



Item 5.1: 2015 Summer Weather Outlook

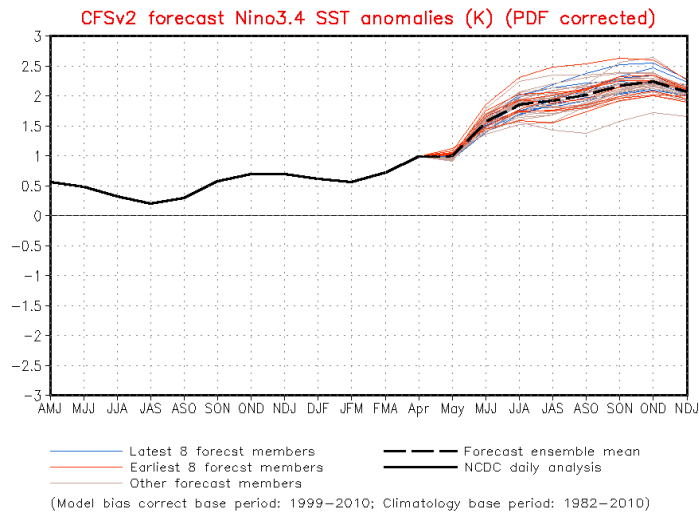
Temperatures, Precipitation, Drought and Hurricanes

Chris Coleman
Senior Meteorologist

Board of Directors Meeting
June 9, 2015

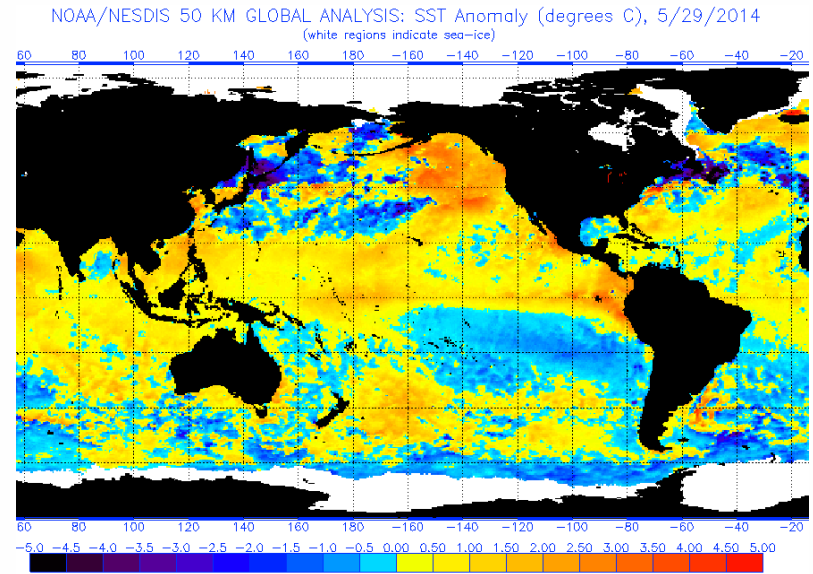
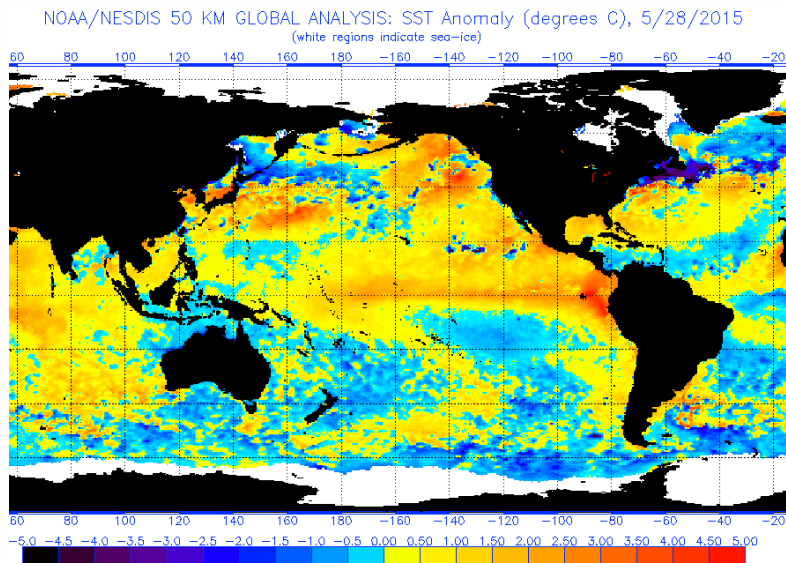
Temperature

ENSO (El Niño Southern Oscillation)

