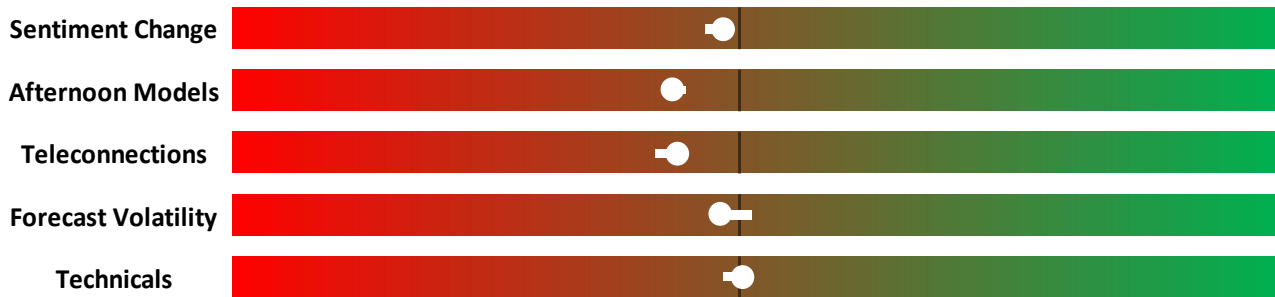




**Report Summary:** The September natural gas contract declined a bit over a percent on the day following what appeared like an overly bullish reaction to yesterday's EIA print. Prices gradually pulled back through the day but again traded within a very tight range, seeing few catalysts to push them in either direction. Quite bearish weather forecasts have continued to weigh on prices, and they appear to be one of the primary headwinds for prices as we head into next week as well.



### Afternoon Discussion

Our sentiment has ticked back neutral after being slightly bearish heading into the day as we still see few catalysts within this market. Prices through the week traded down just 9 cents, with a weekly range that was not all that much larger. Spreads, volatility, and other technical indicators seem to be showing that the market is quite complacent, happy pricing in the dwindling surplus at current levels. We see resistance overhead sitting around the \$2.95 level heading into next week, and to take that out we would rather need far warmer trends in the long-range (which as we explain are rather unlikely) or further structural tightening within a market that is already quite tight. Next week's EIA print should be a bit more bullish thanks primarily to an increase in heat across the country over the last few days, and hear over the weekend and into early next week may help cash prices find some support as demand for a couple days could really get quite elevated. However, Tuesday into Wednesday a broad cold front will sweep across the country and put power markets to sleep, pulling temperatures decently below average and pushing GWDDs far lower. This is quite high confidence, as is the fact that it will linger through the end of next week into next weekend. In the longer-range there are some signs that heat may gradually return to the East Coast, but the center of the country looks very likely to continue to see cool weather through the first half of the month of September. For now, this means that natural gas bulls will have to look elsewhere for support, as we expect weather will be a rather significant headwind into next week. Still, there are increasing signs that much of this cooler weather is getting priced into the market, and as long as forecasts over the weekend do not turn significantly more bearish we doubt weather alone will be enough of a catalyst to send natural gas prices significantly lower. Accordingly, we expect to at least start next week within this current range.

