



Some Long Range Forecasts

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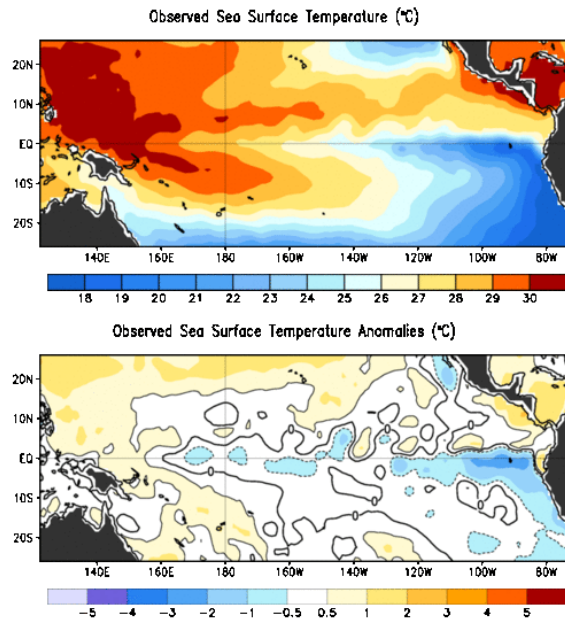
COLUMBIA, MO 65211

Our Forecast - Winter 2016 - 2017 (Mid MO) – Flashback

- ▶ Our forecast – and everyone else's - was a total bust. The winter temperatures were well above normal (+5.6 F), and we said (0.0- 0.5) sigma below normal (0 – 2.5 F).
- ▶ As for precipitation, we missed this badly too projecting near normal precipitation, but we were about 4 inches below the winter mean.
- ▶ There was very little snow and we forecast about 10 – 15 inches. We all waited for a La Niña that never came.

Winter Forecast 2017 - 2018 (mid-MO)

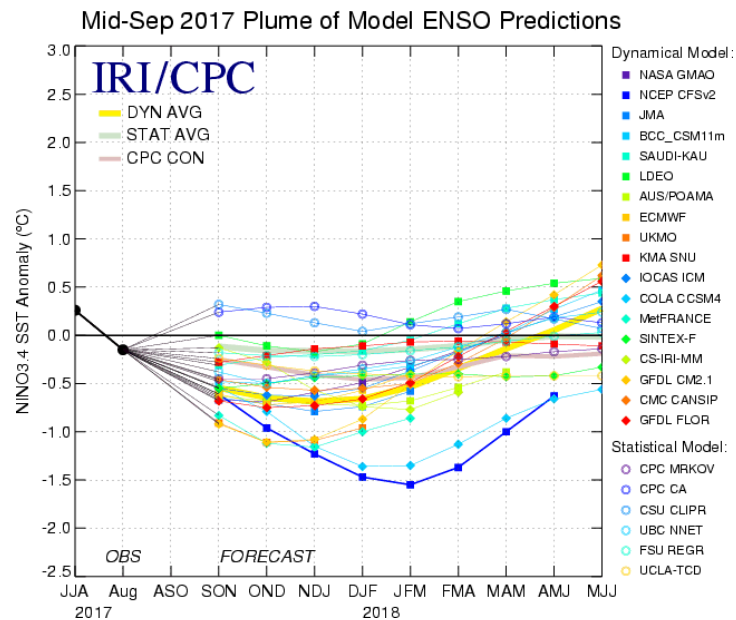
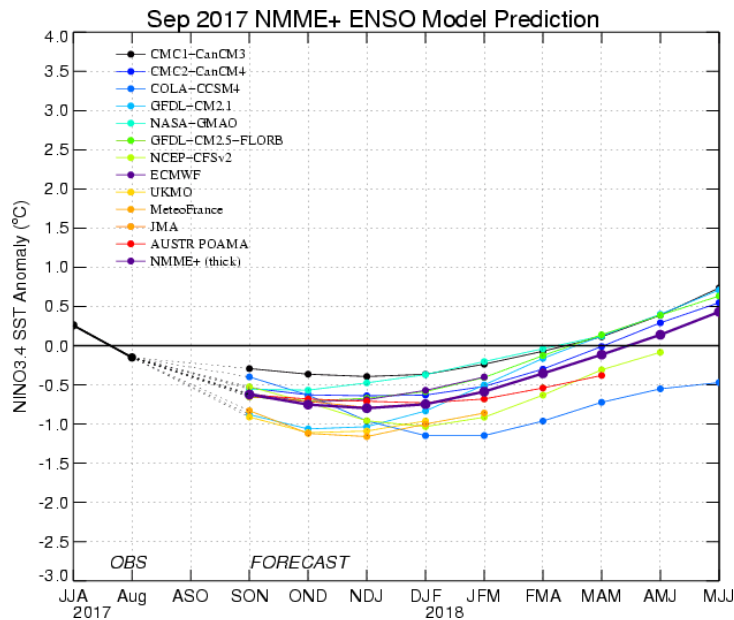
- ▶ Cold Neutral currently, but weak La Niña conditions to come?