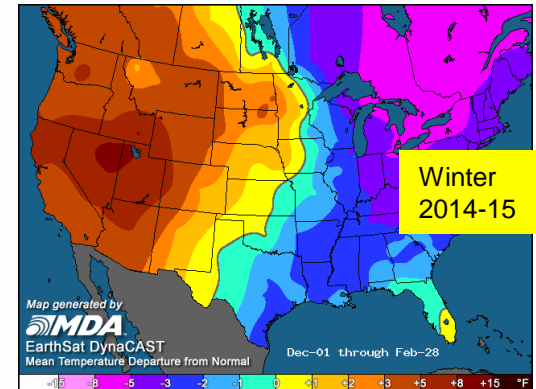
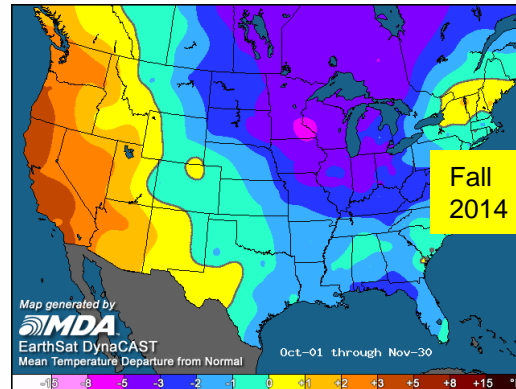
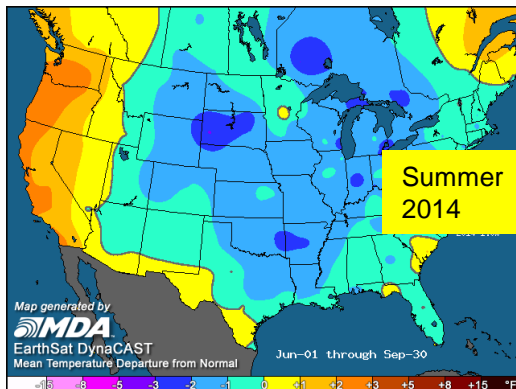
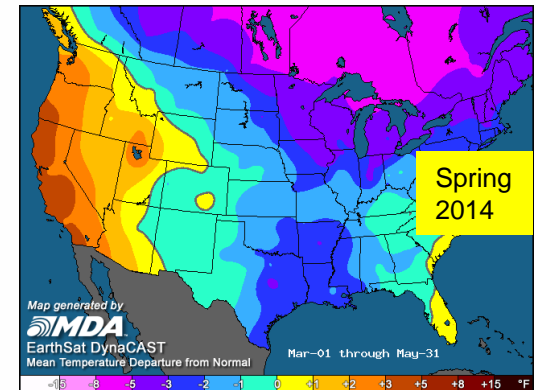
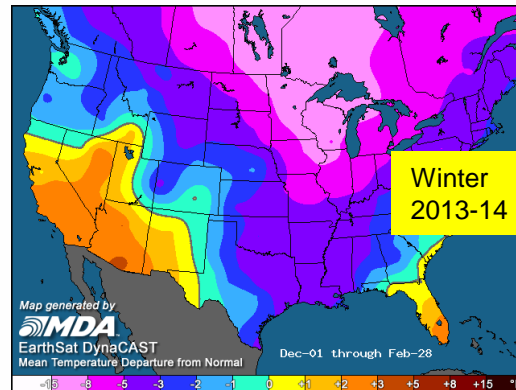
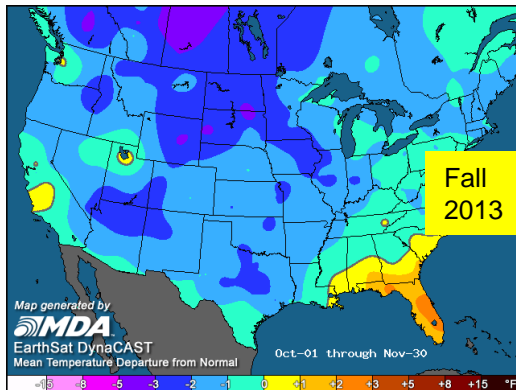


El Niños since 1980:

1982-83
 1986-87-88
 1991-92
 1994-95
1997-98
 2002-03
 2009-10

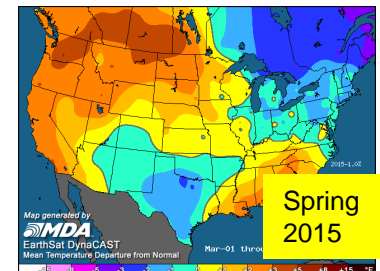


The Warming Pacific

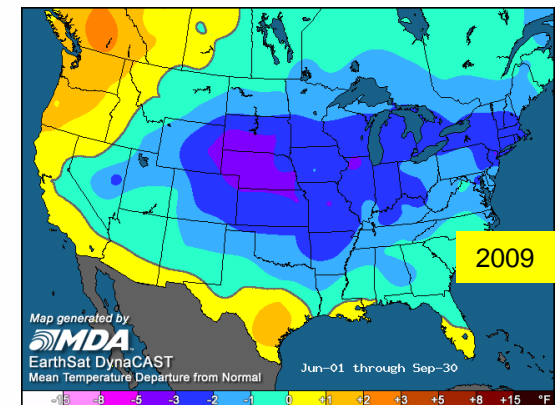
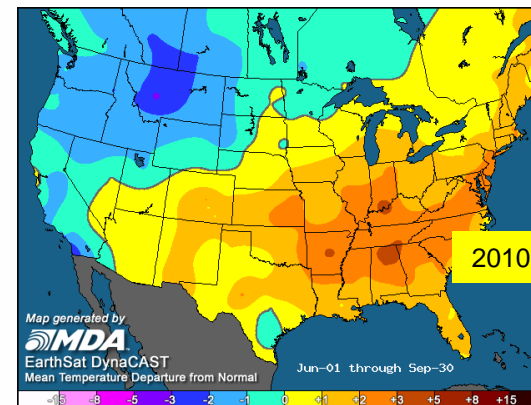
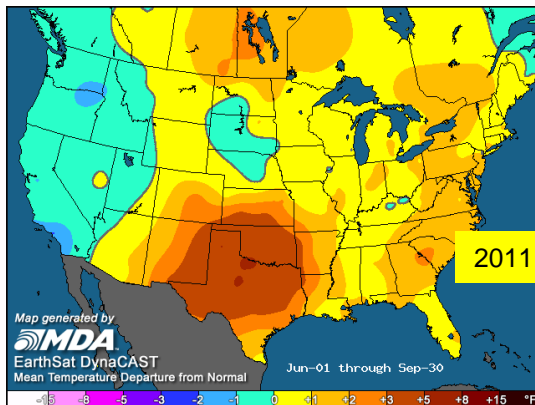
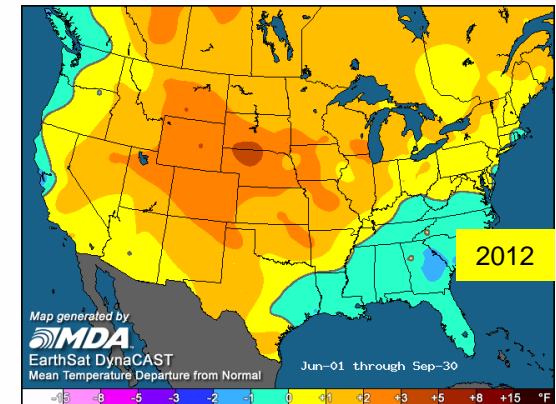
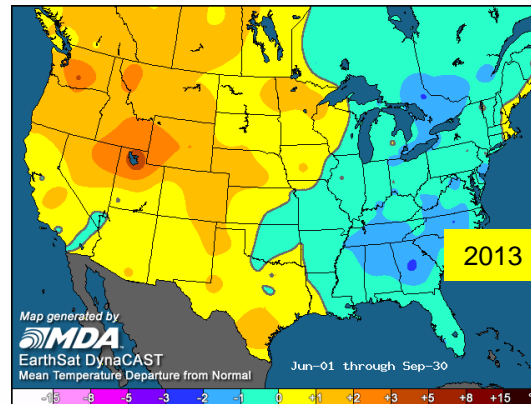
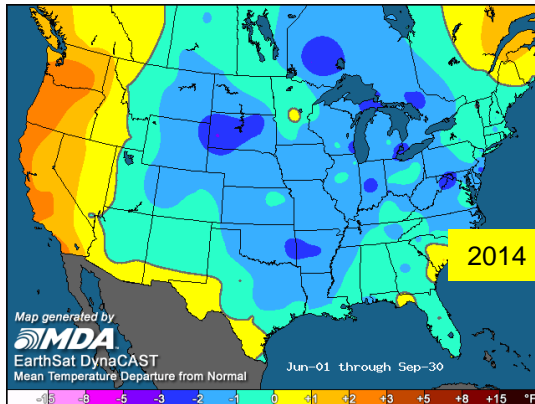


Warming trend from the West over the past several seasons

Positive (warm) phase of the Pacific Decadal Oscillation (PDO) has played a significant role. The **Pacific Ocean** is the primary driver of Texas weather patterns.