3.60

3.50

3.40

3.30

3.20

3.10

3.00

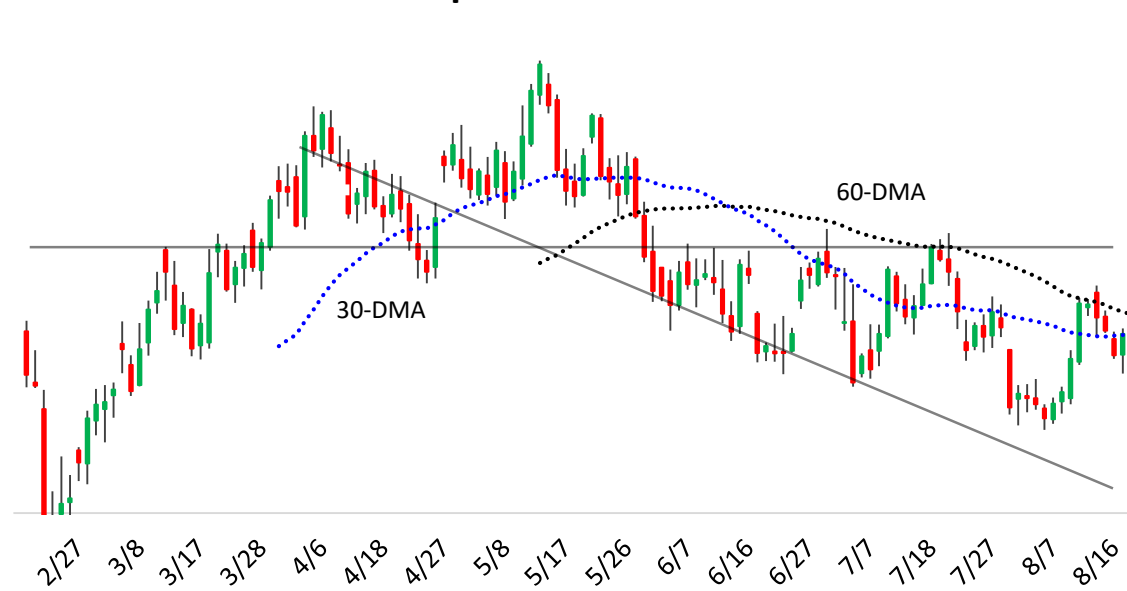
2.90

2.80

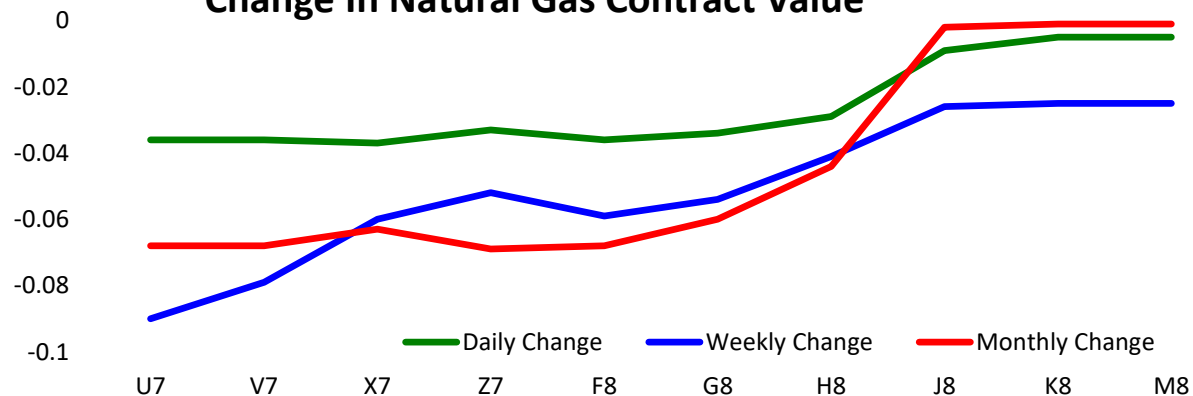
2.70

2.60

### Prompt Month Natural Gas



### Change In Natural Gas Contract Value





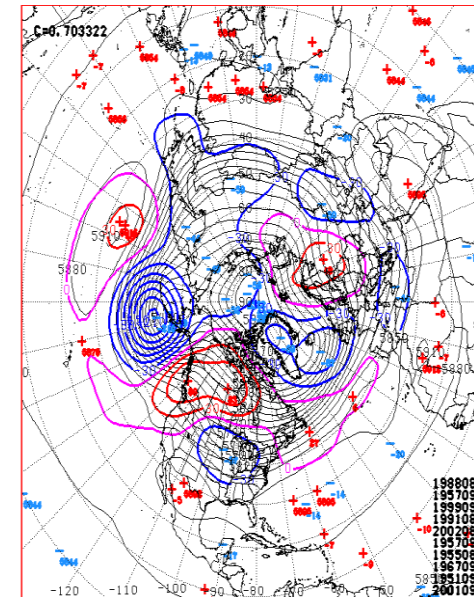
# GWDD Trends: NEUTRAL

**Key Takeaway:** Weather forecasts today were generally unchanged as model guidance continued to confirm medium and long-term cooler trends. We noticed a slightly quicker cold front and slightly more warm risks around Day 15, but the shift from this morning is quite minimal with confidence in cold still quite high.