7-day Average Centered on 27 September 2017

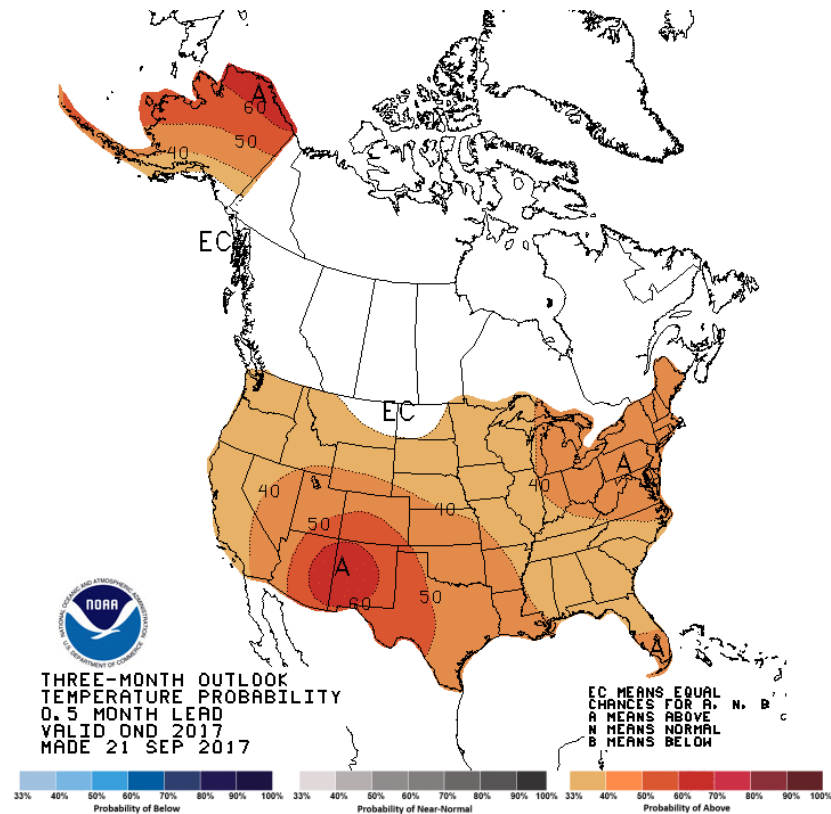
Winter Forecast 2017 - 2018

- ▶ During summer models continued warm Neutral conditions, but in August we took a turn toward La Niña. Is this leading us toward another bust?



