Synoptic Overview of RACORO

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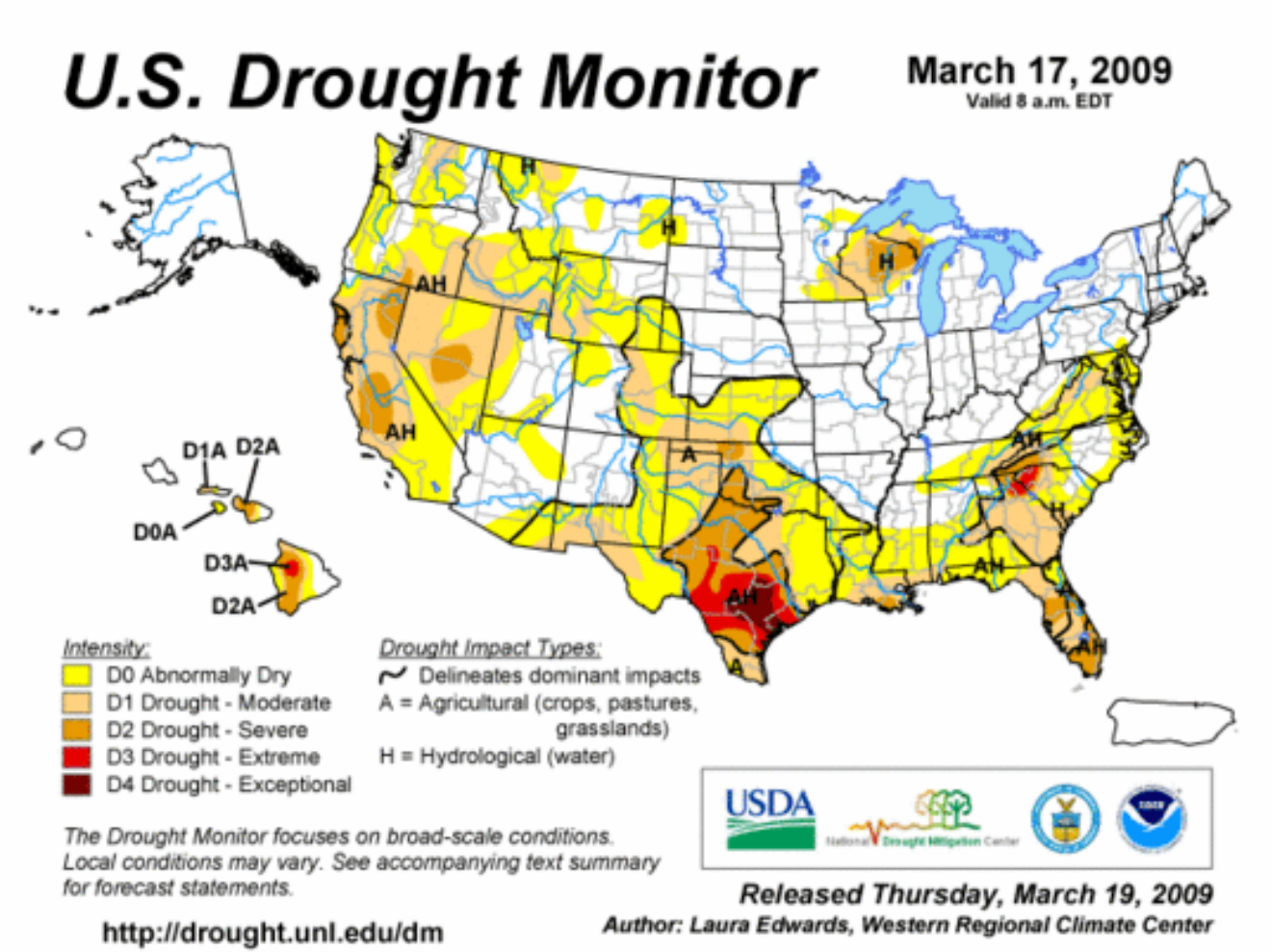
2009 ARM Science Team Meeting
March 31st, 2009
Louisville, KY

Synoptic Overview

- What is going on with the weather?

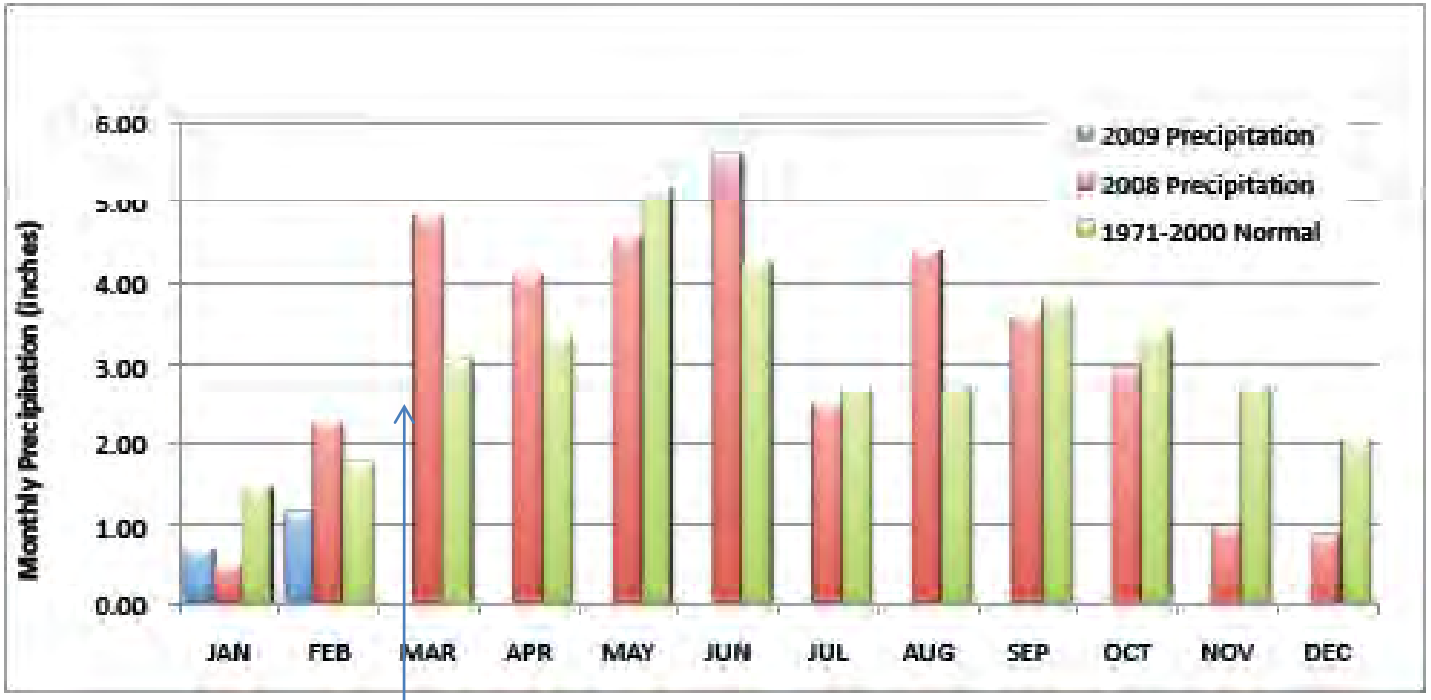
- The following slides will give some insight into why the weather has been so anomalous