Population Weighted Cooling Degree Days

	Region	18 Aug	19 Aug	20 Aug	21 Aug	22 Aug	23 Aug	24 Aug	Total	Diff from Avg.
New England	1	4 3 4 4 3 4 4	10 9 7 5 3 4	8 8 8 6 3	8 8 8 5	10 9 8	9 8	5	54	28 107.69%
Mid Atlantic	2	11 10 10 10 8 8 7	11 11 10 8 7 8	8 9 9 7 7	9 9 9 7	11 11 10	10 9	5	65	28 75.68%
E N Central	3	7 8 7 6 8 8 8	6 6 6 5 7 7	8 8 8 6 7	10 10 9 8	10 10 10	6 6	2	49	8 19.51%
W N Central	4	6 6 6 6 7 8 9	8 8 7 7 7 8	10 10 9 9 8	11 11 10 10	10 10 10	7 6	5	57	3 5.56%
S Atlantic	5	18 17 17 17 17 16 14	16 16 16 15 16 16	16 16 16 15 15	16 16 16 14	16 16 15	16 16	14	112	22 24.44%
E S Central	6	15 15 15 15 15 15 14	14 14 14 13 14 14	15 15 14 13 14	15 15 15 13	16 15 15	14 14	12	101	13 14.77%
W S Central	7	20 19 20 20 20 20 20	20 20 19 20 20 19	20 20 20 20 20	20 19 20 19	20 19 20	20 19	19	139	13 10.32%
Mountain	8	10 10 10 10 10 11 11	11 11 11 11 10 11	10 10 11 11 11	10 10 10 10	10 10 10	10 10	10	71	-2 -2.74%
Pacific	9	7 7 7 8 8 9 9	7 7 7 8 9 9	6 6 6 7 8	5 6 6 6	6 6 6	6 7	6	43	1 2.38%
Cont. US	CONUS	12 11 11 11 11 12 11	12 12 11 11 11 11	11 11 11 11 11	12 12 11 11	12 12 12	11 11	9	79	14 21.54%

8-14 Day CPC Analog



Historic GWDDs

	8/22	8/23	8/24	8/25	8/26	8/27	8/28	8/29	8/30
2016	9	9	10	11	11	11	12	12	11
2015	9	9	10	9	8	8	8	8	9
2014	11	10	10	10	10	10	9	9	9
2013	11	10	9	9	9	11	11	12	13
2012	7	9	10	9	9	10	11	10	10
2011	10	10	11	11	12	12	11	9	8
2010	12	10	9	9	9	8	8	10	11
2009	10	9	8	8	9	10	9	9	9
2008	9	10	9	9	8	8	9	9	10
2007	12	11	12	12	11	10	11	12	11
2006	10	10	10	10	9	11	10	10	8
2005	11	10	9	9	10	10	10	11	11
2004	7	7	8	9	9	10	12	11	10
2003	13	10	9	11	13	13	11	11	10
2002	11	11	10	10	9	9	8	7	8
2001	9	10	10	10	10	11	10	9	9
2000	8	9	10	10	10	10	10	10	10
1999	8	9	10	10	11	11	12	11	9
1998	11	12	13	13	12	12	12	13	12
1997	8	7	7	8	7	8	9	8	8
1996	11	11	10	9	9	8	8	9	8
1995	11	10	10	9	9	10	11	11	11
1994	6	7	8	8	10	11	10	8	8
1993	10	10	11	12	13	13	12	11	11
1992	6	7	9	11	11	10	10	7	5
1991	9	10	10	10	10	10	12	12	13
1990	8	8	9	10	11	12	13	12	10
1989	10	11	10	9	9	9	9	10	10
1988	9	10	10	9	9	9	10	9	7
1987	10	9	9	9	9	9	10	8	8
1986	9	9	8	8	9	10	10	10	7
1985	8	7	8	8	9	9	9	9	10
1984	8	8	7	7	7	9	11	12	12
1983	12	11	11	11	12	13	13	12	11
1982	10	9	9	9	7	9	10	10	8
1981	6	7	8	8	9	9	9	9	9
AVG	9.42	9.33	9.47	9.56	9.69	10.1	10.3	10	9.56

GWDDs	8/18	8/19	8/20	8/21	8/22	8/23	8/24	8/25	8/26	8/27	8/28	8/29	8/30	8/31	9/1	Total
New Forecast	12	11.5	11.5	12	12	11	9.5	9	8.5	9	9	9	9	9.5	9.5	152
AM Forecast	12	11	11.5	12	12	11.5	10	9	8.5	9	9	9	9	9.5	9	152
5-yr Avg	10	10	9.4	9.4	9.4	9.4	9.8	9.6	9.4	10	10.2	10.2	10.4	11.2	11	149.4
1981-2010 Avg	10.3	10.0	9.7	9.6	9.4	9.3	9.5	9.6	9.7	10.1	10.3	10.0	9.6	9.4	9.2	145.6
2016	12	12	11	10	9	9	10	11	11	11	12	12	11	11	9	161

