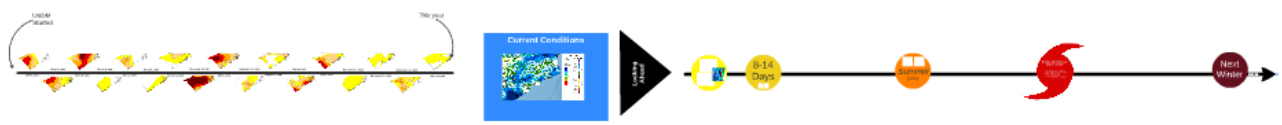
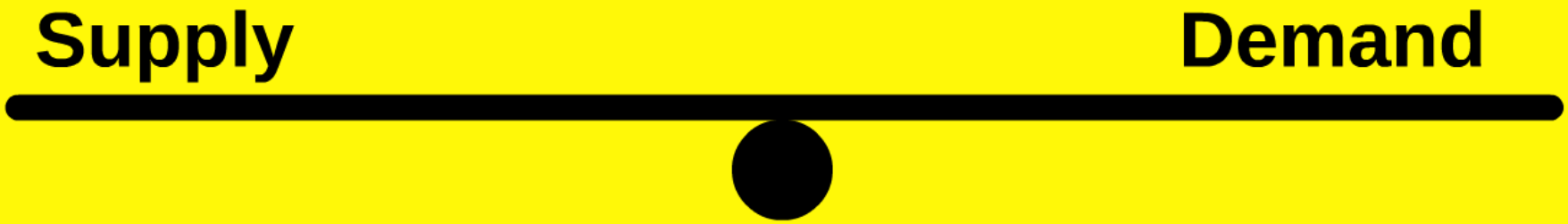
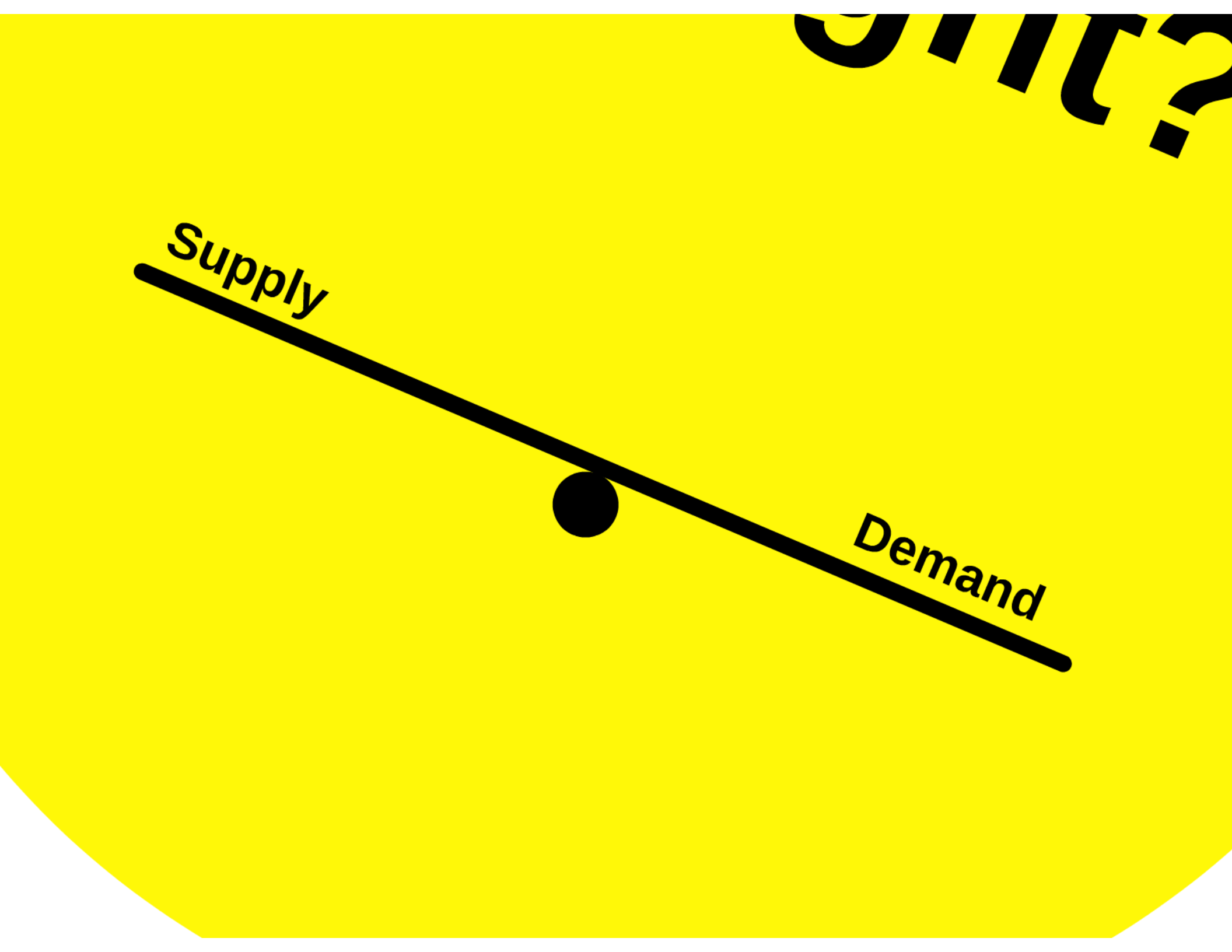
What is Drought?

Drought in the Coastal Carolinas



What is Drought?


Supply
Demand


Supply
Demand

Drought in the Coastal Carolinas

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Griffith, G.E., Omernik, J.M., Comstock, J.A., Schafale, M.P., McNab, W.H., Lenat, D.R., MacPherson, T.F., Glover, J.B., and Shelburne, V.B., 2002, Ecoregions of North Carolina and South Carolina, (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,500,000).

Columbia
Sumter
65p
65l
63n
Lynches River
Lake Marion water release
weather.gov
Fresh
Waccamaw W
65p
65l
63h
63n
75j
Edisto River
BULLS BAY
63h

Singletary Lake. Credit: NC Division of Parks and Rec.

LICO SOUND

Cape Hatteras

63g

35

63c

Cape Lookout

Longleaf Pine Forest

Croatan National Forest. Credit: David McAdoo, Creative Commons

Carolina Bays

Singletary Lake. Credit: NC Division of Parks and Rec.

Freshwater Tidal Marshes

Waccamaw Wildlife Refuge. Credit: US Fish and Wildlife Service.