Anomalously Dry 2009



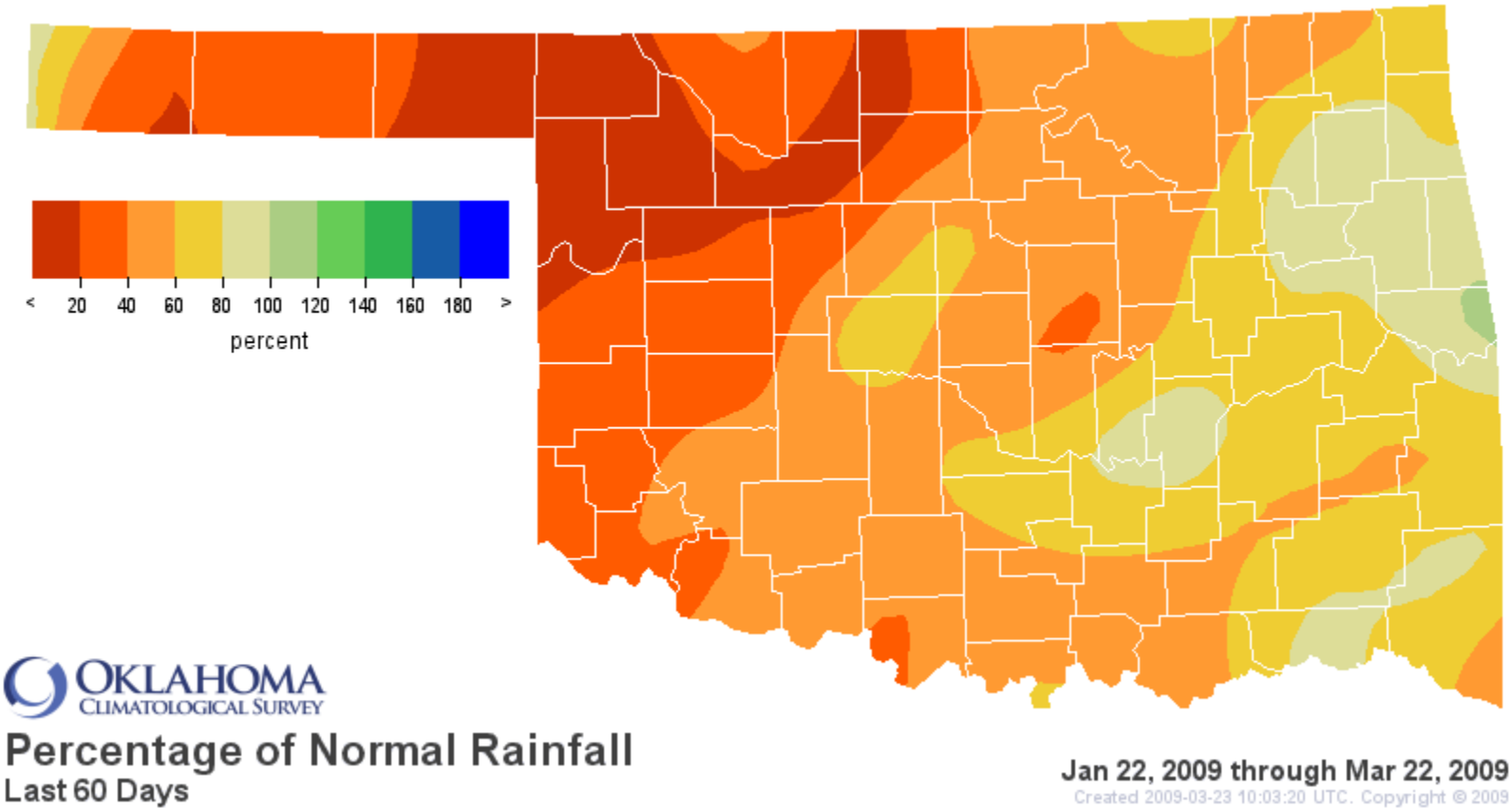
Below Average Precipitation

Oklahoma State-wide Precipitation Data

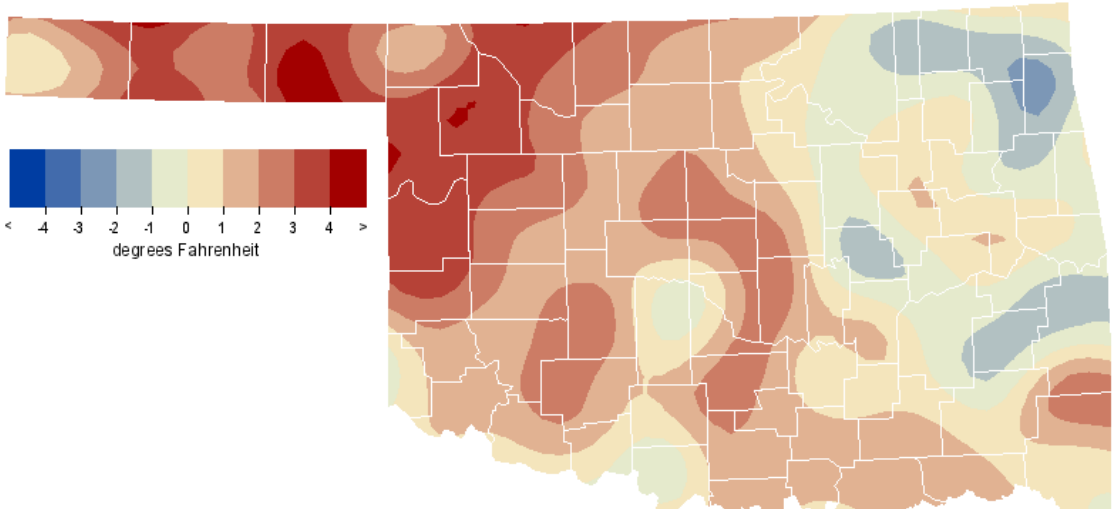


March 1-30, 2009: **2.36** in

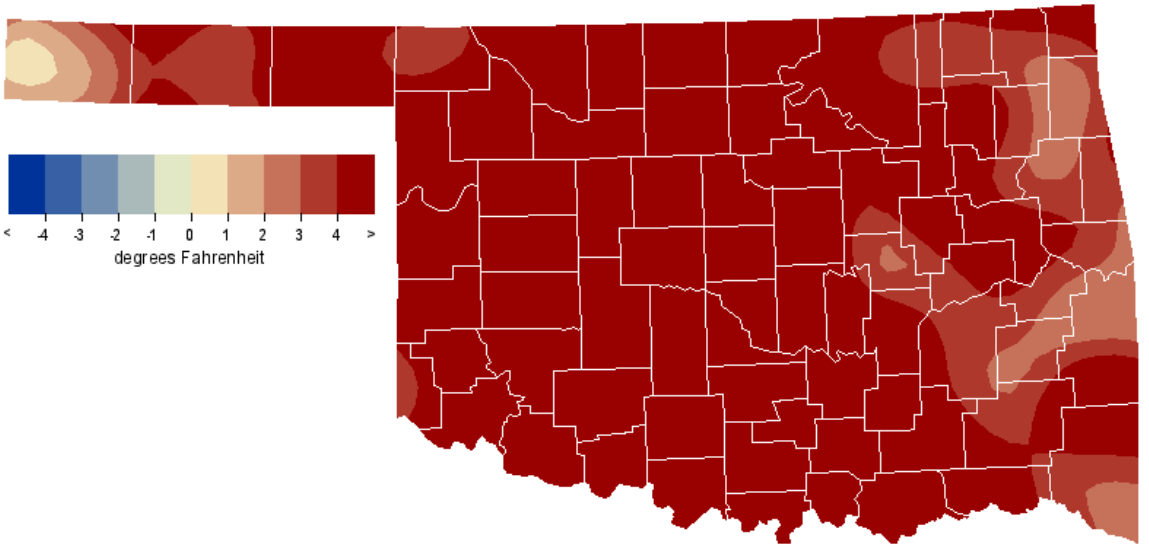
Below Average Precipitation



Warm January & February 2009



