



Item 5.2: 2016 Summer Weather Outlook

Chris Coleman

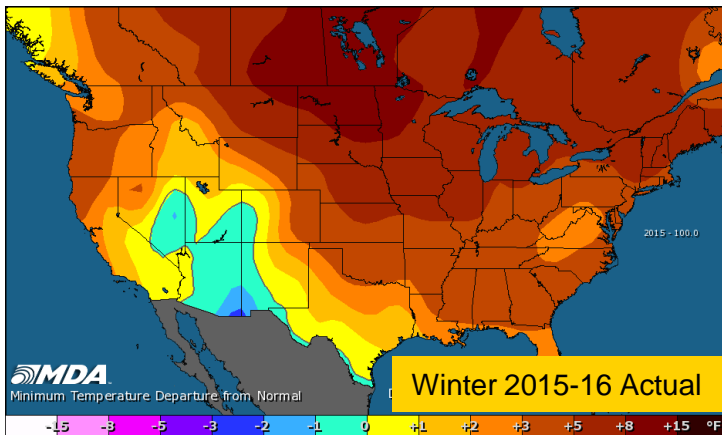
ERCOT Sr. Meteorologist

Board of Directors Meeting

ERCOT Public

June 14, 2016

Winter and Spring 2016 Temperature Review

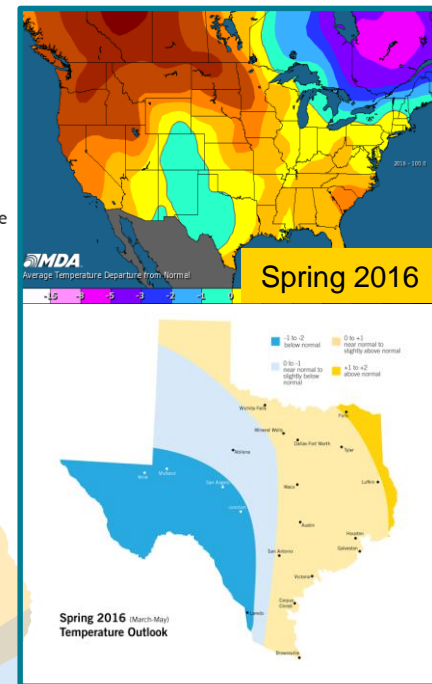
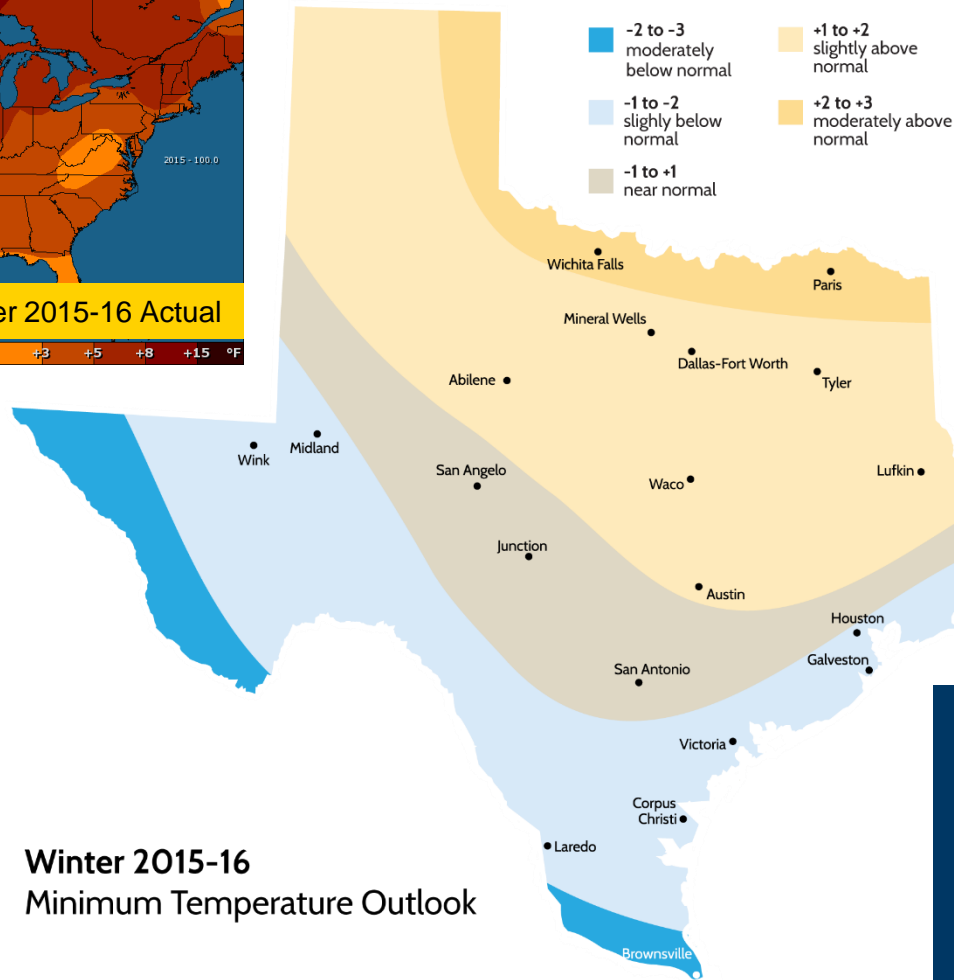


