

US GRAIN WEATHER ISSUES

as of FRIDAY
1 SEPT 2017



LOCATED in Richmond VA

Featured frequently on AGRI-MONEY

EMAIL WXRISK@VERZION .NET



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wxrisk@gmail.com



Who we are

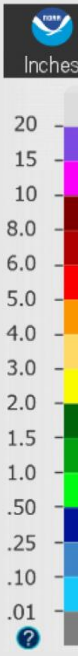
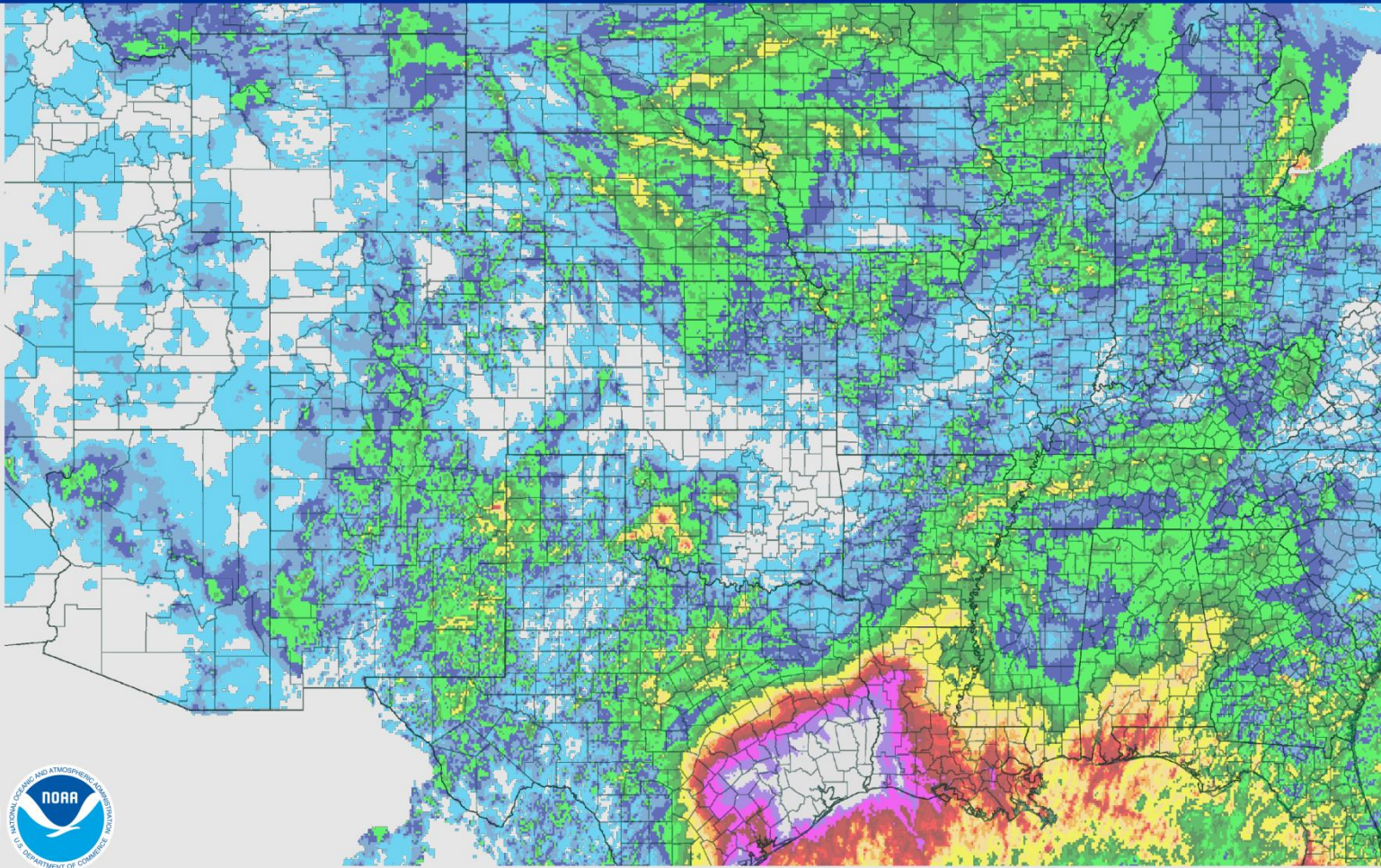
WxRisk is a private, subscription, Weather Forecasting Company. Founded in 1998, the company specializes in providing the most detailed and accurate weather forecasts for Days 3 through 30, as well as seasonal forecasts, for Grain Traders, Farmers, Energy Traders, Construction companies, Oil and Heat associations, Wineries and other businesses impacted by weather. Geographic areas covered include, but are not limited to: The Middle Atlantic region of the U.S., all of the Continental U.S., South America, Europe, Ukraine/Southern and western Russia, Kazakhstan, India, Australia & China. Current and previous clients include large and mid-size commodity trading houses, energy firms, gas and propane companies, ski resorts, individual farmers and business involved in providing transportation and construction services throughout the world.

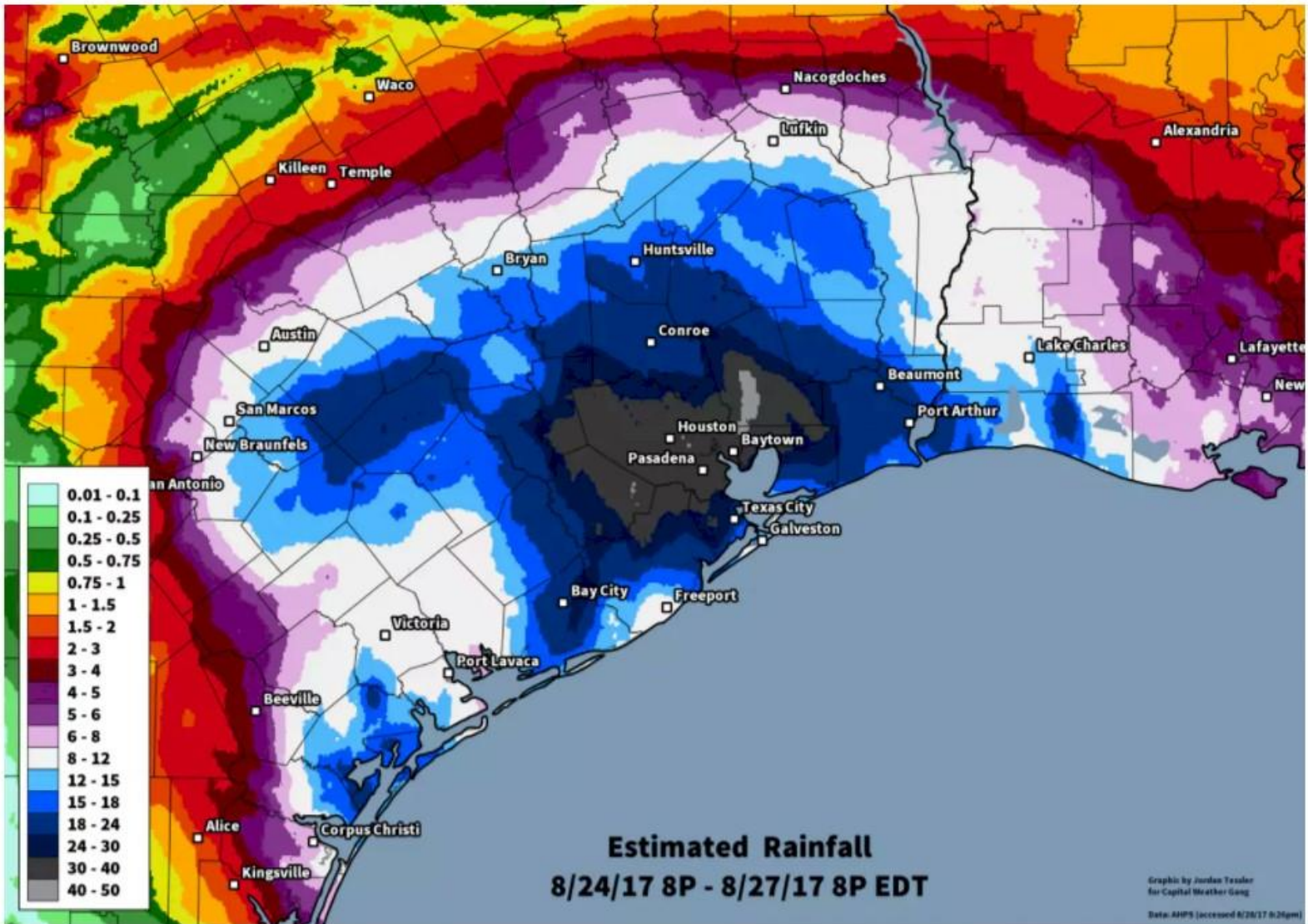
RAINFALL PAST 7 DAYS—

August 31, 2017 7-Day Observed Precipitation

Created on: September 01, 2017 - 06:29 UTC

Valid on: August 31, 2017 12:00 UTC





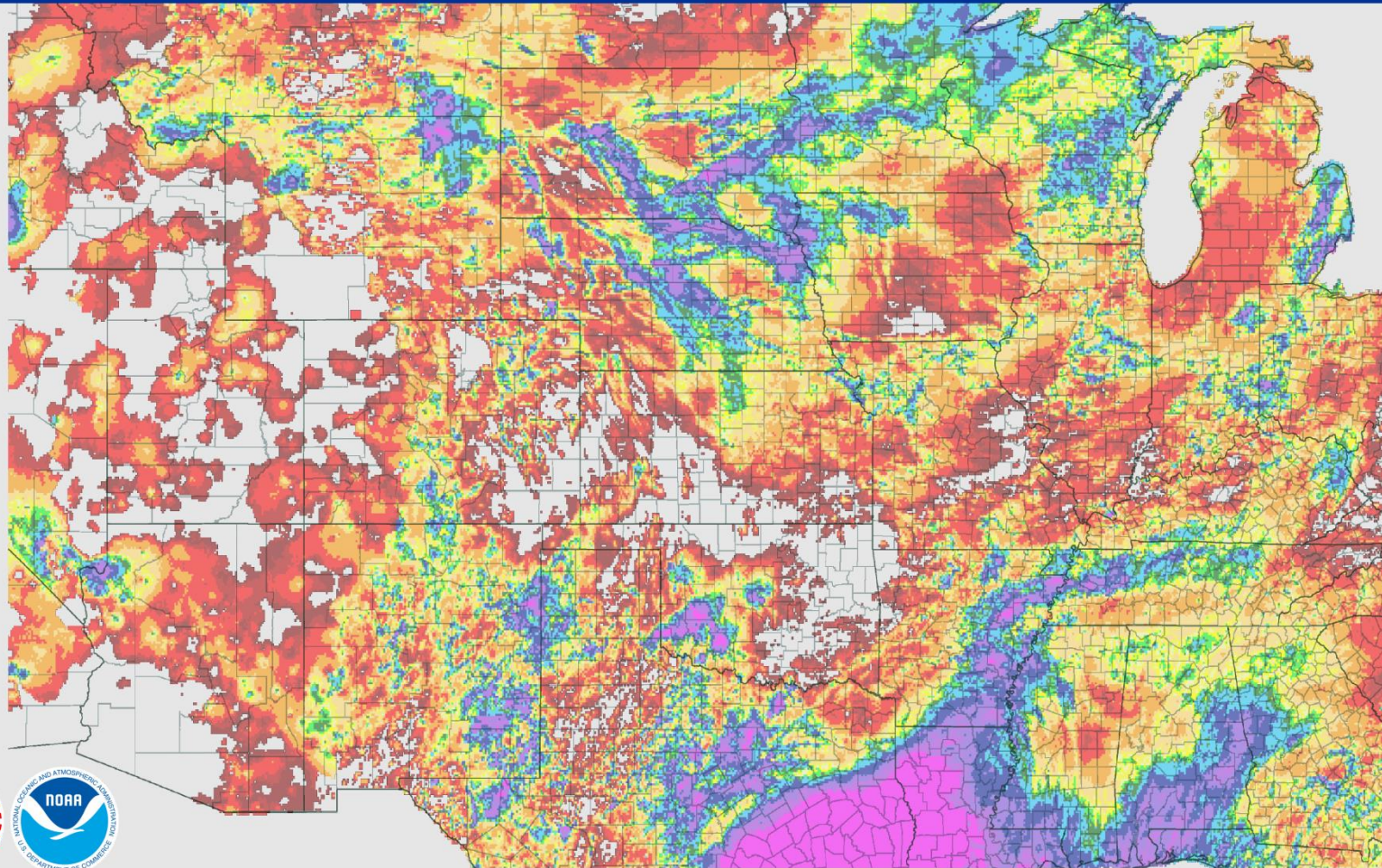
Graphic by Jordan Tessler
 for Capital Weather Gang
 Data: AMP9 (accessed 8/26/17 9:20pm)

PRECIP ANOMALIES PAST 7D-

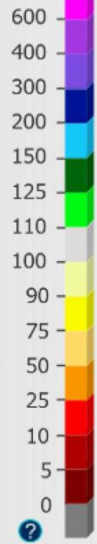
August 31, 2017 7-Day Percent Precipitation

Created on: September 01, 2017 - 12:21 UTC

Valid on: August 31, 2017 12:00 UTC

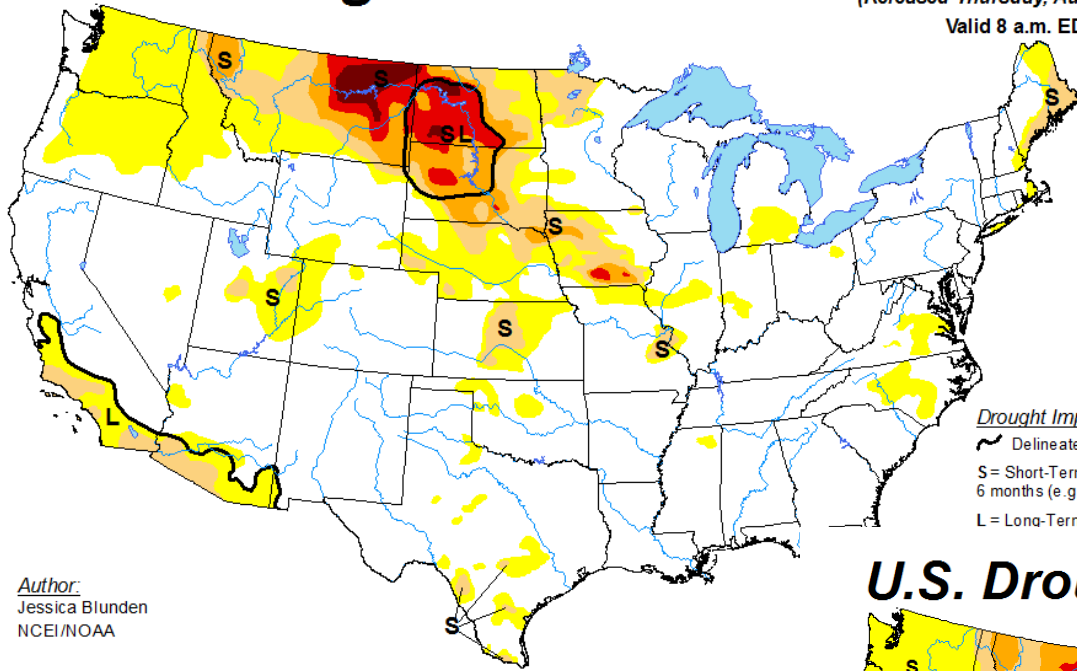


Percent



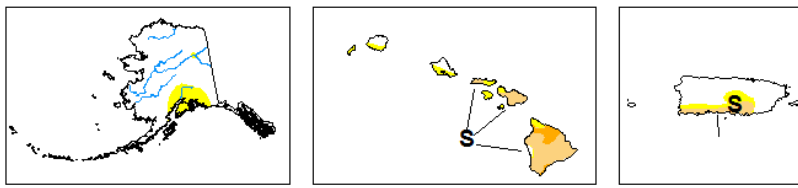
U.S. Drought Monitor

August 15, 2017
 (Released Thursday, Aug. 17, 2017)
 Valid 8 a.m. EDT



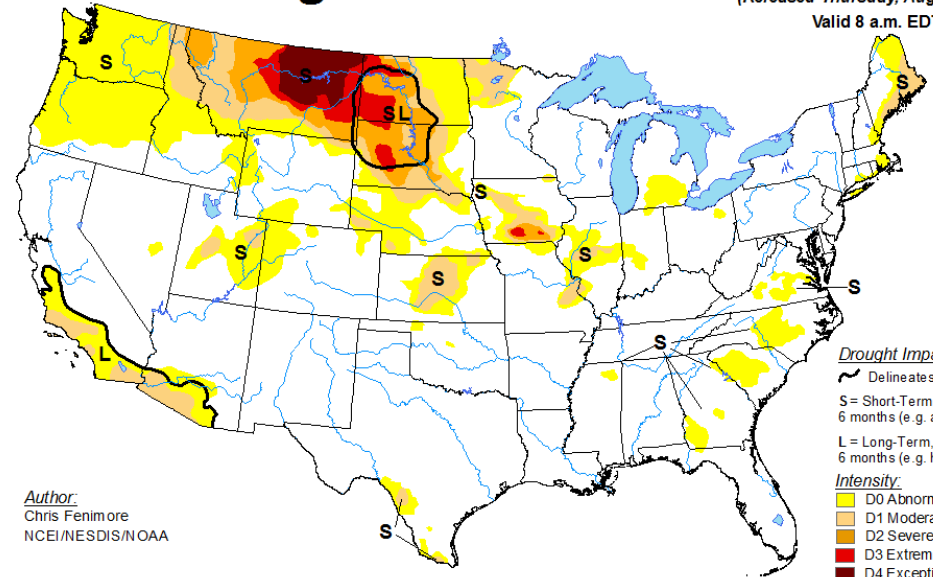
Drought Impact Types:
 ~ Delineates dominant impacts
 S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
 L = Long-Term, typically greater than 6 months

Author:
 Jessica Blunden
 NCEI/NOAA



U.S. Drought Monitor

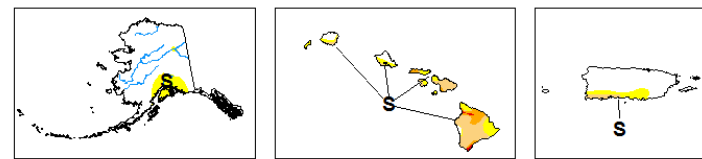
August 29, 2017
 (Released Thursday, Aug. 31, 2017)
 Valid 8 a.m. EDT



Drought Impact Types:
 ~ Delineates dominant impacts
 S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
 L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

