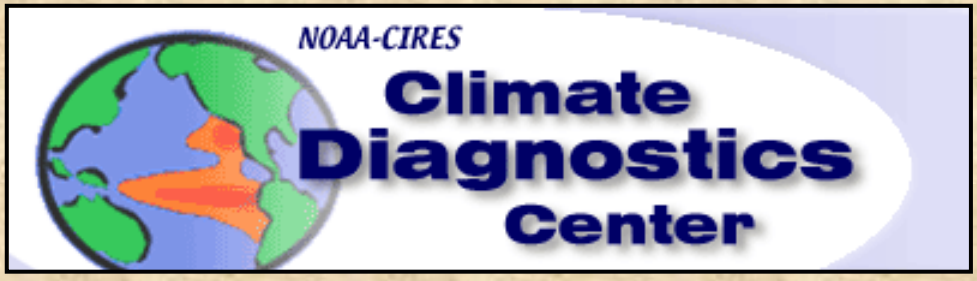

Seasonal Outlook through November 2006

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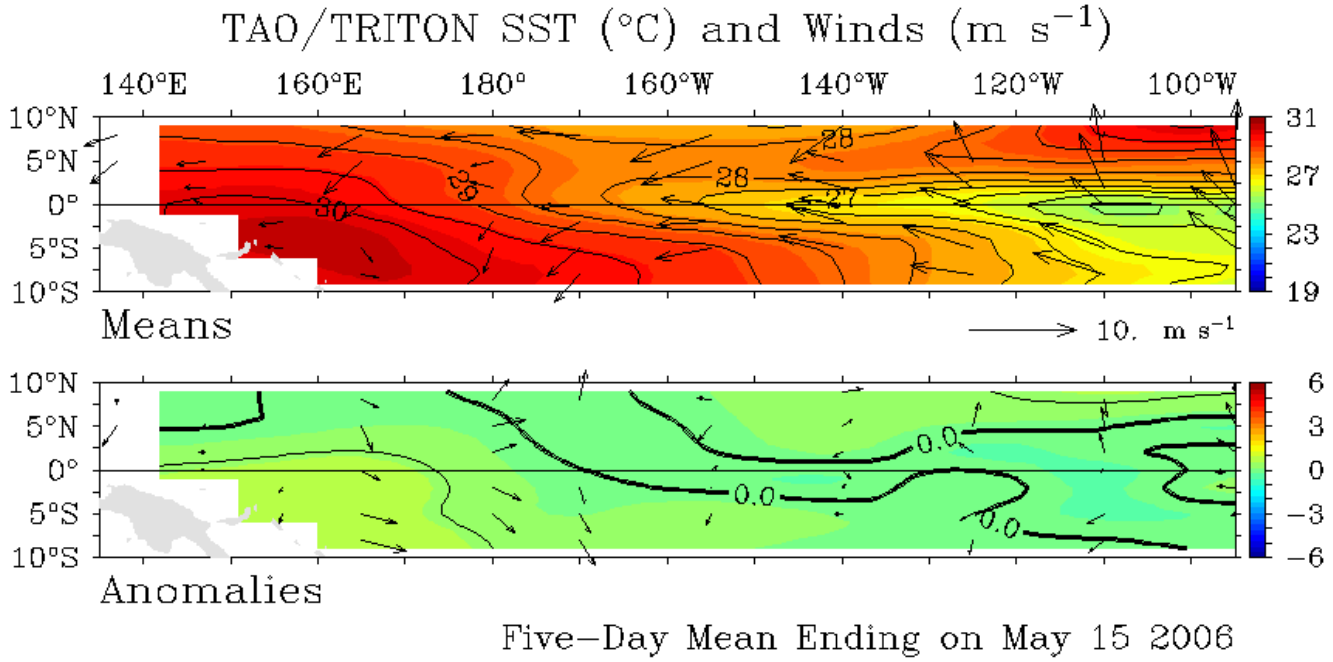
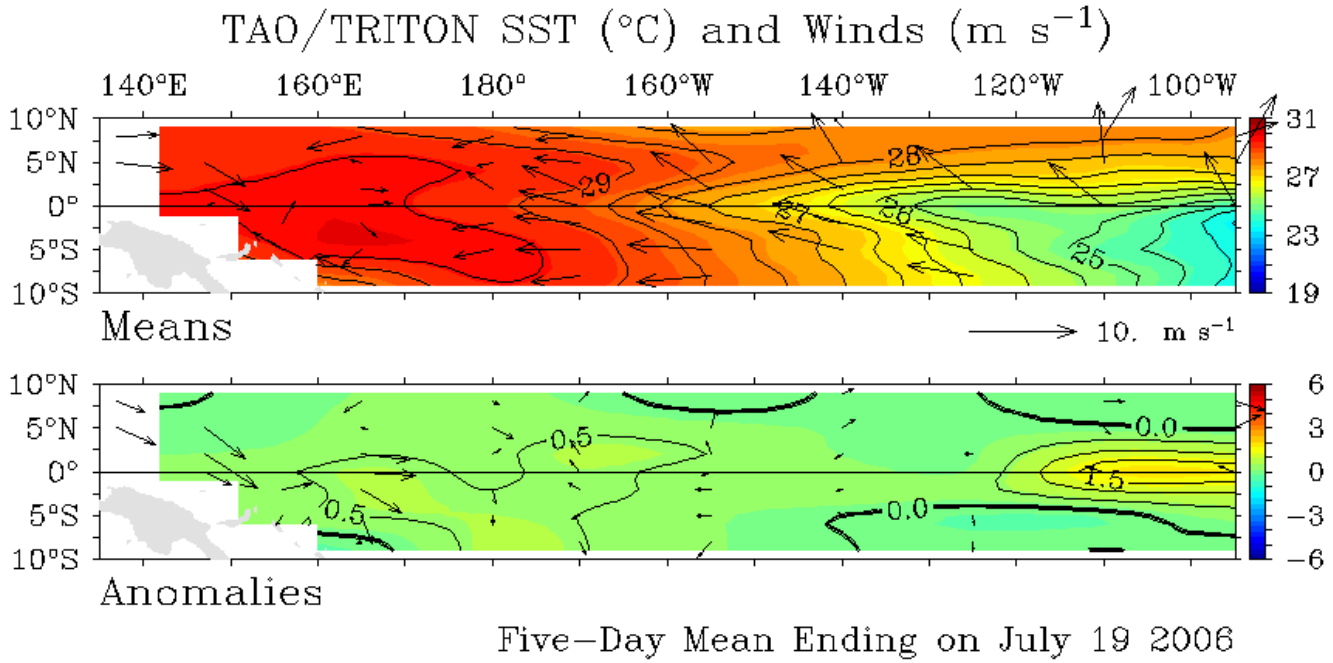