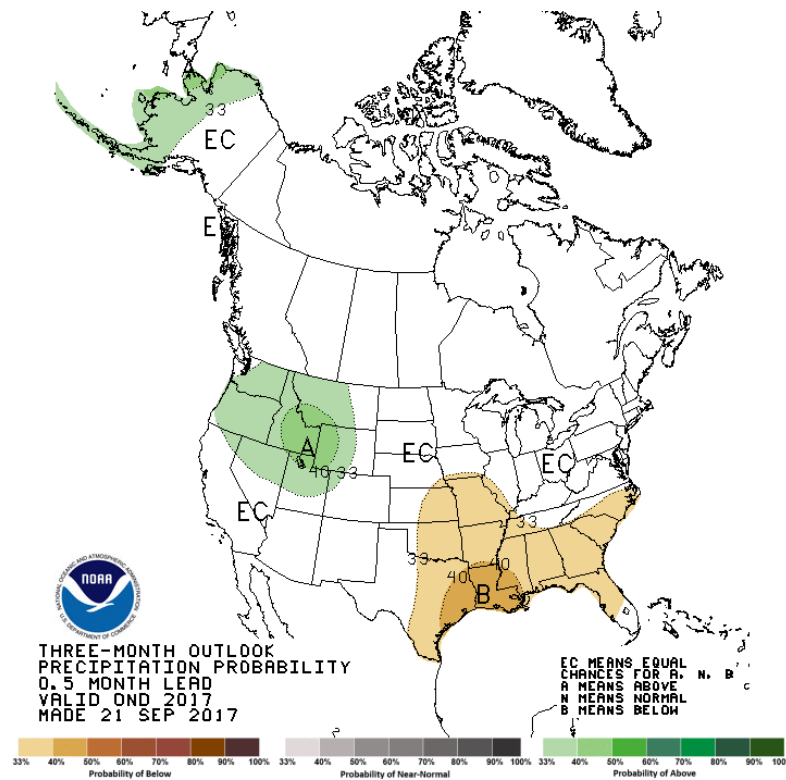
Fall 2017

- ▶ Fall Temps – SON (well above normal – repeating 2016)



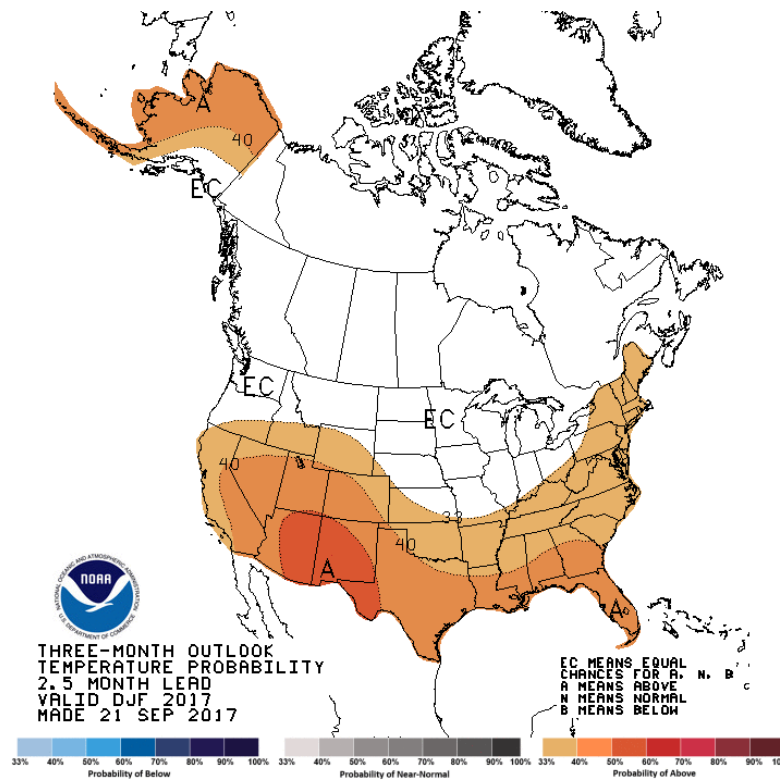
Fall 2017

- ▶ Fall Precipitation: SON (dry here – aids above normal temperature regime)