Austin:
5th warmest winter on record
(1. 1999-2000, 2. 1951-52,
3. 1998-99, 4. 2012-13)

Warmest minimum winter
temperature (31°) in the past
50 years

Dallas:
5th warmest winter on record

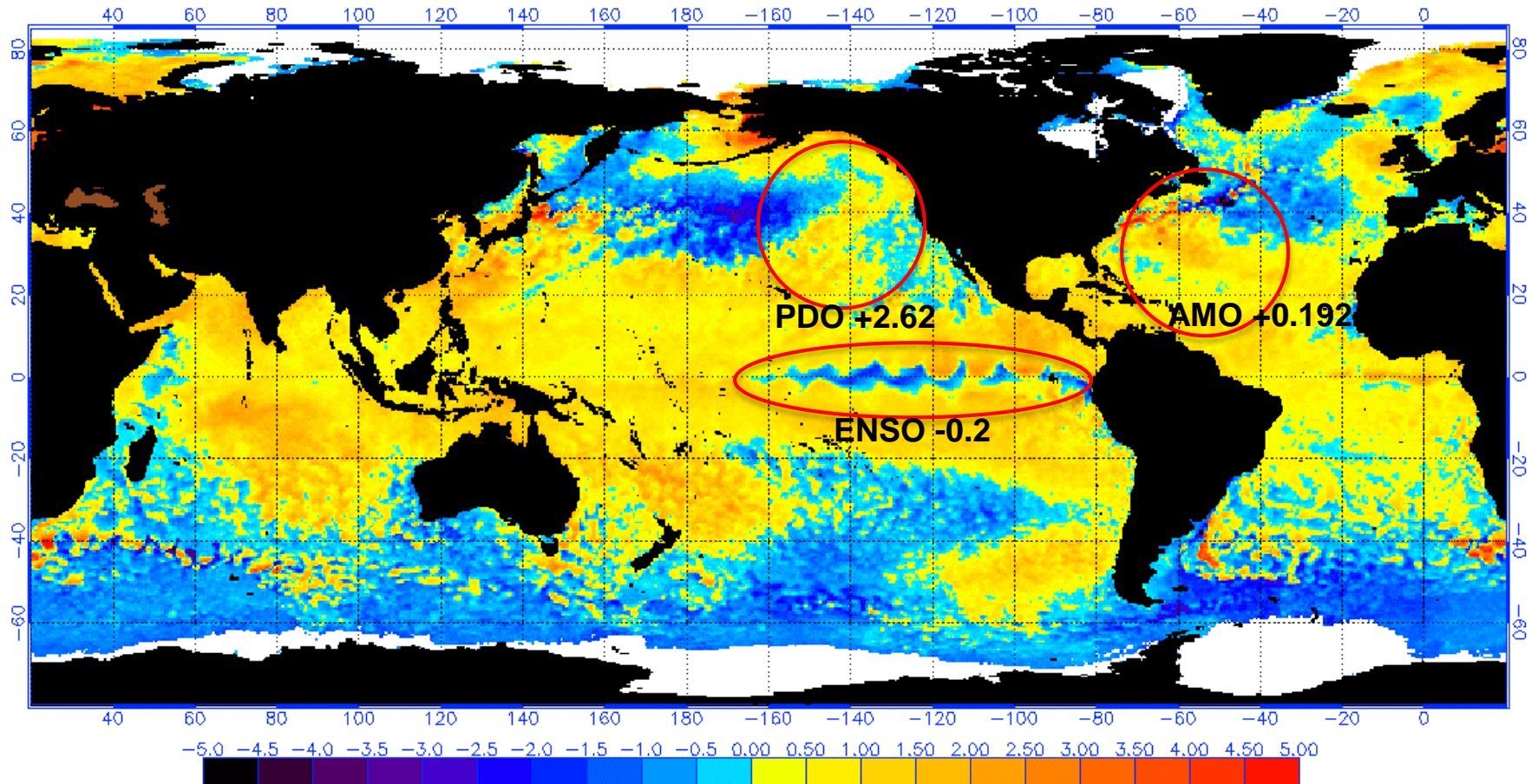
Houston:
5th warmest winter on record



Winter:
“Greater potential for
warmer than colder”