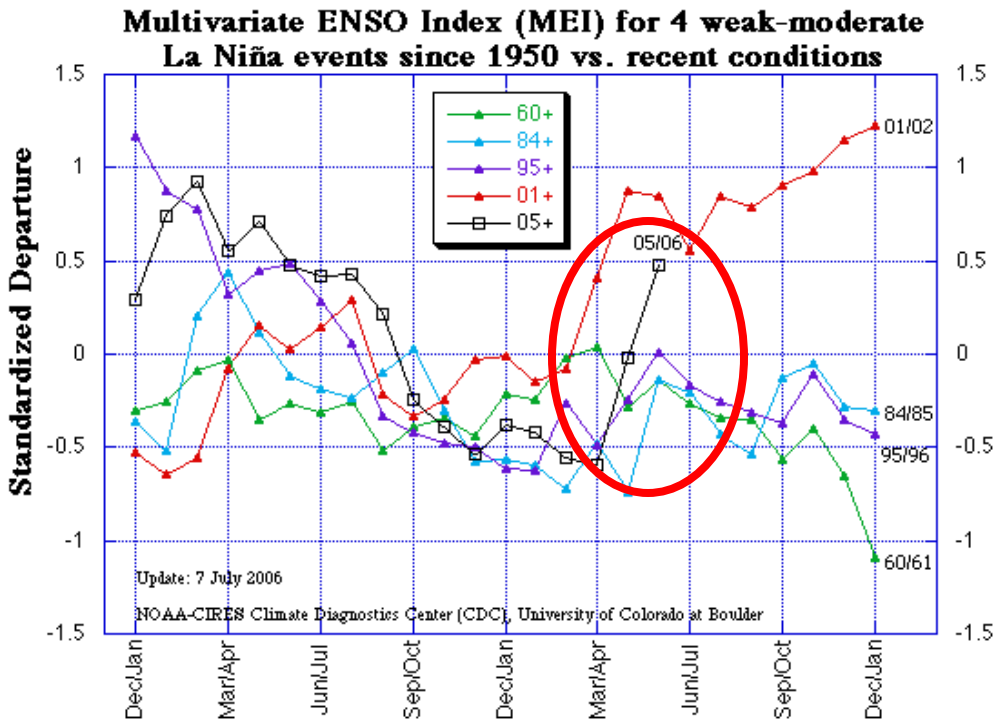
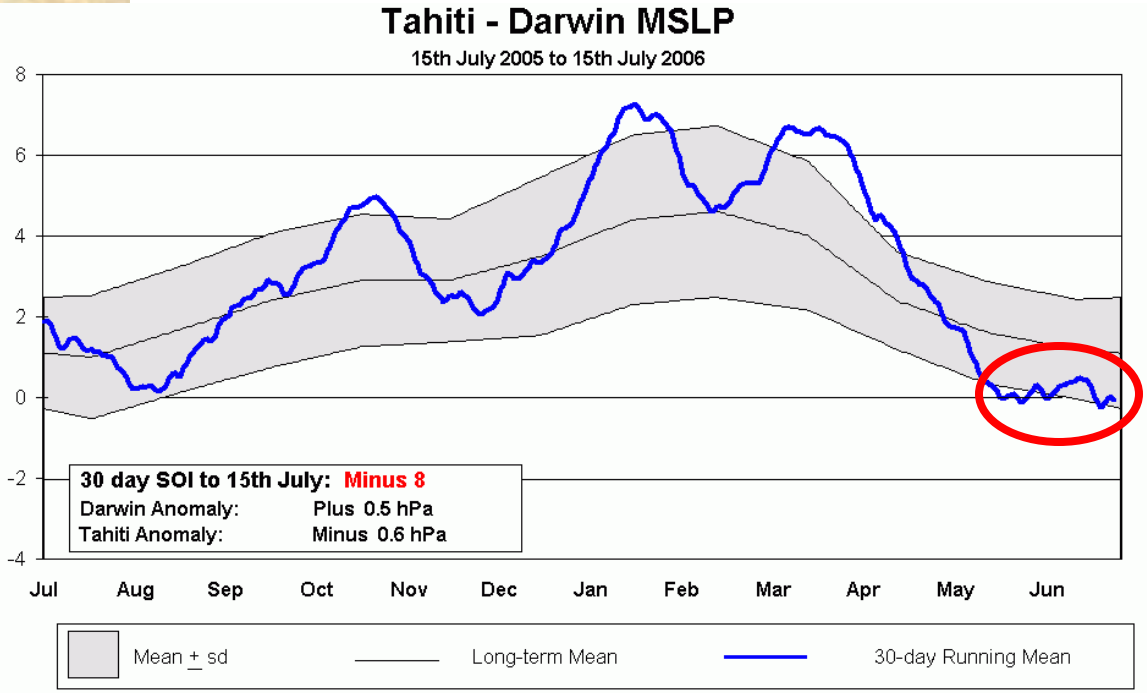
- **El Niño stirring?**
- **CPC forecasts for August-November 2006**
- **Experimental forecast guidance**