Pinckney Island National Wildlife Refuge. Credit: US Fish and Wildlife Service

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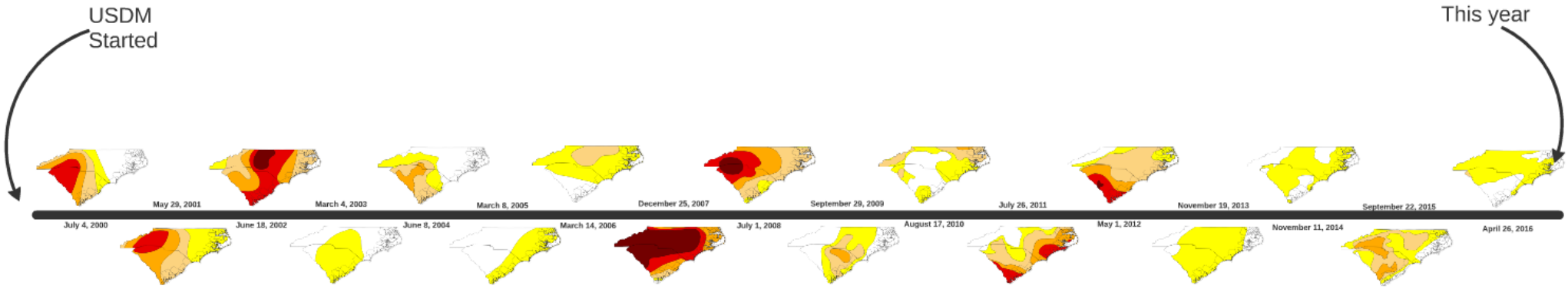
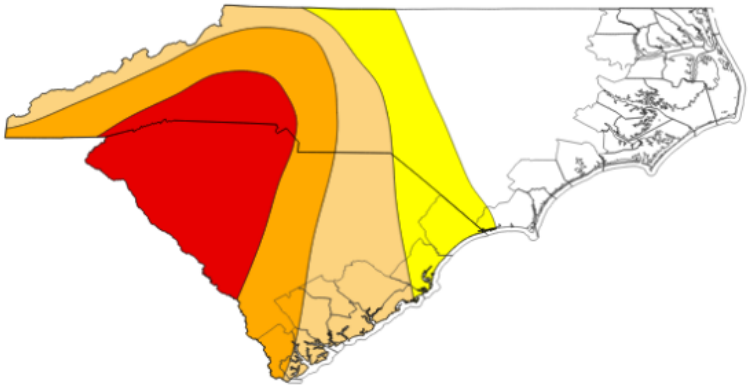
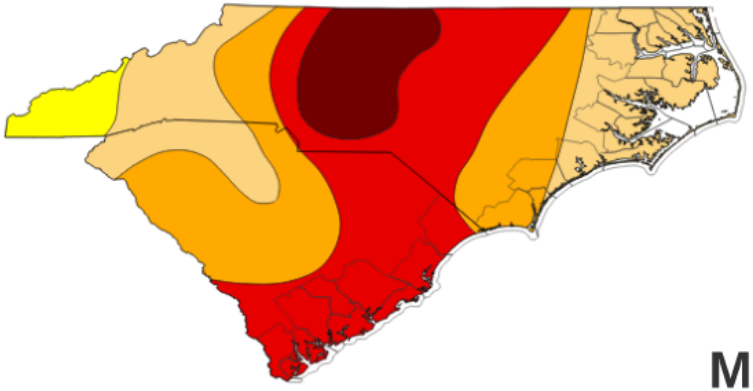
Griffith, G.E., Omernik, J.M., Comstock, J.A., Schafale, M.P., McNab, W.H., Lenat, D.R., MacPherson, T.F., Glover, J.B., and Shelburne, V.B., 2002, Ecoregions of North Carolina and South Carolina, (color poster with map, descriptive text, summary tables, and photographs): Reston, Virginia, U.S. Geological Survey (map scale 1:1,500,000).


USDM
Started
This year
July 4, 2000
May 29, 2001
June 18, 2002
March 4, 2003
June 8, 2004
March 8, 2005
March 14, 2006
December 25, 2007
July 1, 2008
September 29, 2009
August 17, 2010
July 26, 2011
May 1, 2012
November 19, 2013
November 11, 2014
September 22, 2015
April 26, 2016