January 1-2 deg F warmer than normal at the SGP Site

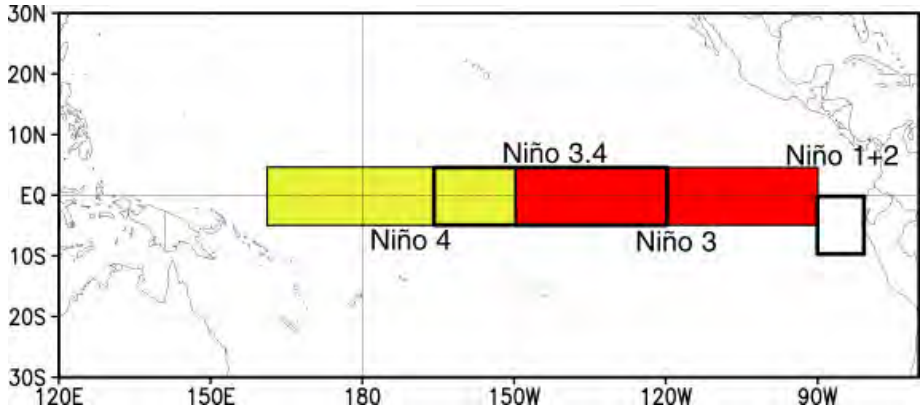


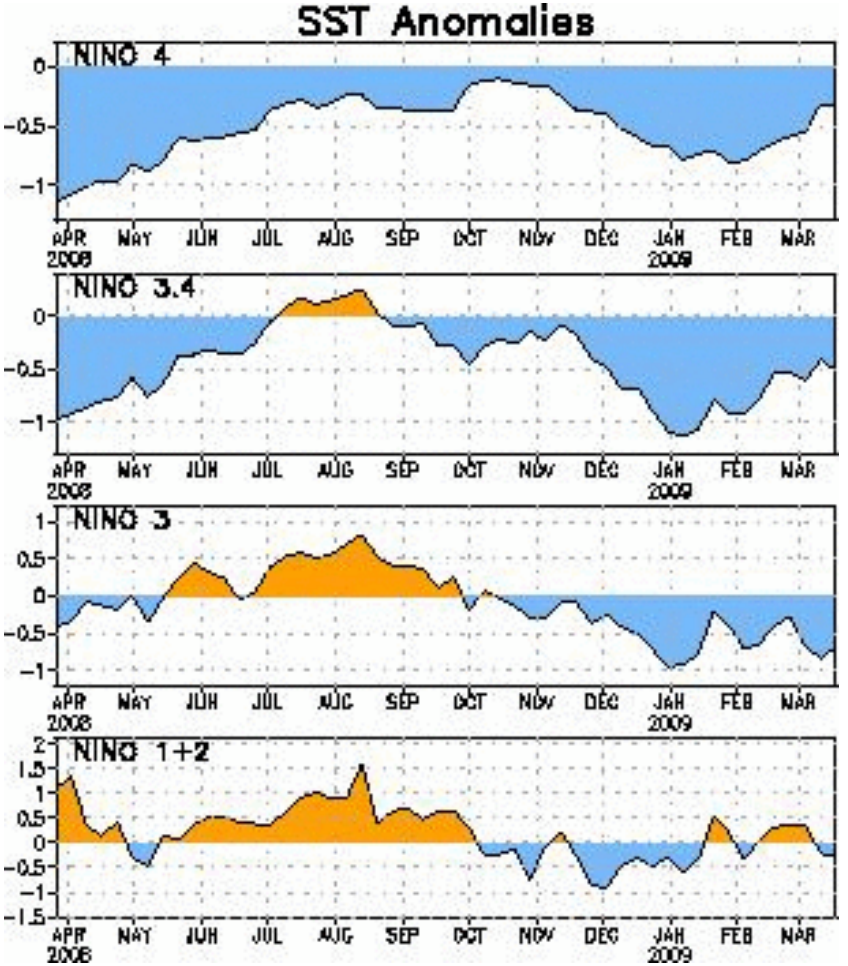
February over 4+ deg F warmer than normal almost state-wide.

La Nina

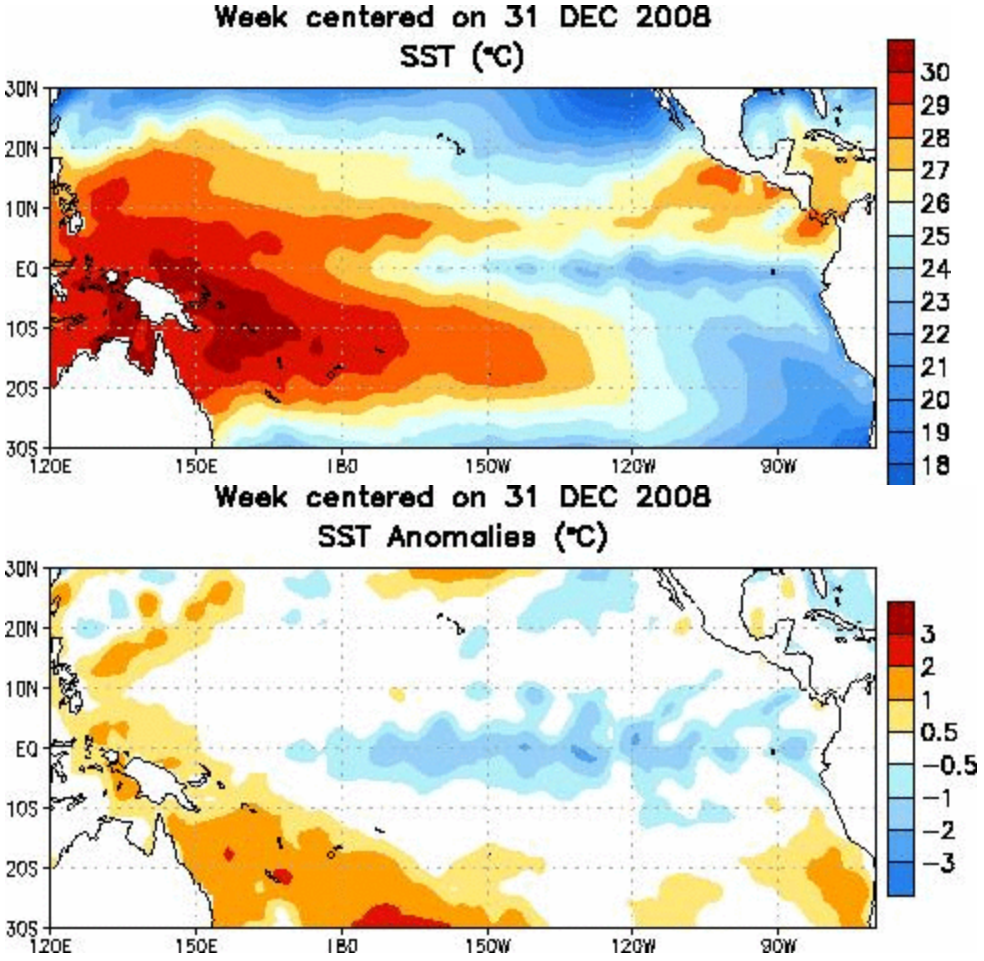
The latest weekly SST departures are:

Niño 4 -0.3ºC
Niño 3.4 -0.5ºC
Niño 3 -0.7ºC
Niño1+2 -0.3ºC



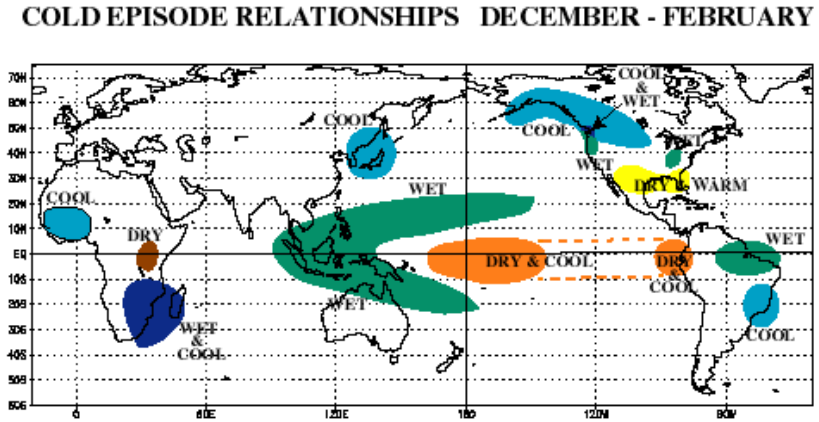


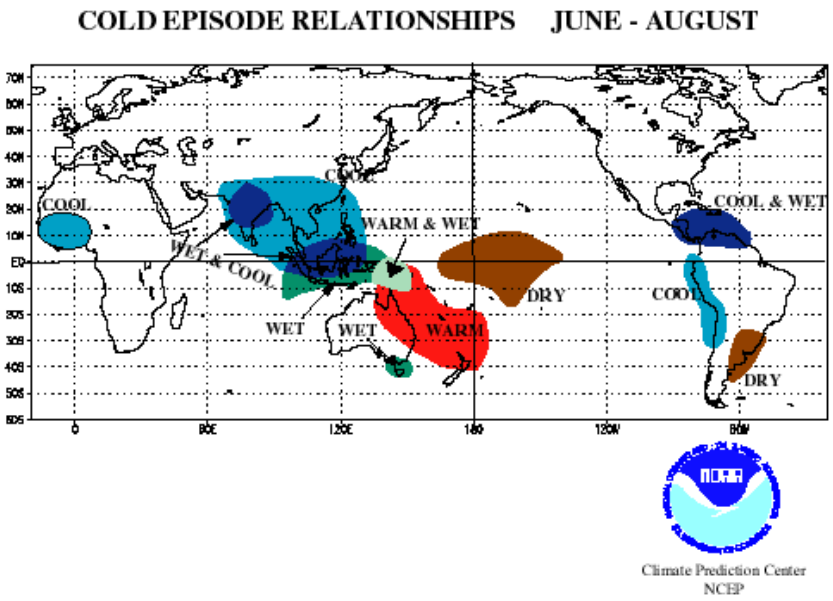
La Nina


Week centered on 31 DEC 2008
SST (°C)
30N
20N
10N
EQ
10S
20S
30S
120E
150E
180
150W
120W
90W
30
29
28
27
26
25
24
23
22
21
20
19
18
Week centered on 31 DEC 2008
SST Anomalies (°C)
3
2
1
0.5
−0.5
−1
−2
−3

La Nina

- Winter
  - Dry and Warm
- Spring
  - Transitioning
- Summer
  - More normal but slightly drier