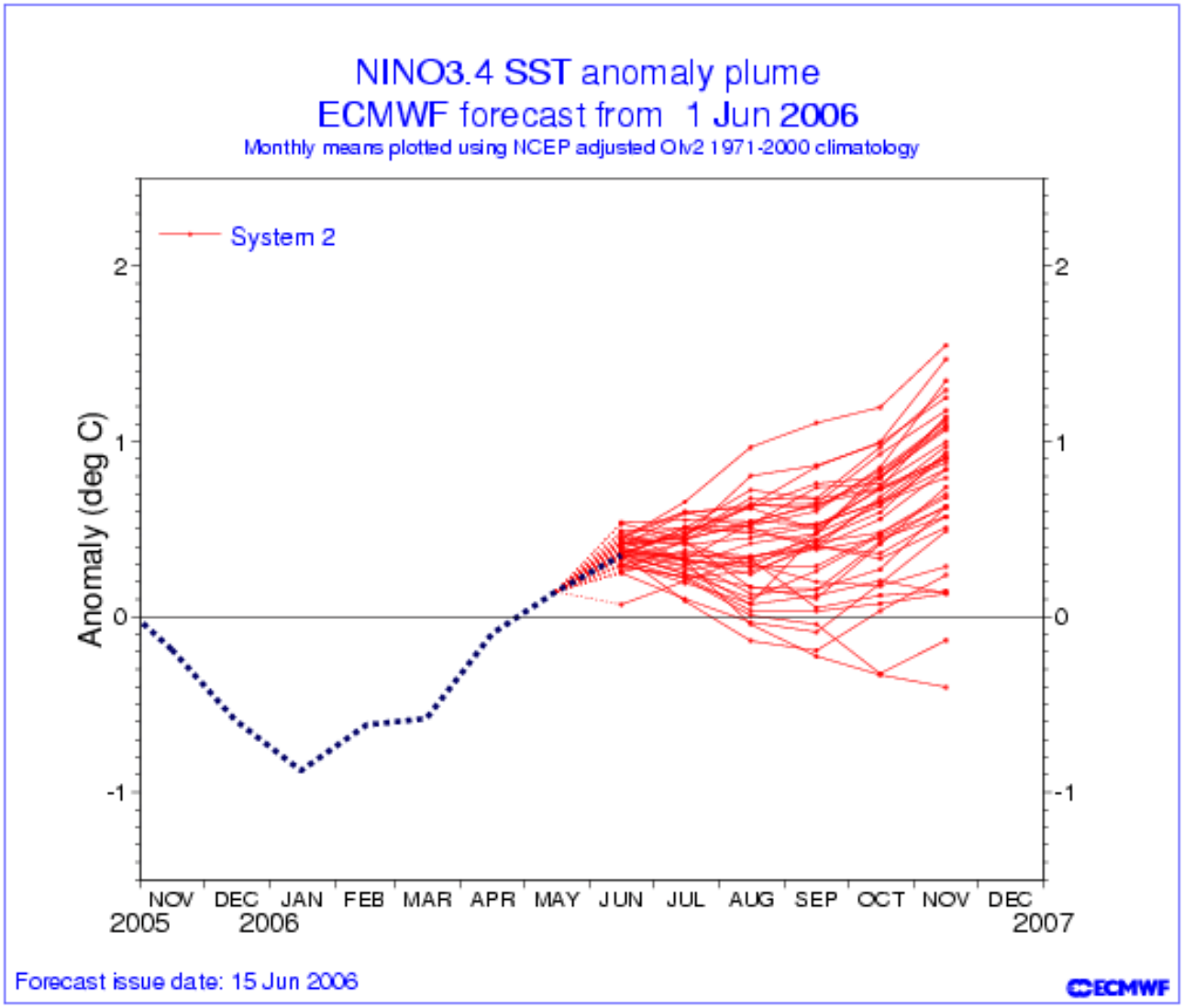


Current state of ENSO (bottom) compared to May - not only is La Niña gone, one could argue that El Niño is trying to establish itself. The big anomalies near 110W should be taken with a grain of salt due to data problems.