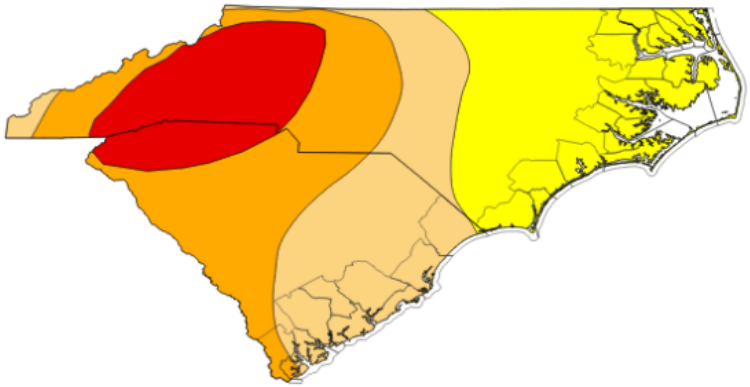


May 29, 2001

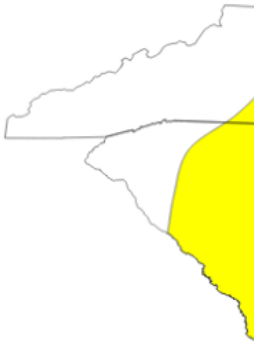


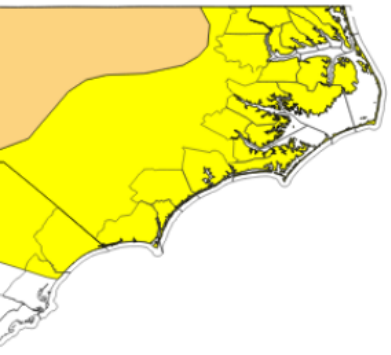
Mar

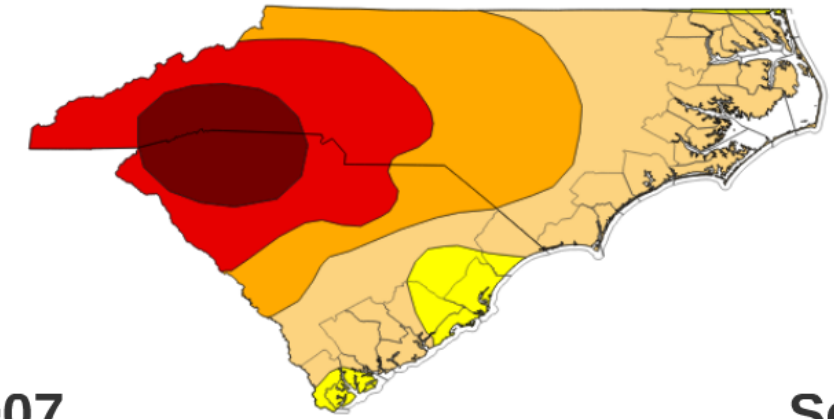
July 4, 2000



June 18, 2002



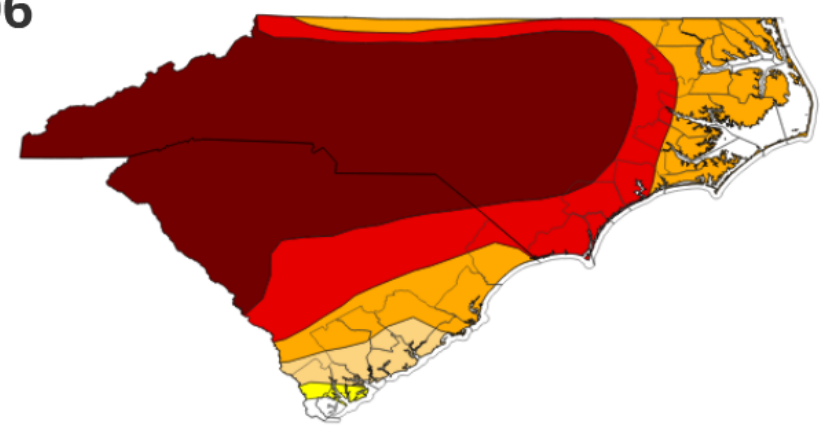




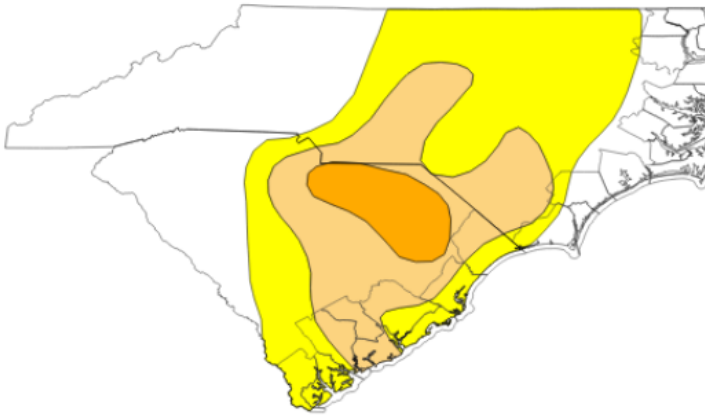
December 25, 2007

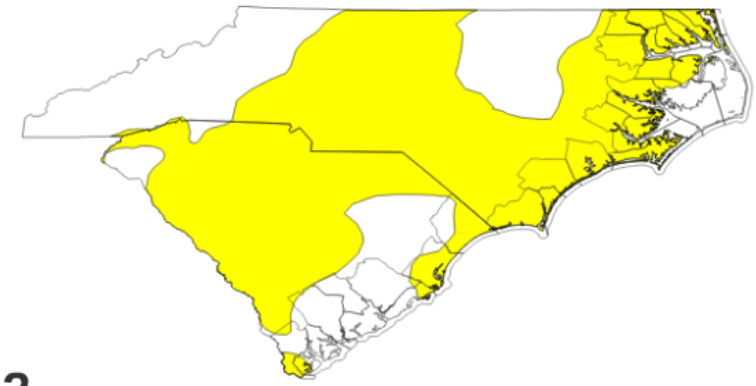
September 29, 2009