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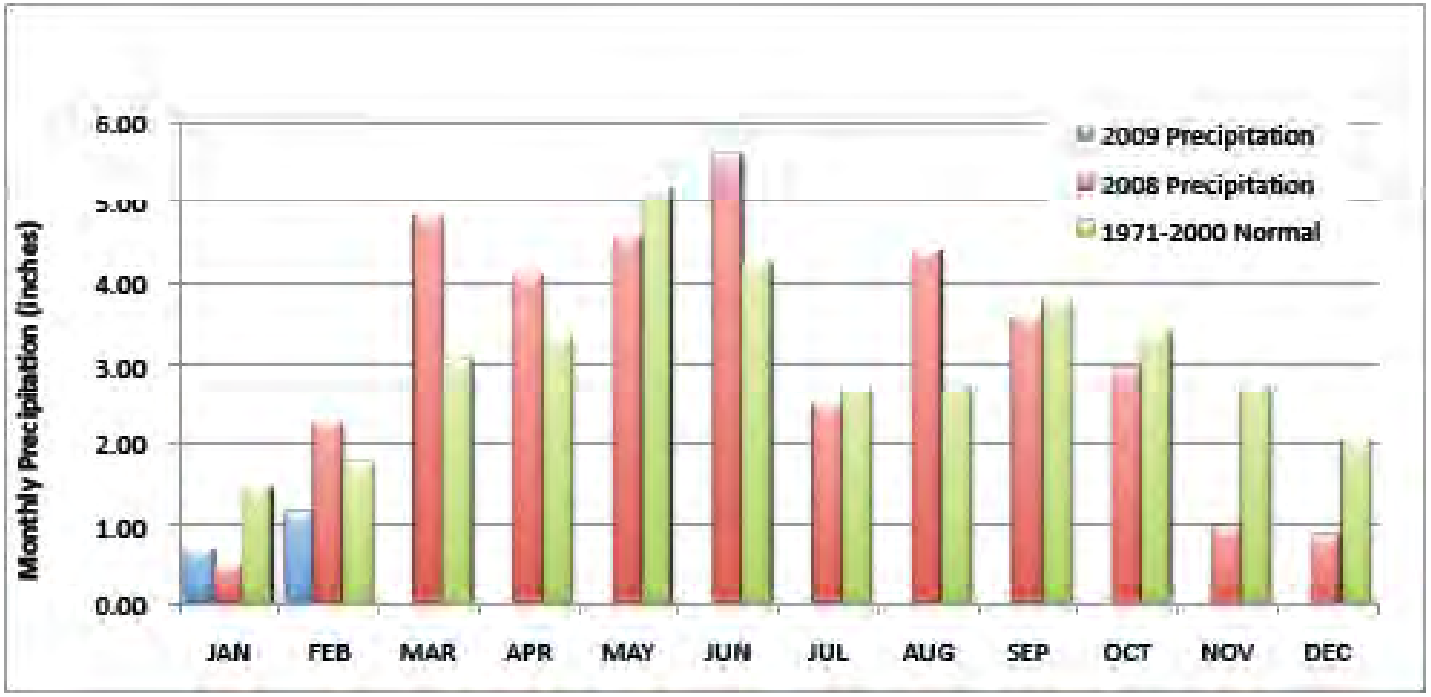
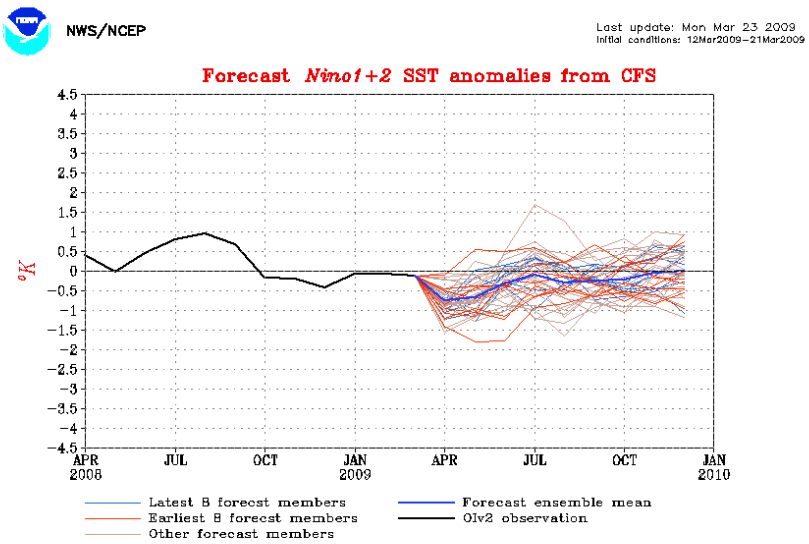
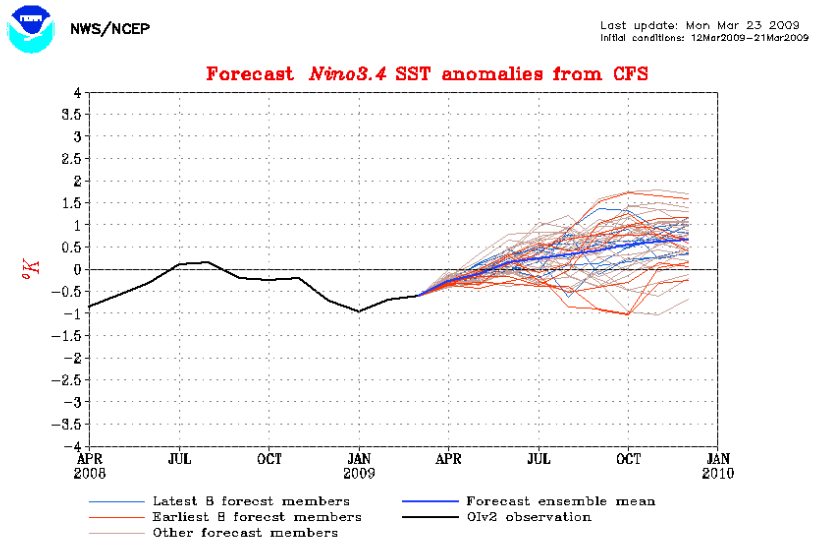
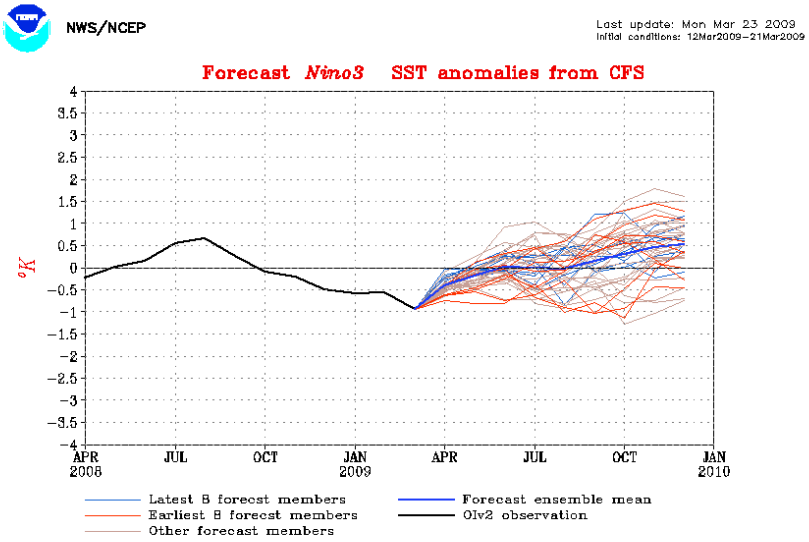
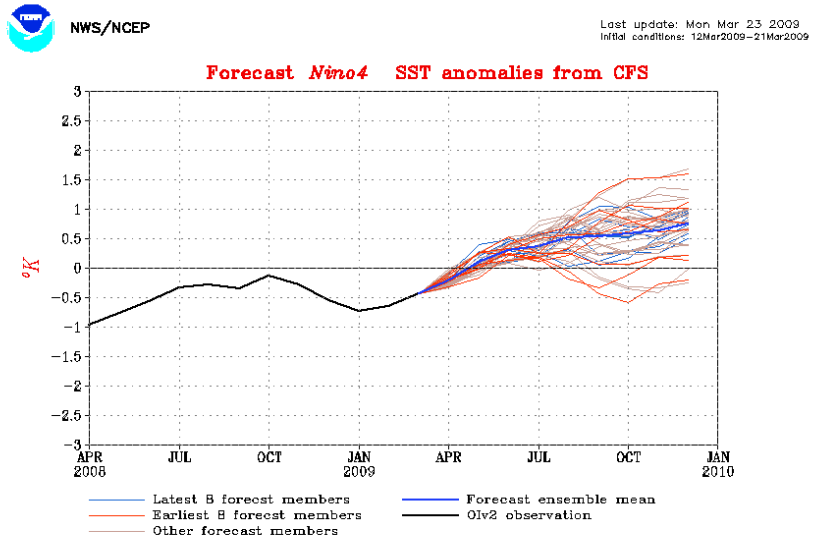