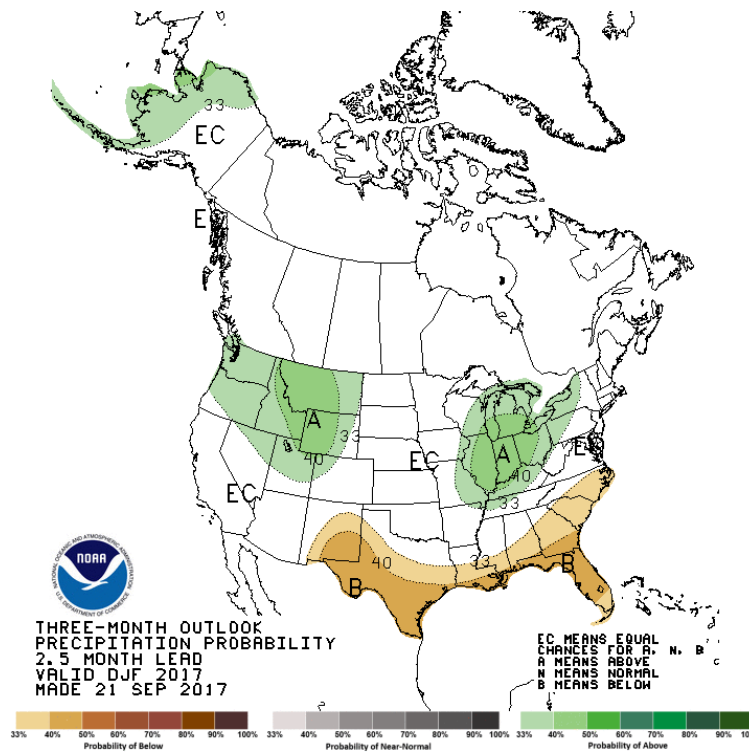
Winter – 2017 - 2018

- ▶ CPC Winter temps – DJF (no ideas for here, but warm across the south) (Warmth in AK indicating blocking?)



Winter – 2017 - 2018

- ▶ CPC winter precipitation DJF (Wetter conditions possible?)



Winter – 2017 - 2018

- ▶ CPC forecast is for near normal winter temperature-wise, but leaning a little toward wetter conditions precipitation-wise.
- ▶ In the winter 2017-2018, weak La Niña conditions expected to prevail!

Our forecast – Winter – 2017 - 2018

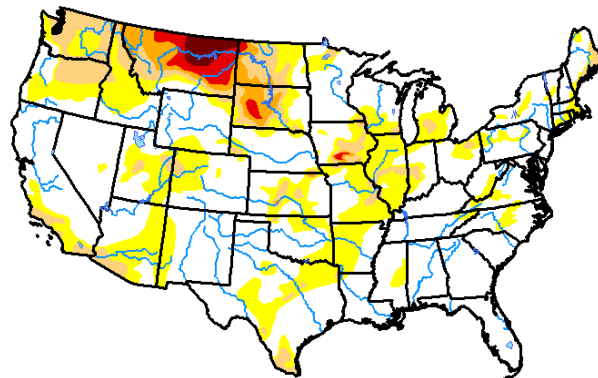
- ▶ After getting burned by La Nina last year, we're being asked to trust in it this year. Can't go there completely. We'll call for very close to normal temperatures, but colder in February – or opposite to last year's cool December – warm Jan/Feb.
- ▶ Above normal amounts of precipitation (about 0.5 sigma). We'll bite on an active clipper season. Include in this forecast, about 15 inches total snow.
- ▶ Reasoning: If we are to go weak La Niña as the Pacific is suggesting (and more so than last year), this would augur for a more similar winter to 2013 - 2014 or 2014 - 2015. La Niña will drive more Pacific blocking.

National drought map




Currently: We've quietly 'slipped' into dry conditions again, following a reasonable summer. But, extremely dry in the Montana region.

**U.S. Drought Monitor
Continental U.S. (CONUS)**

September 26, 2017
(Released Thursday, Sep. 28, 2017)
Valid 8 a.m. EDT



Intensity:

-  D0 Abnormally Dry
-  D1 Moderate Drought
-  D2 Severe Drought
-  D3 Extreme Drought
-  D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Brad Rippey
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

Summer 2017 recap

- ▶ Summer: we called for temperatures 0 – 1 F above normal. The final results were temperatures -0.1 F below normal (with a very cool August). We can call that a 'W'!
- ▶ Precipitation, we called for this to be about 0.5 sigma above normal. Summer totals were about 2.0 inches below normal, less than 0.5 sigma below normal. The cooler weather made this less noteworthy.
- ▶ All in all, a decent, albeit not perfect, summer forecast. We now have six straight years of good summer forecasts!

CoCoRaHs

- ▶ Please consider joining CoCoRaHs. This data will be used by agencies to decide crop loss information. It's worth it to you to join Missouri CoCoRaHs. (State Climatologist Patrick Guinan)
- ▶ <http://www.cocorahs.org>
- ▶ Email: lupoa@missouri.edu