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

Author:
 Chris Fenimore
 NCEI/NESDIS/NOAA

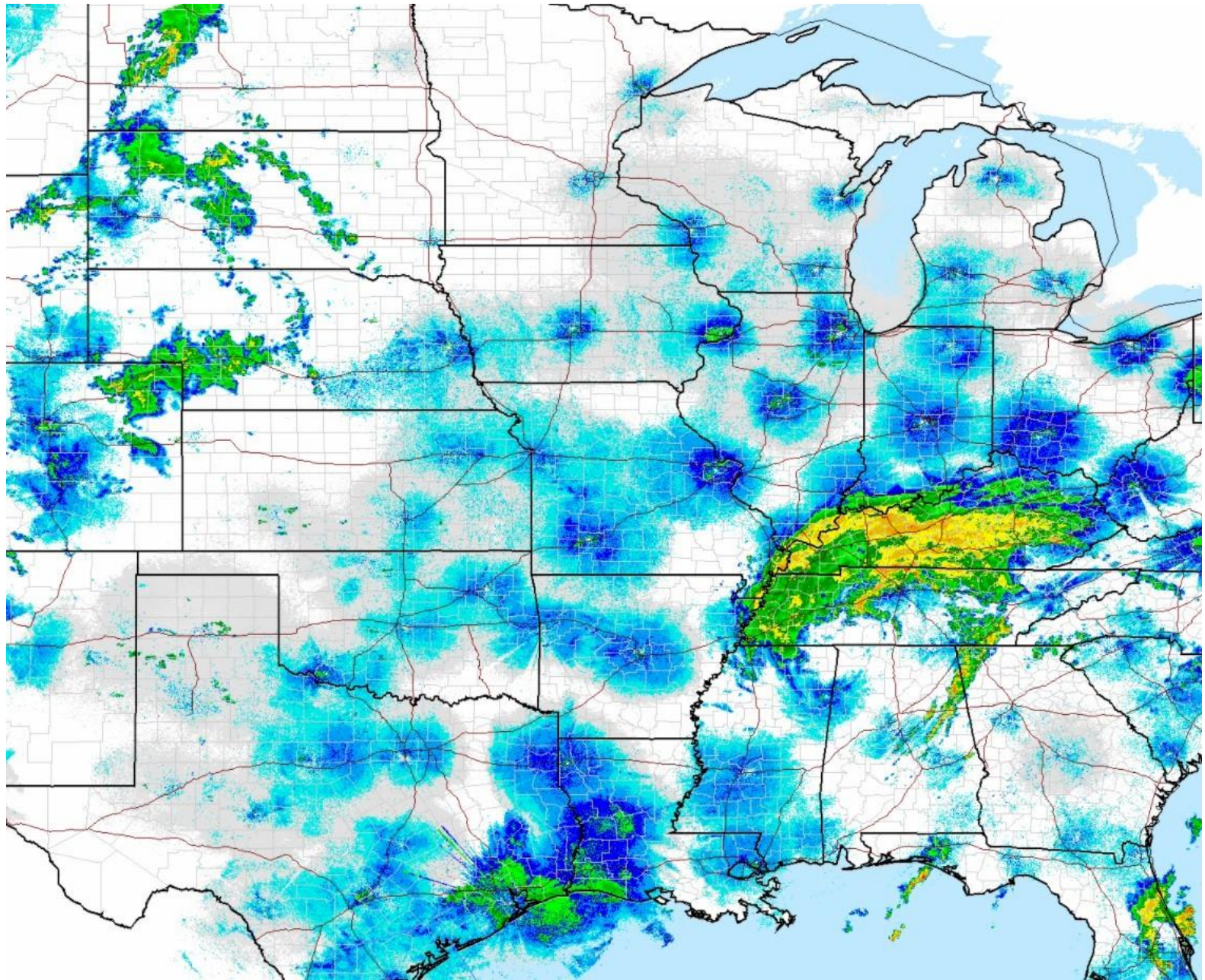


The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

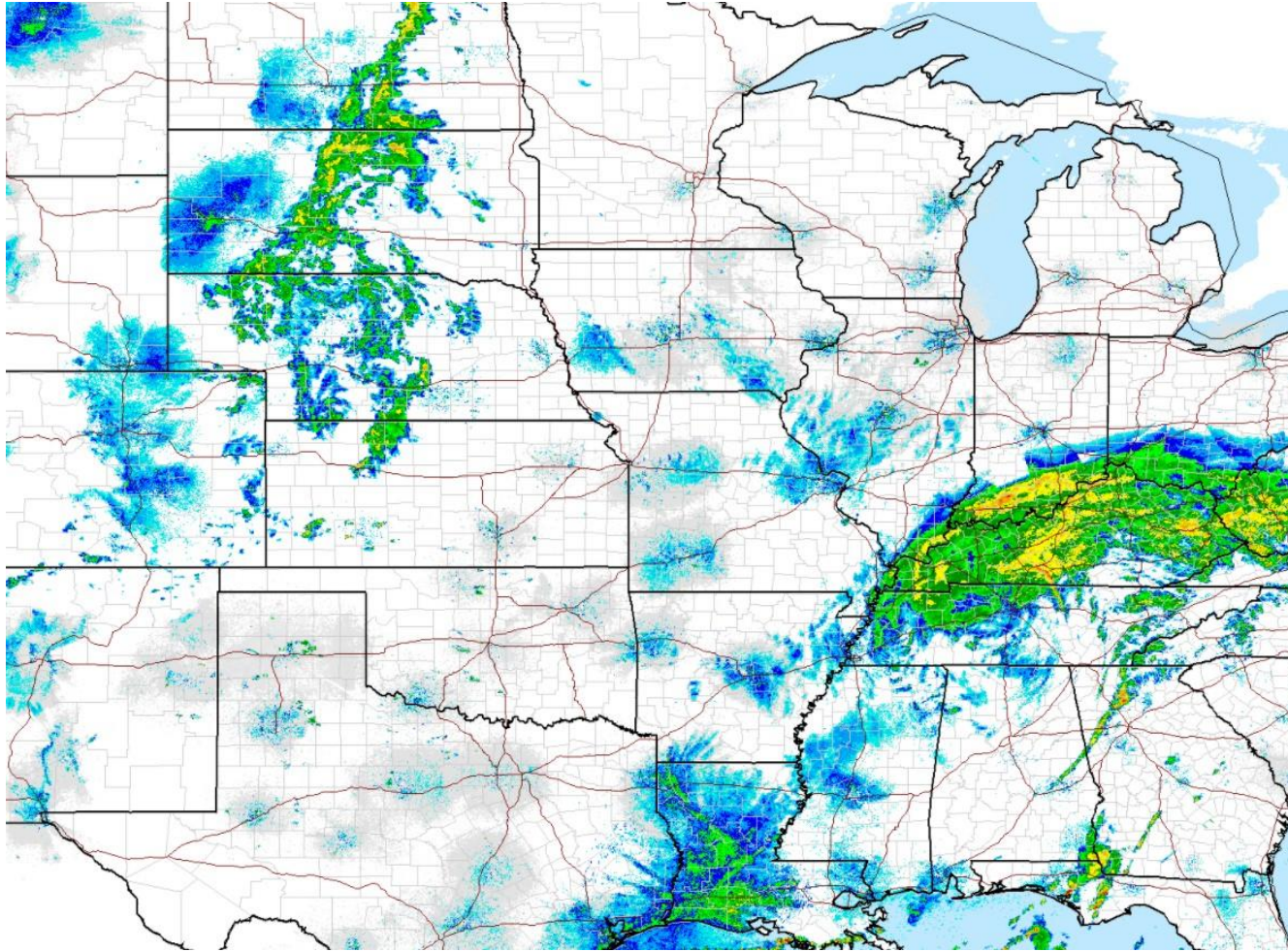


<http://droughtmonitor.unl.edu/>

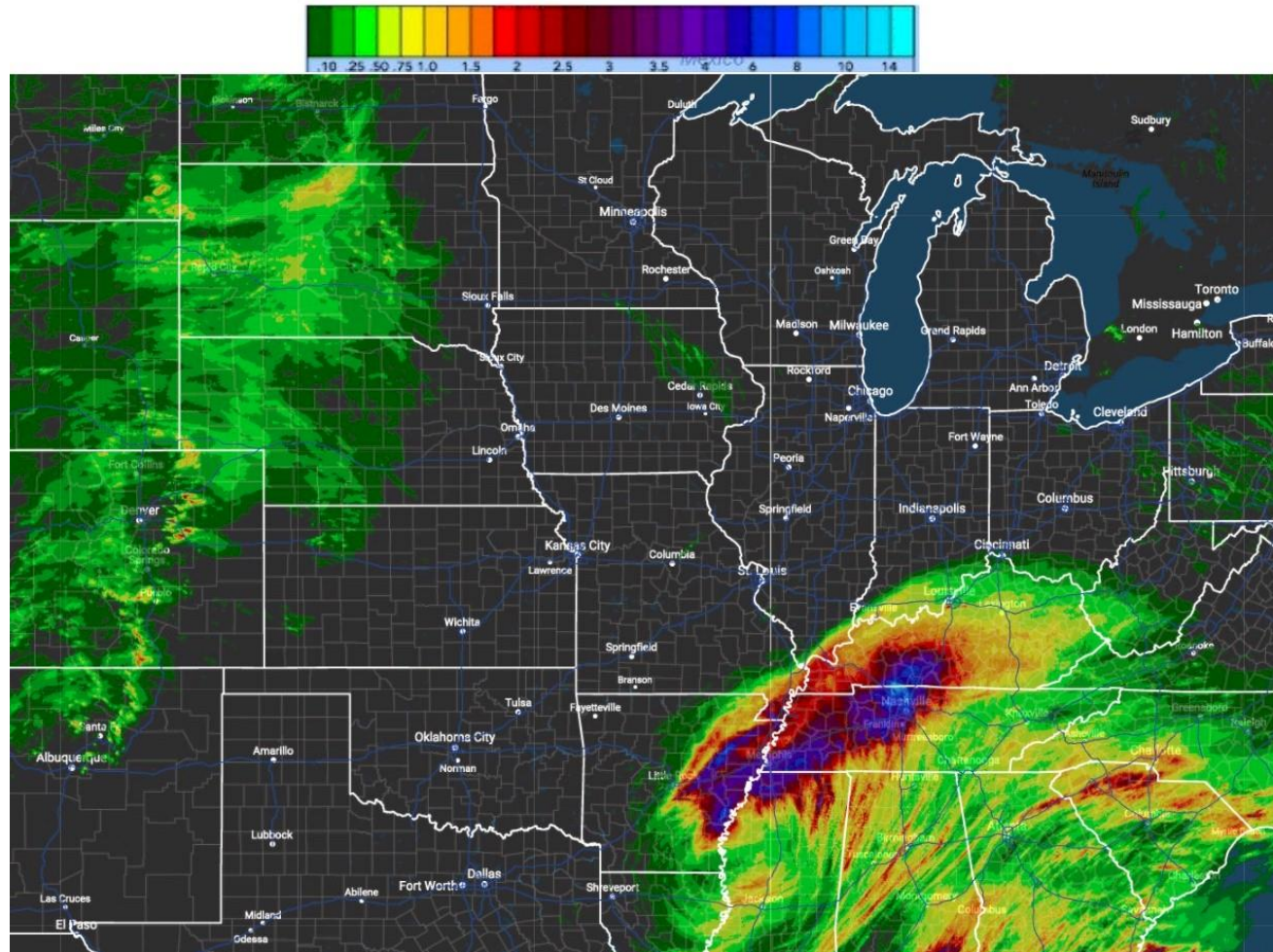
RADAR 12 AM FRIDAY



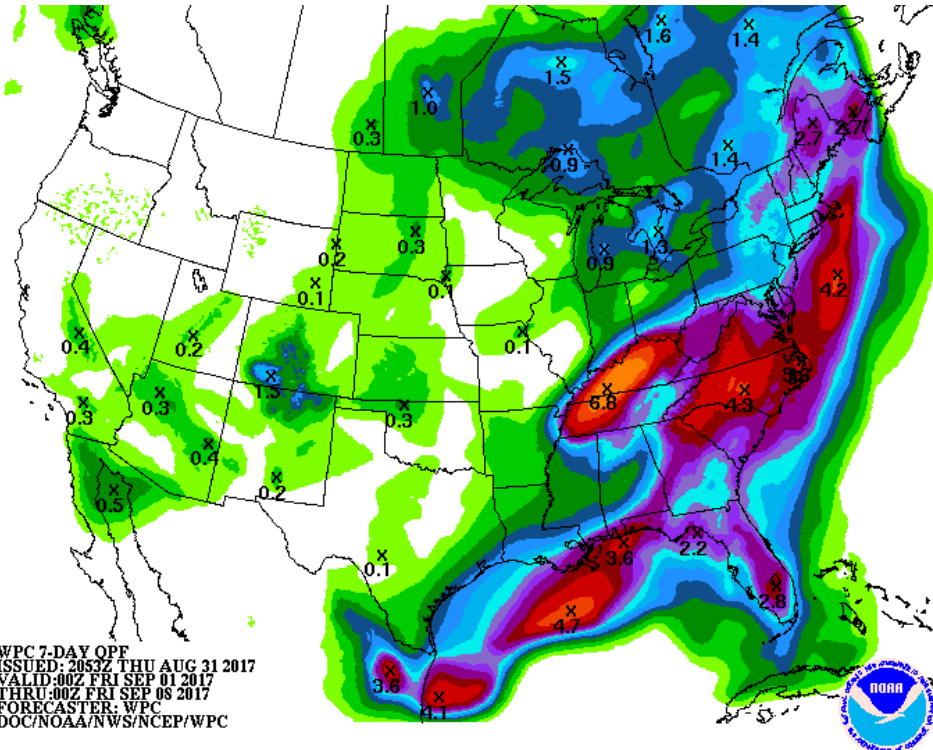
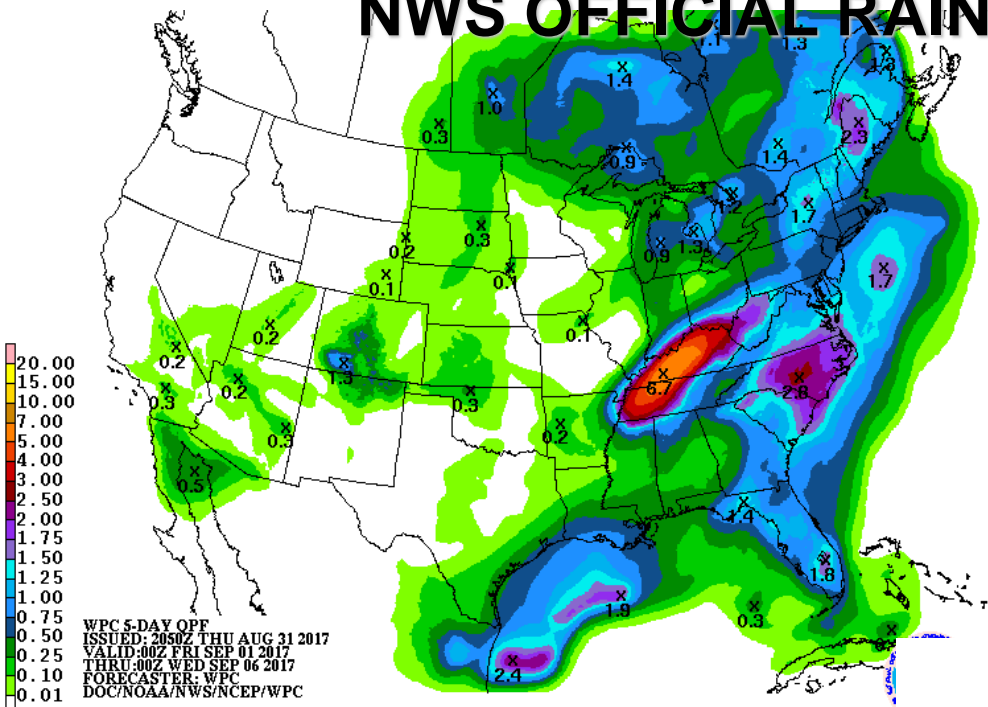
RADAR 7AM CDT FRIDAY



RAINFALL AS OF SEPT 1- Harvey still dropping heavy rains over ne ARK nw MS... western/ central TN... southern KY