The Oceans

NOAA/NESDIS 50 KM GLOBAL ANALYSIS: SST Anomaly (degrees C), 6/2/2016
(white regions indicate sea-ice)



The oceans drive our weather patterns more than any other influence

ENSO/PDO

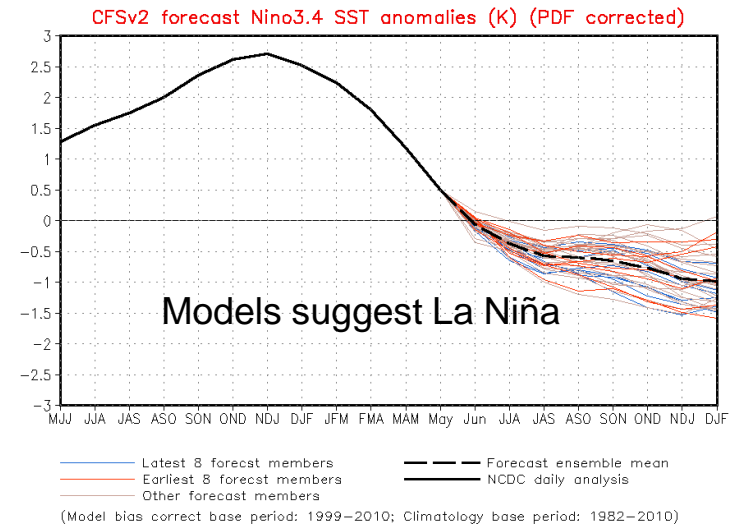
Strong El Niño events;
the following summer-fall-winter

1957-58: Weak El Niño (PDO+)
1965-66: Neutral (PDO+/-)
1972-73: Strong La Niña (PDO-)
1982-83: Weak La Niña (PDO+)
1991-92: Neutral (PDO+)
1997-98: Strong La Niña (→PDO-)
2009-10: Strong La Niña (PDO-)



NWS/NCEP/CPC

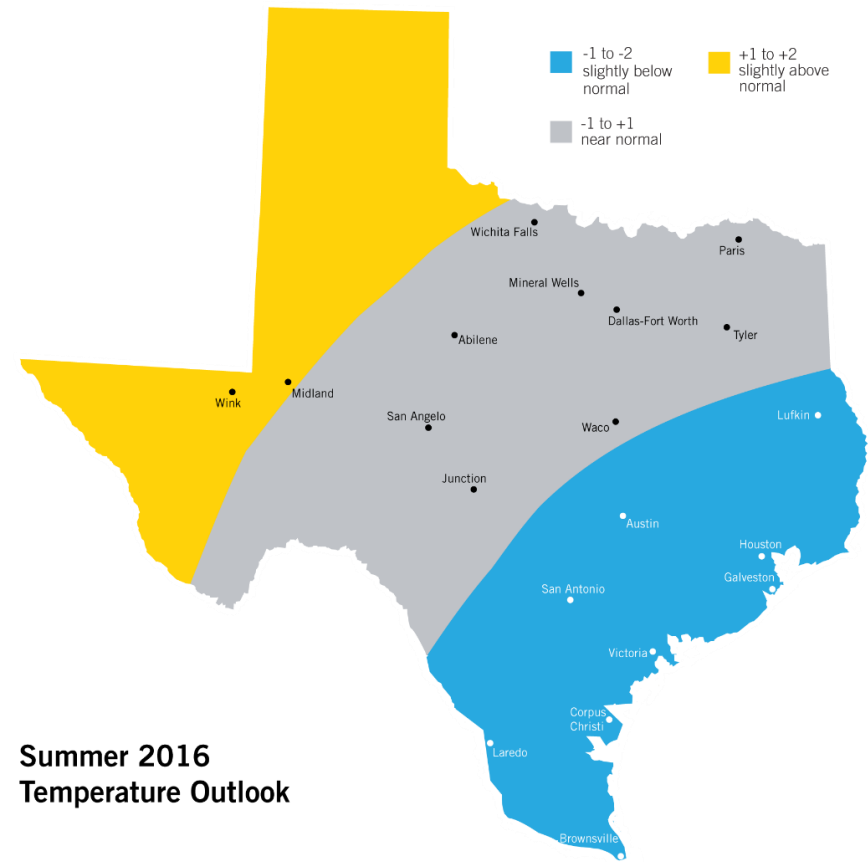
Last update: Thu Jun 2 2016
Initial conditions: 23May2016–1Jun2016