Past Six Summers

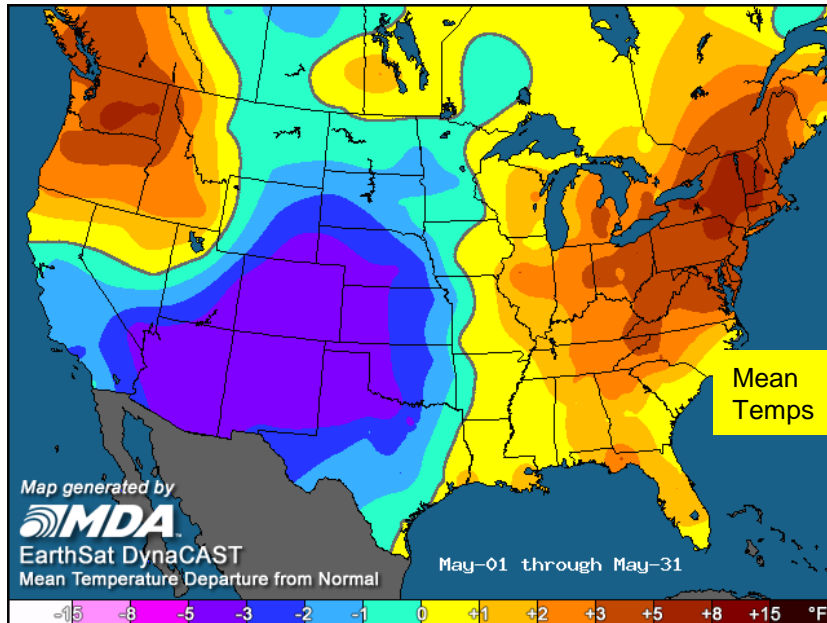


2014: 50th hottest, 80.4°
2011: 1st hottest, 84.6°

2013: 21st hottest, 81.2°
2010: 11th hottest, 81.6°

2012: 13th hottest, 81.5°
2009: 29th hottest, 80.8°

Mild May 2015 as a Potential Summer Indicator

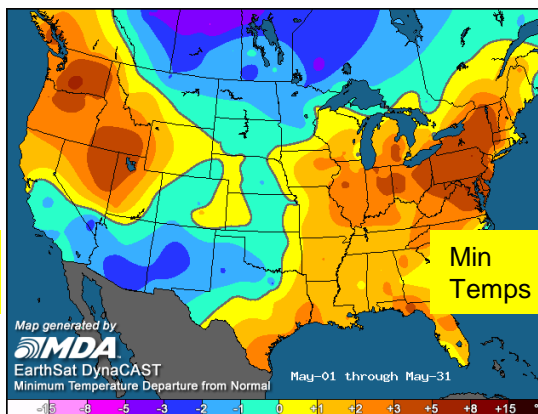
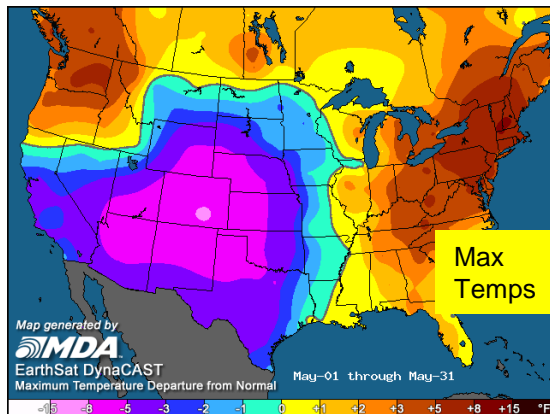


May 2015 recorded **ZERO** days of 90° or greater at Austin Bergstrom International.

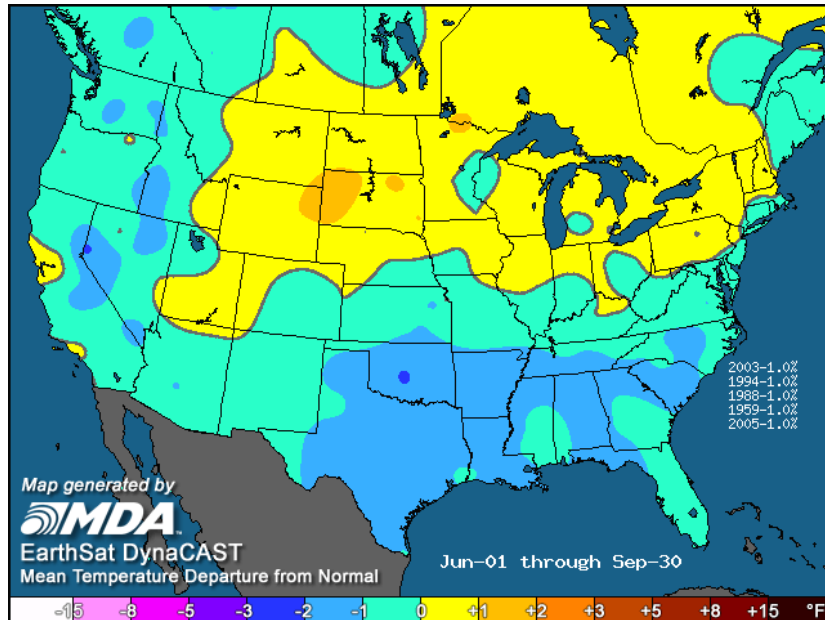
The last time that occurred was 1987.

1987 was the 19th coolest summer on record for the state of Texas (120 summers).

Nine years since 1987 have had fewer than ten 90° days in the spring season. None of those years had summers ranking in the top 50 hottest.