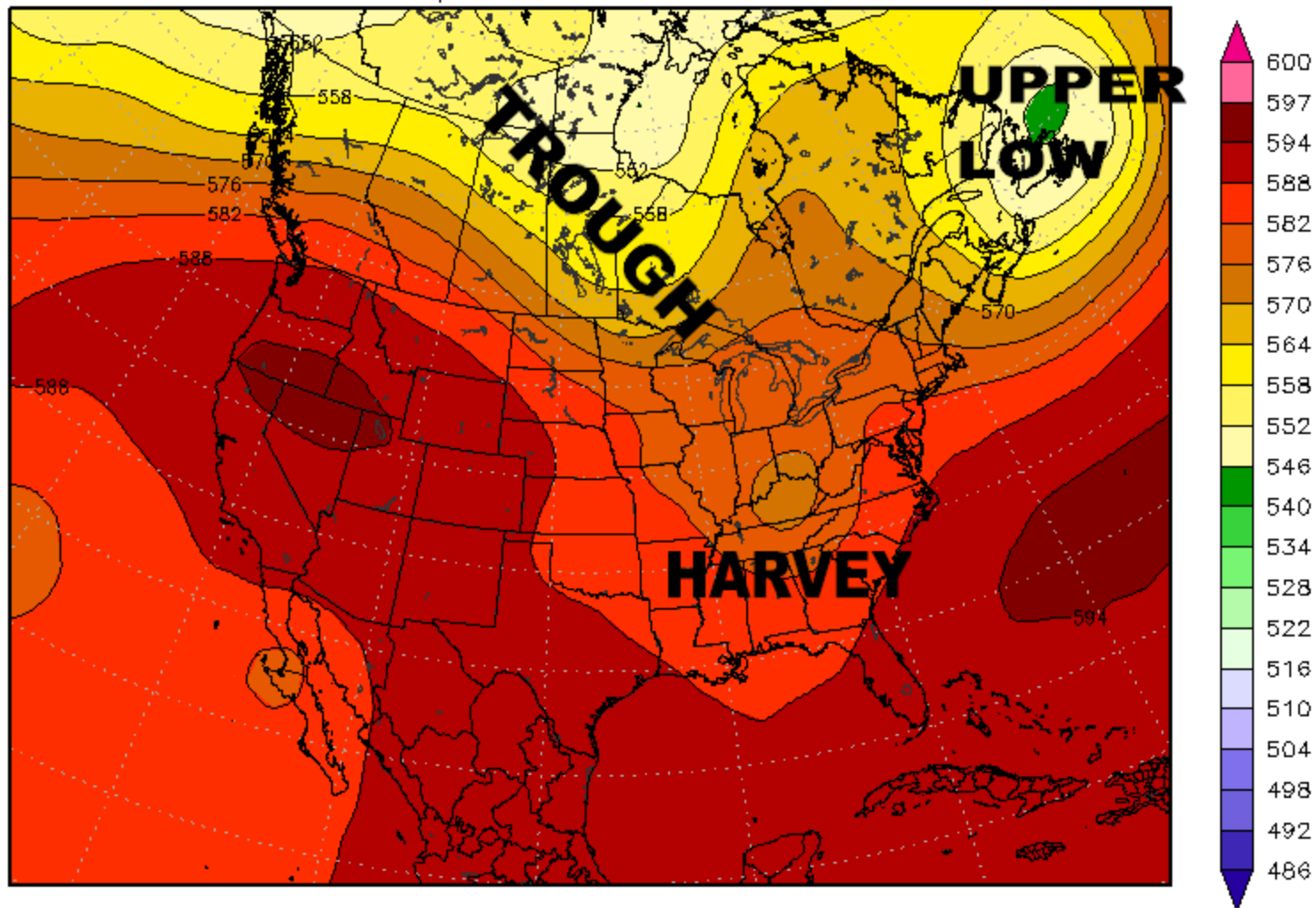
NWS OFFICIAL RAINFALL NEXT 7 DAYS



500mb map sept 1

500 mb Height
Valid: 12z Sat 02 Sep 2017

ECMWF
Hour: 36

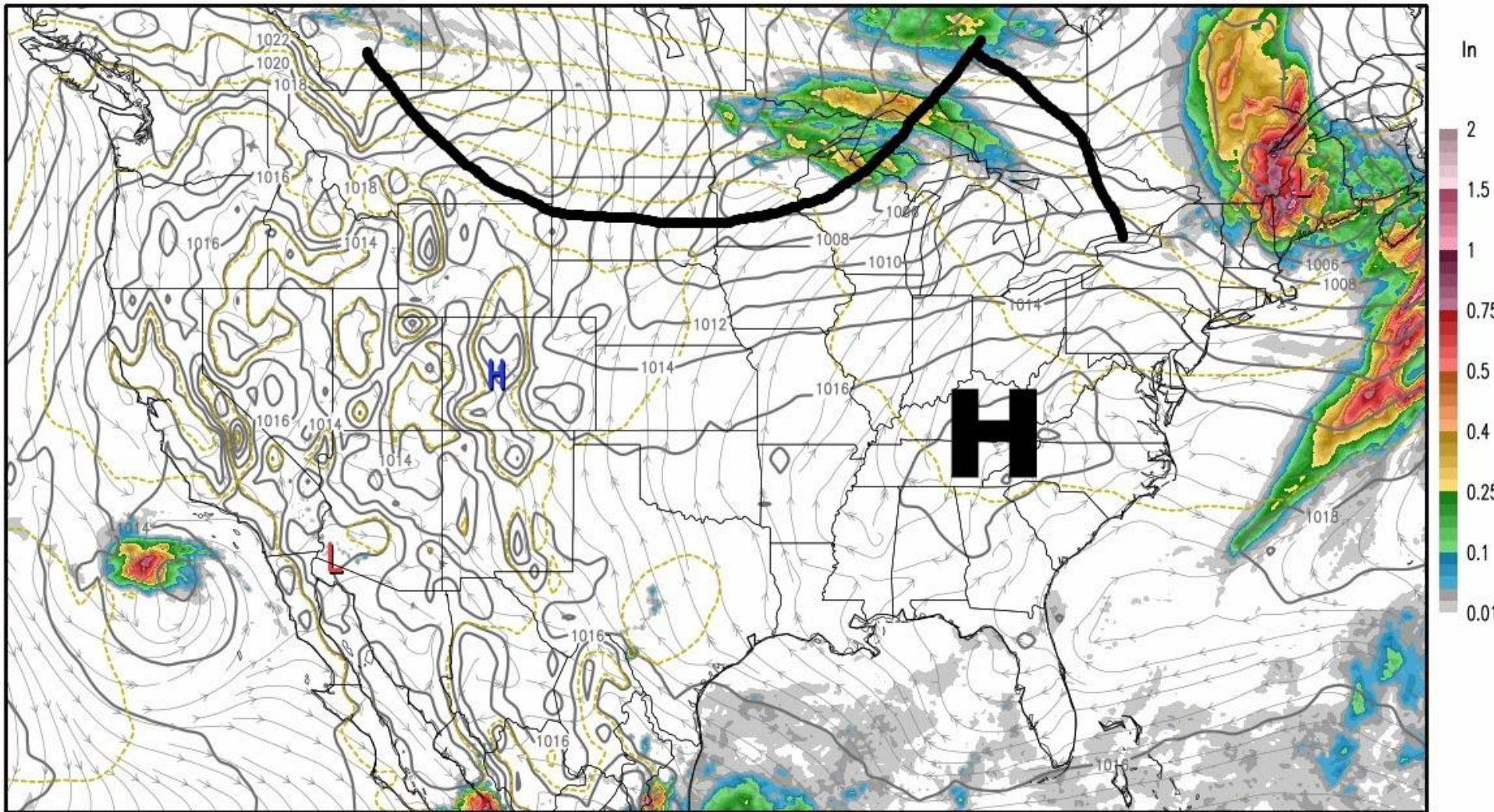


SURFACE map Sunday

MSLP, 6hr Precip, Wind, Thickness, 32f

Valid Monday 06Z 09/04

EuroWX.com



ECMWF HRES MODEL RUN 00Z 09/01 78hr FORECAST

© 2017 ECMWF

This service is based on data and products of the European Center for Medium-range Weather Forecasts.

NEXT 5 DAYS

GFS LEFT

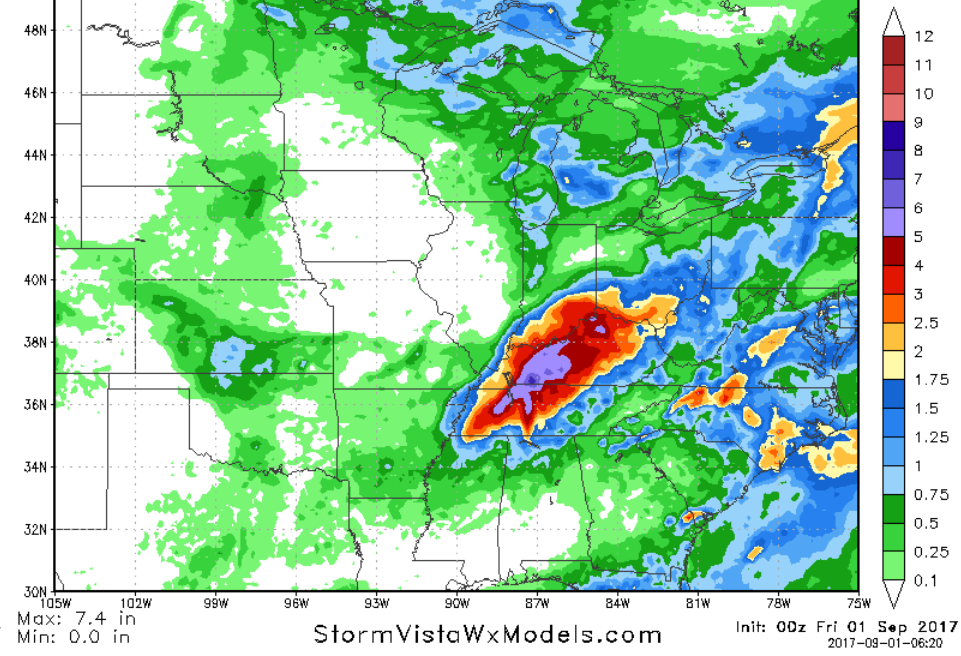
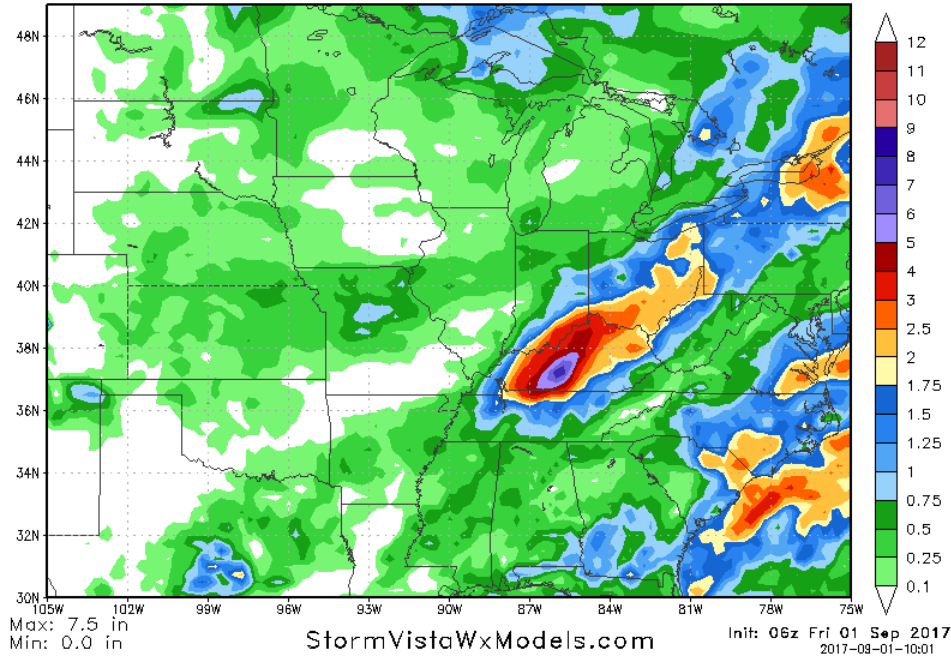
EURO RIGHT

120 Hour Total Precipitation (in)
Valid: 06z Fri 01 Sep 2017 - 06z Wed 06 Sep 2017

GFS-MAXRES
Hour: 0 - 120

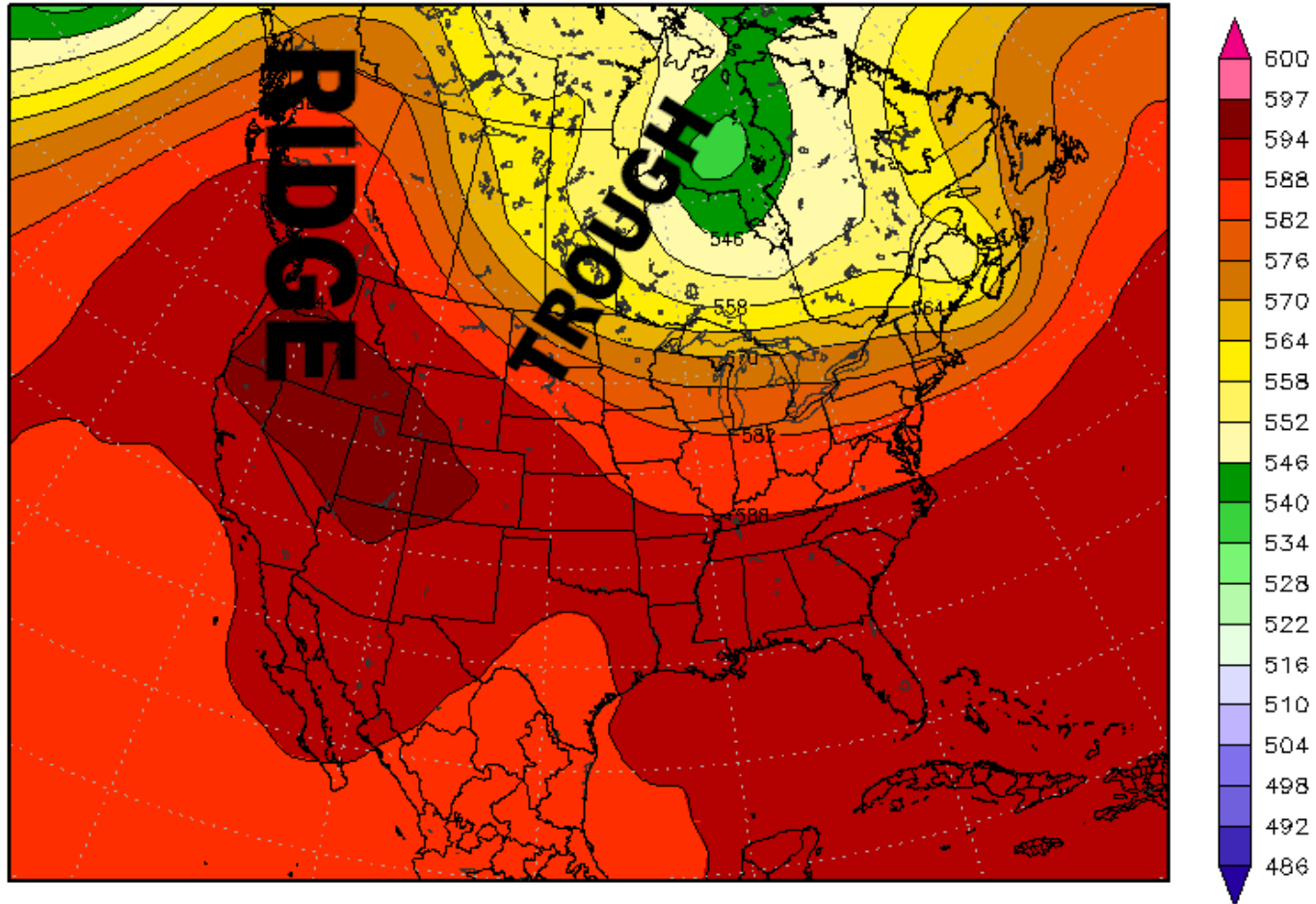
120 Hour Total Precipitation (in)
Valid: 00z Fri 01 Sep 2017 - 00z Wed 06 Sep 2017

ECMWF-MAXRES
Hour: 0 - 120



500 mb Height
Valid: 12z Mon 04 Sep 2017

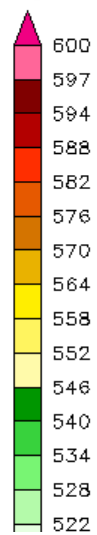
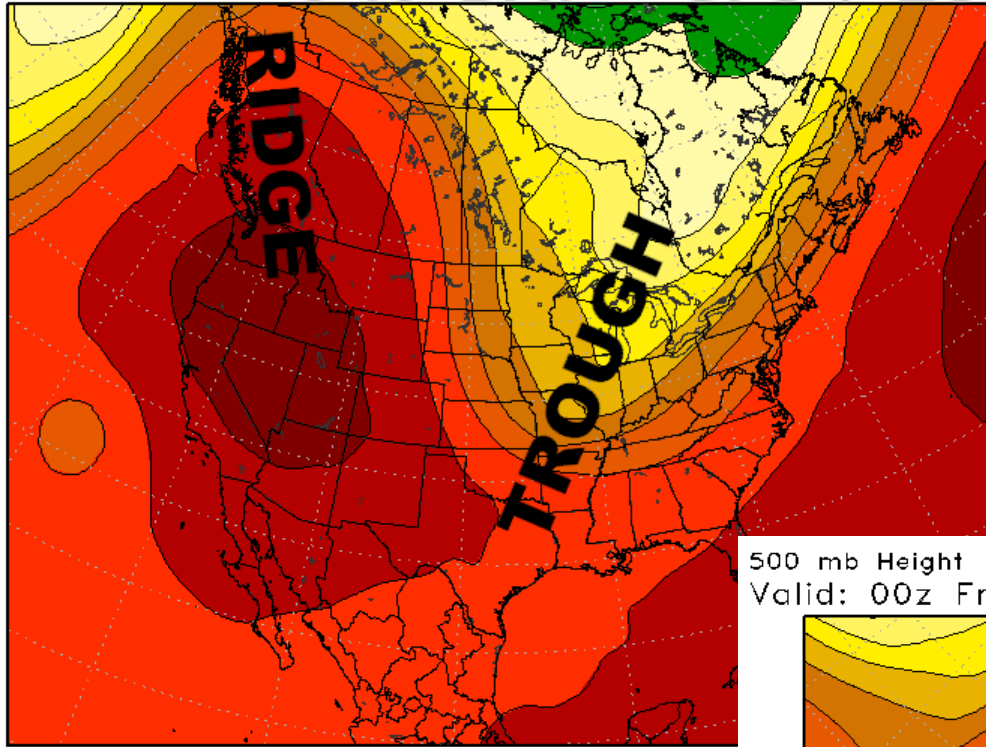
ECMWF
Hour: 84



500 mb Height
Valid: 00z Wed 06 Sep 2017

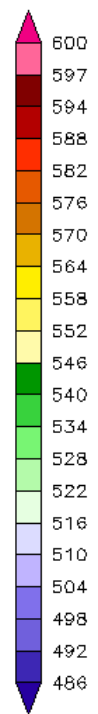
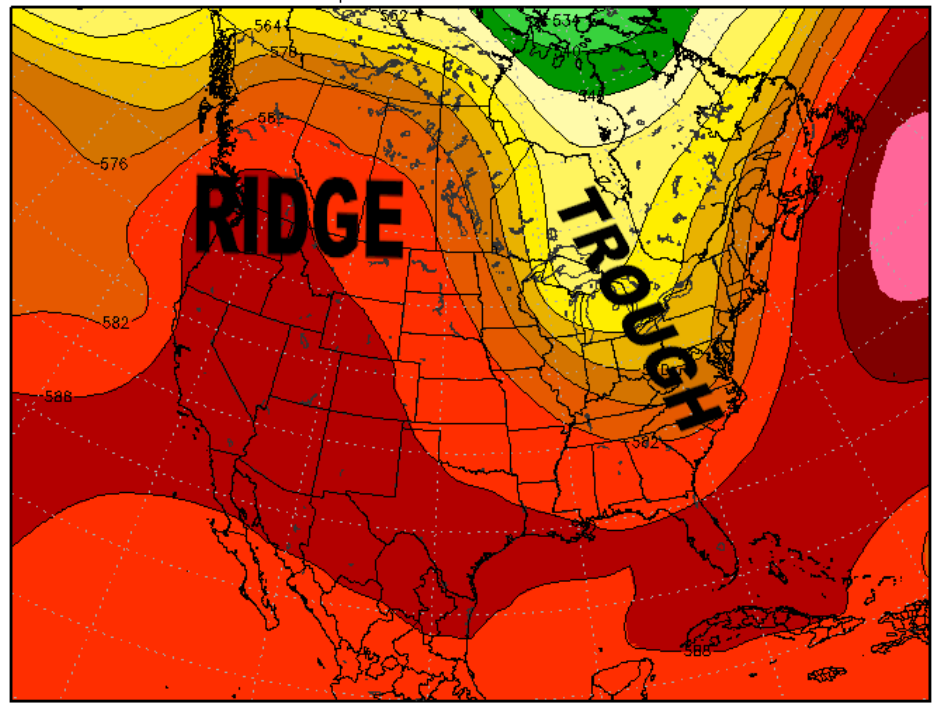
6-10 DAY GFS / EURO

