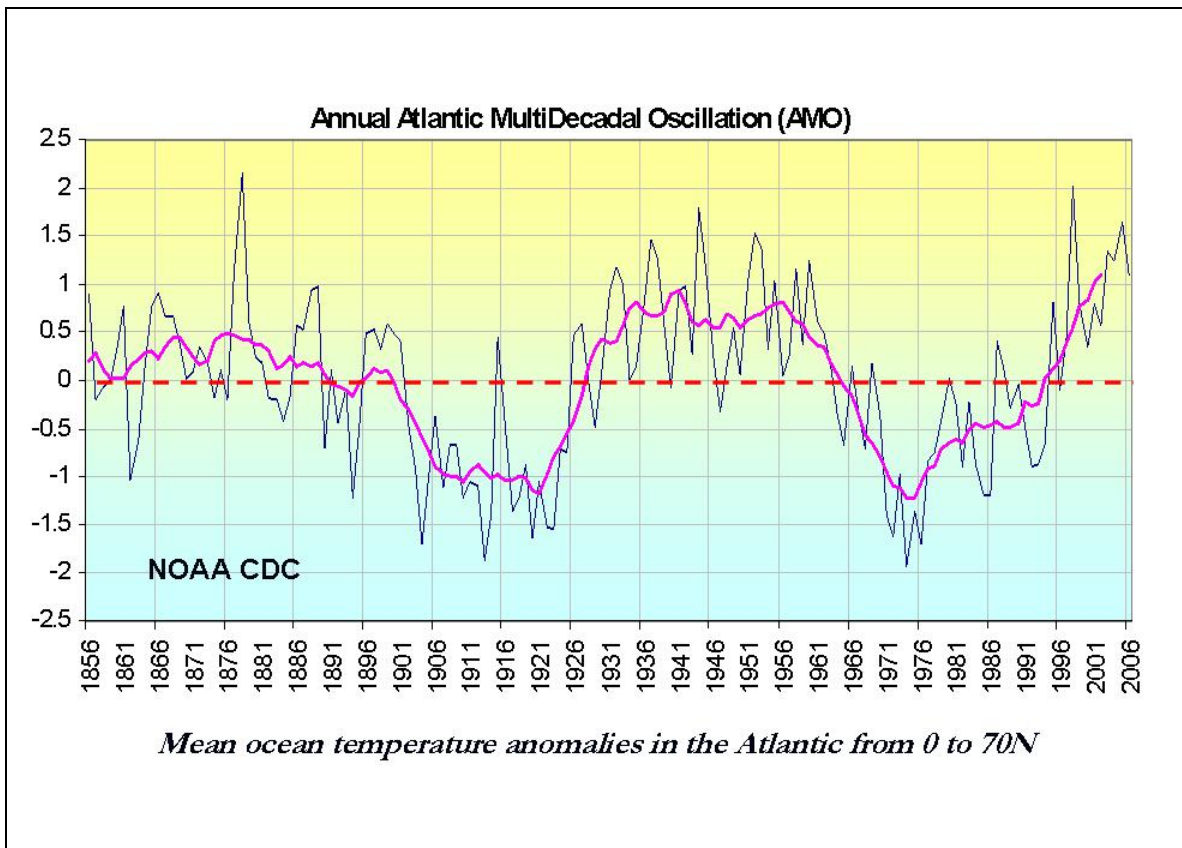
Drought and heat would of course be blamed on global warming but the historical plots of drought show there is no tendency for a steadily increased frequency of drought during the last century.

Severe and Extreme Drought, 1895-1995 (percentage of U.S. land area affected)

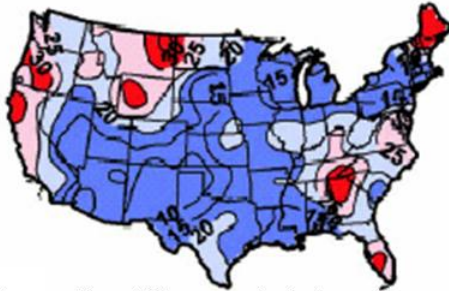


Source: National Drought Mitigation Center.

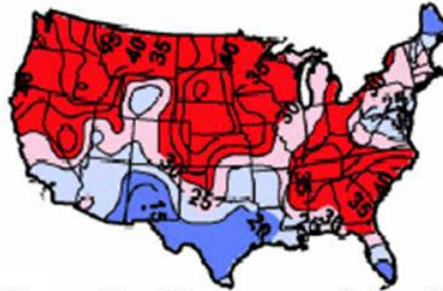
Clearly drought was more severe in the 1930s and 1950s than recent years with a few exceptions. That era was a period with a warm Atlantic mode. As the following shows we have reentered that mode.