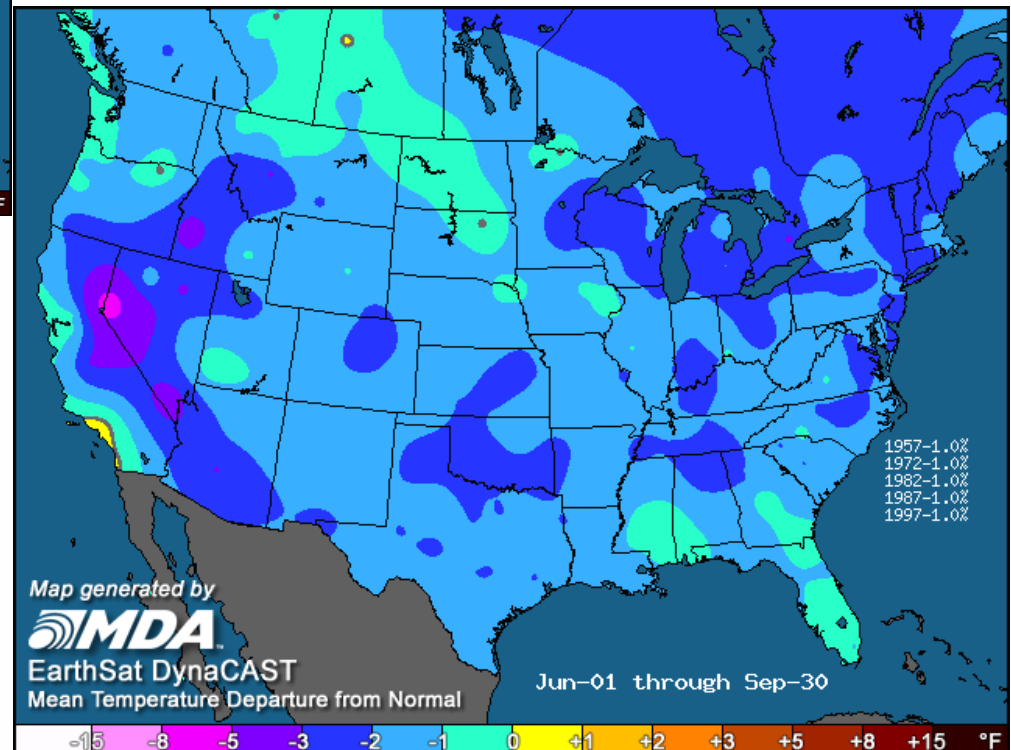


Historical Similar Summers to Forecast 2015



Original historical matches

With El Niño emphasis



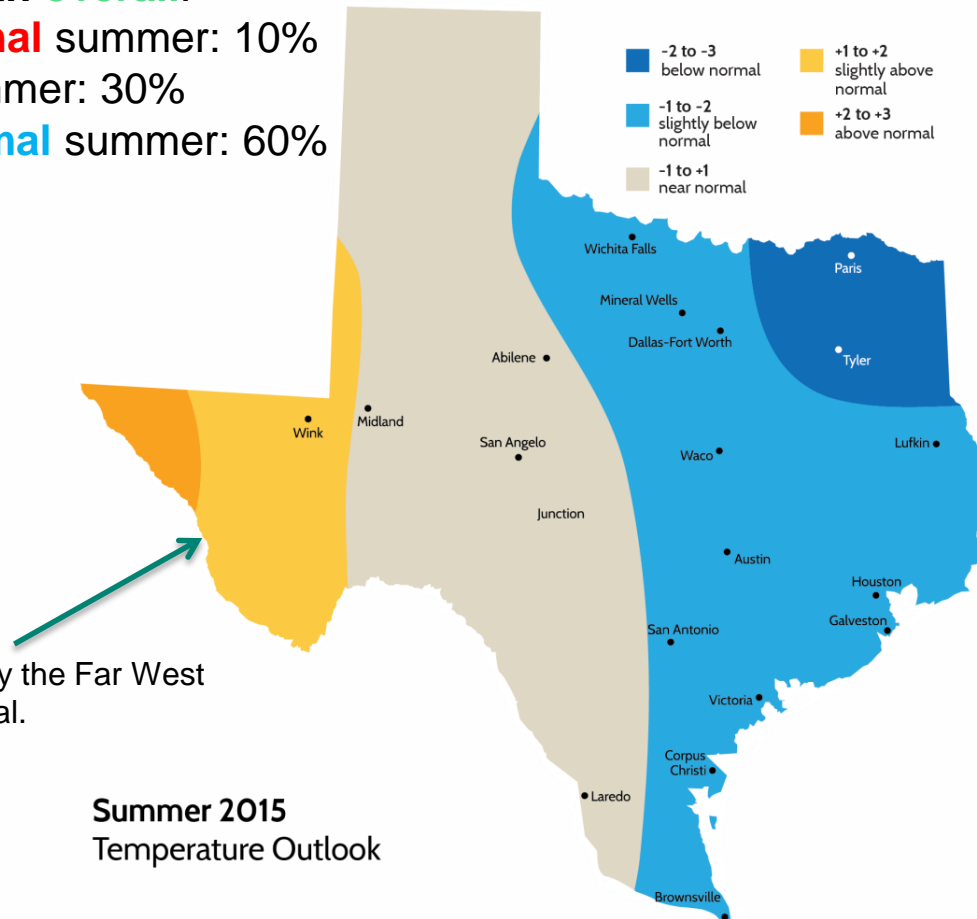
Summer 2015 Temperature Outlook

Probabilities of an **overall**:

Hotter than normal summer: 10%

Near normal summer: 30%

Cooler than normal summer: 60%



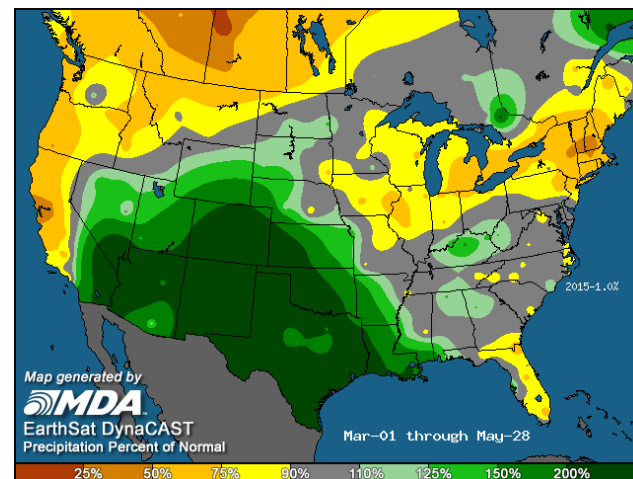
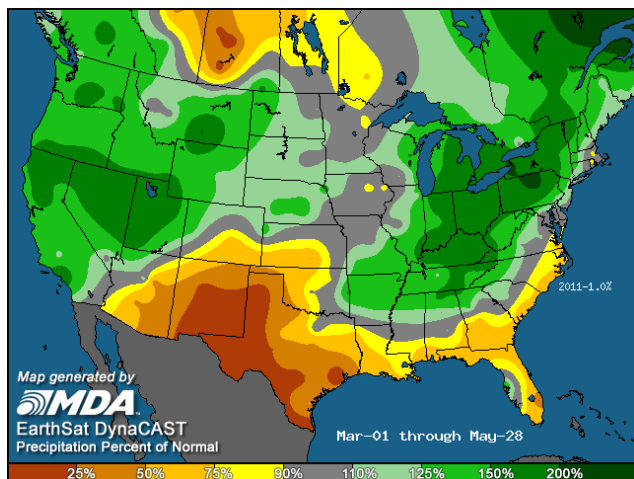
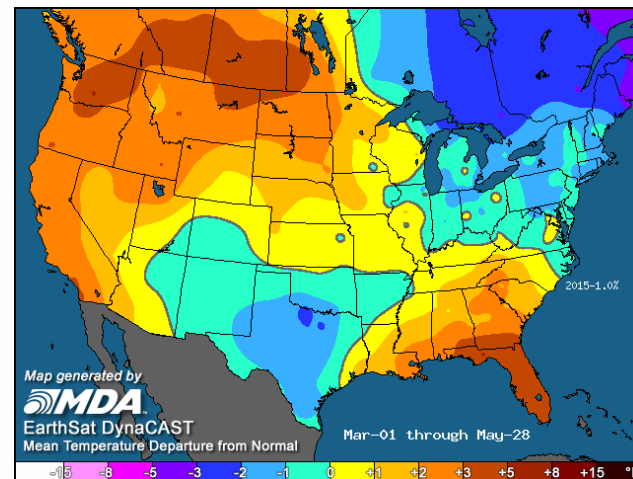
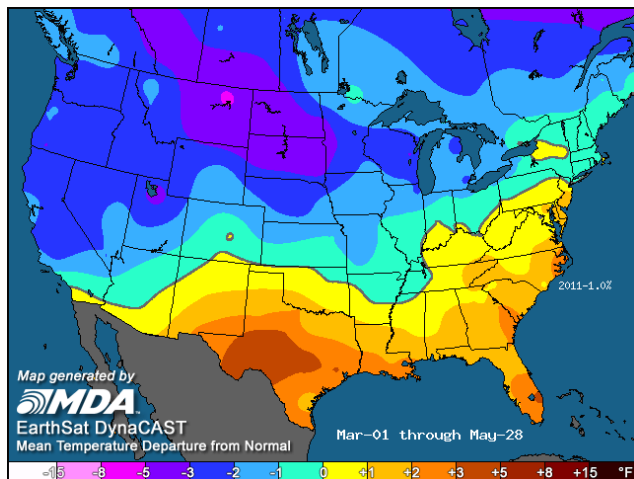
Increasingly unlikely the Far West will be above normal.

Summer 2015
Temperature Outlook

Less than TEN
100° Days
For
Dallas,
Austin,
San Antonio.

Highly unlikely to rank with the summers of 2010-2013 (top 25) for heat

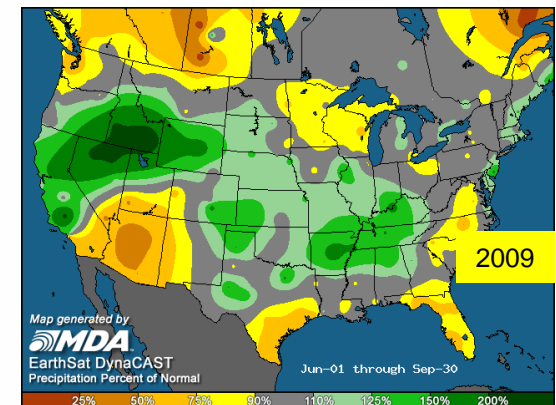
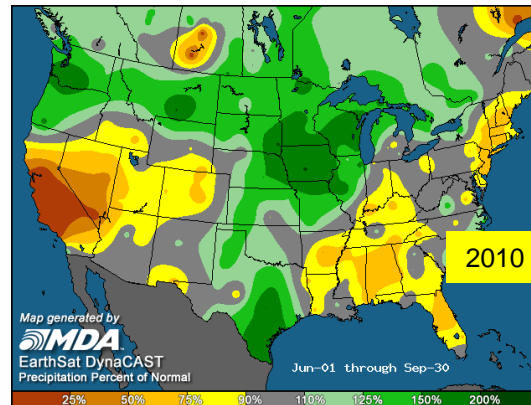
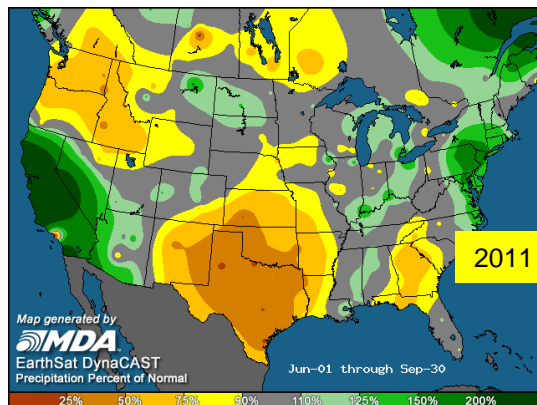
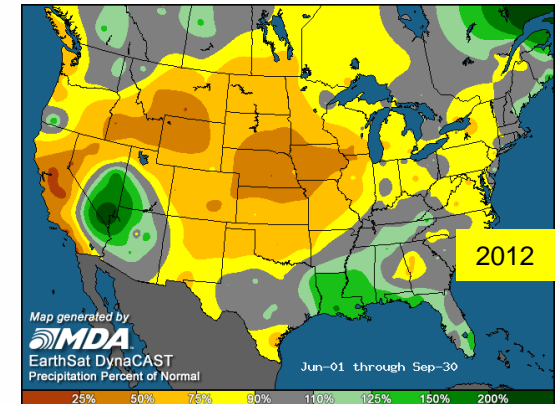
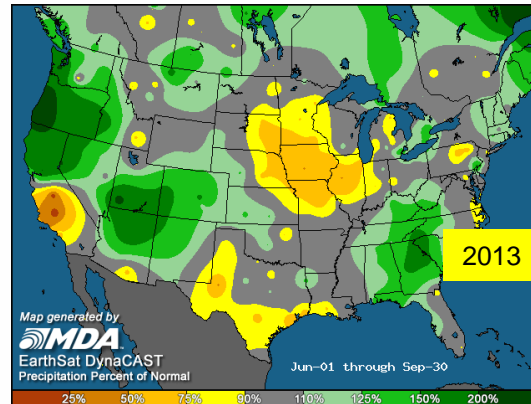
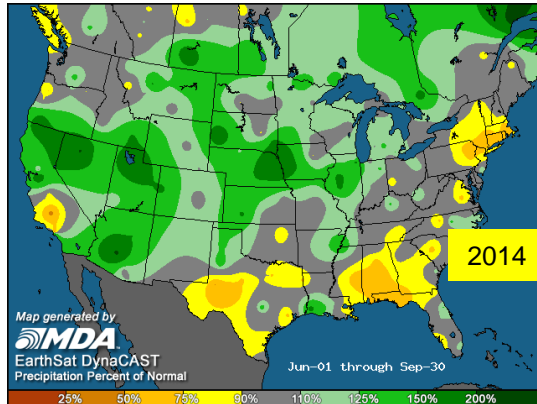
Repeat of 2011? No.