La Nina Forecast

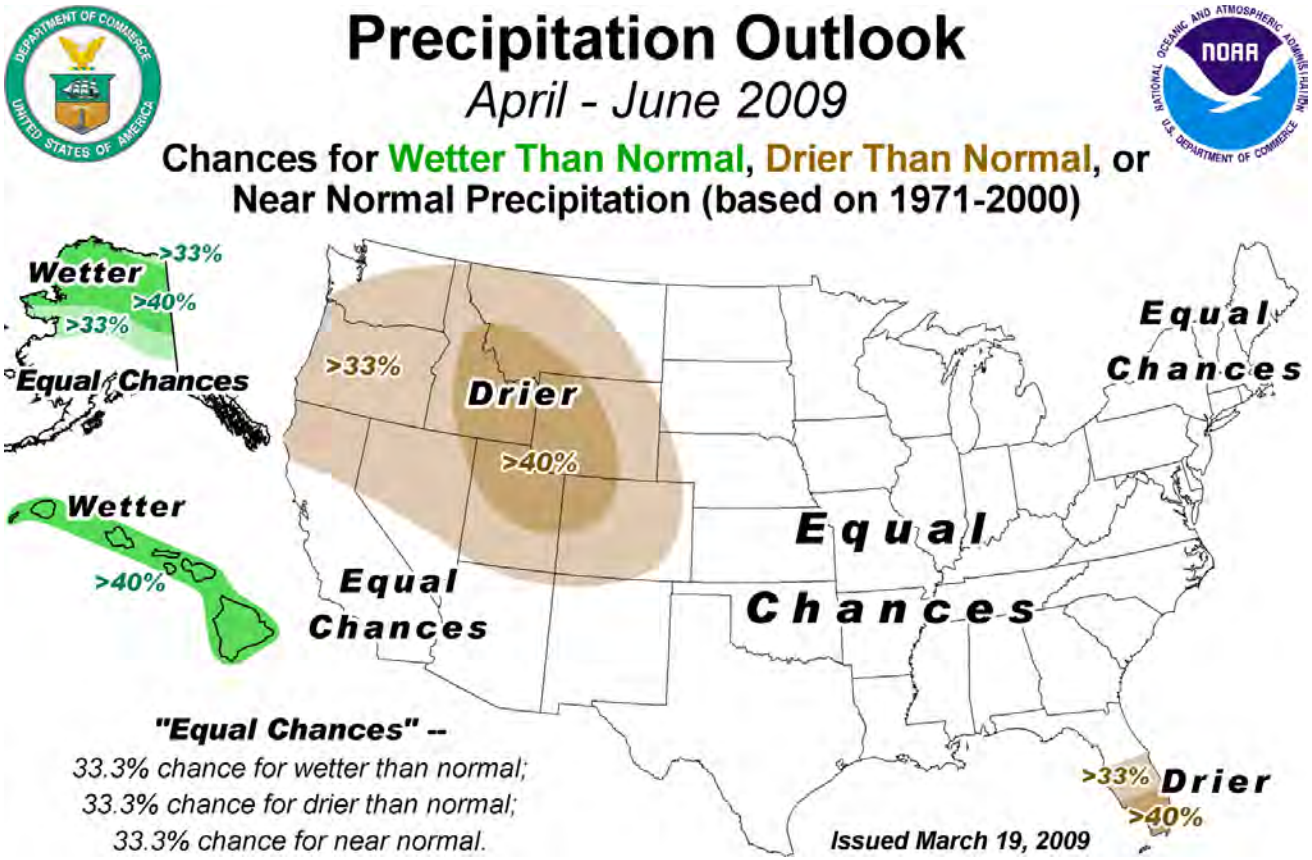






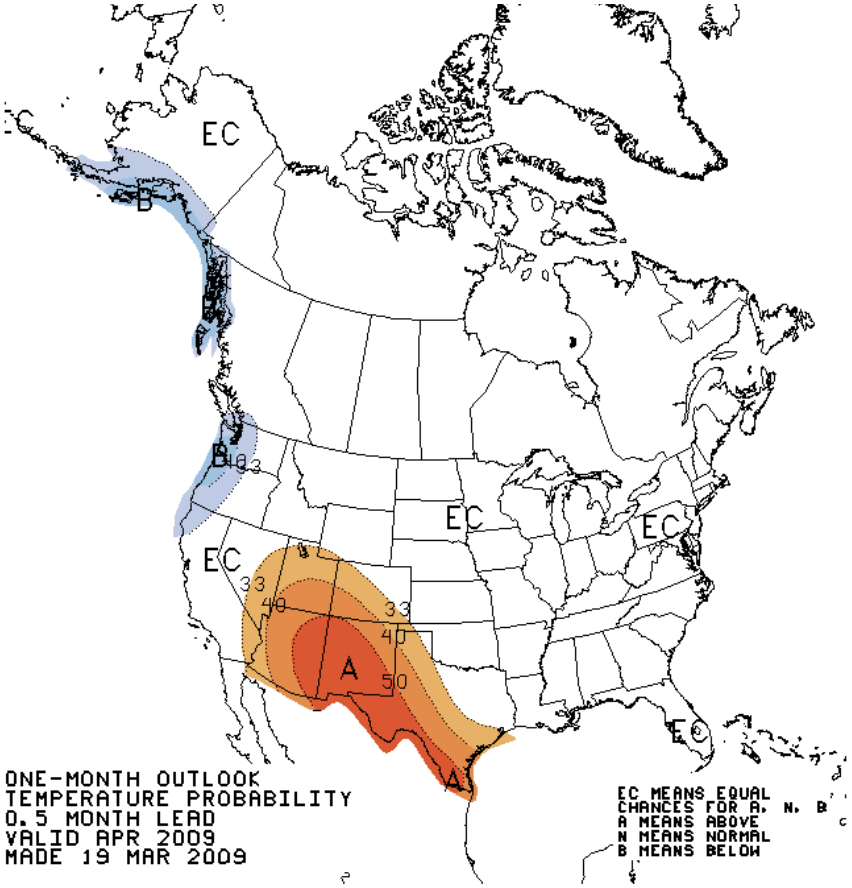


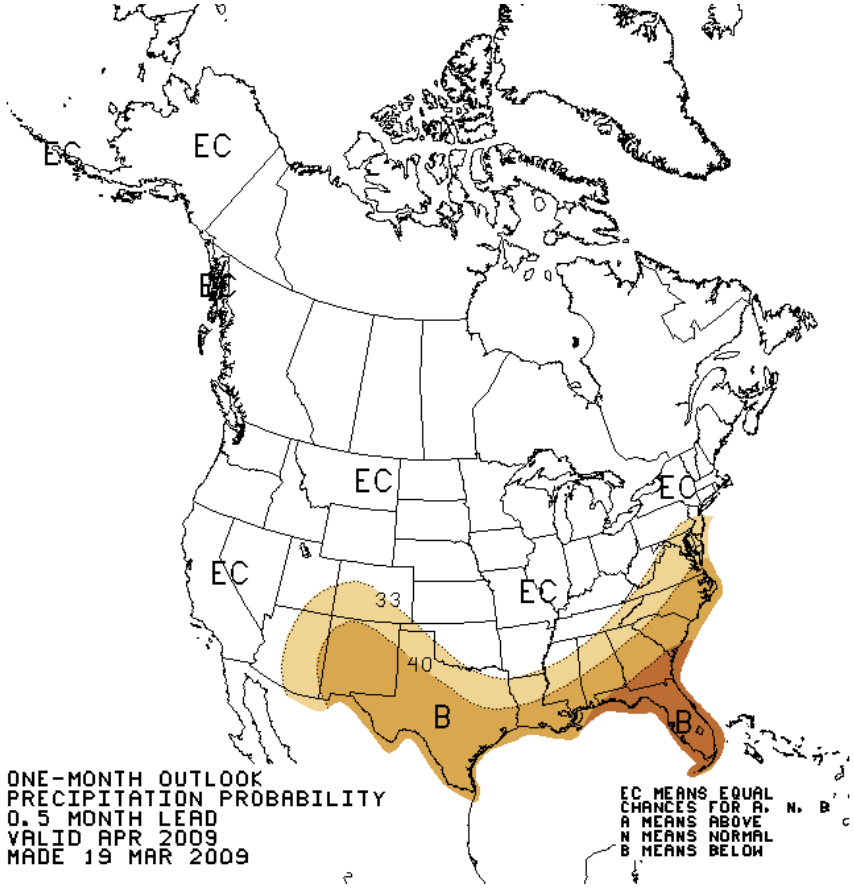
Spring Outlook



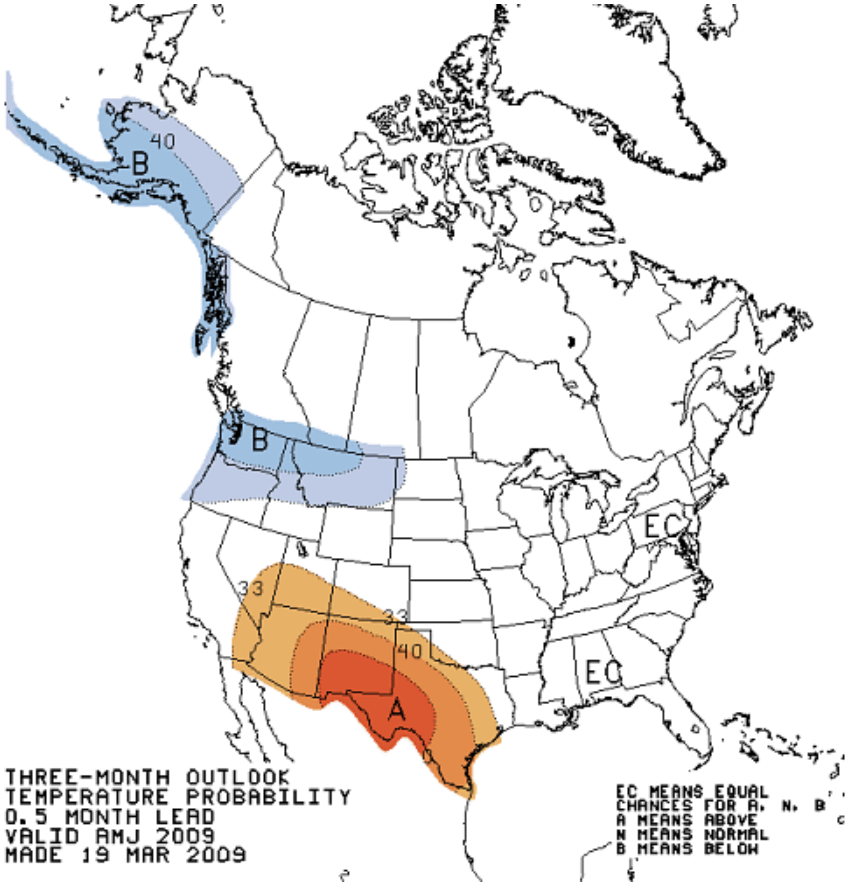
"The current La Niña will likely have some effect on this spring as it continues to weaken. Although La Niña tends to have a smaller influence on U.S. weather during the