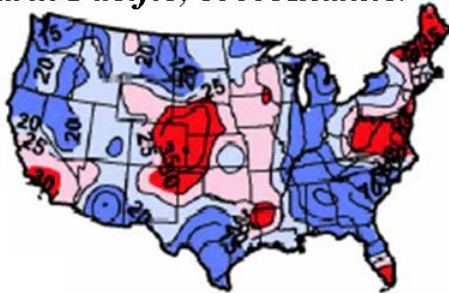
As [McCabe et al](#) found in 2004, drought probability is more likely when the Atlantic is in its warm phase. When the Pacific is cold as is currently the case, there is a tendency for a dry eastern and central Corn Belt and southwest (bottom right map below), both currently the case. Only a wet Texas after a wet winter and spring disagrees.



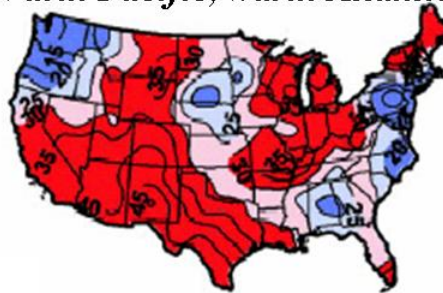
Warm Pacific, cool Atlantic.



Warm Pacific, warm Atlantic.



Cool Pacific, cool Atlantic.



Cool Pacific, warm Atlantic

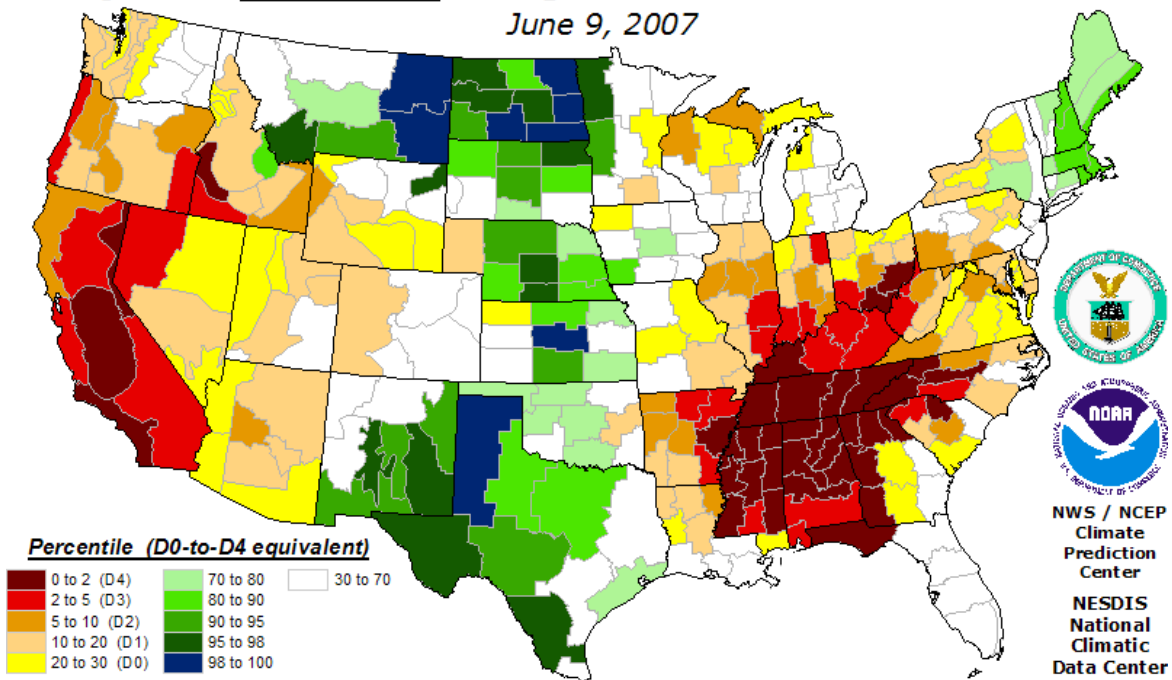
Drought frequency (in percent of years)

Pacific and Atlantic Ocean Influences on Multidecadal Drought Frequency in the United States, Gregory J. McCabe, Michael A. Palecki, and Julio L. Betancourt

The current dryness is shown below:

Objective *Short-Term* Drought Indicator Blend Percentiles

June 9, 2007



This map approximates impacts that respond to precipitation over several days to a few months, such as agriculture, topsoil moisture, unregulated streamflows, and most aspects of wildfire danger. The relationship between indicators and impacts can vary significantly with location and season. Do not interpret this map too literally.

This map is based on preliminary climate division data. Local conditions and/or final data may differ. See the detailed product suite description for more details.

History suggest rains perhaps through tropical activity comes to the south Atlantic but with high summer temperatures and evapotranspiration rates, the drought areas inland should only grow. The wild card of course is a tropical system that rolls inland and dumps heavy rains over dry areas.