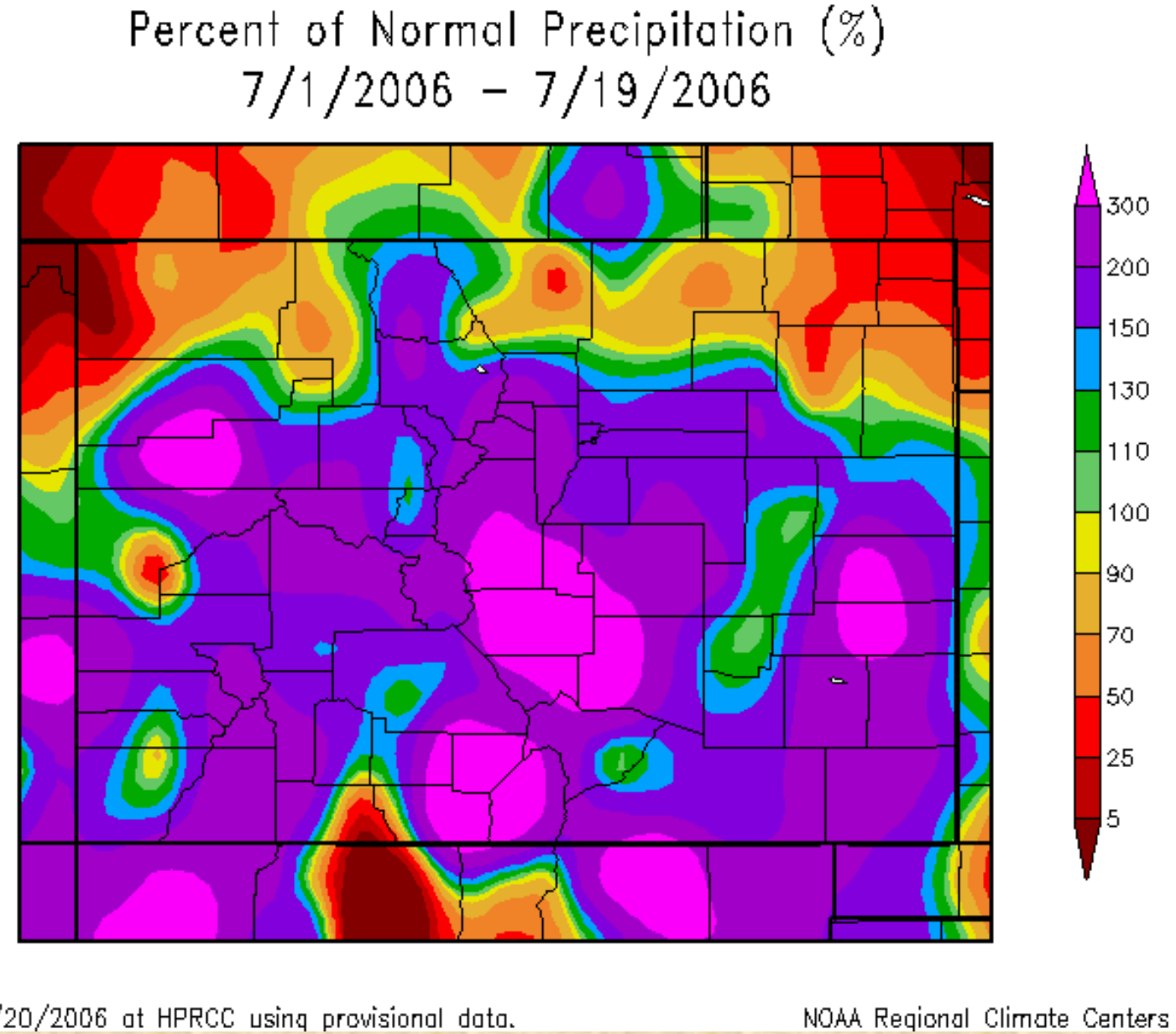




The most recent MEI value (May-June) has come up tremendously (top), very suggestive of imminent El Niño conditions, while the Southern Oscillation Index (below) has gone from full-blown La Niña conditions in April to moderate El Niño conditions since June.

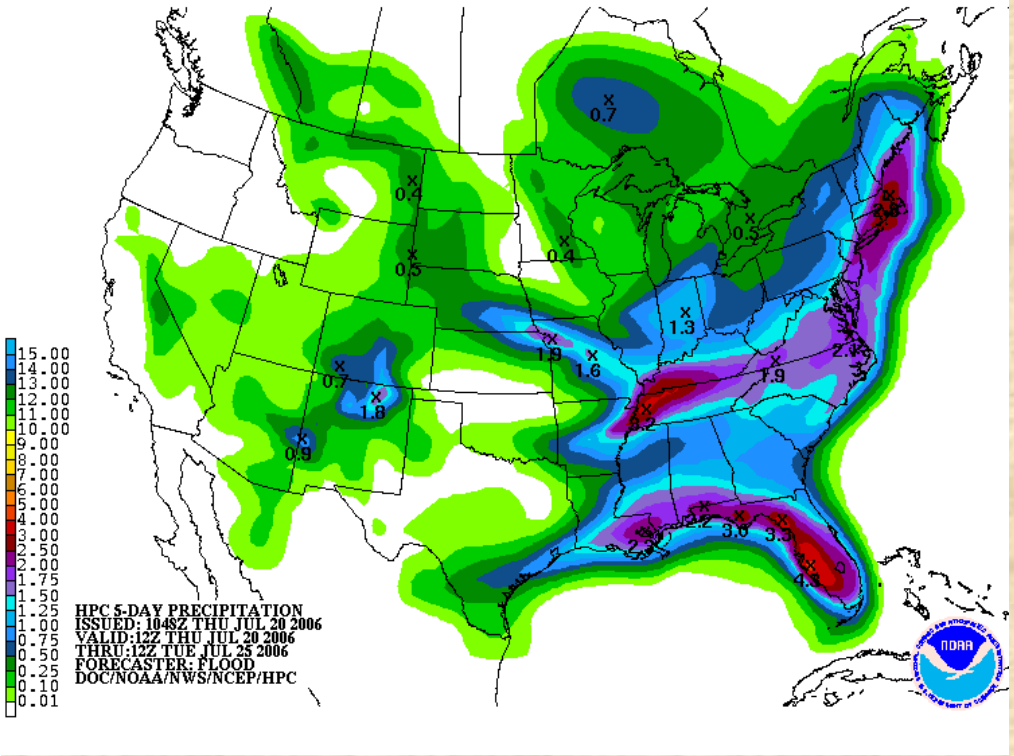


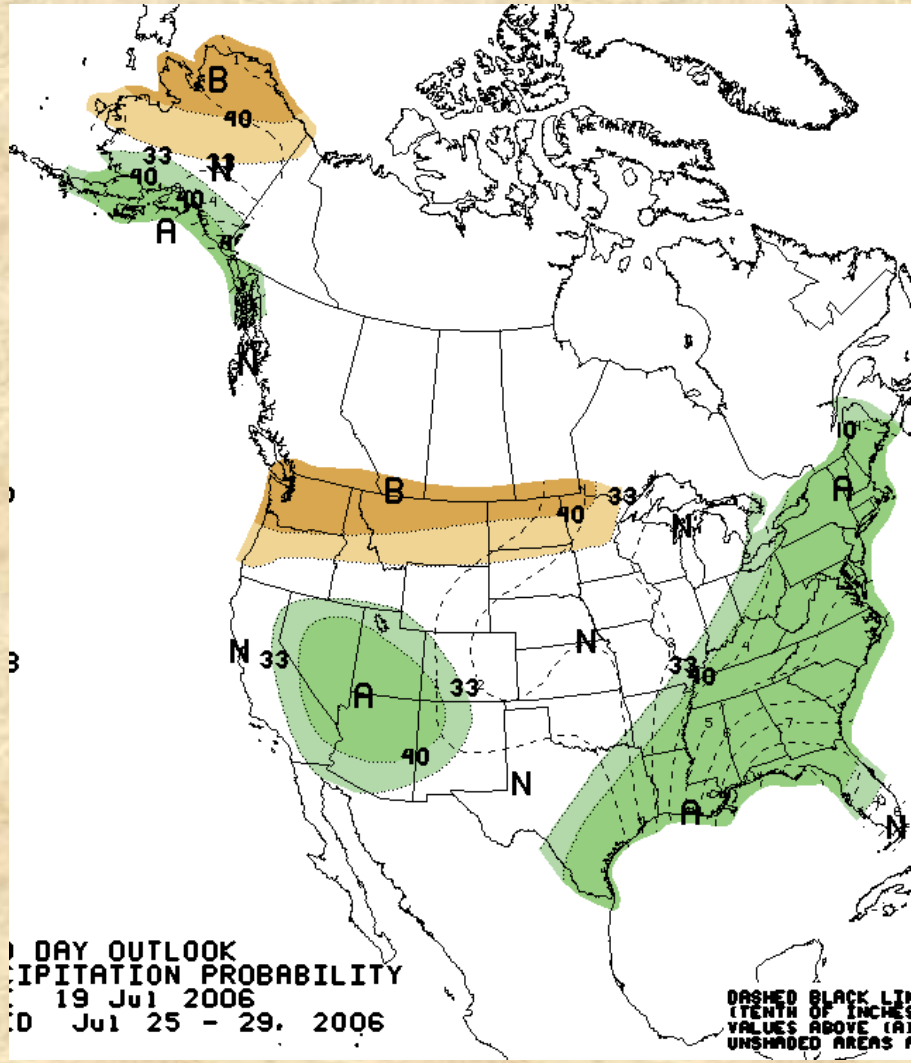
The European model's most recent forecast (from last month, next update by tomorrow) maintains currently weak El Niño conditions into the fall, followed by a nod towards stronger El Niño conditions by November (+1C could be considered moderate strength). Many other models show a similar upward trend.