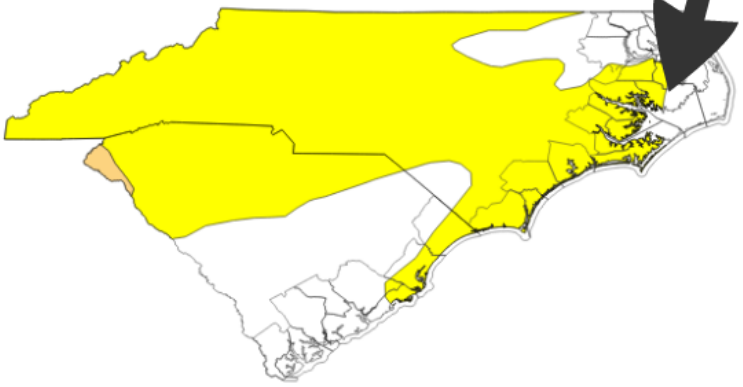
4, 2006



July 1, 2008



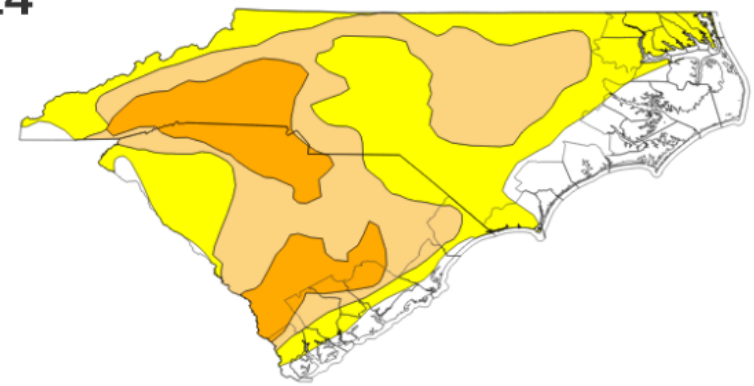




3

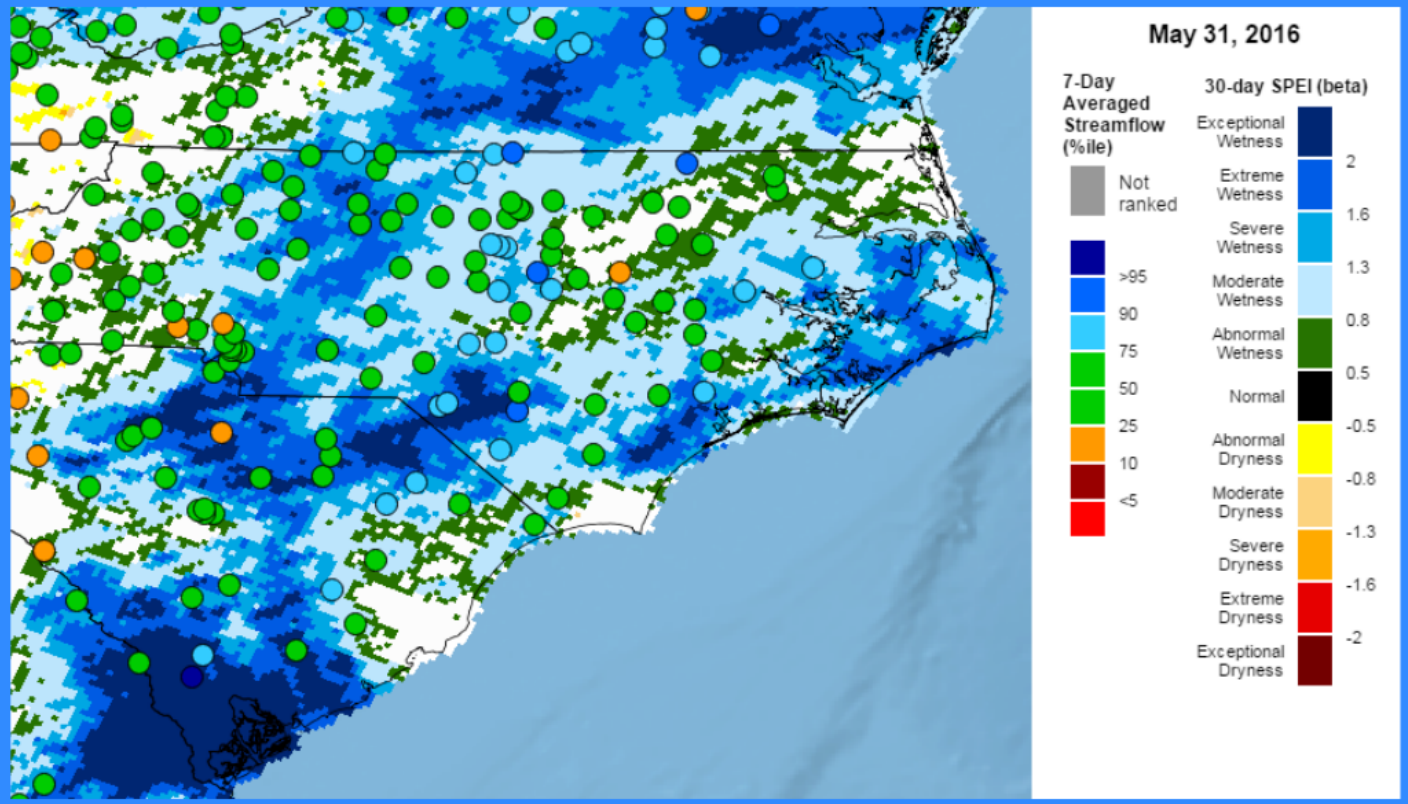
September 22, 2015

November 11, 2014

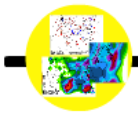


April 26, 2016

Current Conditions



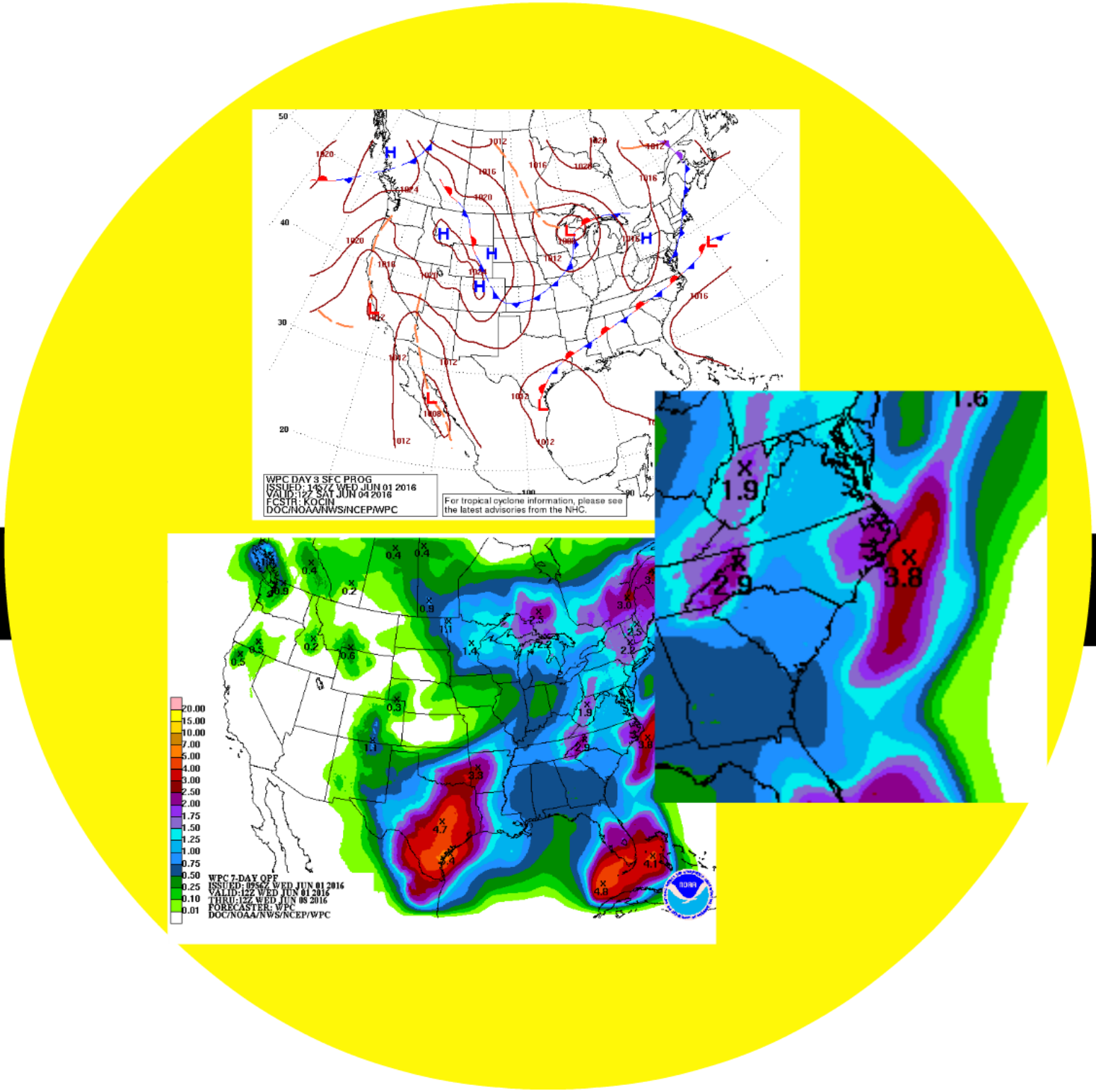
Looking Ahead

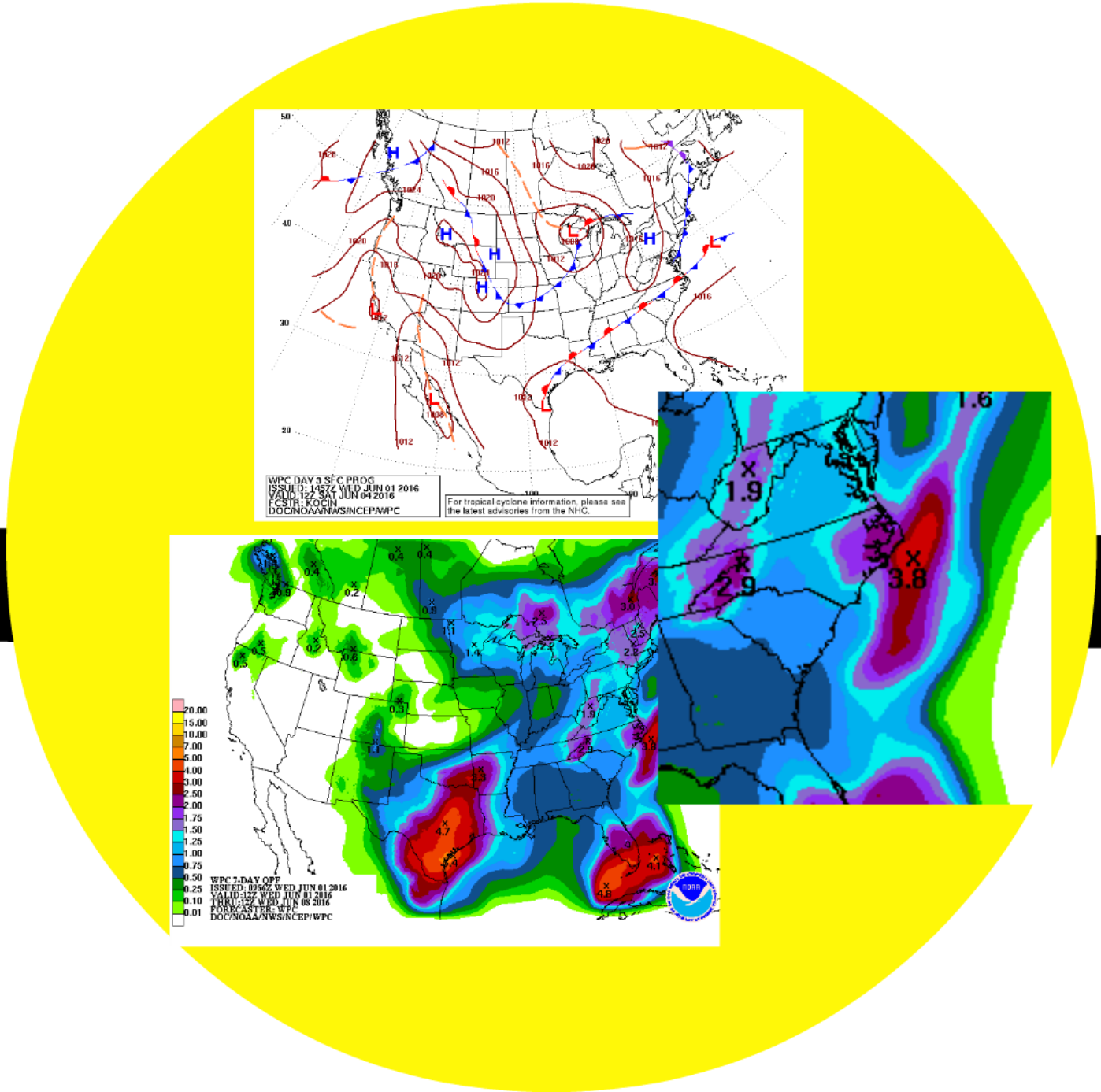


8-14 Days

Summer (JJA)