Spring of 2011 versus Spring of 2015

Precipitation

Past Six Summers



2014: 65th driest, 10.93"

2011: 1st driest, 3.60"

(POR 1895-current, Jun-Sep; all of Texas)

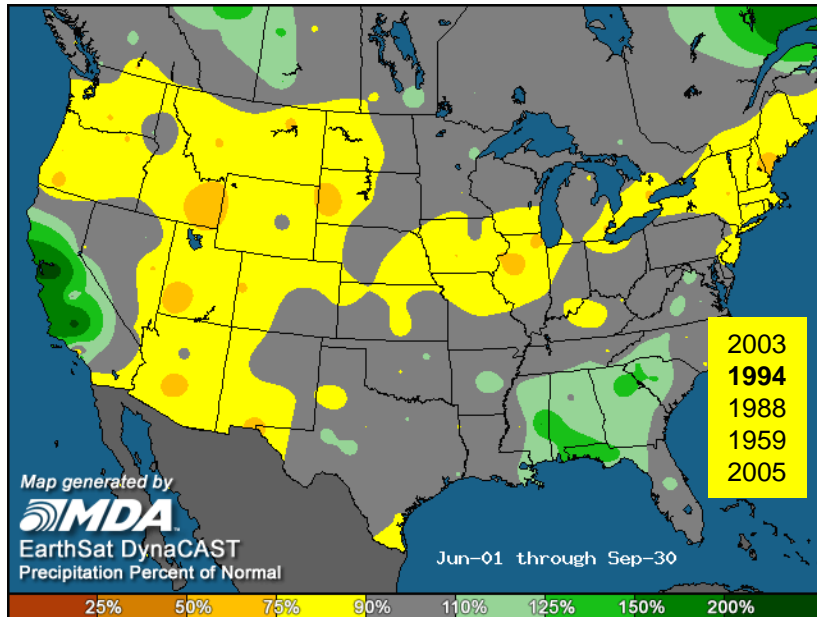
2013: 64th driest, 10.89"

2010: 105th driest, 13.49"

2012: 52nd driest, 10.35"

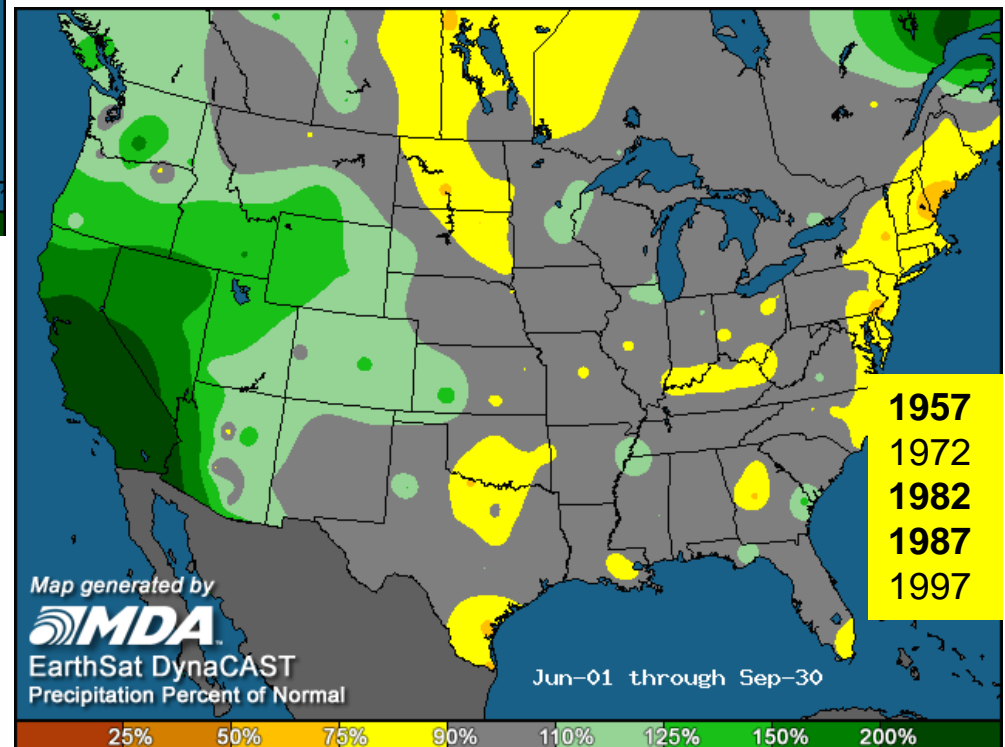
2009: 60th driest, 10.78"