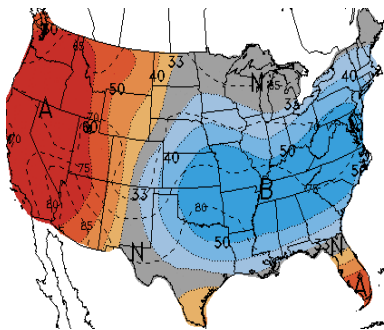




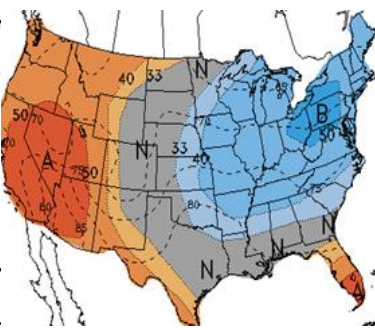
# Forecast Trends: NEUTRAL

**Key Takeaway:** The Climate Prediction center has finally picked up on the cooler trends that we expect to see through the medium and long-term, with widespread cooler anomalies now seen on all their products. The GEFS has focused more cold in the medium-term than the long-term, a trend we see on the CFSv2 now too.

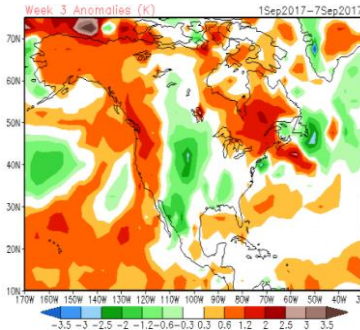
New 8-14 Day CPC



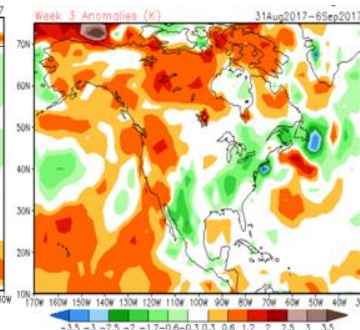
Old 8-14 Day CPC



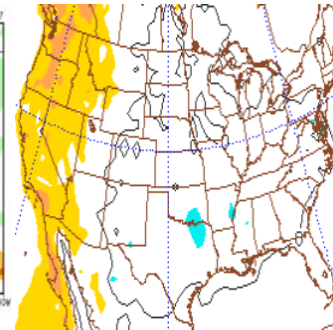
Today's CFSv2



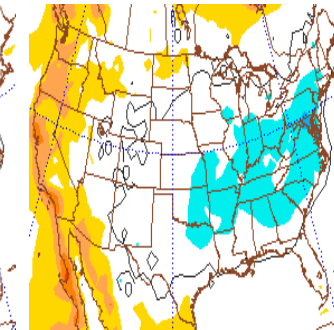
Yesterday's CFSv2



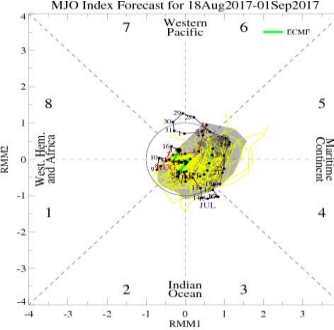
12z GFS D8-14



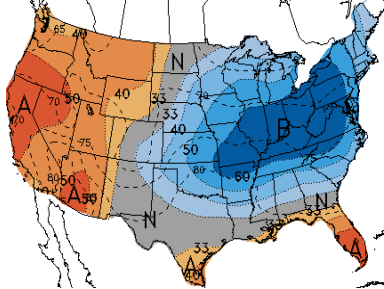
0z GFS D8-14



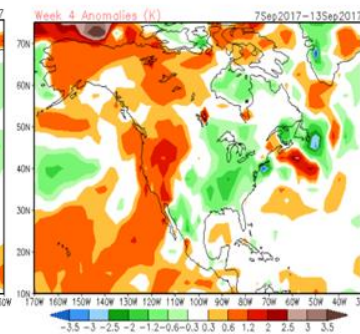
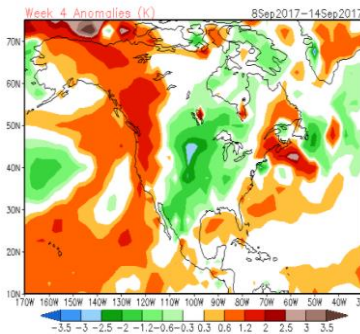