Next Winter


WPC DAY 3 SFC PROG
ISSUED: 1457Z WED JUN 01 2016
VALID:12Z SAT JUN 04 2016
FCSTR: KOCIN
DOC/NOAA/NWS/NCEP/WPC
For tropical cyclone information, please see the latest advisories from the NHC.
WPC 7-DAY QPF
ISSUED: 0956Z WED JUN 01 2016
VALID:12Z WED JUN 01 2016
THRU:12Z WED JUN 08 2016
FORECASTER: WPC
DOC/NOAA/NWS/NCEP/WPC
20.00
15.00
10.00
7.00
5.00
4.00
3.00
2.50
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.10
0.01


WPC DAY 3 SFC PROG
ISSUED: 1457Z WED JUN 01 2016
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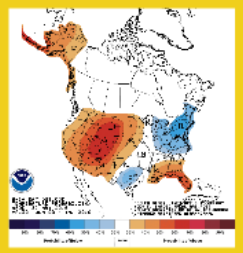
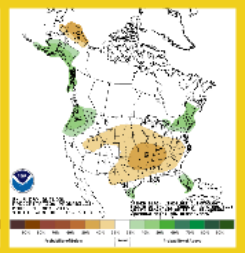
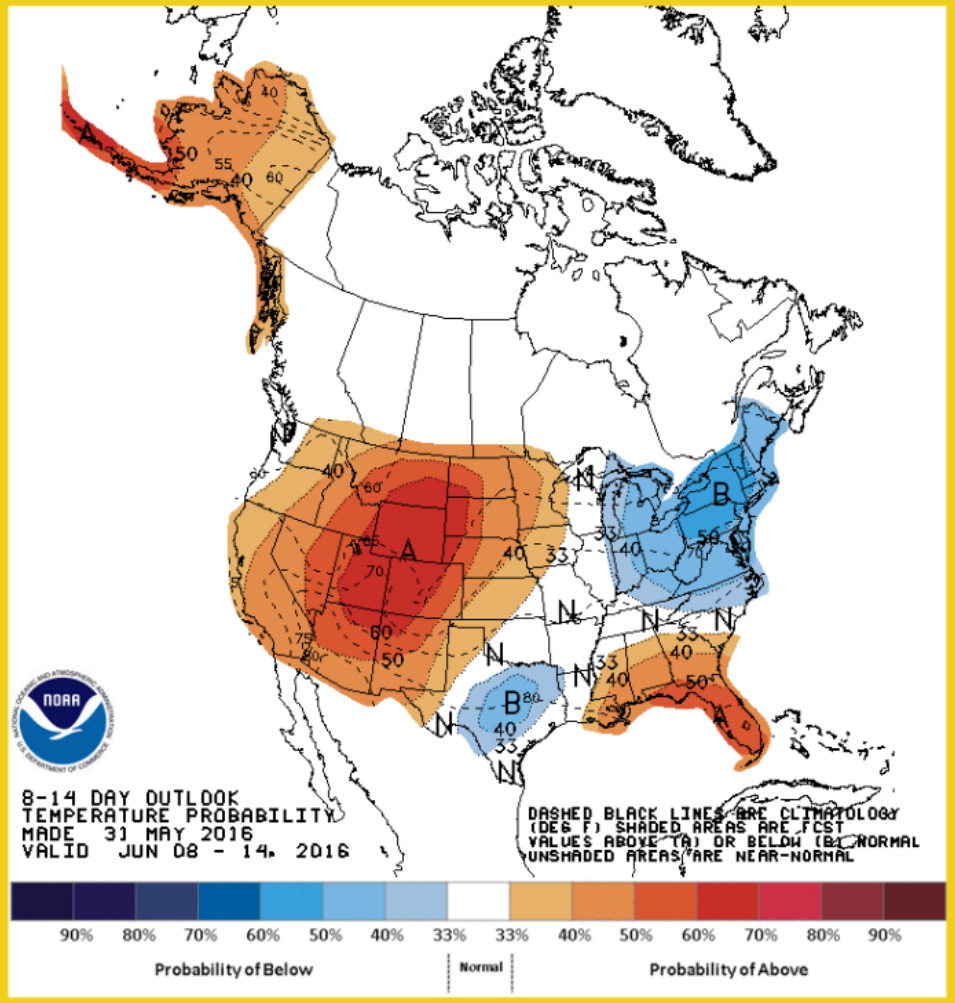
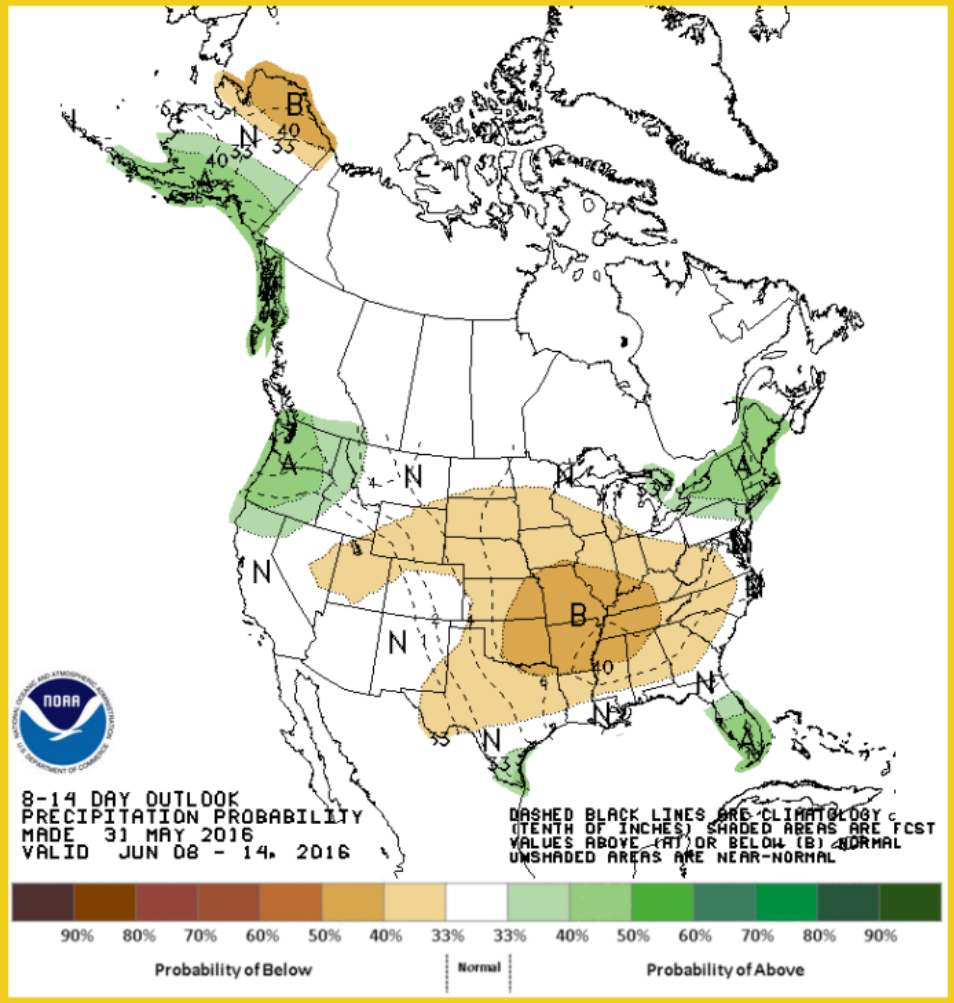
FORECASTER: WPC
DOC/NOAA/NWS/NCEP/WPC
20.00
15.00
10.00
7.00
5.00
4.00
3.00
2.50
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.10
0.01