For the month since our last meeting, most of the interior southwest, including Colorado, has seen a very early onset of the summer monsoon (in late June), resulting in localized flash-flooding in particular during the 2nd week of July.

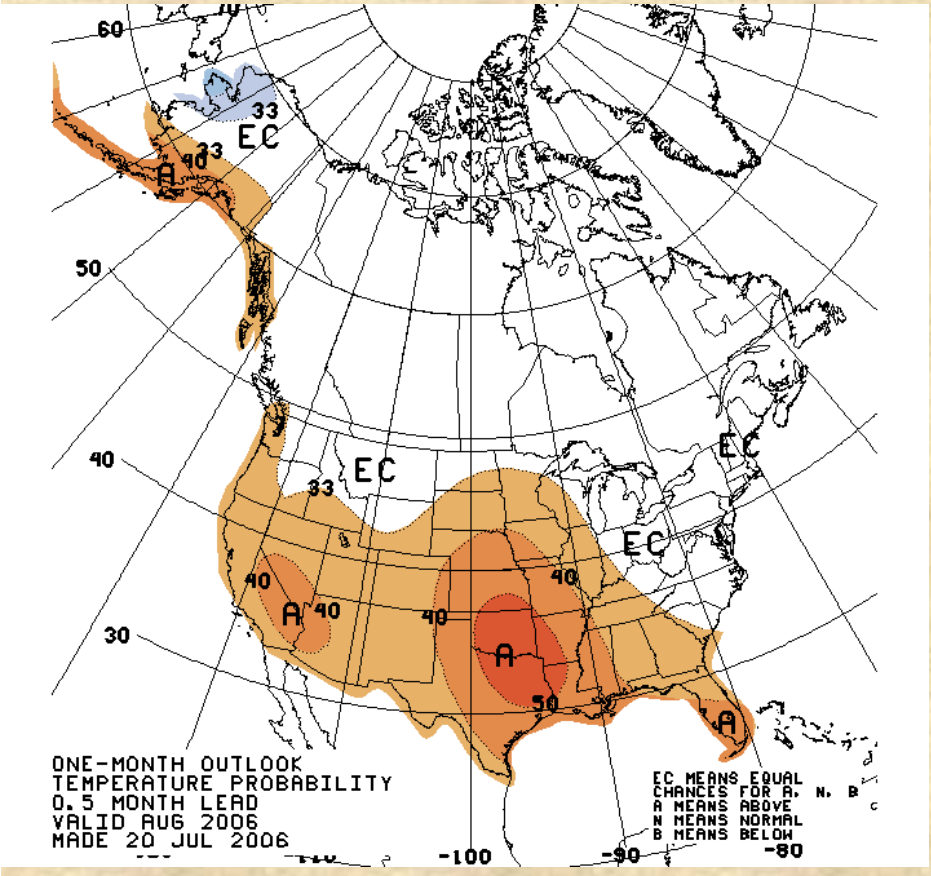
After a wet onset of the monsoon, how about the next two weeks?

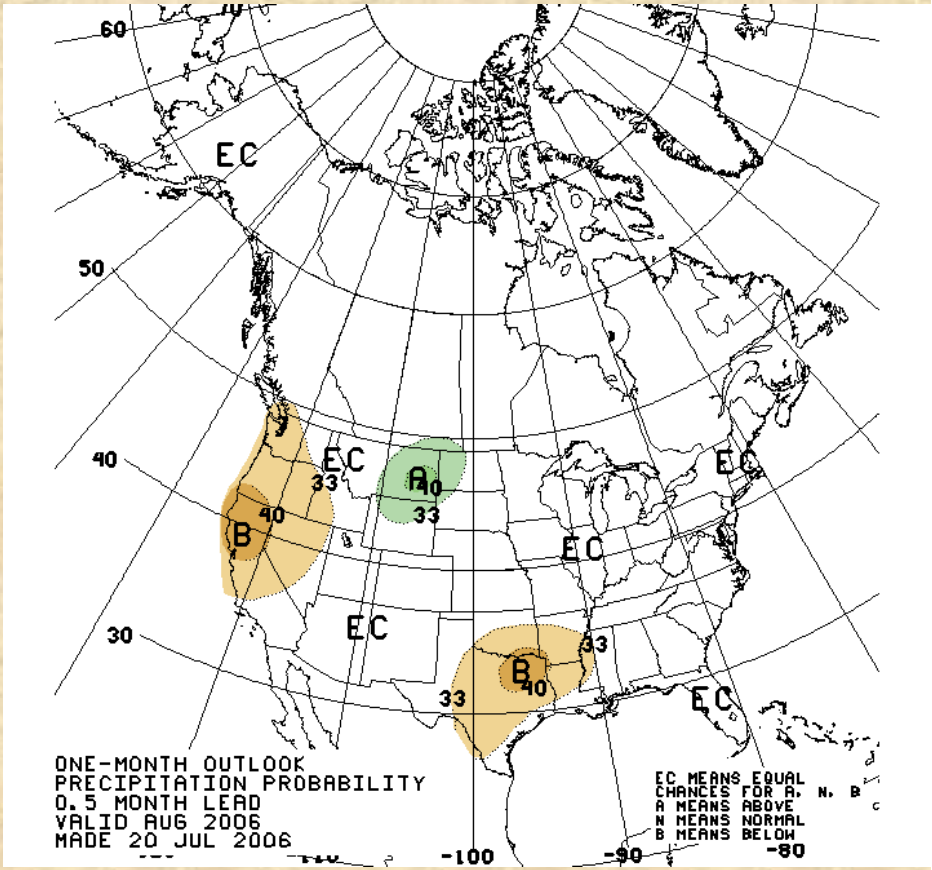




CDC ensembles are 'AWOF' (absent without funds!), other tools show some promise for continued rains in this, the core monsoon season. Left figure shows the official 1-5 day forecast, while the right one shows yesterday's 6-10d. forecast.