ECMWF



500 mb Height
Valid: 00z Fri 08 Sep 2017

ECMWF
Hour: 168

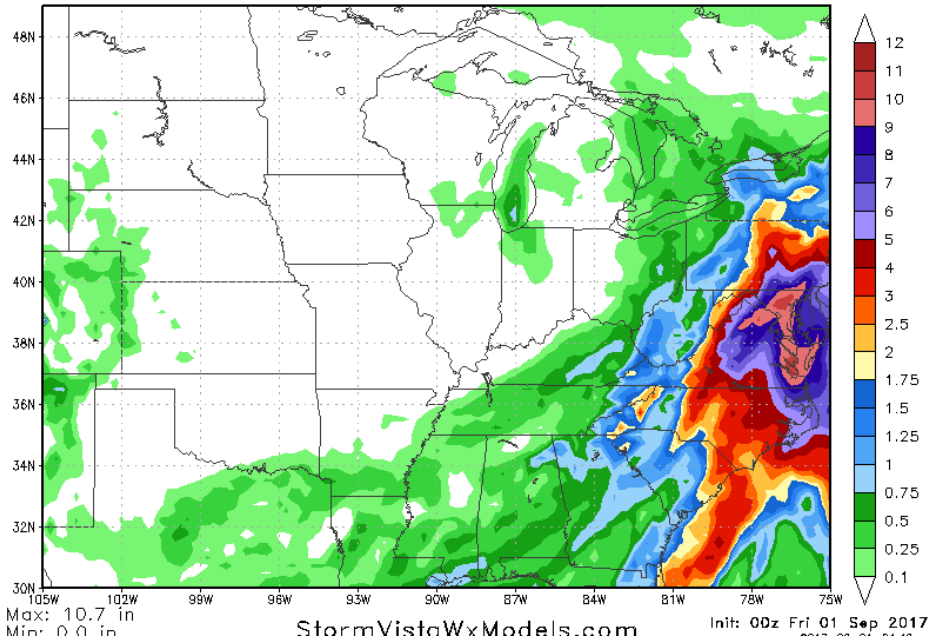


GrADS: COLA/IGES

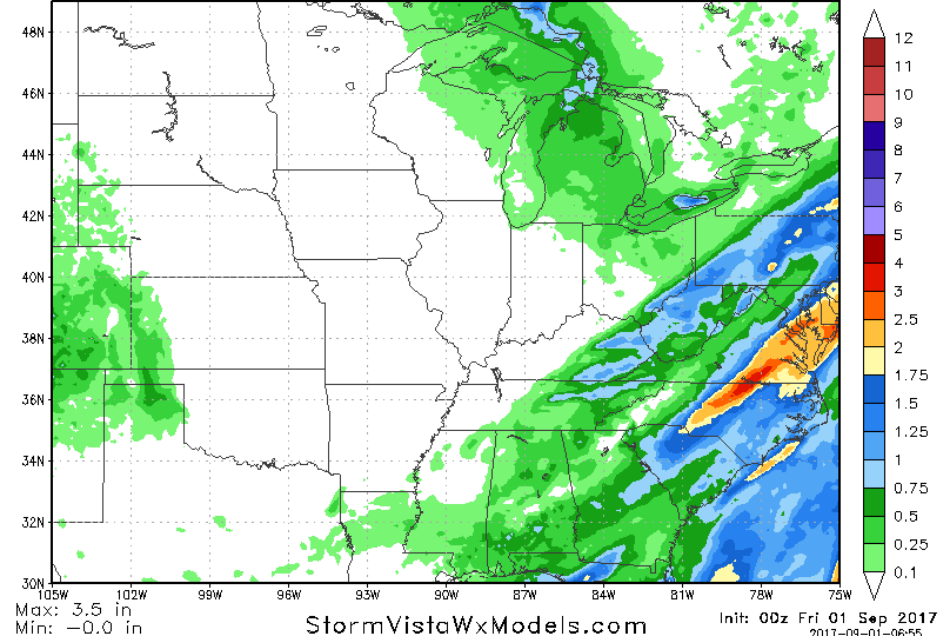
StormVistaWxModels.com

6-10 DAY RAINFALL ...PLAINS/ MIDWEST DRY... GFS super heavy rains over NC VA MD DEL as GFS take IRMA into east coast. EURO has IRMA Well off the coast so its drier..

120 Hour Total Precipitation (in)
Valid: 00z Wed 06 Sep 2017 - 00z Mon 11 Sep 2017
GFS-MAXRES Hour: 120 - 240



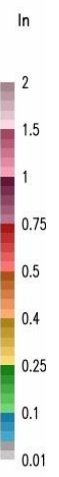
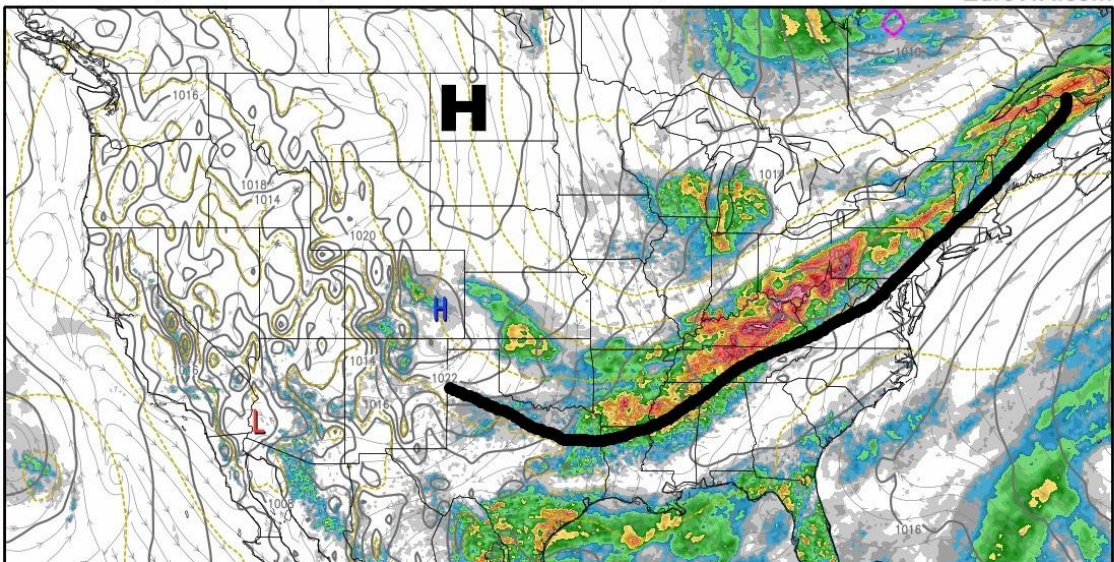
120 Hour Total Precipitation (in)
Valid: 00z Wed 06 Sep 2017 - 00z Mon 11 Sep 2017
ECMWF-MAXRES Hour: 120 - 240



MSLP, 12hr Precip, Wind, Thickness, 32f

Valid Wednesday 00Z 09/06

EuroWX.com

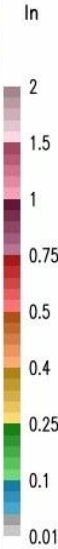
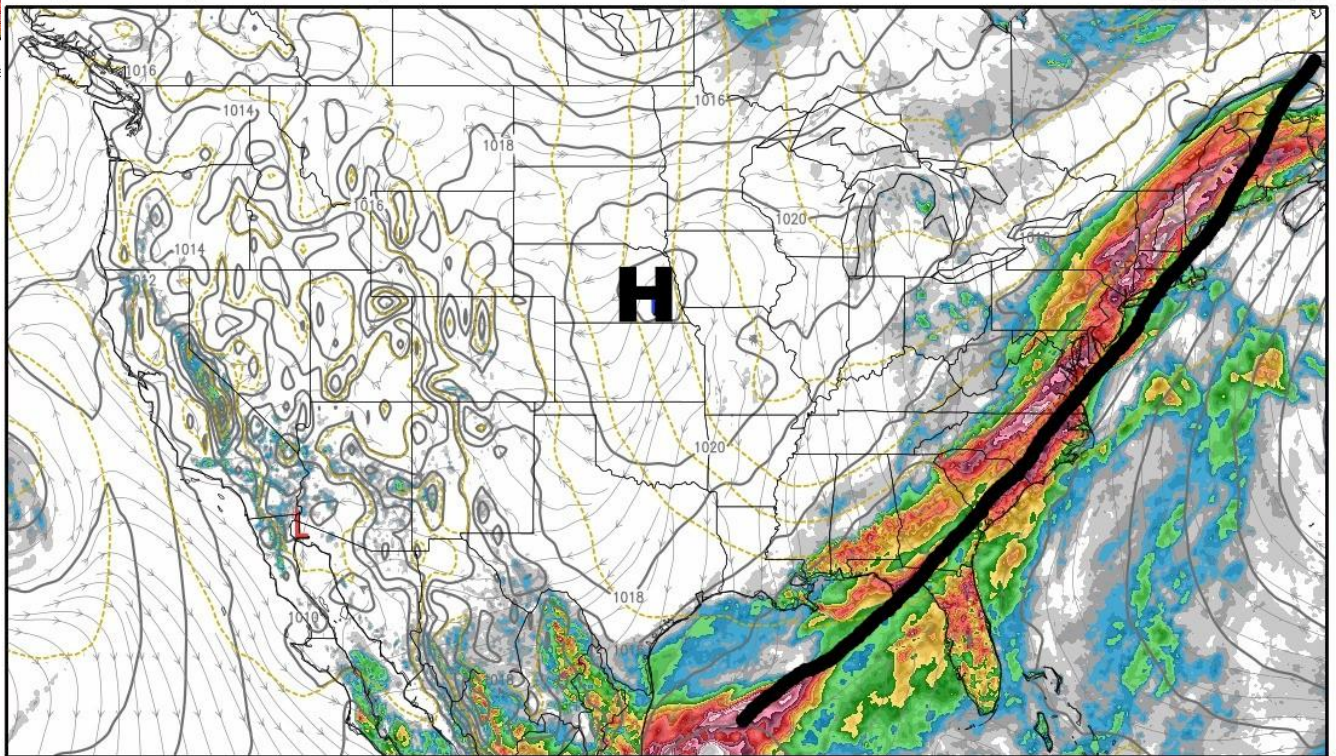


MSLP, 12hr Precip, Wind, Thickness, 32f

Valid Thursday 00Z 09/07

EuroWX.com

ECMWF HRES MODEL RUN 00Z 09/01 120hr FORECAST
This service is based on data and products of the



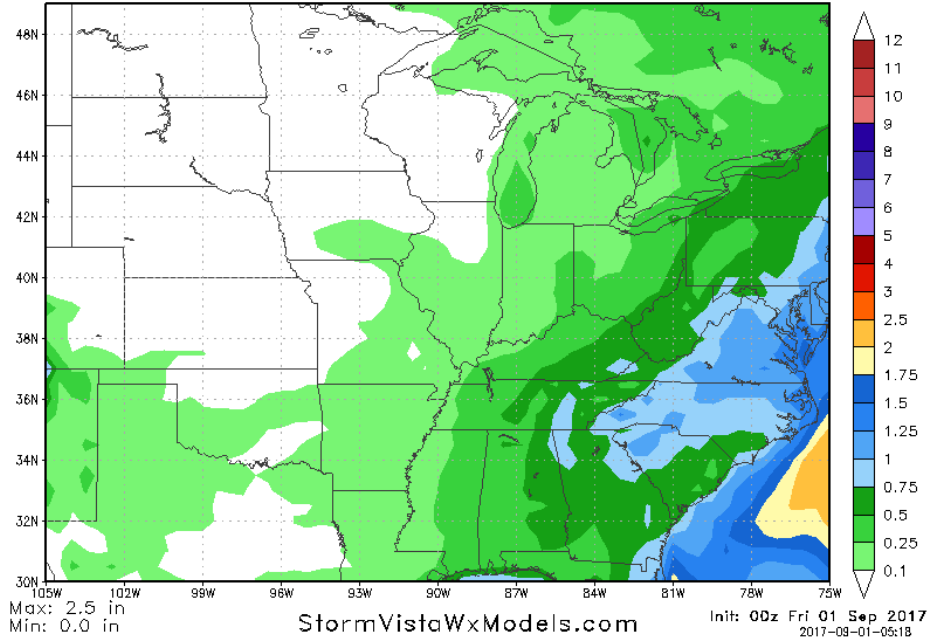
ECMWF HRES MODEL RUN 00Z 09/01 144hr FORECAST

C 2017 ECMWF

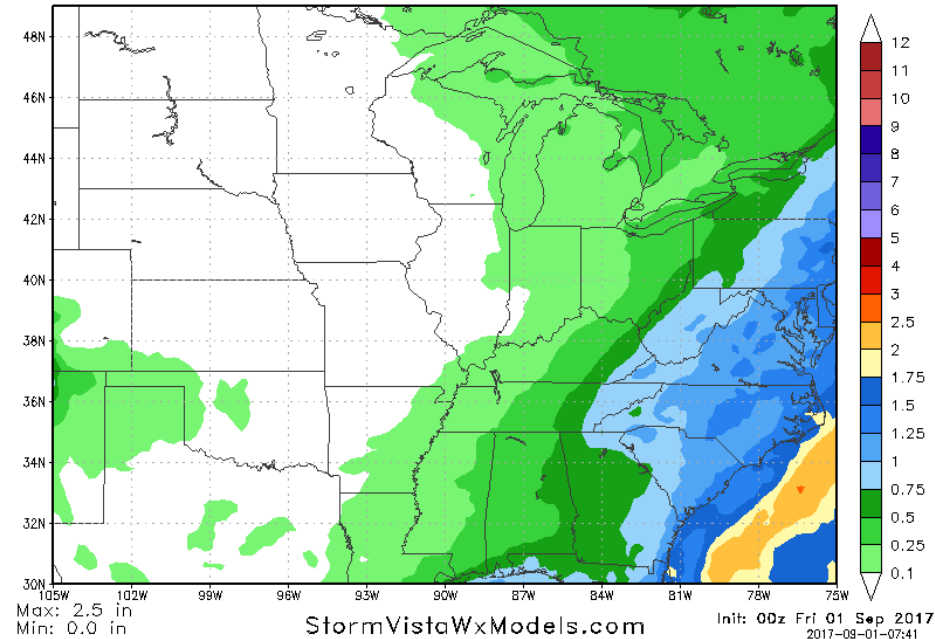
This service is based on data and products of the European Center for Medium-range Weather Forecasts.

6-10 DAY ENSEMBLES – again DRY all over Plains and Midwest Mostly dry over Delta

120 Hour Total Precipitation (in) GFS-ENS-MAXRES
Valid: 00z Wed 06 Sep 2017 – 00z Mon 11 Sep 2017 Hour: 120 – 240



120 Hour Total Precipitation (in) ECMWF-EPS-MAXRES
Valid: 00z Wed 06 Sep 2017 – 00z Mon 11 Sep 2017 Hour: 120 – 240

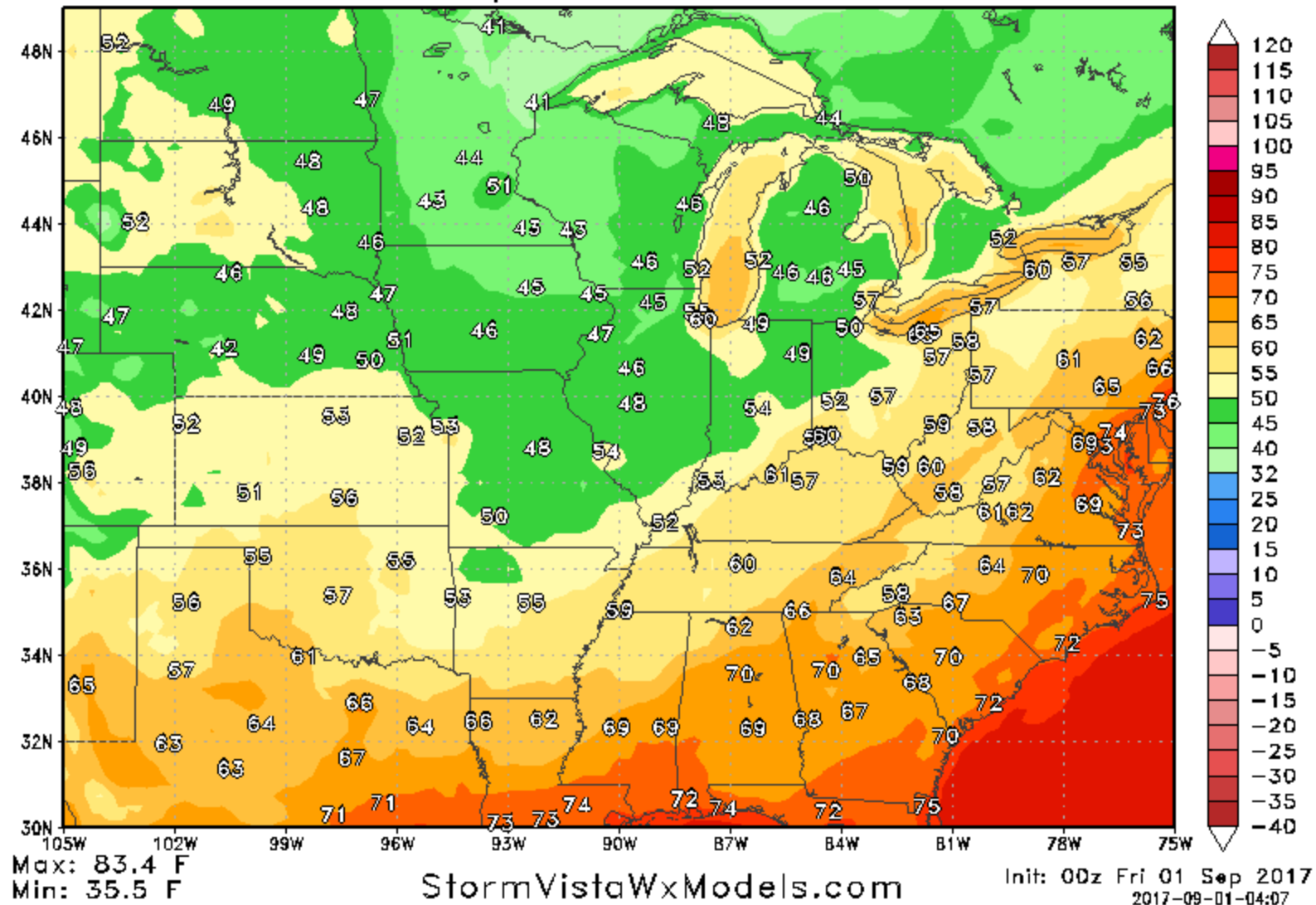


0Z GFS MIN TEMPS FORECAST FOR SEPT 6..