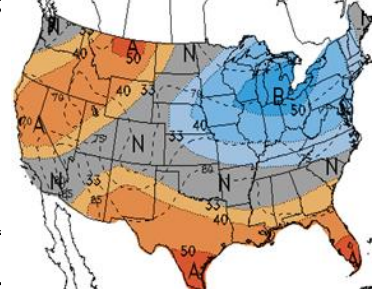
ECMWF MJO



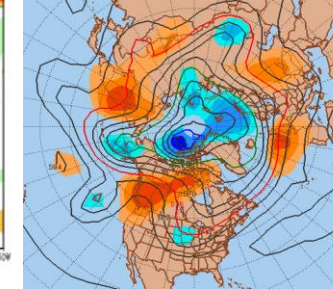
New 6-10 Day CPC



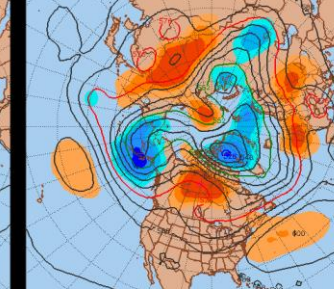
Old 6-10 Day CPC



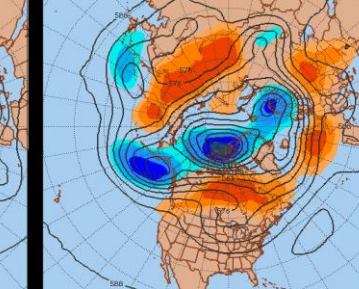
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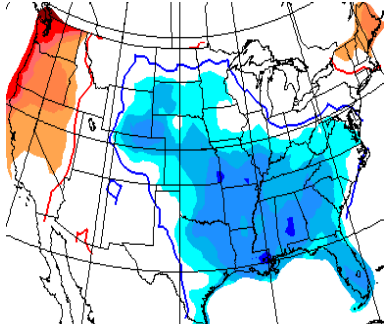
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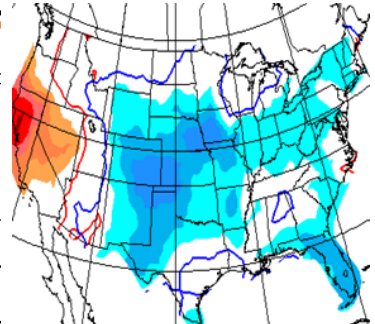
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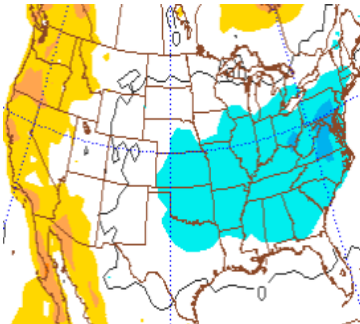
New 8-14 Day Analog



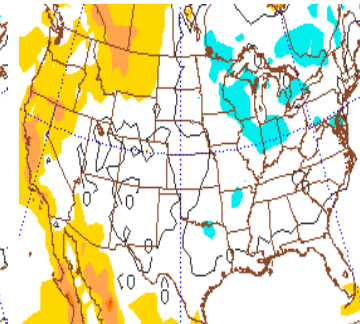
Old 8-14 Day Analog



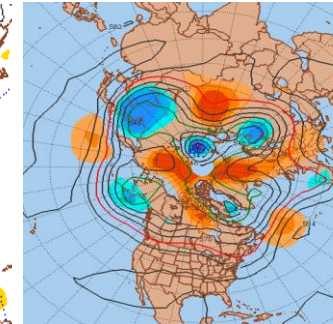
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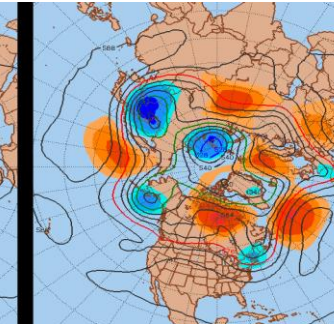
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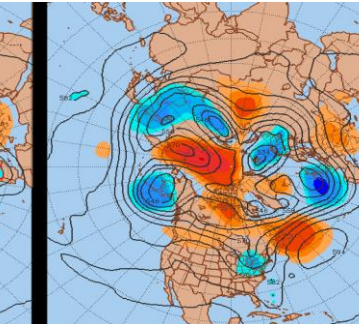
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0z GFS D8-10