To follow a strong El Niño with a
strong La Niña likely requires a
switch to PDO-
(Pacific Decadal Oscillation)

Summer 2016 Temperature Outlook

- Using a 10-15 year normal
- Very little historical precedence. Best historical match is 1992, which must be thrown out
- Unlikely not as warm as last summer, (17th hottest of past 121 summers)
- Most indicators suggest a milder (cooler) summer
- Strong PDO+ in spring rarely results in a hot, much above-normal summer (3 in 10)
- Late-summer shows more above-normal potential than early-summer

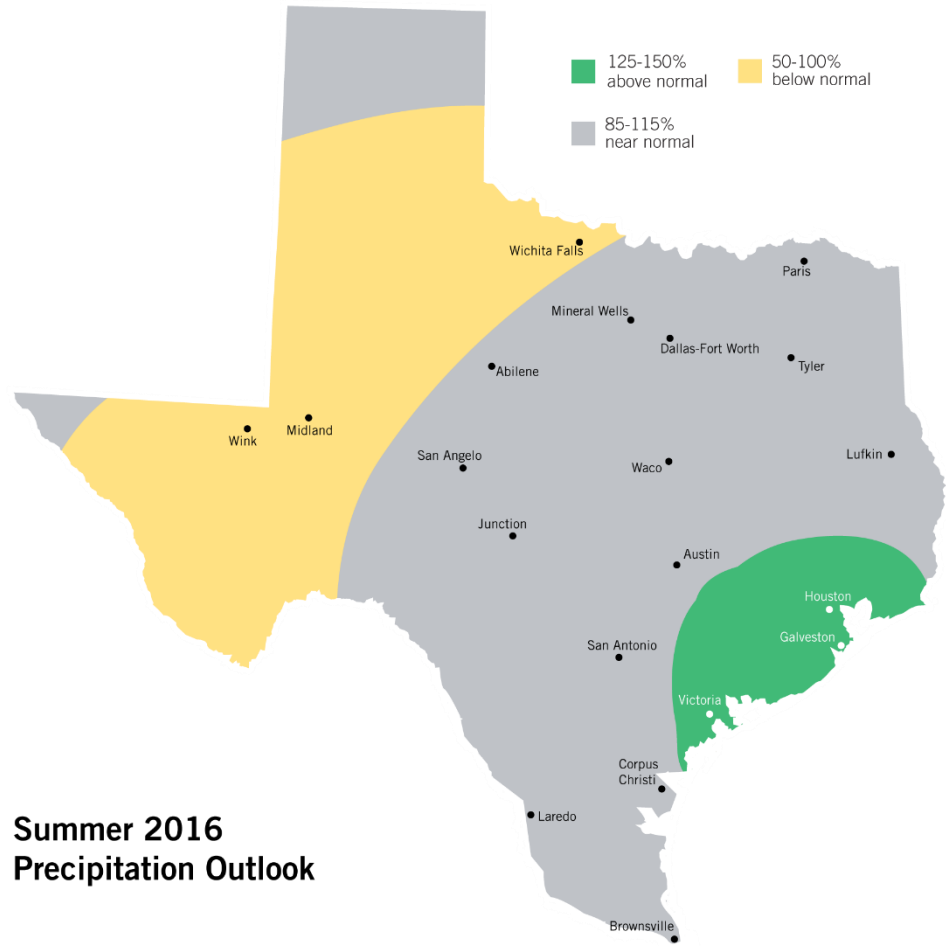


Greater potential for cooler summer rather than hotter.

Pattern could flip, moving the below normal area to the West region.

Summer 2016 Precipitation Outlook

- The majority of the state will experience near-normal or drier-than-normal conditions
- Above-normal potential may depend on tropical activity
- Very unlikely to be as dry as last summer, (second driest of the past 15 years)



Summer 2016
Precipitation Outlook

2016 Hurricane Forecast

Total Named Storms: 12

Total Hurricanes: 5

Major Hurricanes: 2

Gulf activity very likely.