GFS shows cold air to be weaker and weaker with each model run. Note only 30s over ne third of MN

2 m Min Temperature (F)
Valid: 12z Wed 06 Sep 2017

GFS-MAXRES
Hour: 132

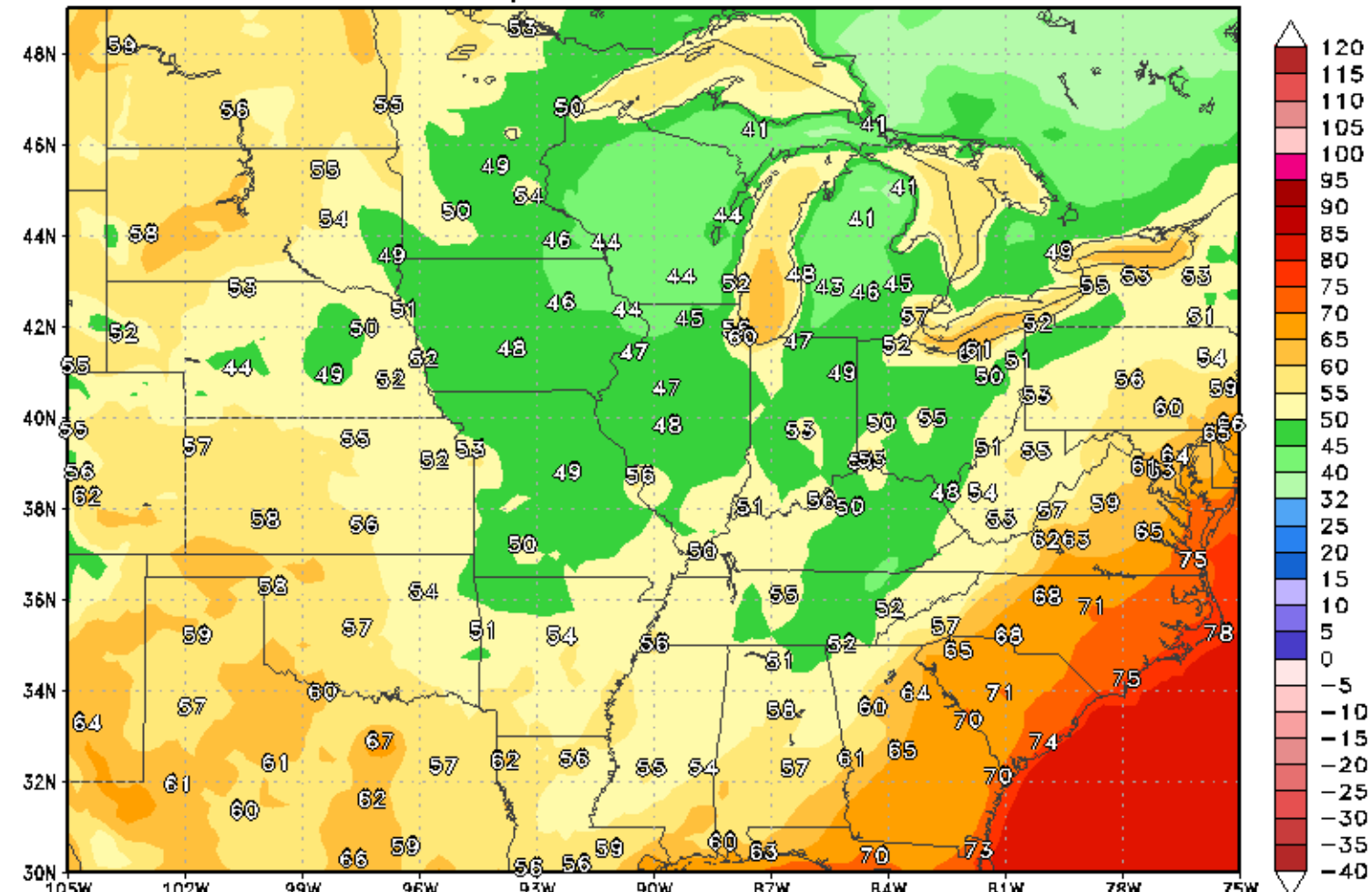


0Z GFS MIN TEMPS FORECAST FOR SEPT 7..

GFS shows cold air to be weaker and weaker with each model run.

2 m Min Temperature (F)
Valid: 12z Thu 07 Sep 2017

GFS-MAXRES
Hour: 156



Max: 83.8 F
Min: 34.4 F

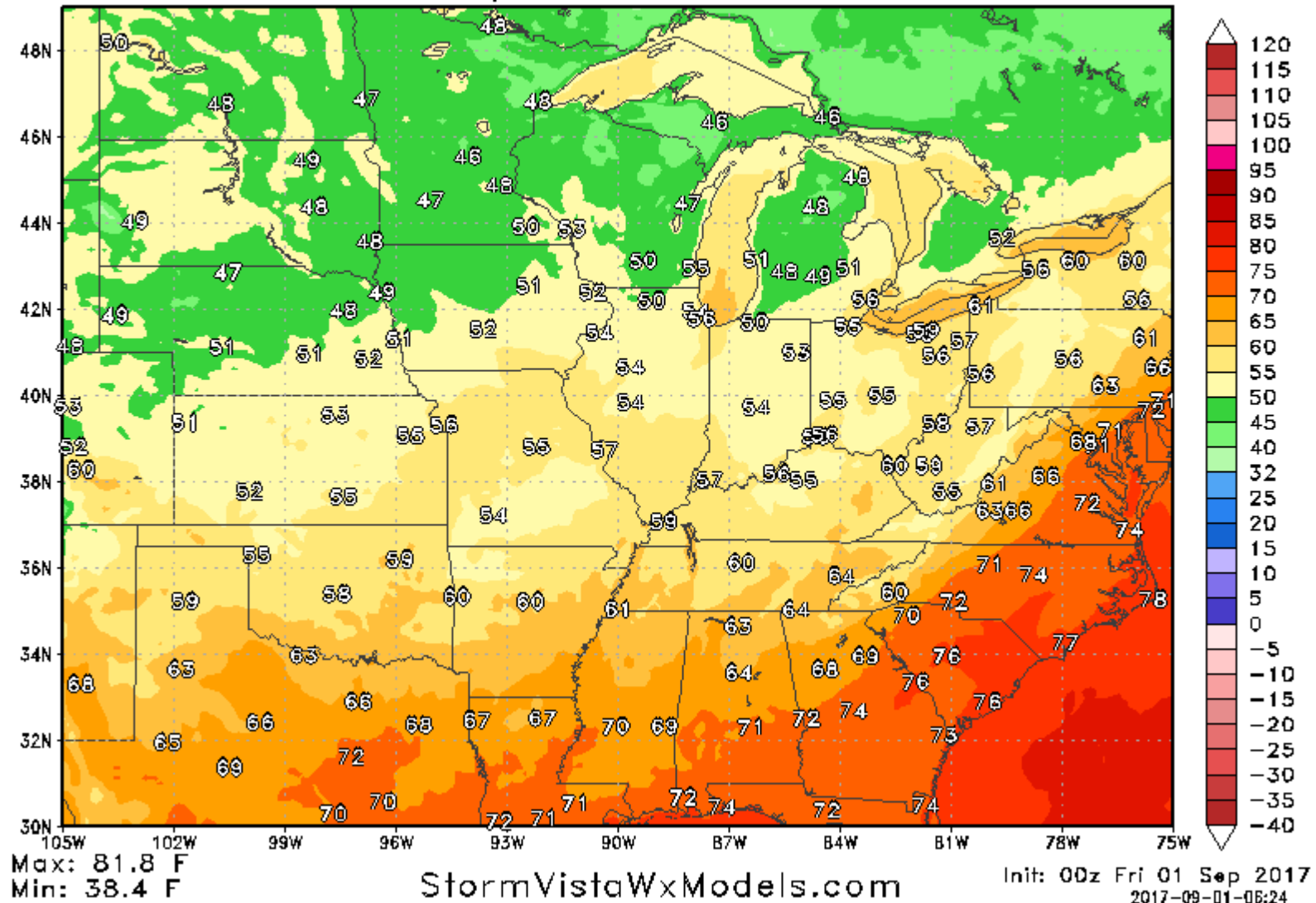
StormVistaWxModels.com

Init: 00z Fri 01 Sep 2017
2017-09-01-04:15

0Z EURO MIN TEMPS FORECAST FOR SEPT 6.. 40s only - no readings in 30s.. Clearly GFS is trending towards euro

2 m Min Temperature (F)
Valid: 12z Wed 06 Sep 2017

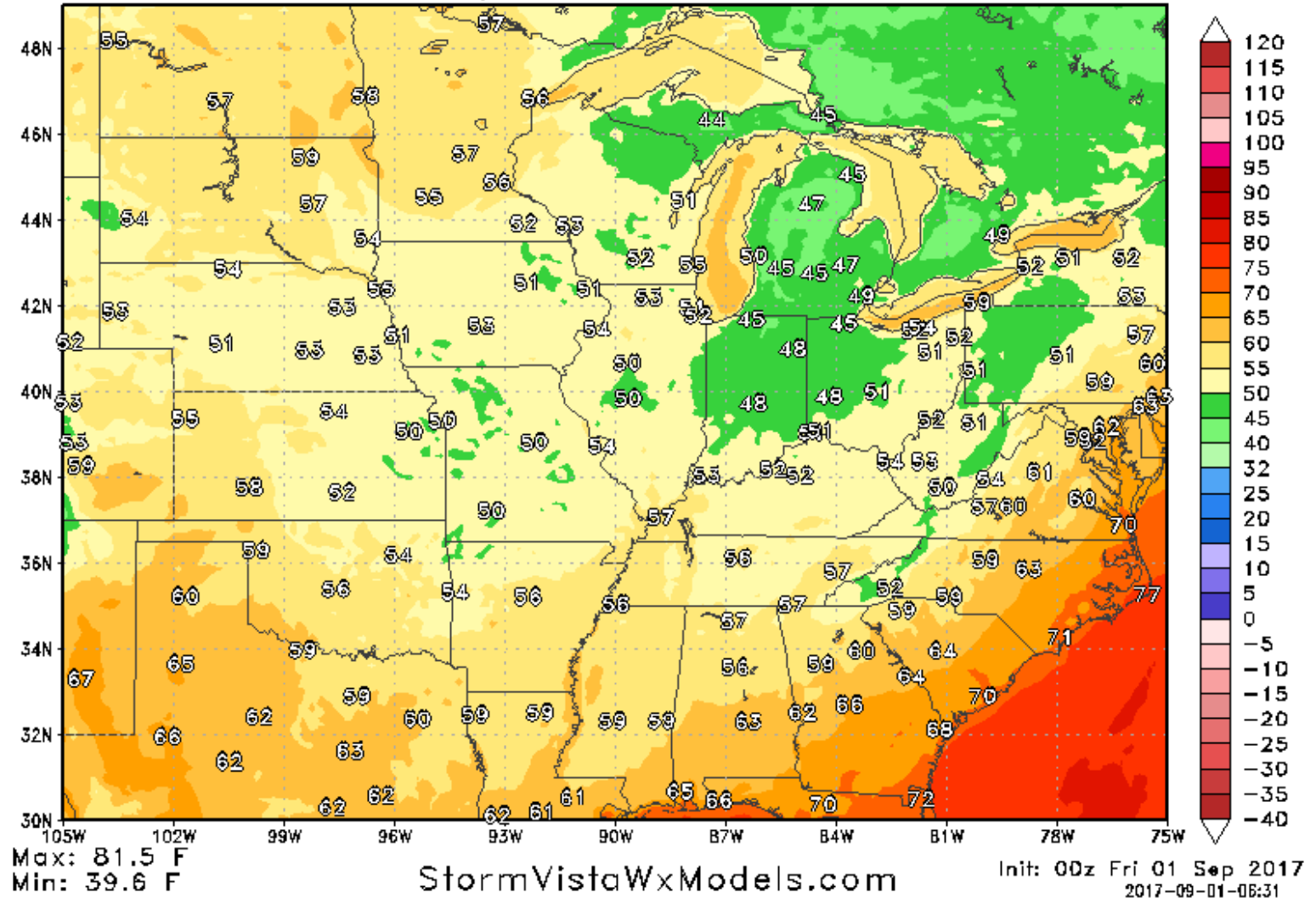
ECMWF-MAXRES
Hour: 132



0Z EURO MIN TEMPS FORECAST FOR SEPT 7.. 40s only - no readings in 30s.. Clearly GFS is trending towards euro