0z CMC D8-10





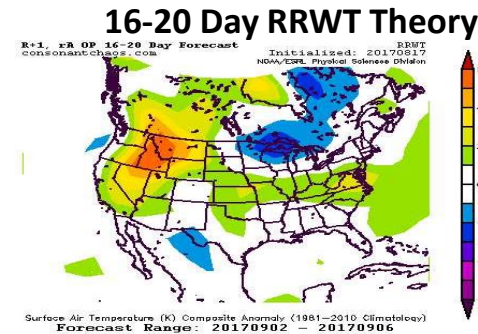


# Weekend Expectations: NEUTRAL

**Key Takeaway:** Seeing as it would be difficult for current forecasts to turn all that much more bearish, we see further increasing confidence in medium-term cool weather and a slight tick up in long-range warm risk across the East Coast as canceling out. These are the two trends we would expect to dominate across model guidance over the weekend, though increasing confidence in Week 2 cool weather will likely result in even cooler 6-10 and 8-14 Day forecasts come Monday.

GWDDs	Current	Monday Expected	Climo	5-yr Avg	2016
6-10 Day Forecast	45	44	49.1	49	55
8-14 Day Forecast	63.5	61	68.2	72.4	77

The medium-range forecast continues to be quite high confidence as model guidance all shows a very strong trough diving down into the center of the country and sliding east, ensuring that temperatures will be significantly below average. While a few UGW HDDs will be possible across far northern areas, the main trend will be a reduction in PW HDDs and thus GW HDDs, as we see the current 6-10 Day forecast with 4 fewer GW HDDs than average. By Monday we expect that to increase a bit as confidence rises even further, as we could see a day or two with only 8 PW HDDs, but those should not last all week. The 8-14 Day forecast is also likely to see a slight demand reduction as cooler weather in the long-range becomes higher confidence moving into the middle of Week 2. We do note that currently there is a risk of warmer trends in the 13-16 Day forecast range, meaning that come Monday we could see a couple GW HDDs added to the end of the 8-14 Day timeframe. We see cooler trends at the front-end of that range canceling those out regardless, but the picture for natural gas prices may not be much more bearish than it is now if at least some warming trends across the East Coast will be possible. We agree with the CPC in placing the primary cool risk for Weeks 3 and 4 across the center of the country, and a warm Atlantic will allow for a bit more warm risk across the Northeast and Southeast at times. CIPS analogs only shows real significance to cold risk across the South, though the Northeast will have a few cold days as well. A rising NAO should add a bit more heat risk back to the Northeast in the long-range, though the JMA indicates that ridging across the eastern Pacific should work to keep some trough risk across the center of the country. Overall, we do not expect any major forecast changes over the weekend, with significant medium-term cold likely still the story through the trading day on Monday but maybe a bit more long-range warm risks to ease some of the bearishness in forecasts.