warmer months, lingering effects are not uncommon in spring." (Ed O'Lenic, CPC)

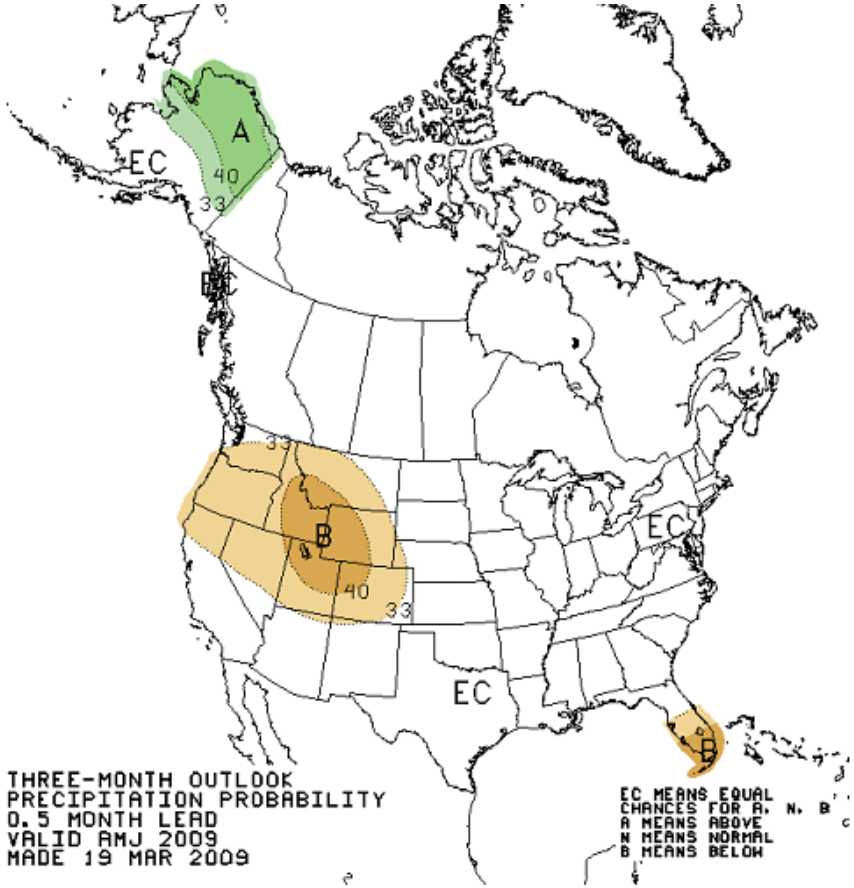
1-Month Outlook (CPC)





3-Month Outlook (CPC)



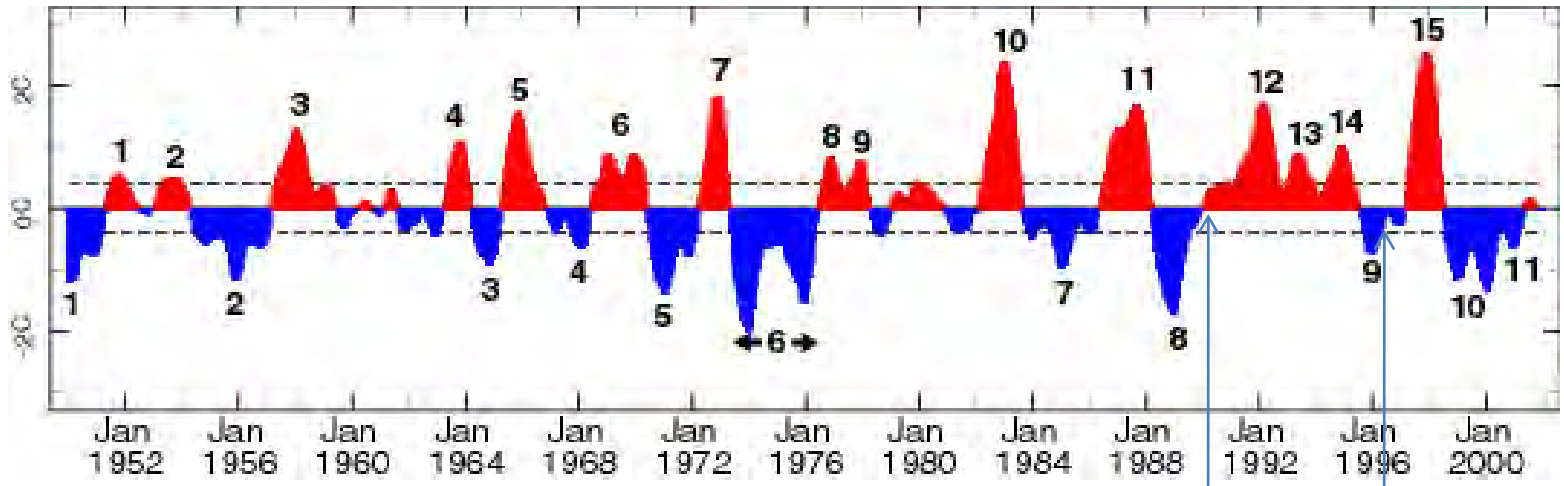


Synopsis: La Niña is expected to gradually weaken with increasing chances (greater than 50%) for ENSO-neutral conditions during the Northern Hemisphere Spring.