Can't rule out a more active season

Named Storms in Gulf: 3-4+

Hurricane in Gulf: 1-2

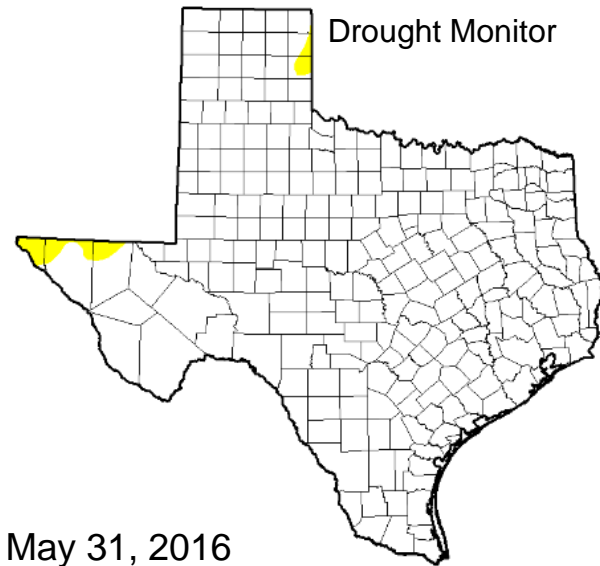
Named Storms with Texas Landfall: 0-1-2

Hurricanes with Texas Landfall: 0-1

2016 Hurricane Season Analogs				
1958		10	7	5
1959		11	7	2
1977		6	5	1
1978		12	5	2
1983		4	3	1
1985		11	7	3
1986		6	4	0
1987		7	3	1
1994		7	3	0
1998		14	10	3
2003		16	7	3
2004		15	9	6
2005		28	15	7
2015		11	4	2

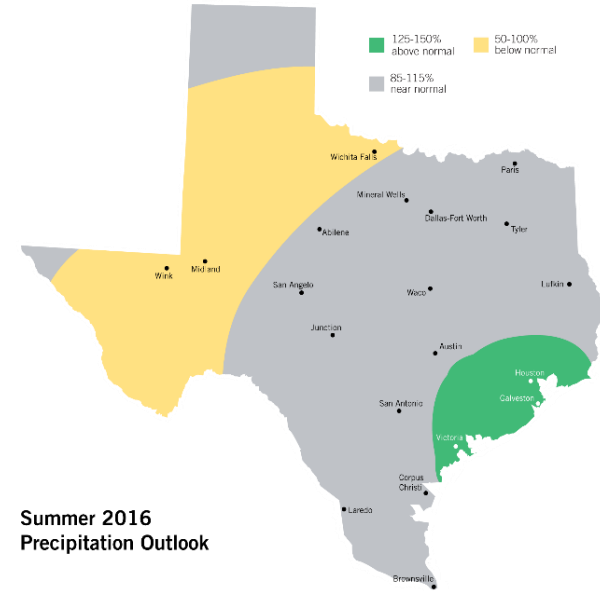
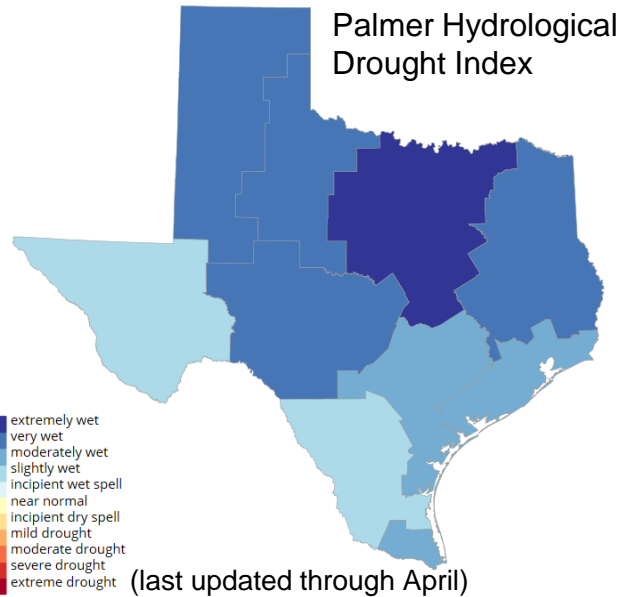
8 of 11 analogs had a Texas landfall, but all had at least 1 Gulf storm.

2016 Drought Outlook



May 31, 2016

0% in moderate or worse drought



- ENSO will help determine any future 2016 drought concerns
- Hurricane season holds a potential impact
- Could see increasing drought concerns in the Panhandle and West Texas
- Not currently seeing potential for a widespread, exceptional hydrological drought returning in 2016