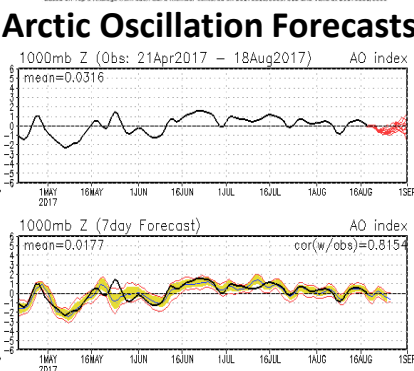
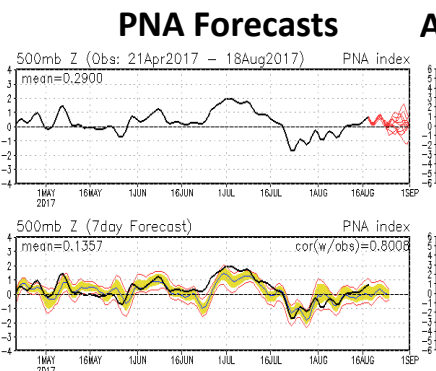
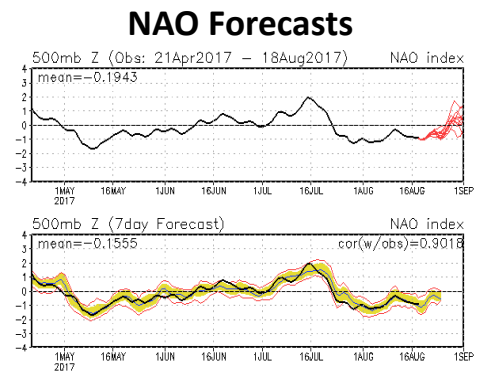
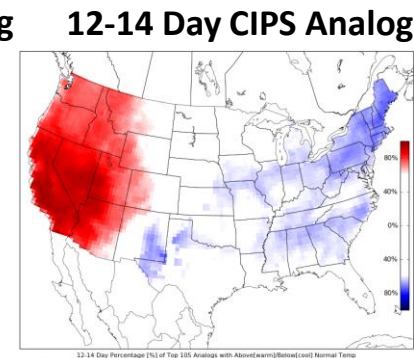
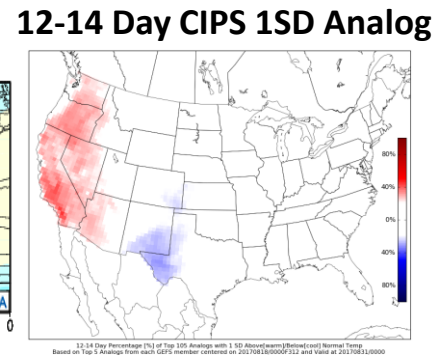
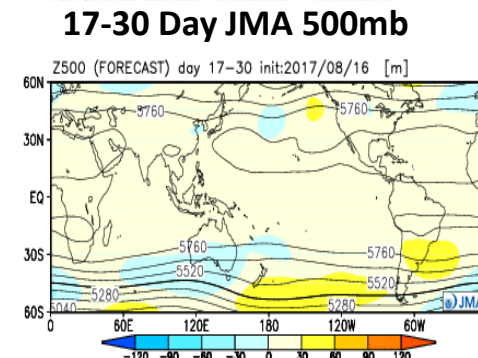
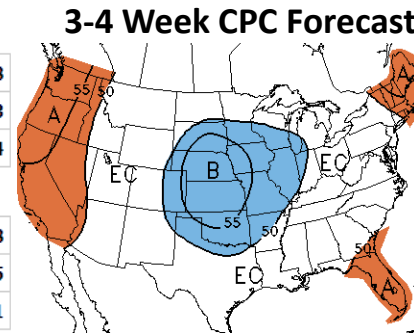


SOI values for 18 Aug 2017

Average for last 30 days	5.28
Average for last 90 days	0.63
Daily contribution to SOI calculation	22.64