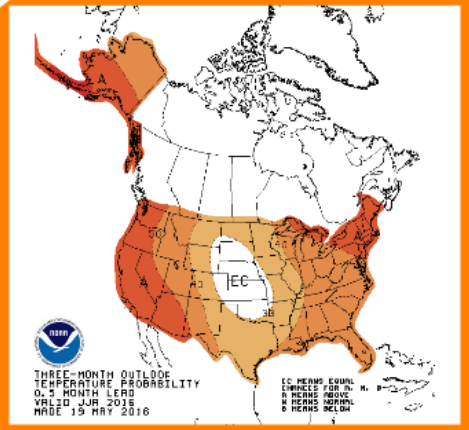
8-14 Days

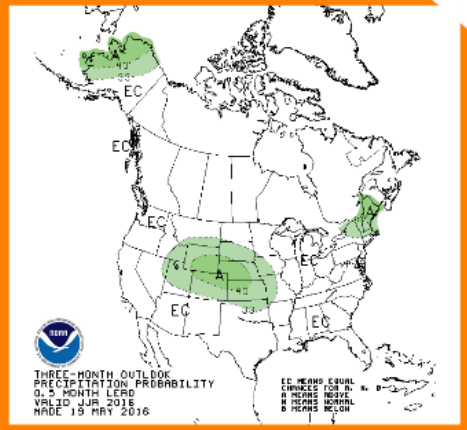





8-14 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 31 MAY 2016
VALID JUN 08 - 14. 2016
DASHED BLACK LINES ARE CLIMATOLOGY (DEG F) SHADED AREAS ARE FCST VALUES ABOVE (A) OR BELOW (B) NORMAL UNSHADED AREAS ARE NEAR-NORMAL
90% 80% 70% 60% 50% 40% 33% 33% 40% 50% 60% 70% 80% 90%
Probability of Below
Normal
Probability of Above

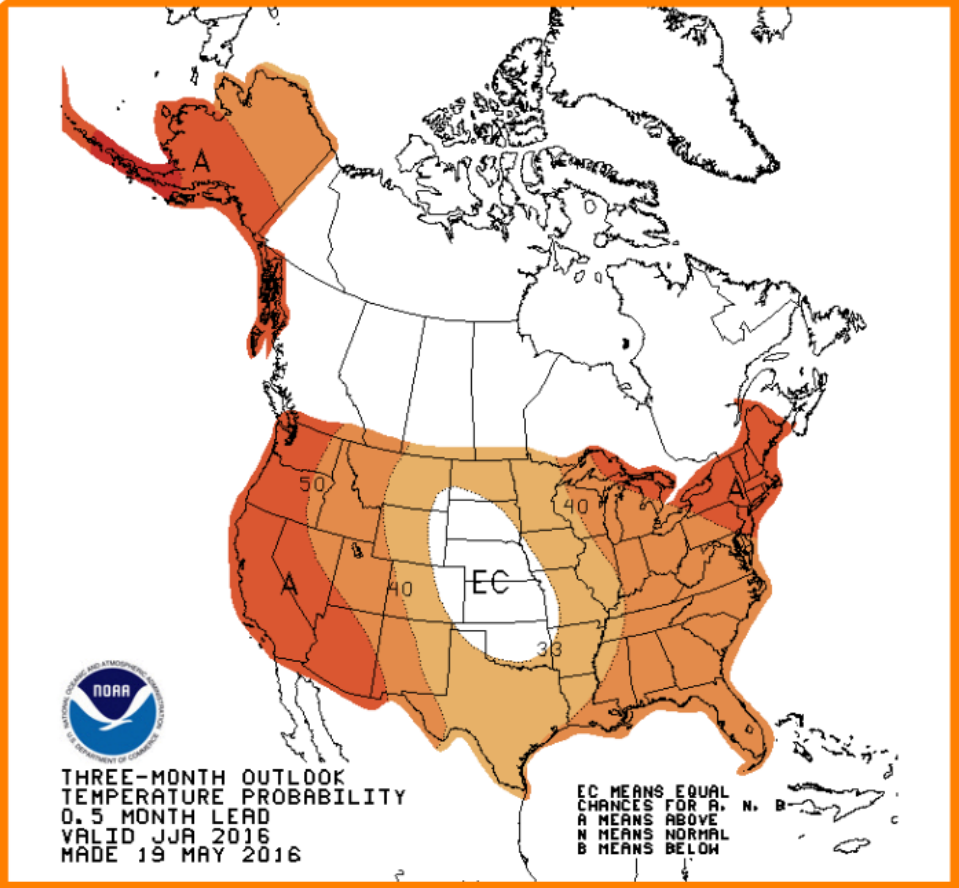

8-14 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 31 MAY 2016
VALID JUN 08 - 14. 2016
DASHED BLACK LINES ARE CLIMATOLOGY (TENTH OF INCHES) SHADED AREAS ARE FCST VALUES ABOVE (A) OR BELOW (B) NORMAL UNSHADED AREAS ARE NEAR-NORMAL
90% 80% 70% 60% 50% 40% 33% 33% 40% 50% 60% 70% 80% 90%
Probability of Below
Normal
Probability of Above

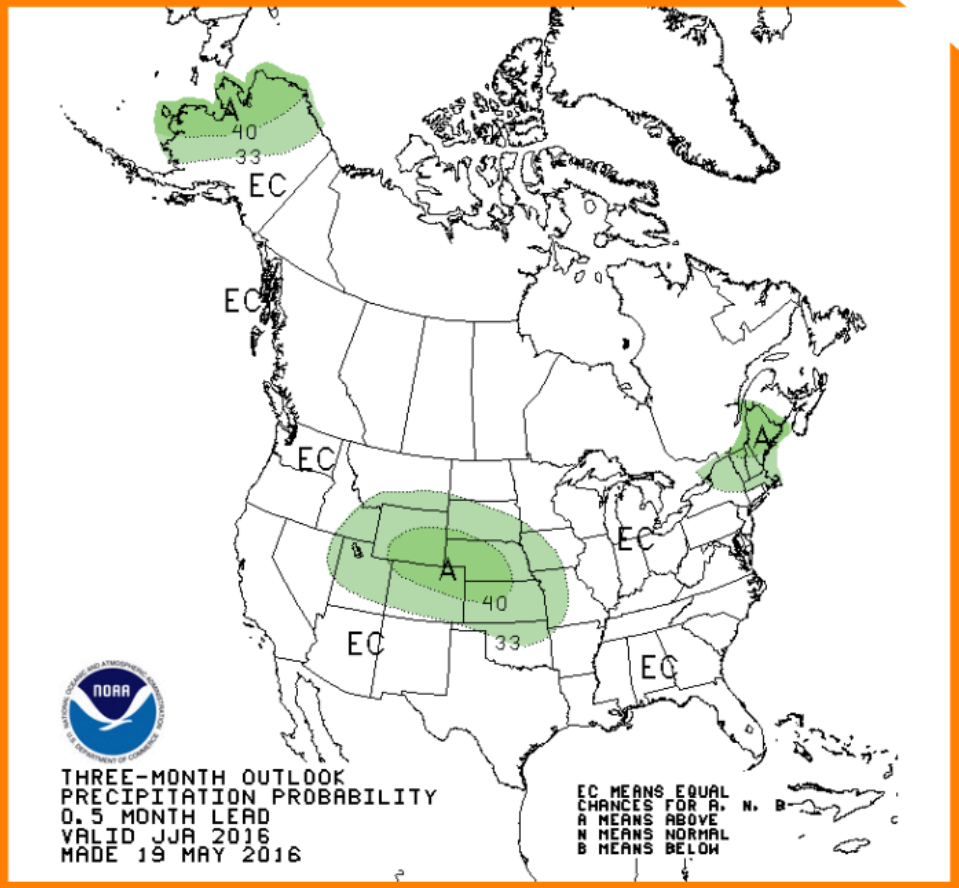

THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID JJA 2016
MADE 19 MAY 2016
EC MEANS EQUAL
CHANCES FOR N.
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