August Forecasts (CPC)

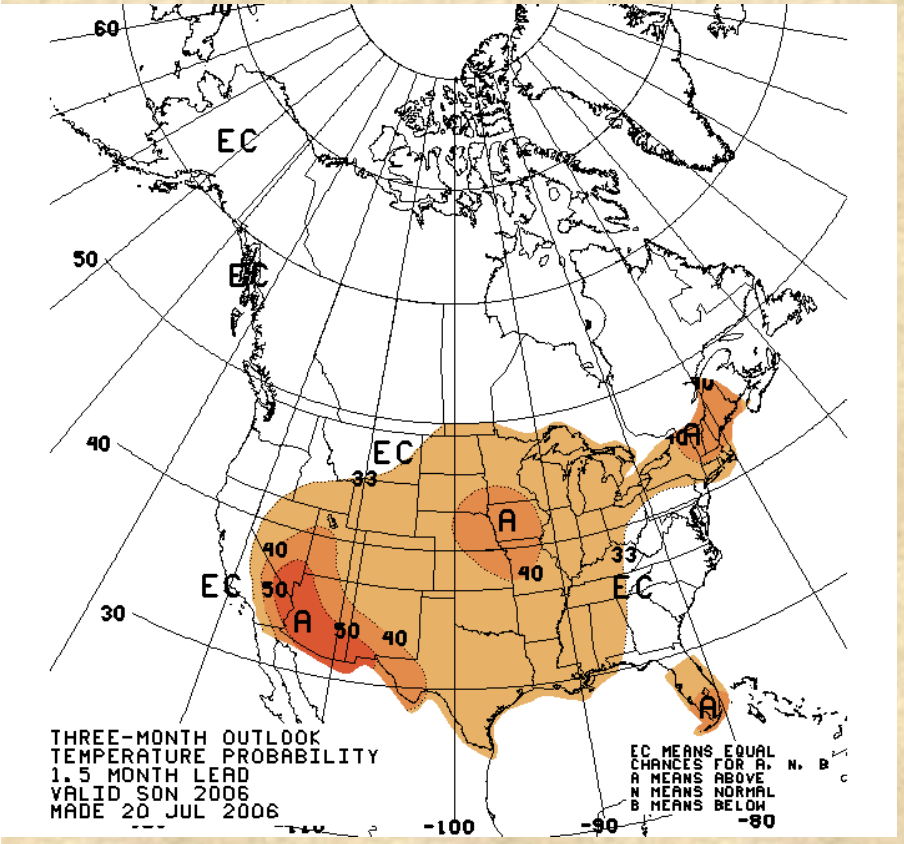


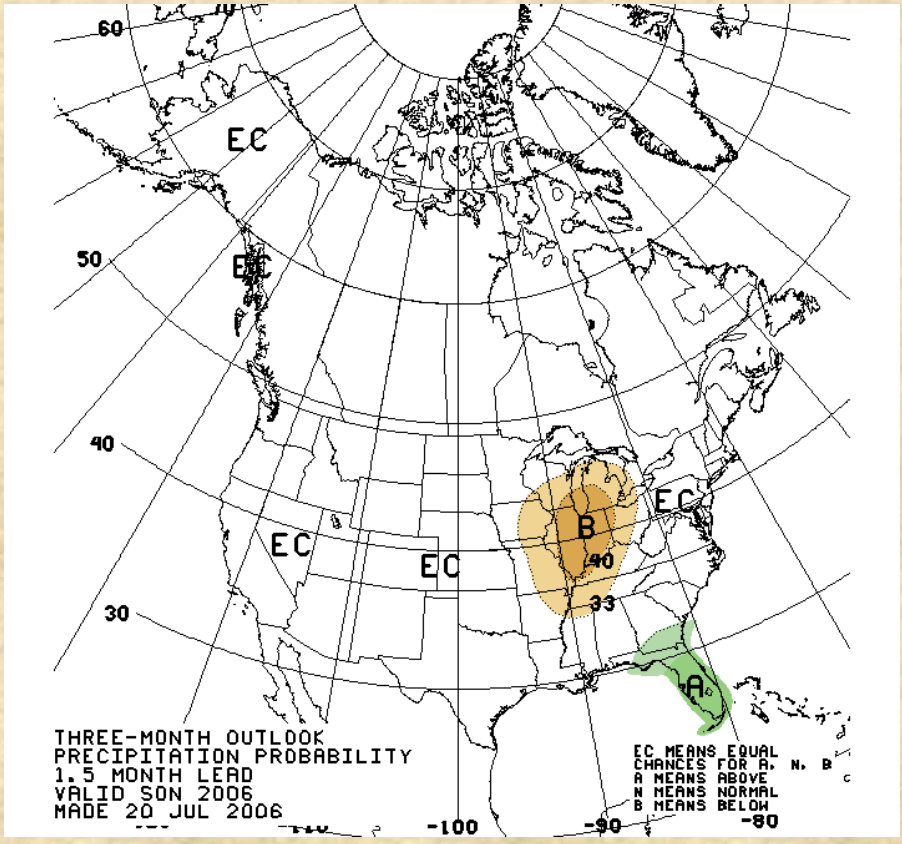


CPC's official forecast for August 2006 temperatures (left) is on the warm side of the 1971-2000 climate normals over most of the U.S., mostly due to an overall warming trend. They leave us in "EC" for precipitation (right).