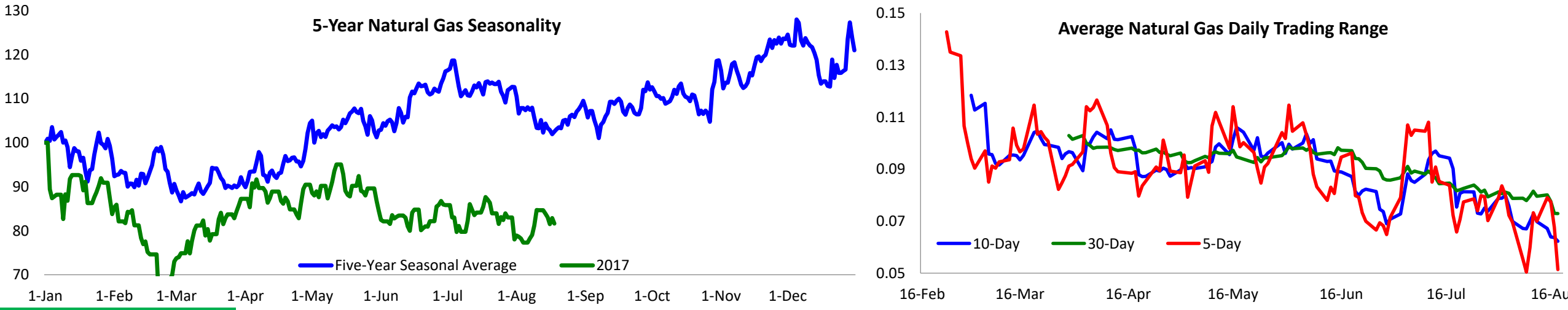
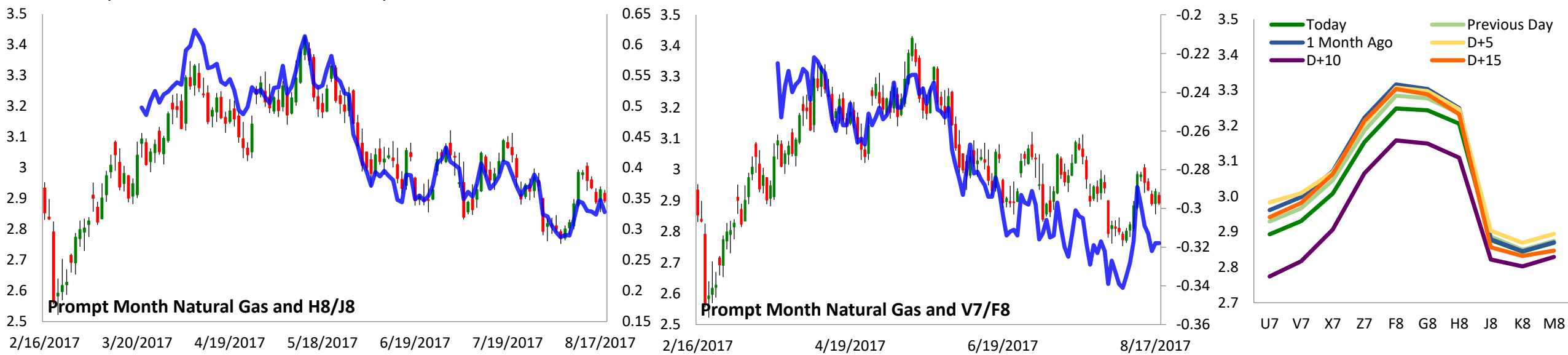
Monthly average SOI values

May	0.68
June	-9.45
July	6.51





**Key Takeaway:** September natural gas prices closed out the week within a tight range, and a lack of real movement in spreads over the past couple of days indicates that the market seems rather complacent at current levels. Average trading ranges continue to set new lows as well while volatility is minimal. We do note that seasonality over the next two weeks is quite bullish, which could be a bit of a tailwind, but otherwise technicals show a rather slow market overall.





# Pre-Close Update Disclaimer and Key

Bespoke Weather Services, LLC believes all information contained in this report to be accurate, but we do not guarantee its accuracy. None of the information in this report or any opinions expressed constitutes a solicitation of the purchase or sale of any securities or commodities.

## Key:

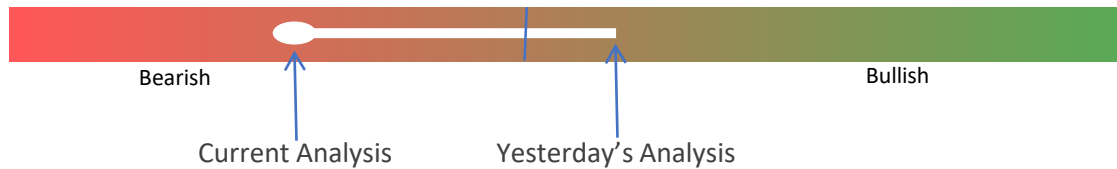
**CFSv2:** American climate model guidance

**CPC:** Climate Prediction Center

**Analog:** Previously occurring weather pattern that has similarities to the current one

**GEFS:** Global Ensemble Forecasting System, American modeling guidance

**Teleconnections:** Atmospheric indices that measure expected orientation both of upper and lower levels of the atmosphere (ie. MJO, NAO, AO, PNA, etc.)



**MJO:** Madden/Julian Oscillation, a measure of global convection (storminess) placement

**GWDDs:** Gas Weighted Degree Days (calculated by combining Population Weighted Cooling Degree Days (PWCDs) with Utility Gas Weighted Heating Degree Days (UGWHDDs))

**EIA Forecasts:** Our forecast for the weekly change in natural gas stockpiles, going out three or four weeks

**Note:** All above information is part of this informational key, and is not updated daily. Page 1 contains all relevant daily updated material in the Morning Update.