Summary

- A strong La Nina pattern has lead to a very dry pattern
- However the pattern should start to weaken and the La Nina effects are not as strong in the spring and summer months
- Good news is that a more normal pattern should start to emerge
- Bad news is that severe weather season is approaching

Past La Nina Years

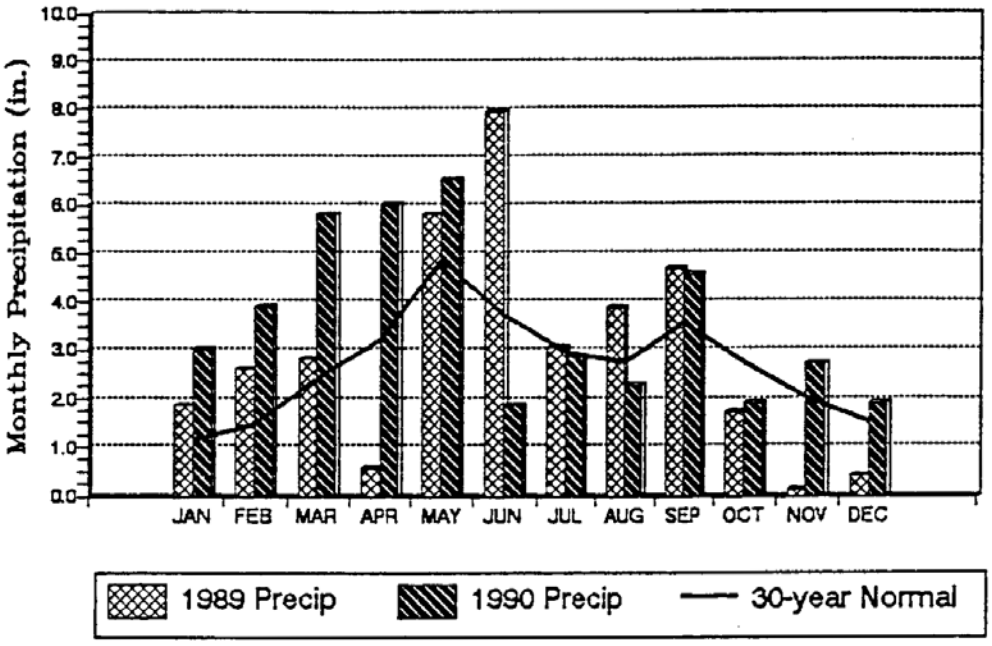


Jan 1990 switch from La Nina to El Nino

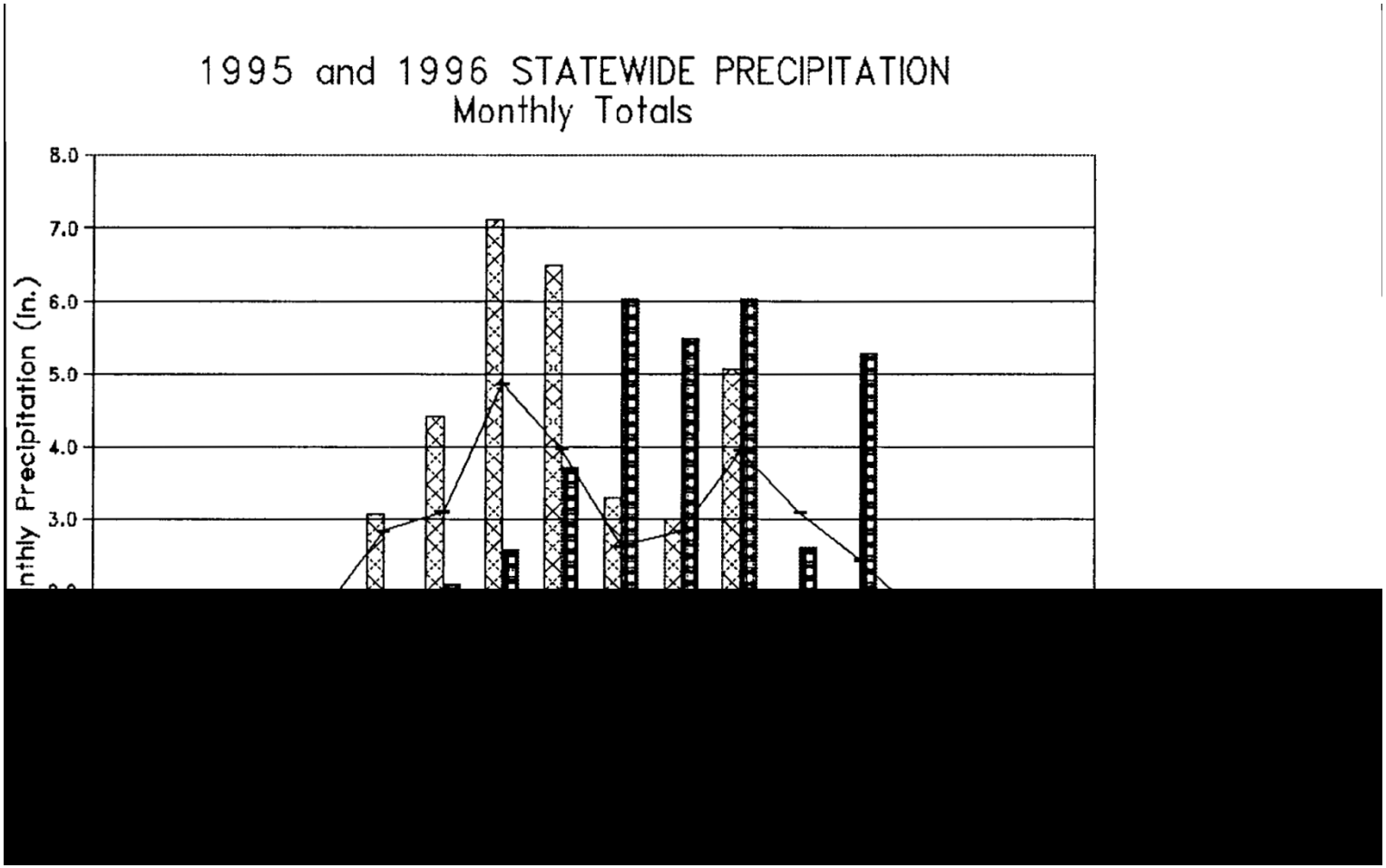
Jan 1996 La Nina

La Nina of 1988-89

Comparison of Monthly Precipitation
Statewide Average for Oklahoma



La Nina of 1995-96



March 2009 Precipitation