2 m Min Temperature (F)
Valid: 12z Thu 07 Sep 2017

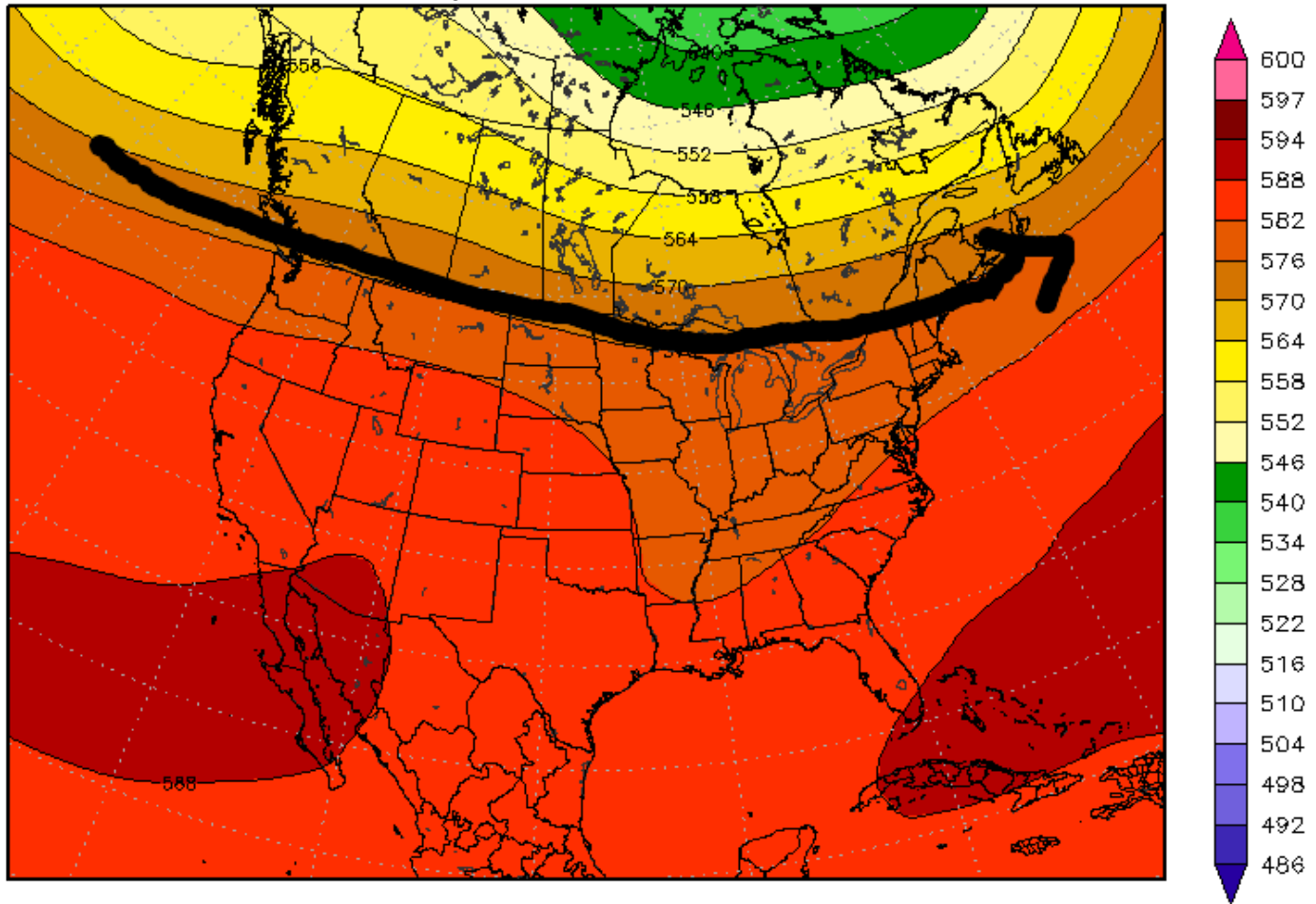
ECMWF-MAXRES
Hour: 156



500 mb map shows zonal flow ... no cold air outbreaks ... no troughs rather dry

500 mb Height
Valid: 12z Wed 13 Sep 2017

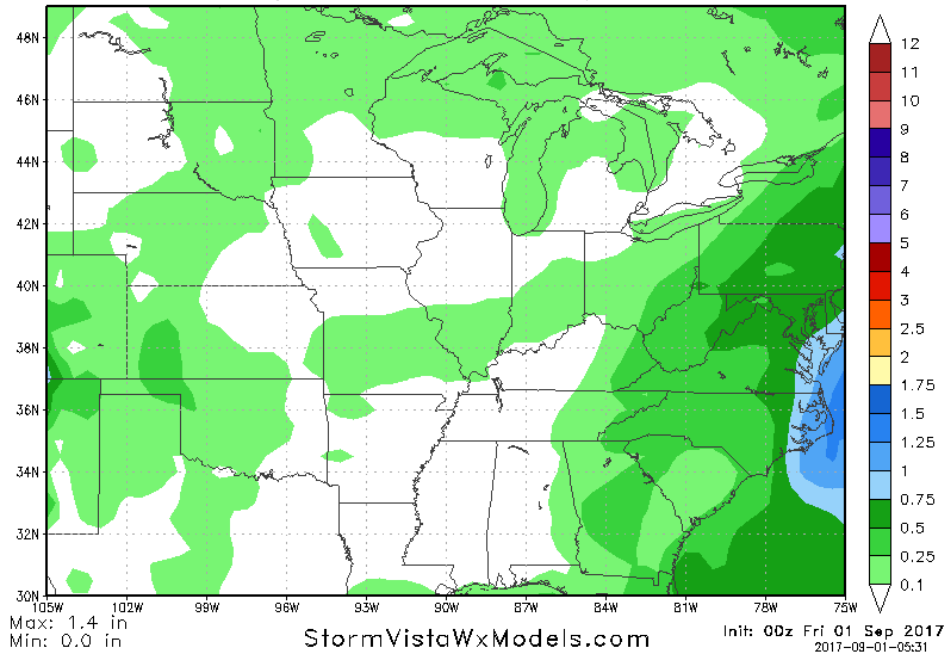
ECMWF-EP
Hour: 300



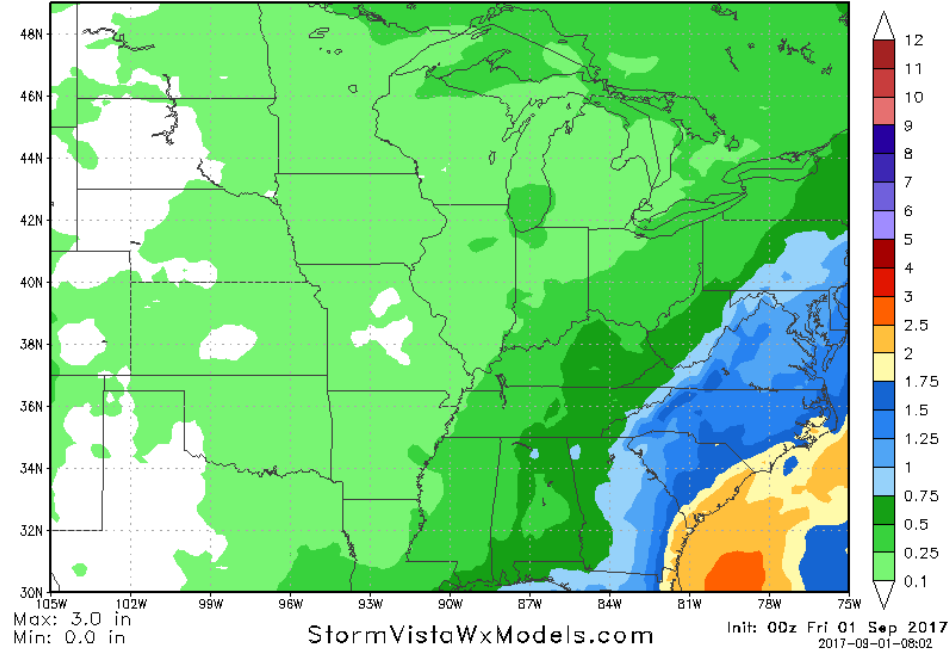
11-15 DAY ENSEMBLES

GFS RAINFALL LEFT EURO RIGHT ... all areas DRY

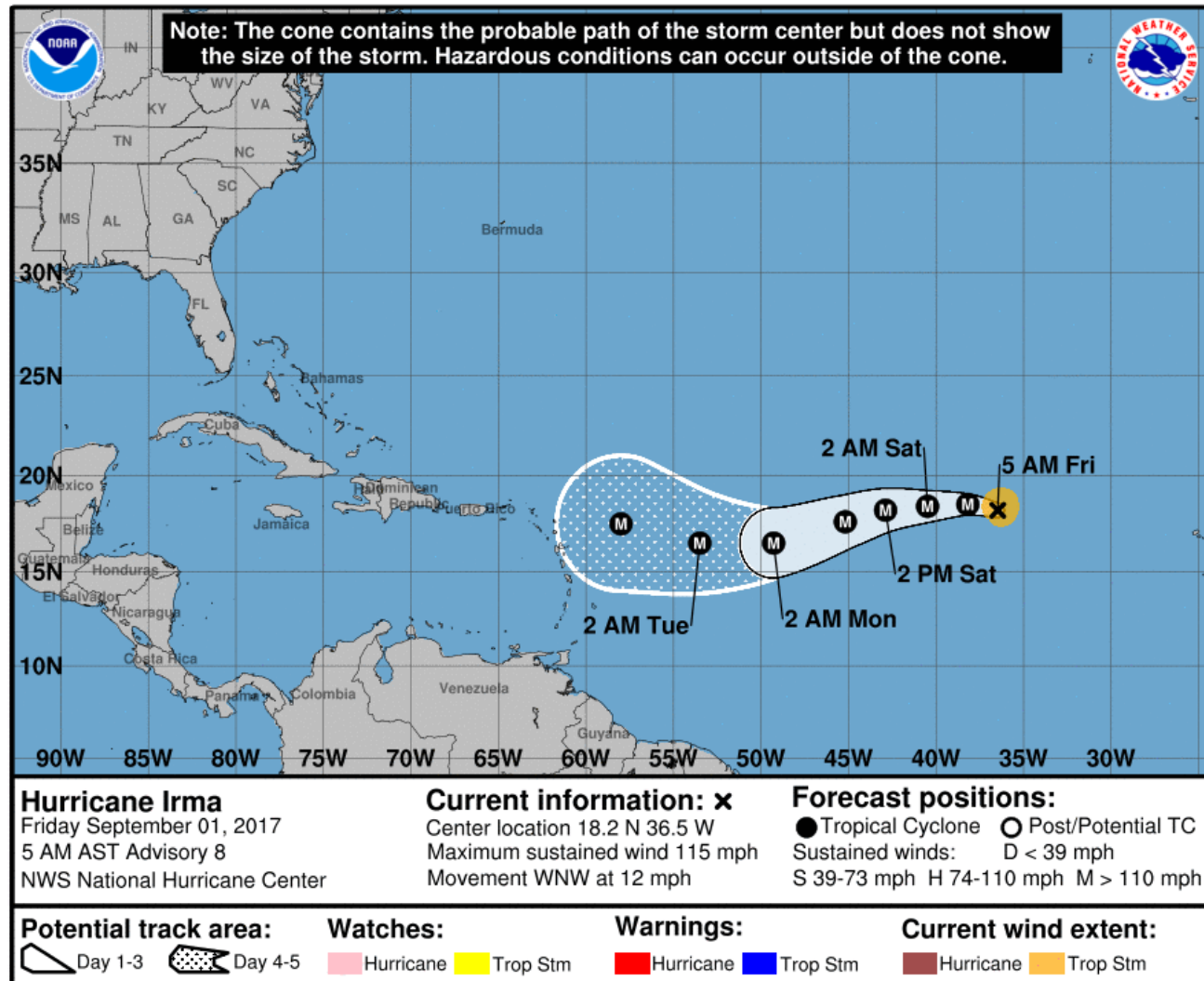
120 Hour Total Precipitation (in)
Valid: 06z Mon 11 Sep 2017 - 06z Sat 16 Sep 2017
GFS-ENS-MAXRES
Hour: 246 - 366



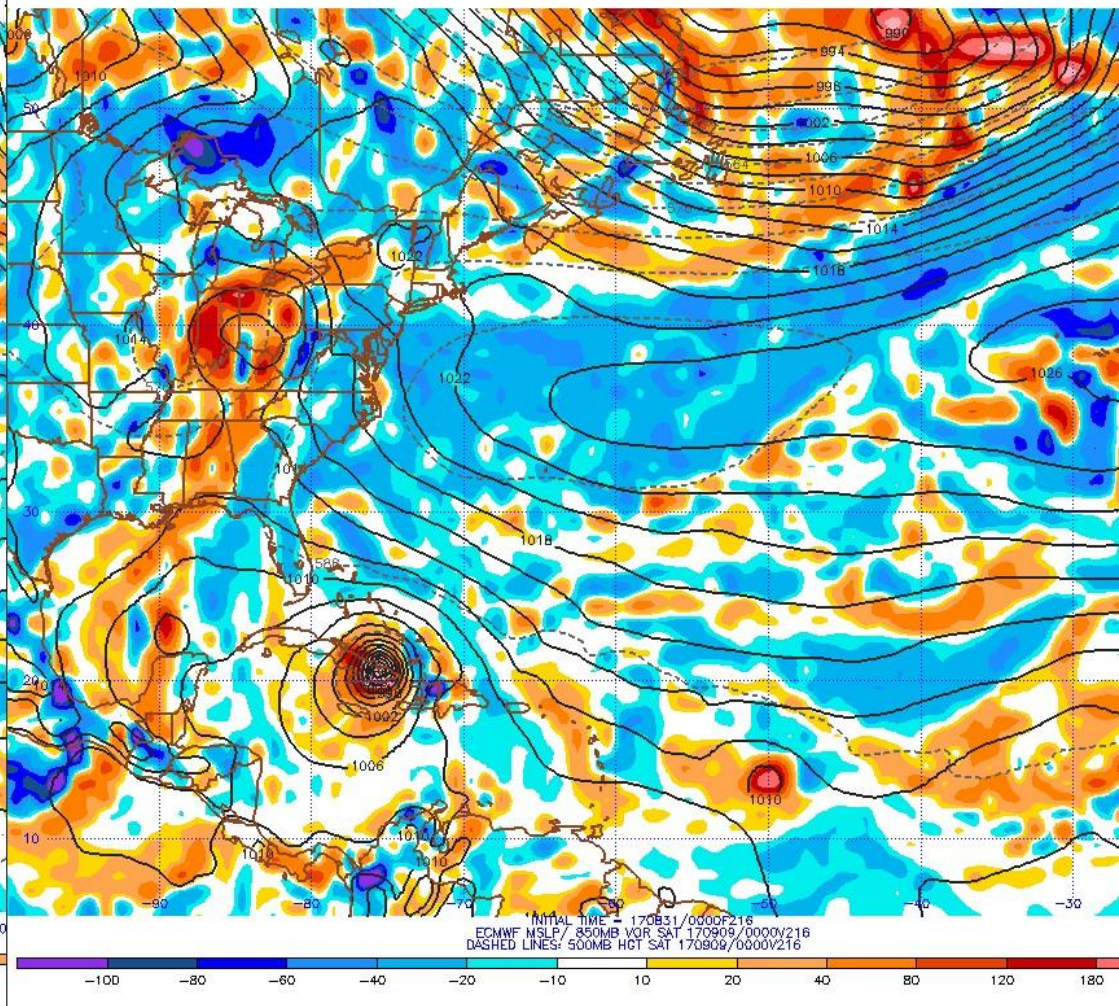
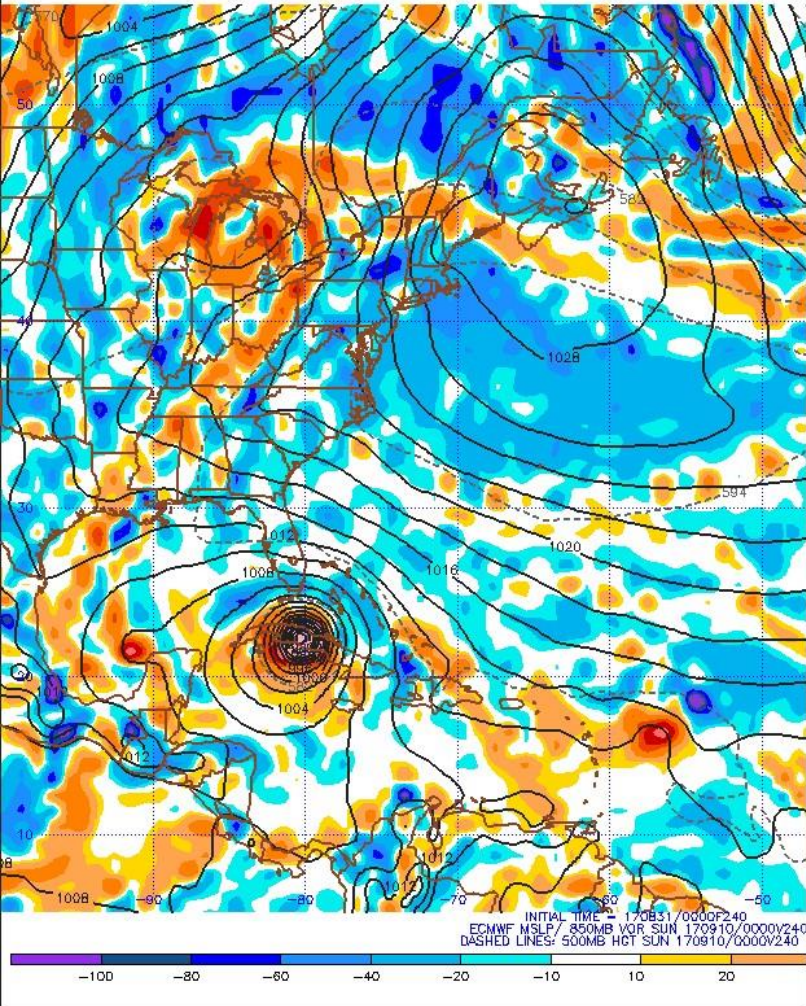
120 Hour Total Precipitation (in)
Valid: 00z Mon 11 Sep 2017 - 00z Sat 16 Sep 2017
ECMWF-EPS-MAXRES
Hour: 240 - 360



IRMA now category 4 Hurricane heads towards Leeward island / Puerto Rico Sept 5-6



THURS EURO had IRMA tracking over Hispaniola and Cuba into FL striats and se Gulf

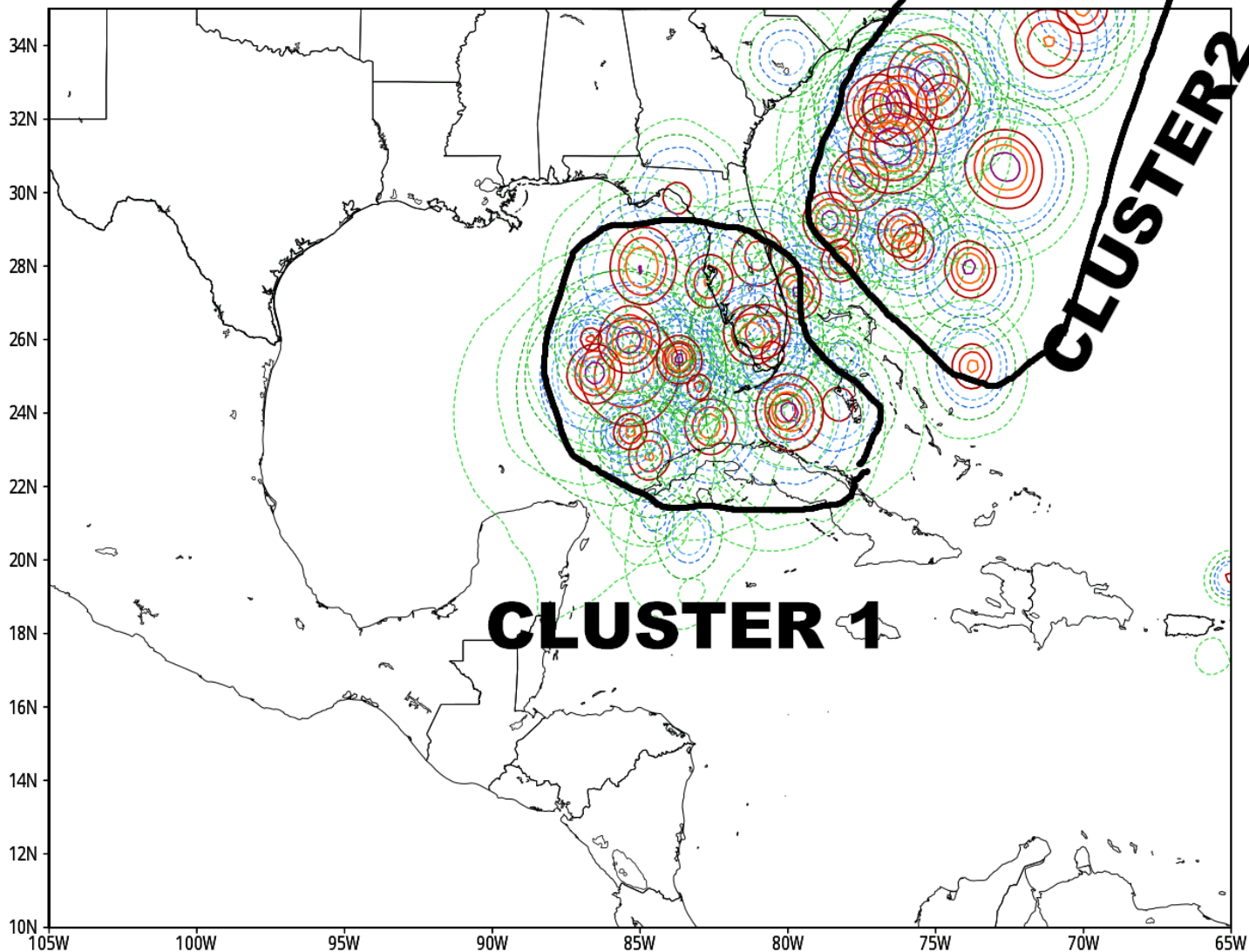


THURS AM EURO ENSEMBLE = favored 2 clusters of tracks -- 1 over FL/se Gulf and 2nd off the se US coast

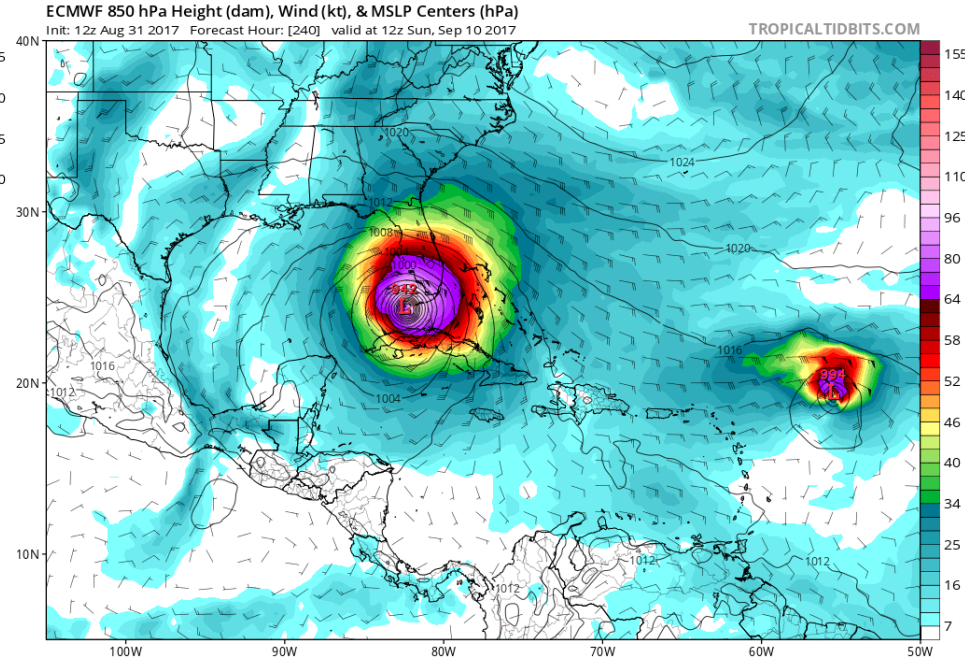
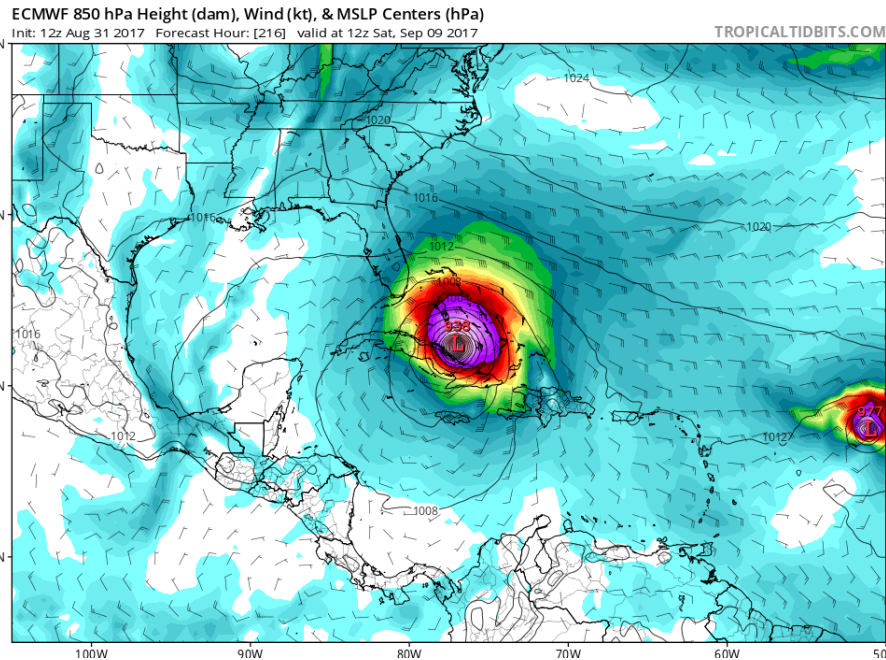
ECMWF EPS 6-hourly MSLP [hPa] -- 51-member MSLP Spaghettios
INIT: 00Z31AUG2017 fx: [264] hr --> Mon 00Z11SEP2017

o-o > 1010 hPa
o-o 1000 - 1010 hPa
o-o 980 - 999 hPa

o-o 960 - 979 hPa
o-o 940 - 959 hPa
o-o < 940 hPa



THURS PM EURO again favored Cuba FL straits into se corner of the Gulf.