Historical Similar Summers to Forecast 2015



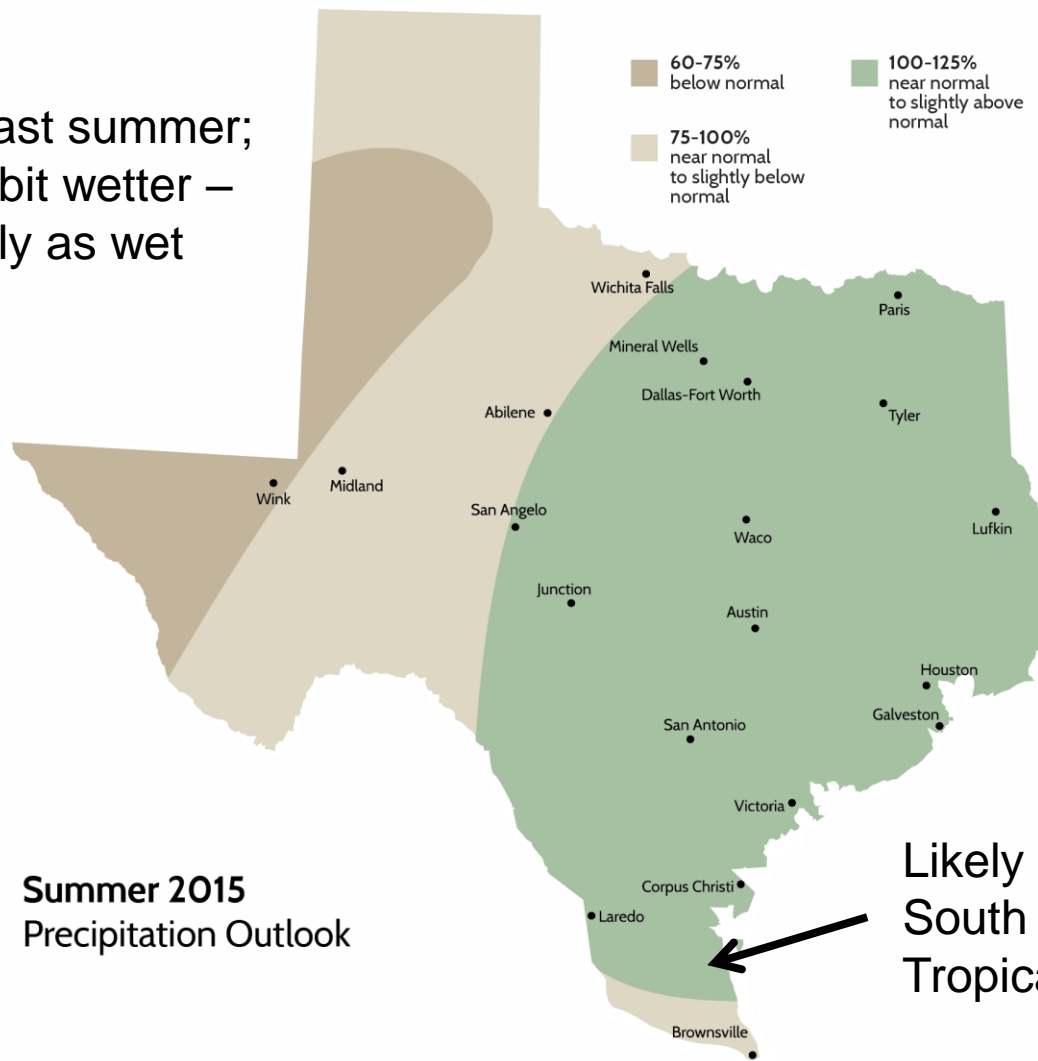
Original historical matches

With El Niño emphasis




Summer Precipitation Outlook

Similar to last summer;
Possibly a bit wetter –
but not likely as wet
as spring.