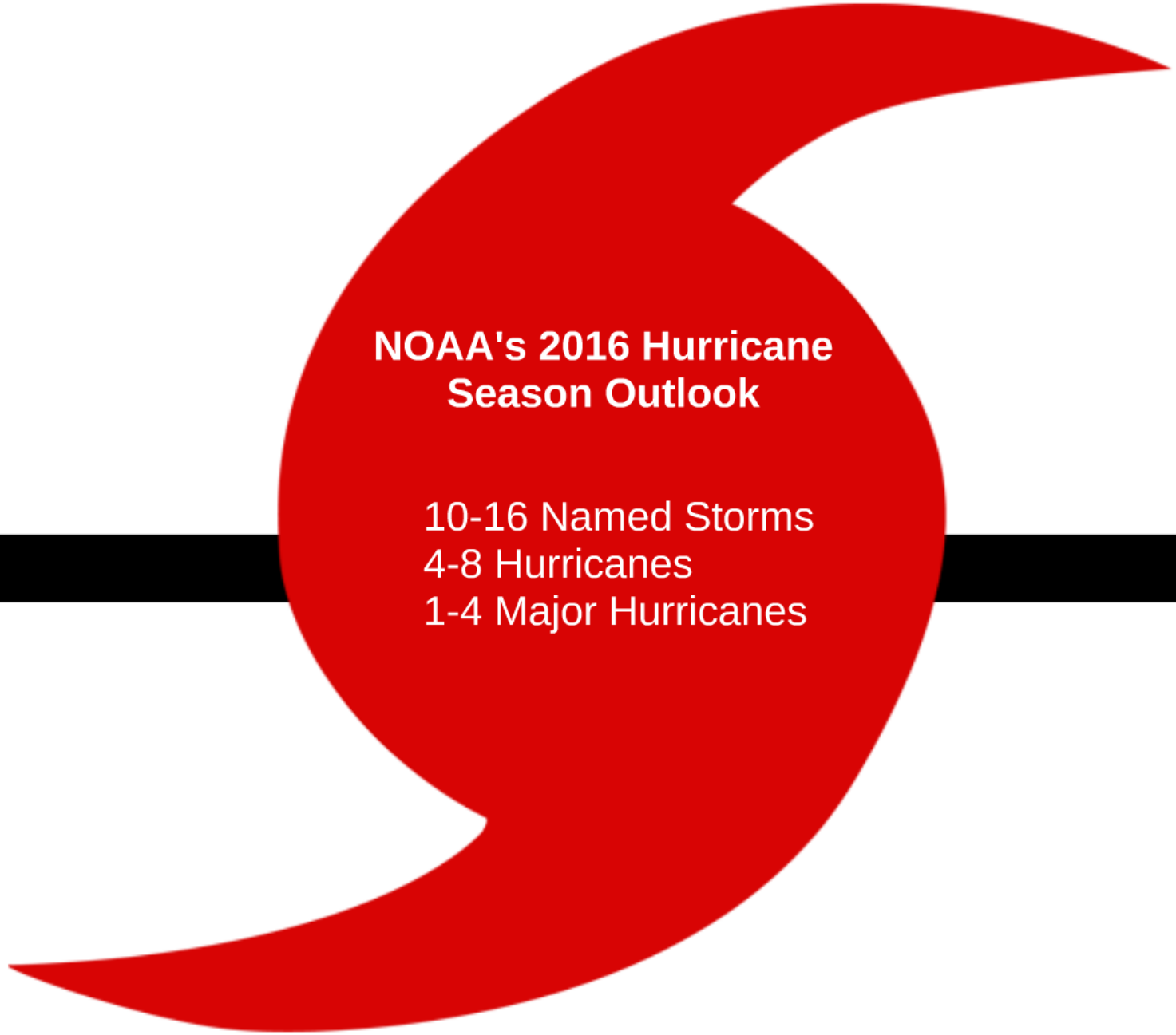

THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID JJA 2016
MADE 19 MAY 2016
EC MEANS EQUAL
CHANCES FOR N.
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

Summer

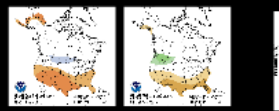
(JJA)

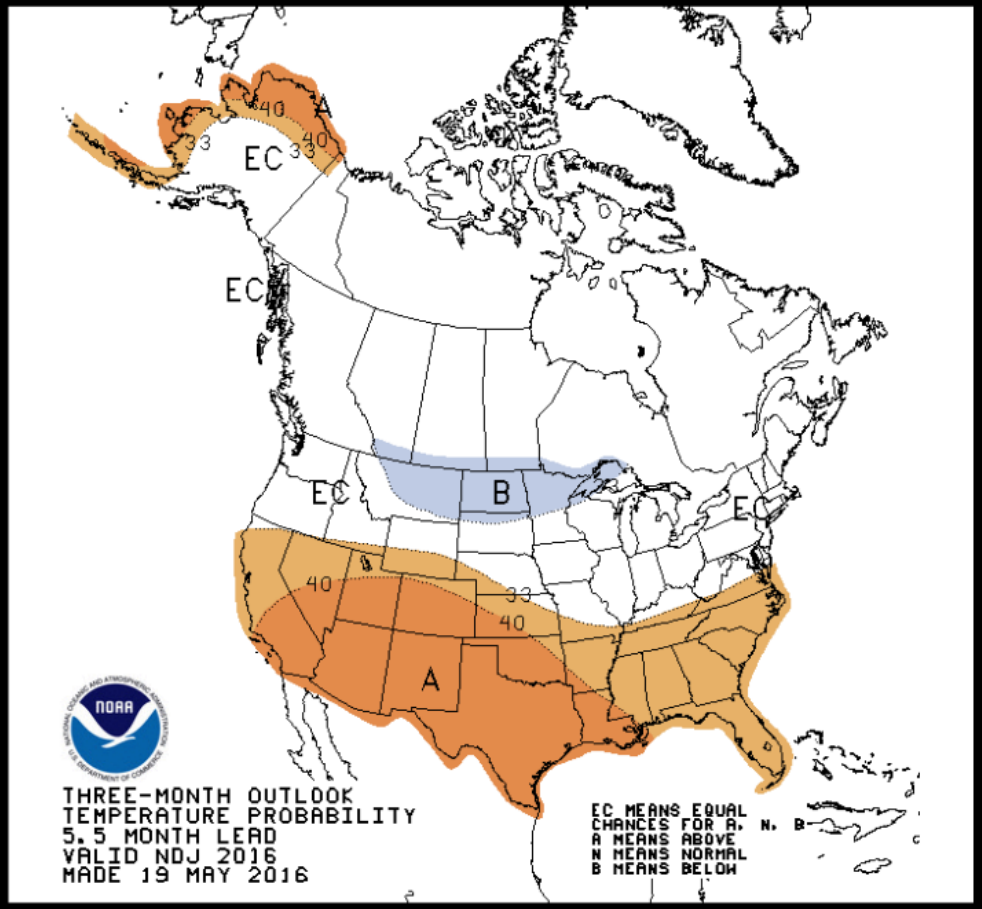

A
50
40
A
40
EC
33
A
NOAA
THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID JJA 2016
MADE 19 MAY 2016
EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