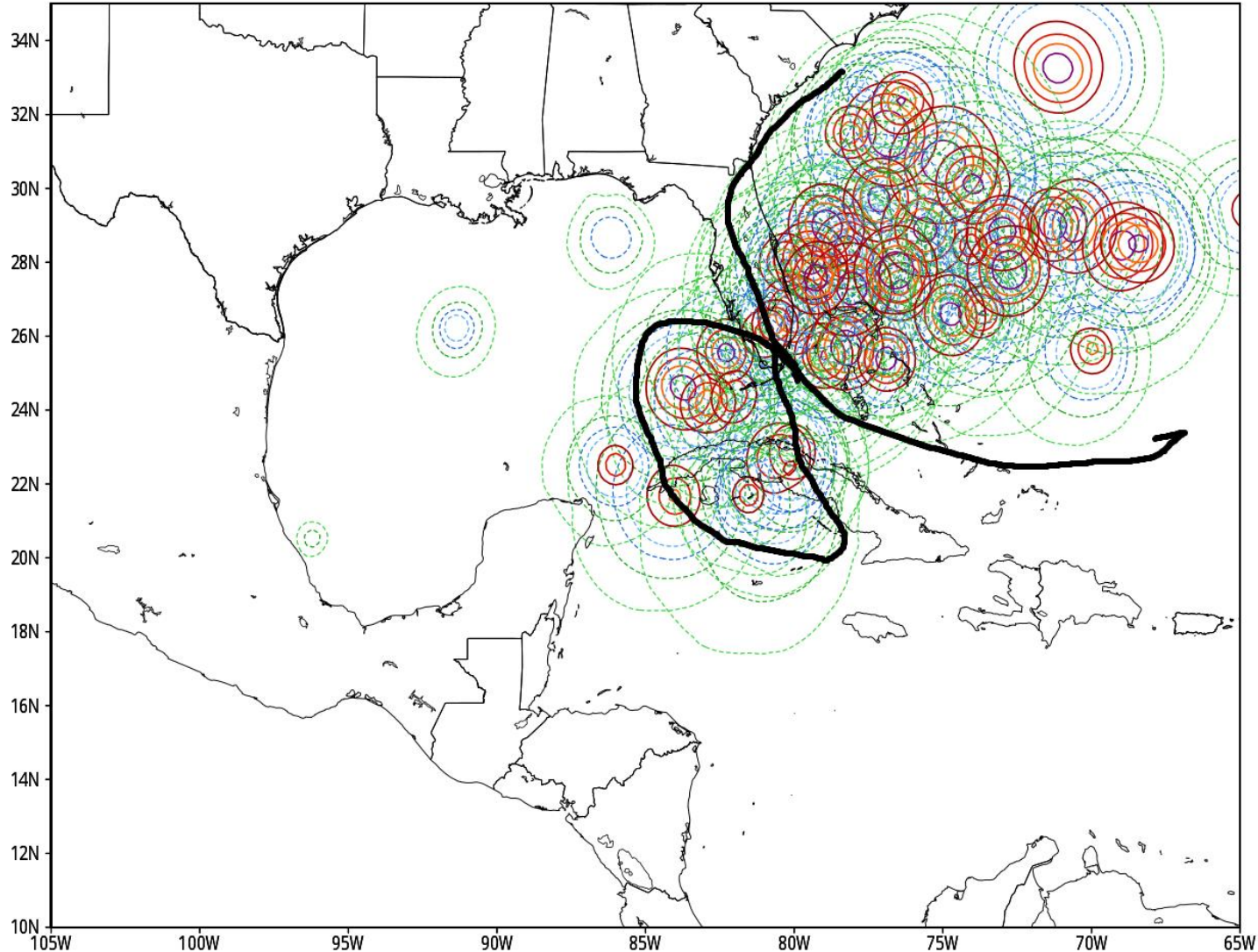


THURS AFTERNOON EURO ENSEMBLE clearly shifted tracks to favoring Bahamas se US coast

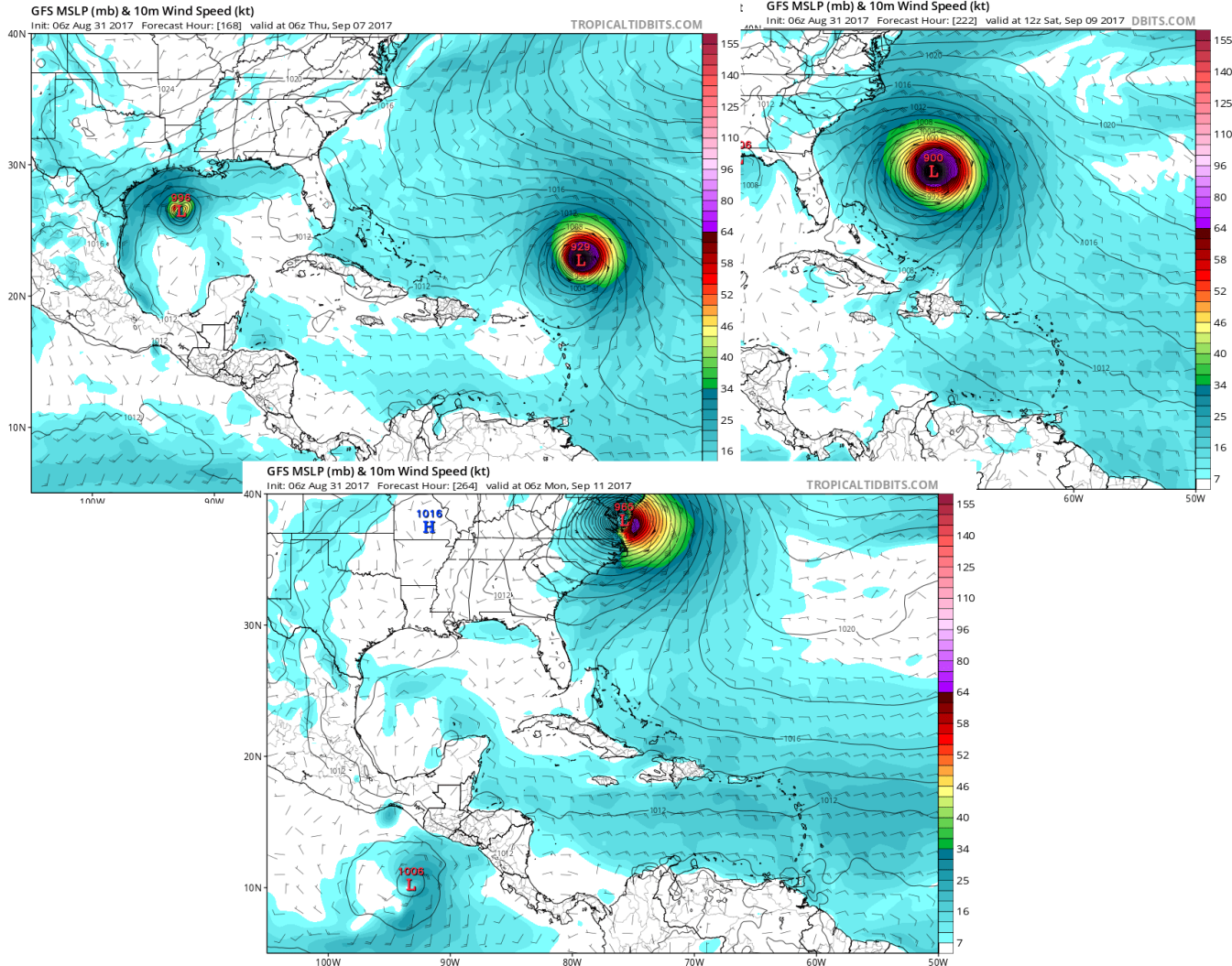
ECMWF EPS 6-hourly MSLP [hPa] -- 51-member MSLP Spaghettios
INIT: 12Z31AUG2017 fx: [240] hr --> Sun 12Z10SEP2017

o-o > 1010 hPa
o-o 1000 - 1010 hPa
o-o 980 - 999 hPa

o-o 960 - 979 hPa
o-o 940 - 959 hPa
o-o < 940 hPa



GFS Models all days Thursday showed severe Hurricane into NV VA ND... worst Hurricane ever ! SOLUTION is absurd

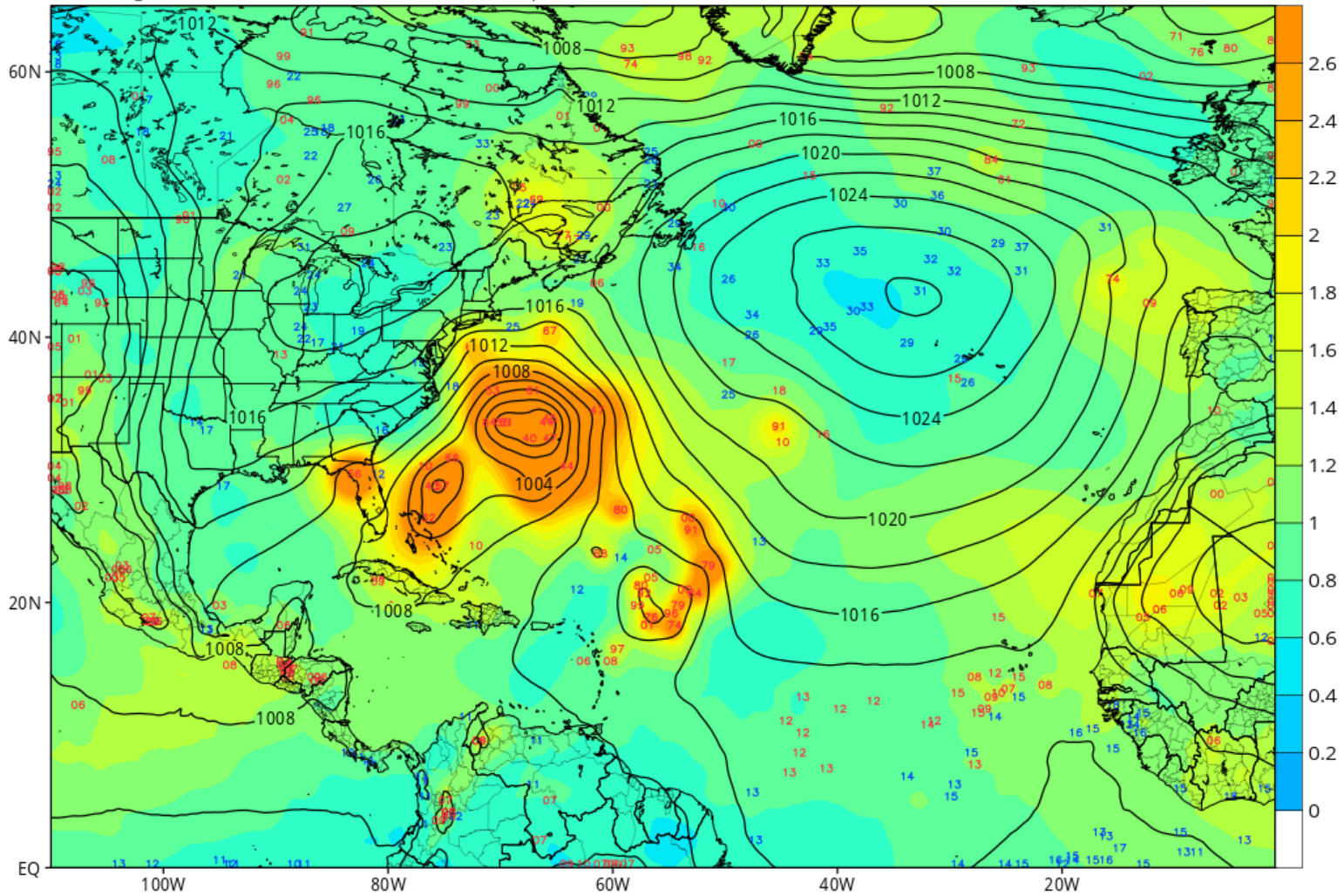


THURS GFS ensemble were MUCH further east and away from the coast

GEFS Mean MSLP (mb), Ensemble Member Pressure Centers (Lows: red | Highs: blue), & Normalized Spread (σ)

Init: 12z Aug 31 2017 Forecast Hour: [252] valid at 00z Mon, Sep 11 2017

TROPICALTIDBITS.COM

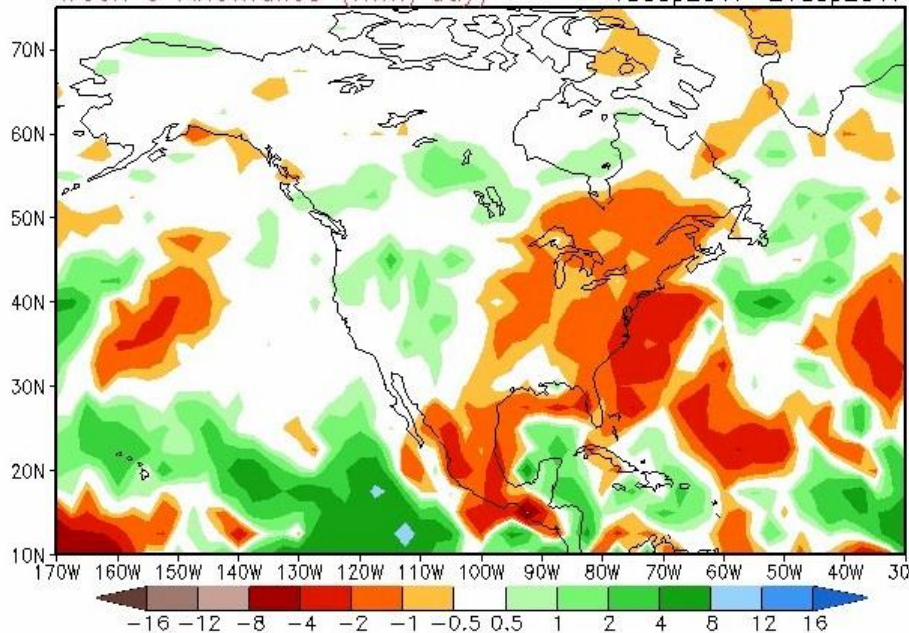


AUG 31 WEEK 3 CFS below Normal rainfall over Midwest Deep South East Coast and Much above normal temps ECB/ Upper Plains and south central Canada

CFSv2 Weeks 3 & 4 Precipitation

16 Member Ensemble Mean Forecast from 31Aug2017

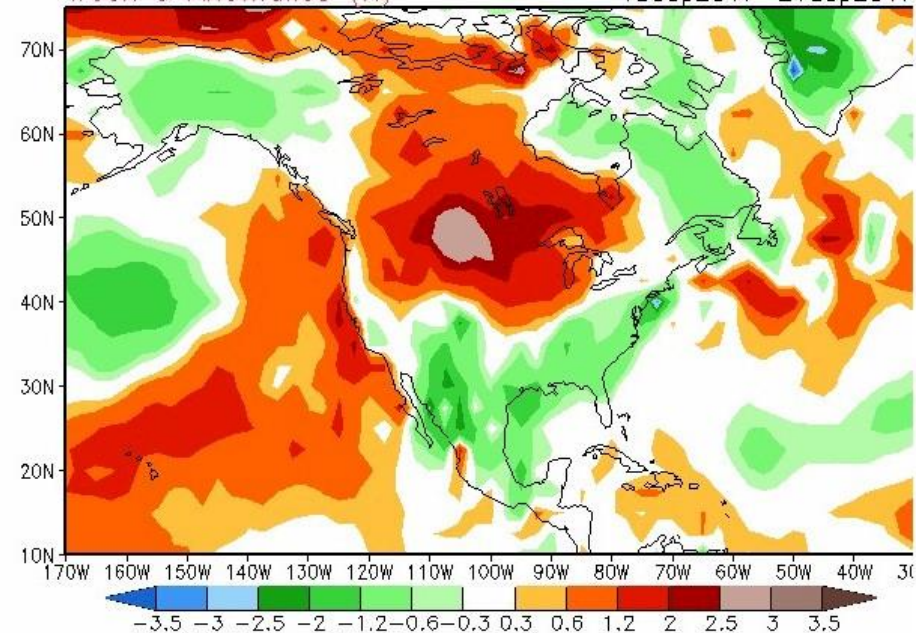
Week 3 Anomalies (mm/day) 15Sep2017-21Sep2017



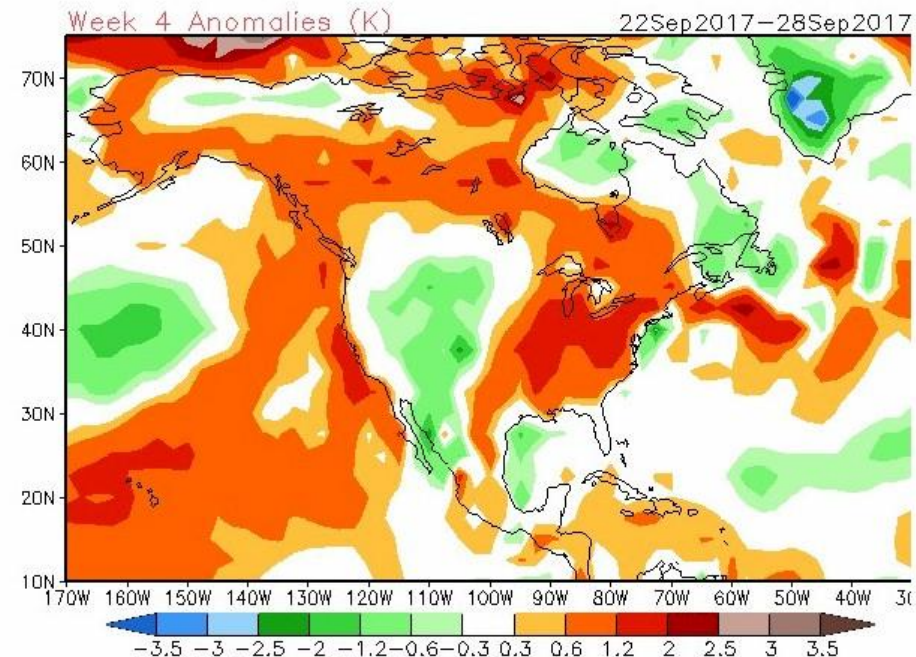
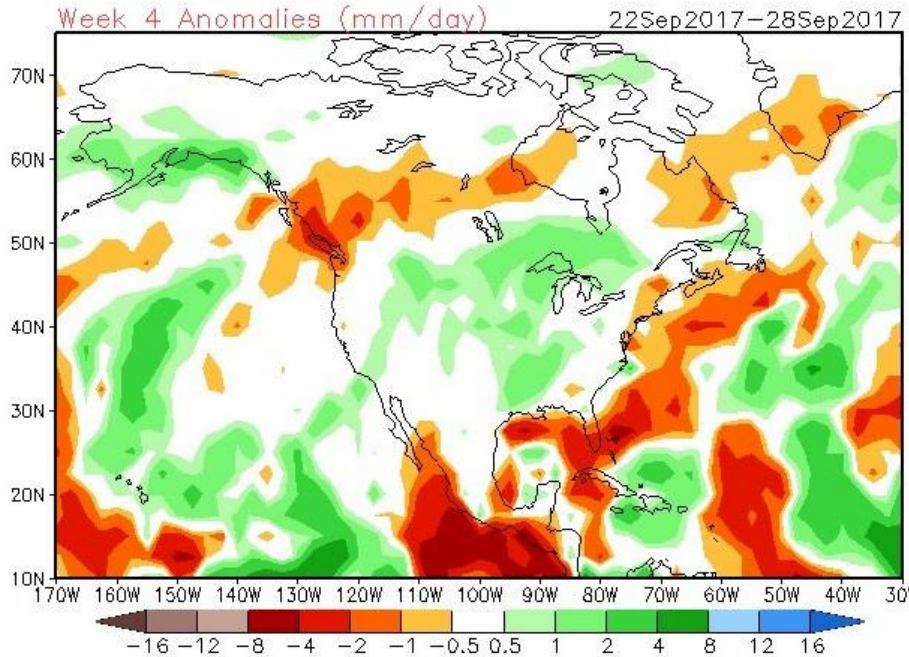
CFSv2 Extended Range Temperature