Source: ***http://www.cpc.ncep.noaa.gov/products/predictions/30day/***

September-November Forecasts (CPC)

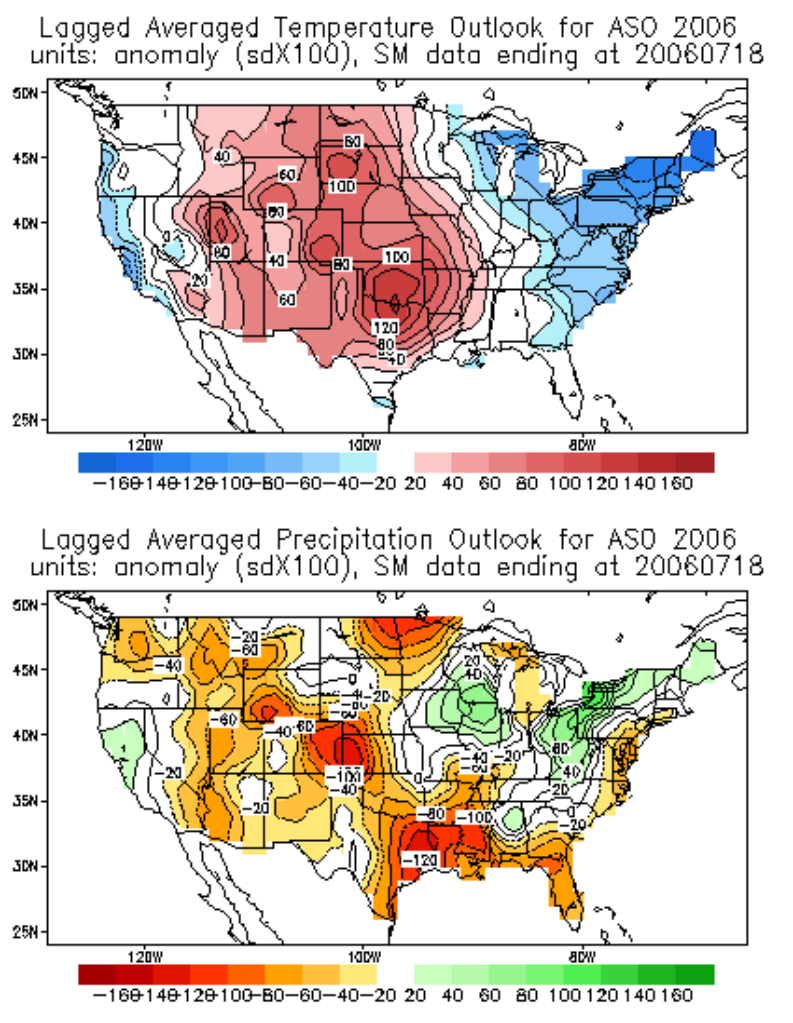


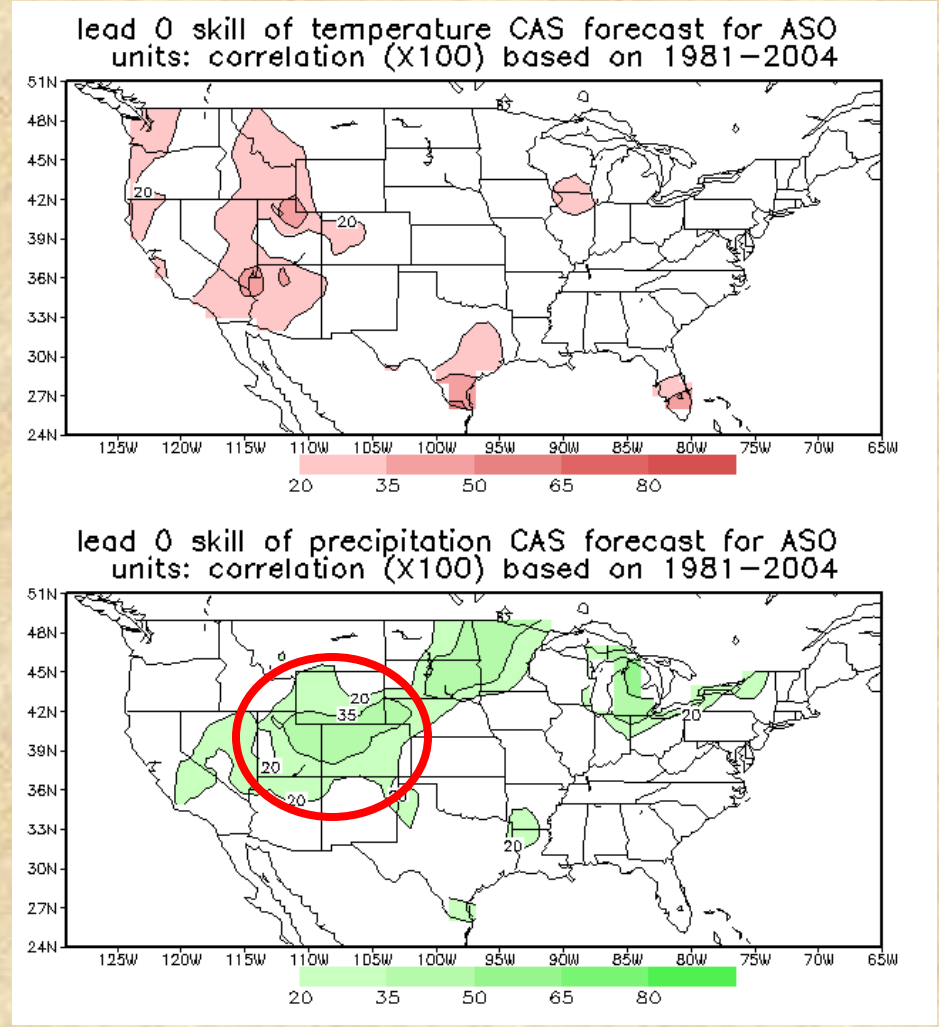


CPC's official forecast for September-November 2006 temperatures (left) is on the warm side of the 1971-2000 climate normals over most of the U.S., also due to an overall warming trend. They leave us in "EC" for precipitation (right). El Niño is not (yet) a factor in these forecasts.