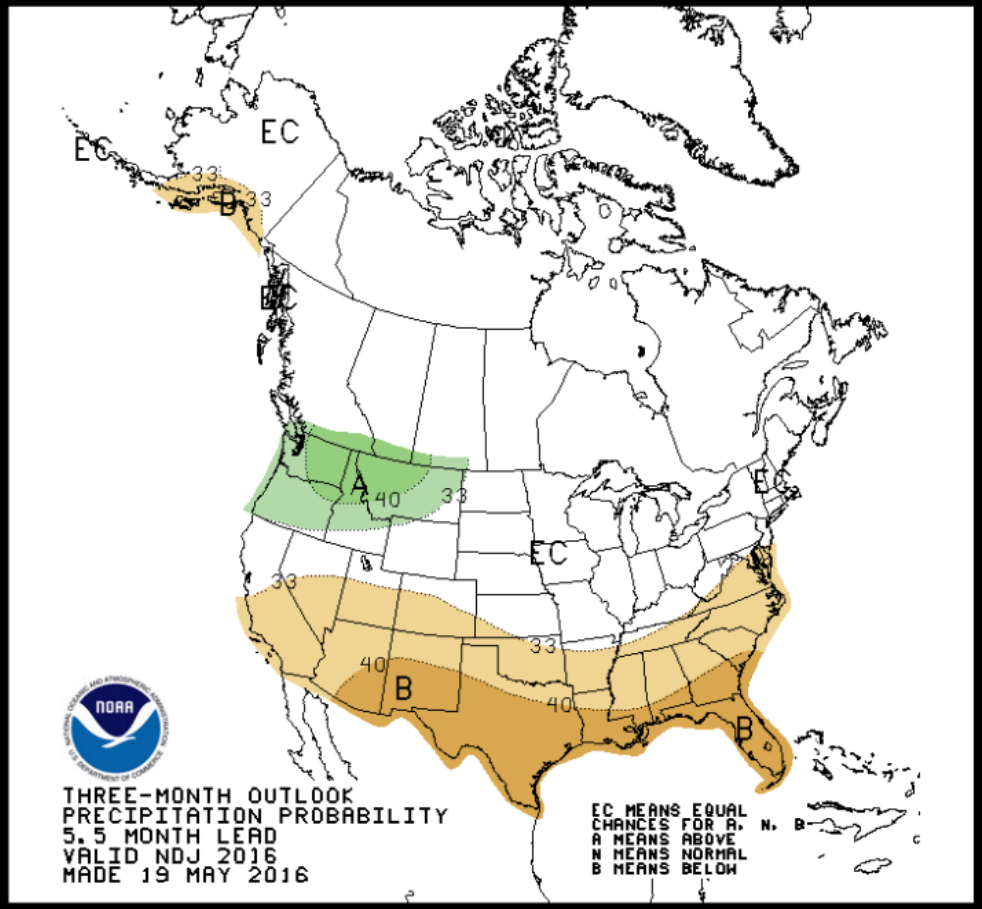

A
40
33
EC
EC
EC
A
EC
A
40
EC
33
EC
NOAA
THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID JJA 2016
MADE 19 MAY 2016
EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

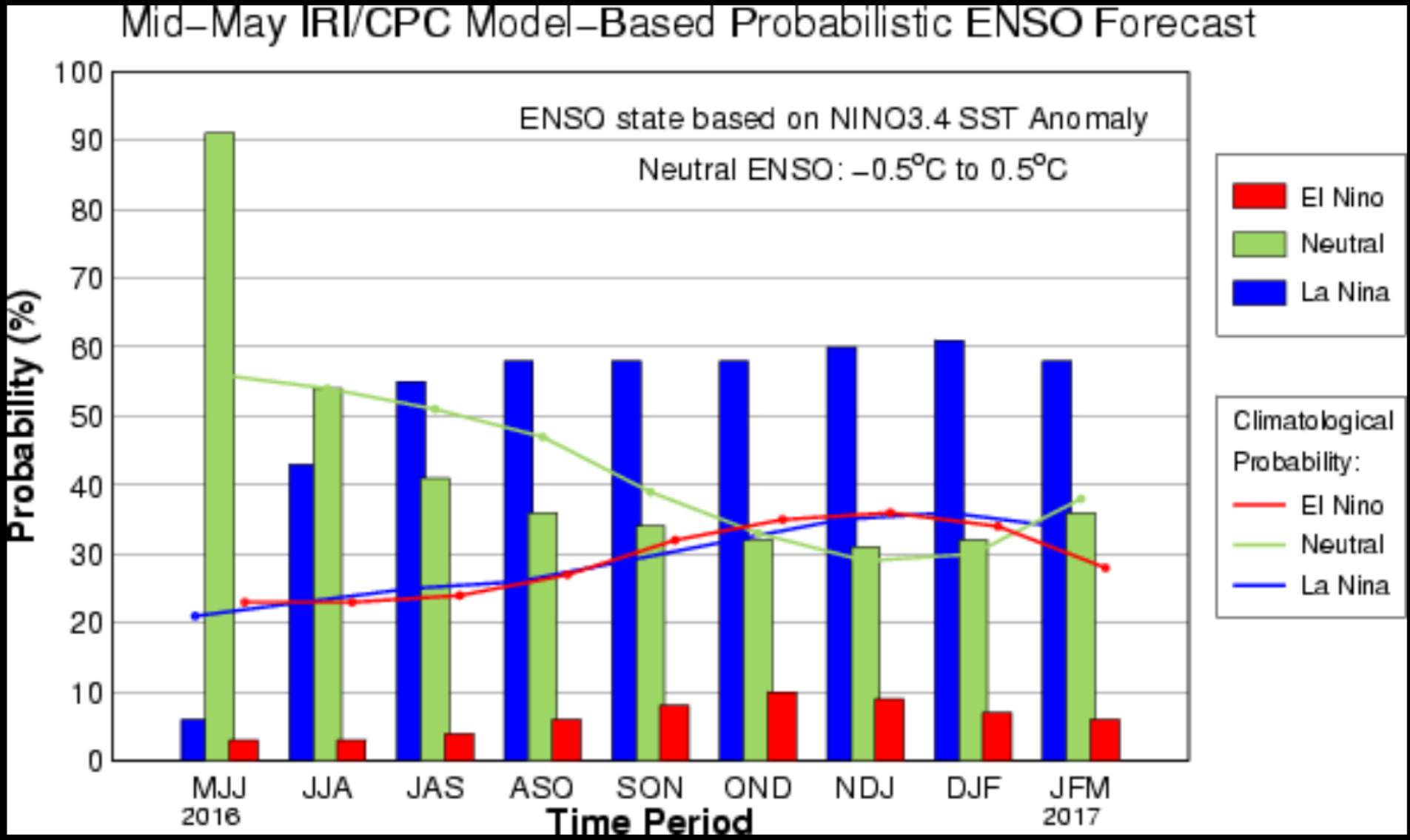

NOAA's 2016 Hurricane Season Outlook
10-16 Named Storms
4-8 Hurricanes
1-4 Major Hurricanes

Next Winter




EC
A
B
40
33
THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
5.5 MONTH LEAD
VALID NDJ 2016
MADE 19 MAY 2016
EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW


EC
A
B
40
33
THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
5.5 MONTH LEAD
VALID NDJ 2016
MADE 19 MAY 2016
EC MEANS EQUAL
CHANCES FOR A, N, B
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW


Mid–May IRI/CPC Model–Based Probabilistic ENSO Forecast
ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: –0.5°C to 0.5°C
Probability (%)
100
90
80
70
60
50
40
30
20
10
0
MJJ
2016
JJA
JAS
ASO
SON
OND
NDJ
DJF
JFM
2017
Time Period
El Nino
Neutral
La Nina
Climatological Probability:
El Nino
Neutral
La Nina

Thanks!

rvcumbie@ncsu.edu