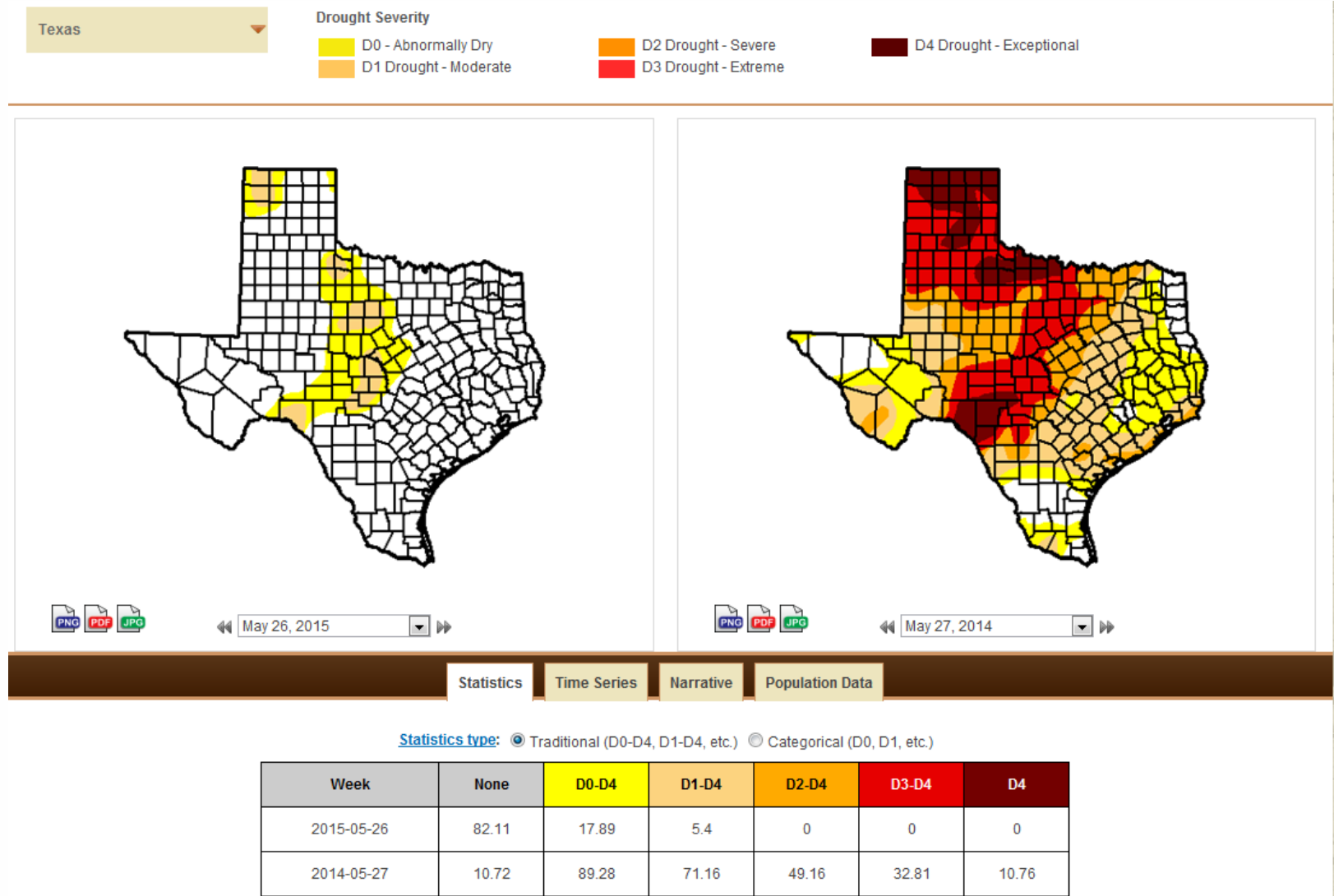
Summer 2015
Precipitation Outlook

Likely drier in
South Texas – barring
Tropical influences



Drought

Drought Monitor – Comparison to Last Year



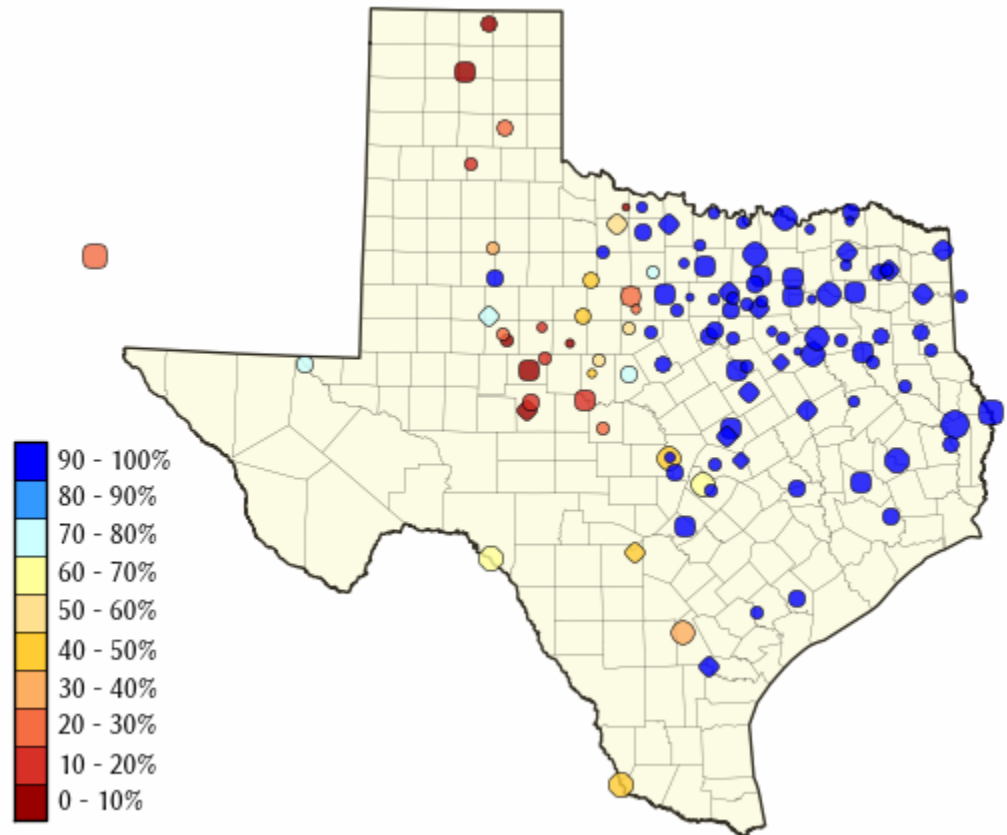
Reservoir Levels

May 2015
was the wettest
month on record
for the state of
Texas. Average
rainfall was 7.54
inches.

June 2004 was
the previous
wettest at
6.66 inches.

Texas Reservoirs at 82.1%
(May 28, 2015)

Six months ago at 62.4%

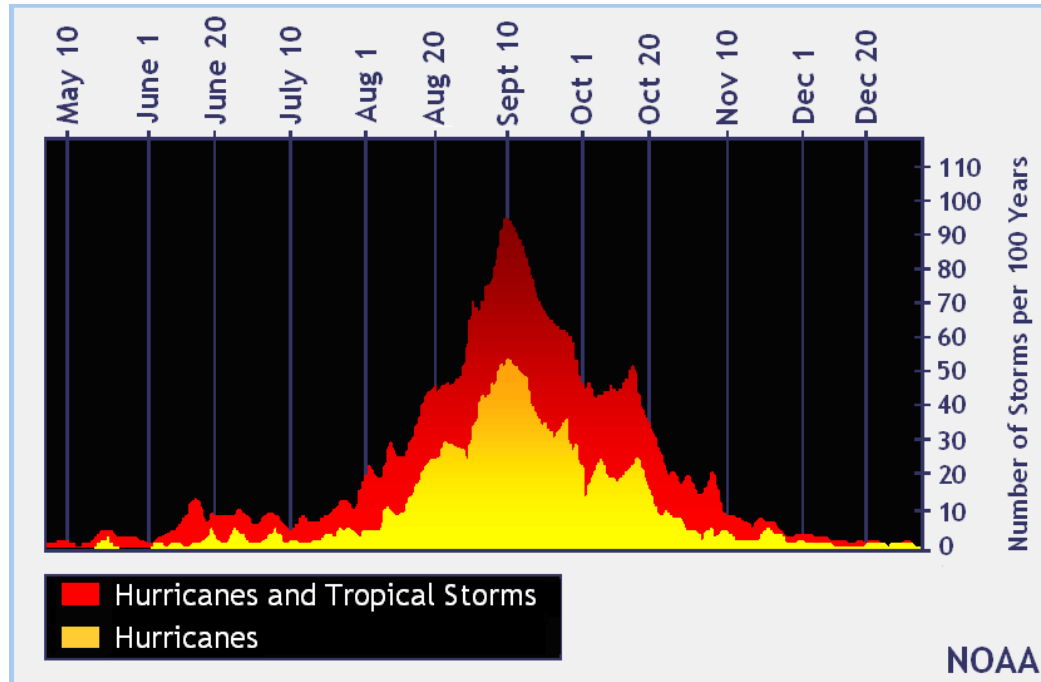


Hurricanes

Hurricane Forecast

2015

Ana
Bill
Claudette
Danny
Erika
Fred
Grace
Henri
Ida
Joaquin
Kate
Larry
Mindy
Nicholas
Odette
Peter
Rose
Sam
Teresa
Victor
Wanda



Historical Averages

Named Storms: **12**

Hurricanes: **6**

Major Hurricanes: **3**

Hurricane Forecast

Total Named Storms: 7

Total Hurricanes: 3

Major Hurricanes: 1

Named Storms in Gulf: 1-4

Named Storms in Western Gulf: 0-2

Hurricane in Gulf: 0-2

Major Hurricane in Gulf: 0-1

Named Storms with Texas Landfall: 0 or 1

Hurricanes with Texas Landfall: 0 or 1

Overall, less activity than normal. Opportunity to be a bit more active in the Gulf than last year.

NOAA/NESDIS SST Anomaly (degrees C), 5/28/2015