Source: ***http://www.cpc.ncep.noaa.gov/products/predictions/90day/***

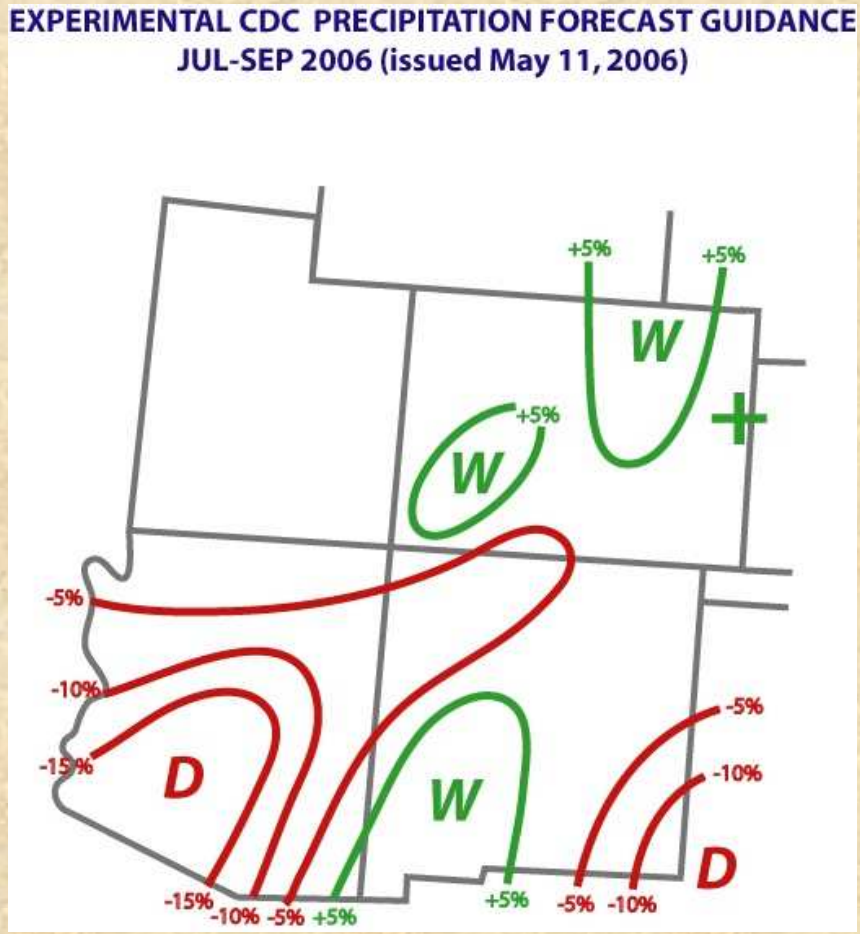
Constructed Analog Forecasts (CPC)

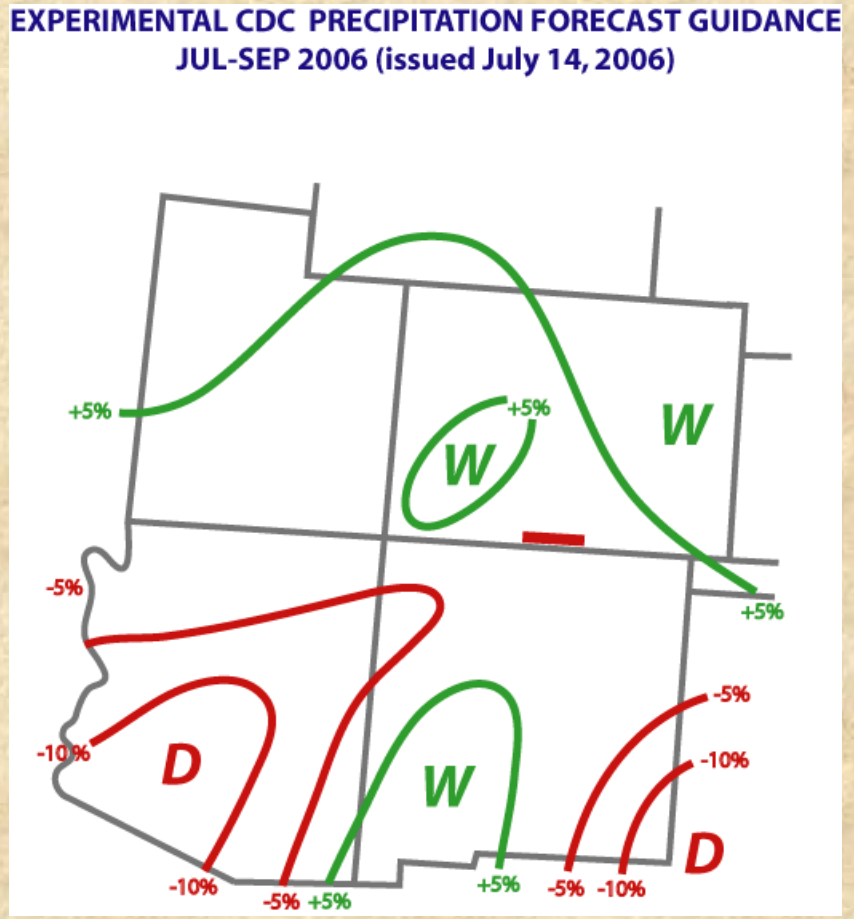




According to 'Constructed Analog' forecasts from CPC, **August-October** (left) combines warmer -than-average temperatures with reduced precipitation amounts. The skill for the precipitation forecast in Colorado is annoyingly good, putting a damper on my own forecast expectations. However, the CAS June forecast was off despite high a priori skill as well.

Experimental CDC Forecasts





May's forecast of the summer monsoon (left) showed a positive tilt of the odds for Colorado, supported by high skill in the northwestern part of the state, but not the rest. Updated forecasts (right) confirm this guardedly optimistic outlook for us (and New Mexico).

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Executive Summary (20 July 2006)

1. A weak La Niña pattern was replaced by near-normal sea surface temperature anomalies in April, and appears to be developing into a weak El Niño. Whether this is in time to benefit our summer monsoon, remains to be seen.
2. Since last month, we have seen significant relief in terms of widespread above-normal precipitation around most of Colorado. This may have been too late for many agricultural interests, but certainly reduced our wildfire danger. However, a strong heat wave in mid-July threatened to wipe out many of the gains made.
3. My experimental forecast guidance for July-September precipitation covers large parts of Colorado and New Mexico with favorable odds, while leaving Arizona and southeastern New Mexico under the threat of yet another dry season. While both Arizona and New Mexico summer monsoon seasons have been anticipated with some skill since 2000, Colorado's optimistic outlook is handicapped by poor skill performance over the same period.
4. Bottomline: Our spring season was exceptionally hot and dry, only partially explained by lingering La Niña effects. The July-September monsoon has the potential to be above-average from southwestern New Mexico into eastern Colorado (despite some caveats about the forecast skill in our state), while temperatures appear to remain mostly on the warm side. If the fledgling El Niño gains strength over the next month or two, this could provide for a much-hoped for boost in our precipitation chances.