16 Member Ensemble Mean Forecast from 31Aug2017

Week 3 Anomalies (K) 15Sep2017-21Sep2017



WEEK 4 CFS ABOVE normal rains -wetter than Normal over Canadian Prairies & WCB/Delta ... TEMPS still above normal

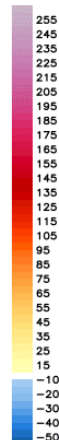
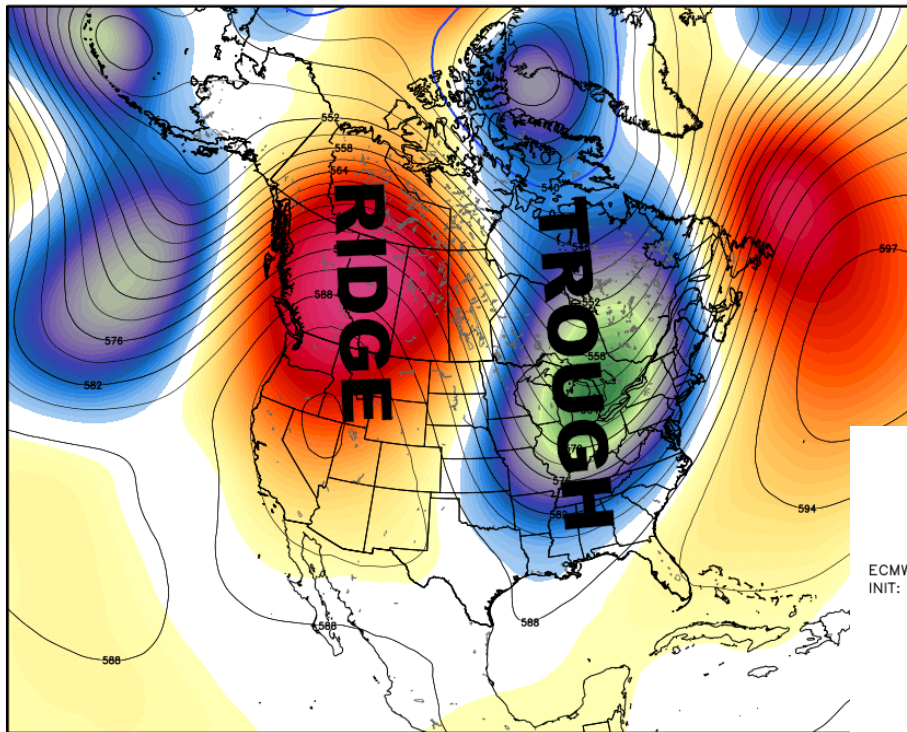


AUG 31 EURO WEEKLIES 500 mb map valid 9/7

ECMWF EPS Monthly Ensemble Mean 500 hPa Geopotential Height [dm] & Anomaly [m]

INIT: 00Z31AUG2017 fx: [168] hr --> Thu 00Z07SEP2017

Min|Max: -190.5 | 194.4 m

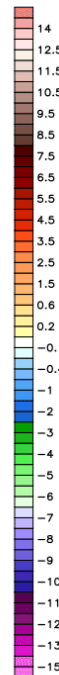
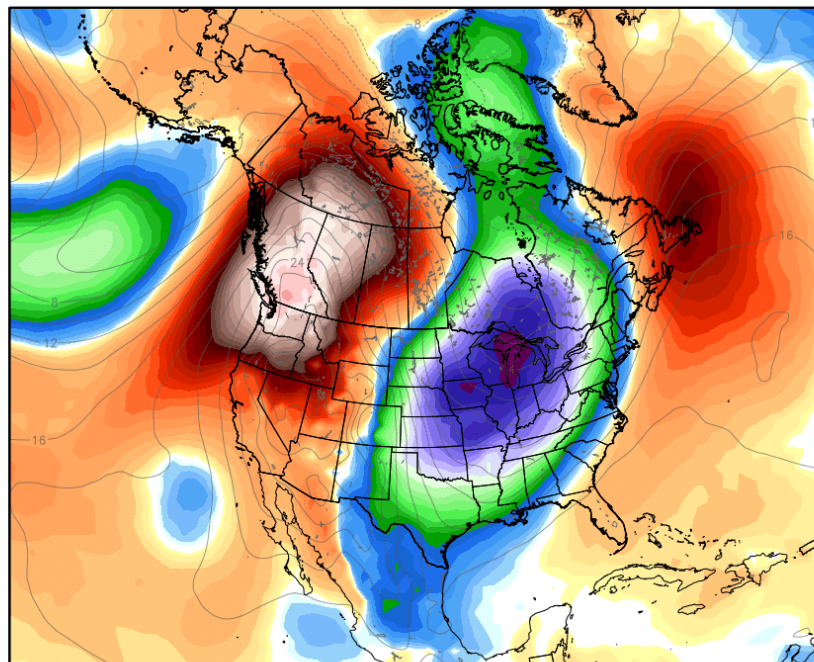


if this was 9/20 these temp anomalies would support FROST

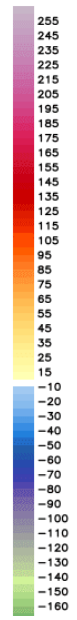
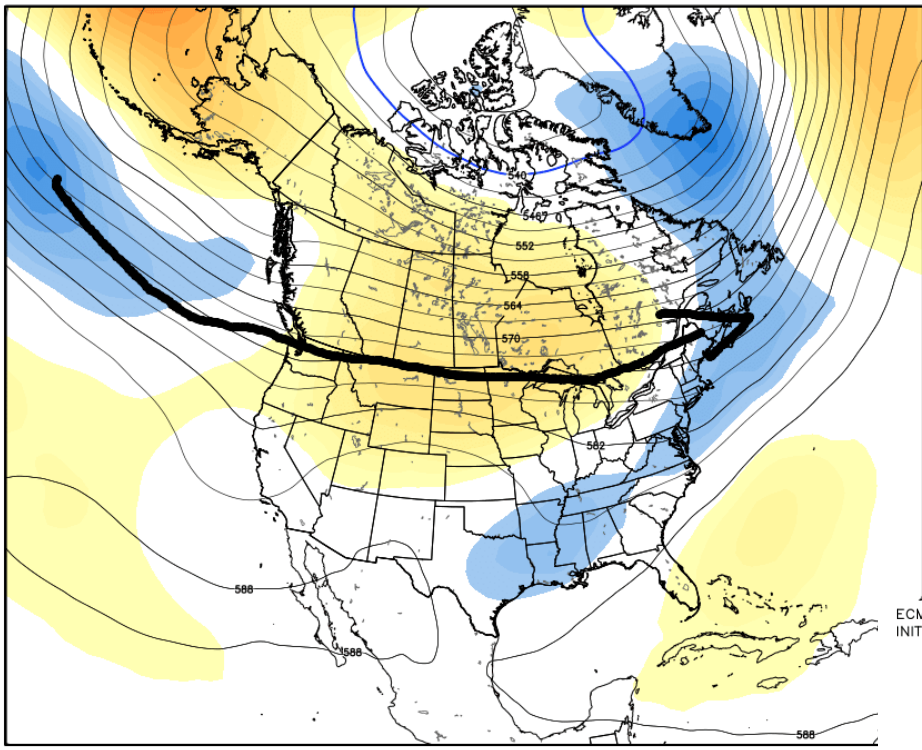
ECMWF EPS Monthly Ensemble Mean 850 hPa Temperature Anomaly [°C] & Anomaly

INIT: 00Z31AUG2017 fx: [168] hr --> Thu 00Z07SEP2017

Min|Max: -11.2 | 14.3 °C

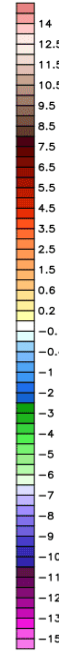
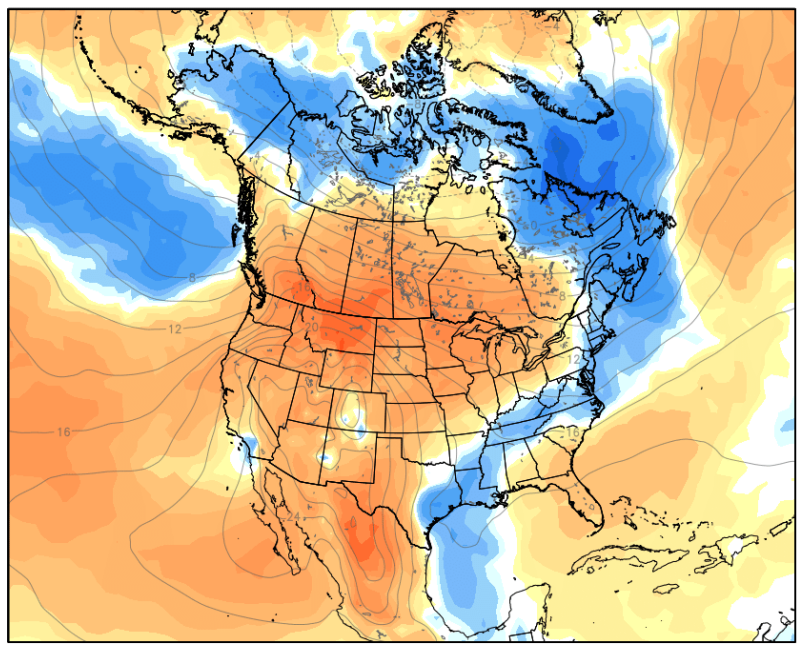


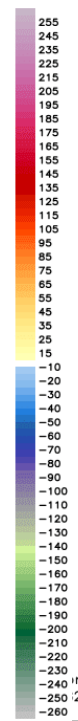
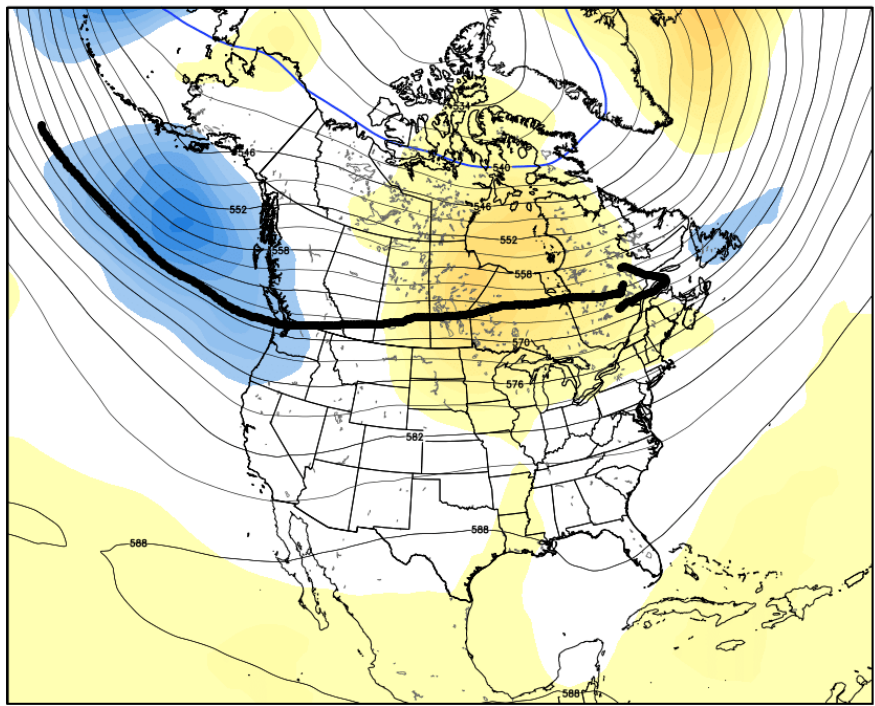
ECMWF EPS Monthly Ensemble Mean 500 hPa Geopotential Height [dm] & Anomaly [m]
 INIT: 00Z31AUG2017 fx: [360] hr --> Fri 00Z15SEP2017 Min|Max: -41.5 | 91.1 m



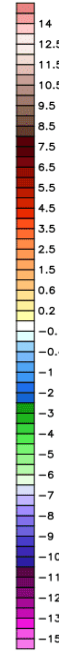
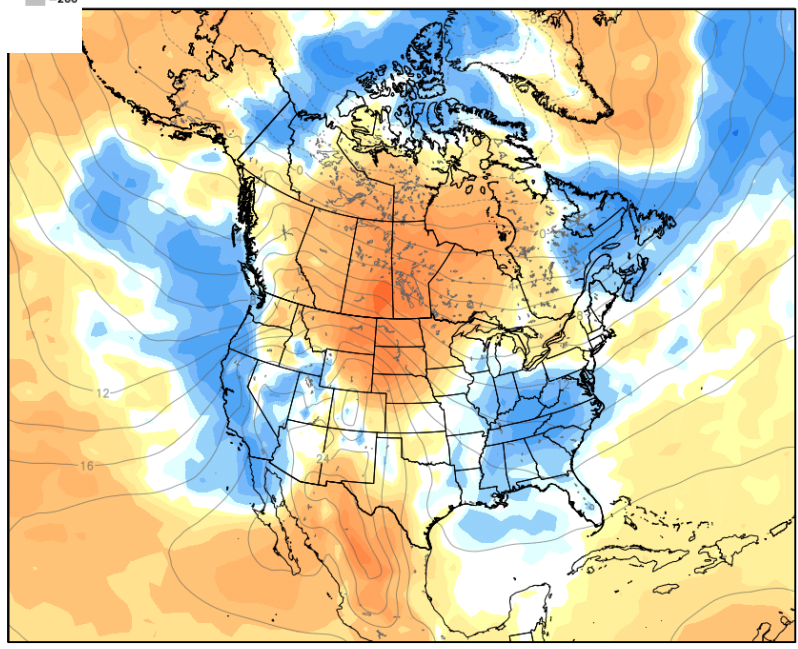
EURO weeklies show zonal flow over N. America --west to east direction – rest of Sept

ECMWF EPS Monthly Ensemble Mean 850 hPa Temperature Anomaly [°C] & Anomaly
 INIT: 00Z31AUG2017 fx: [360] hr --> Fri 00Z15SEP2017 Min|Max: -2.4 | 3.8 °C





Monthly Ensemble Mean 850 hPa Temperature Anomaly [°C] & Anomaly
2017 fx: [600] hr --> Mon 00Z25SEP2017
Min|Max: -1.6 | 3.3 °C

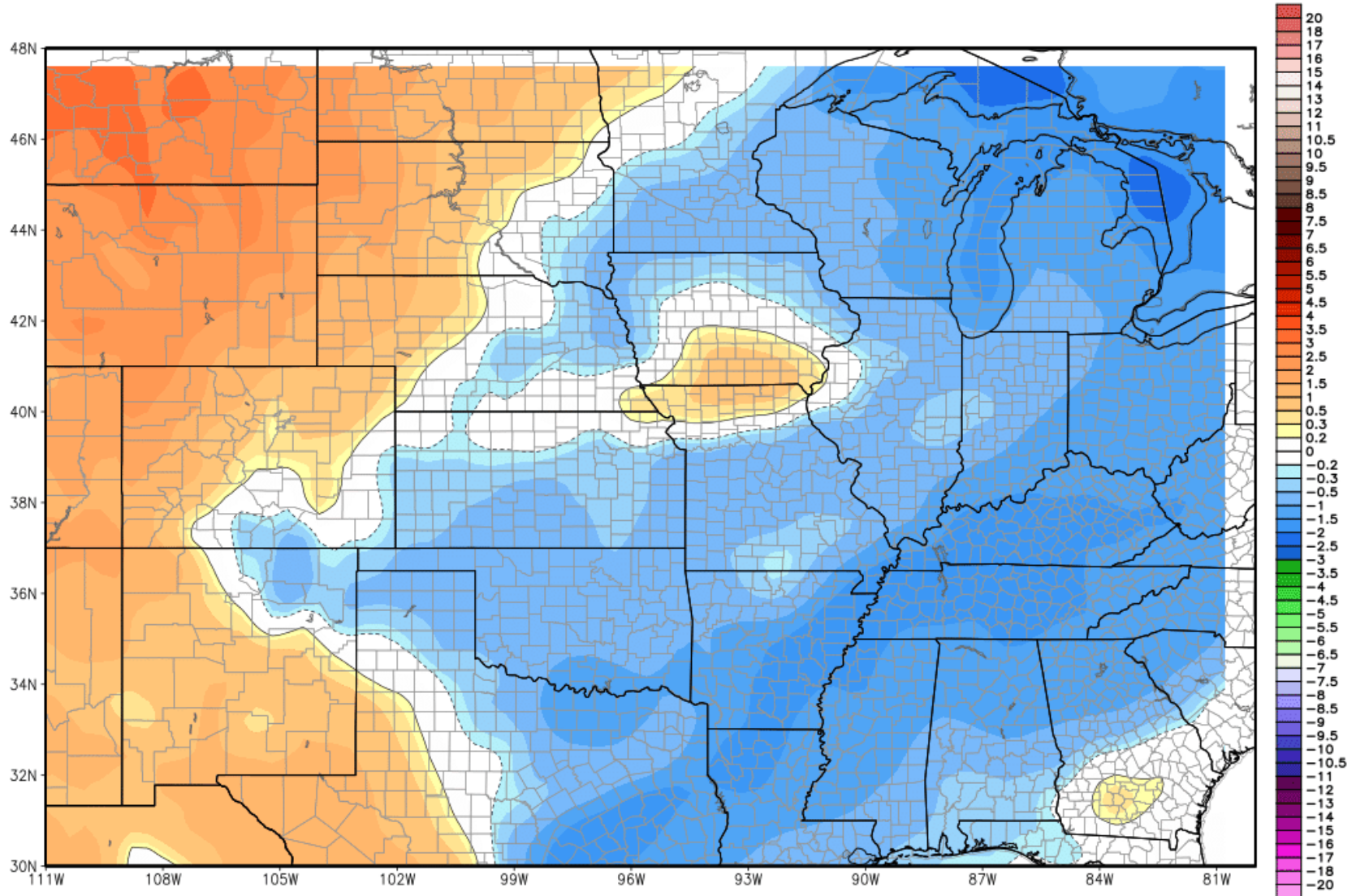


TEMPS OVER NEXT 32 DAYS ... slightly below Normal temps over Plains / Midwest/ Deep South

ECMWF EPS Ensemble Mean 32-day Avg 2m Temperature Anomaly [°C]

Min|Max: -2.5° | 3.7°C

Init: 00Z31AUG2017 -- [768] hr --> Valid on Mon 00Z02OCT2017 Day 0 - Day 32



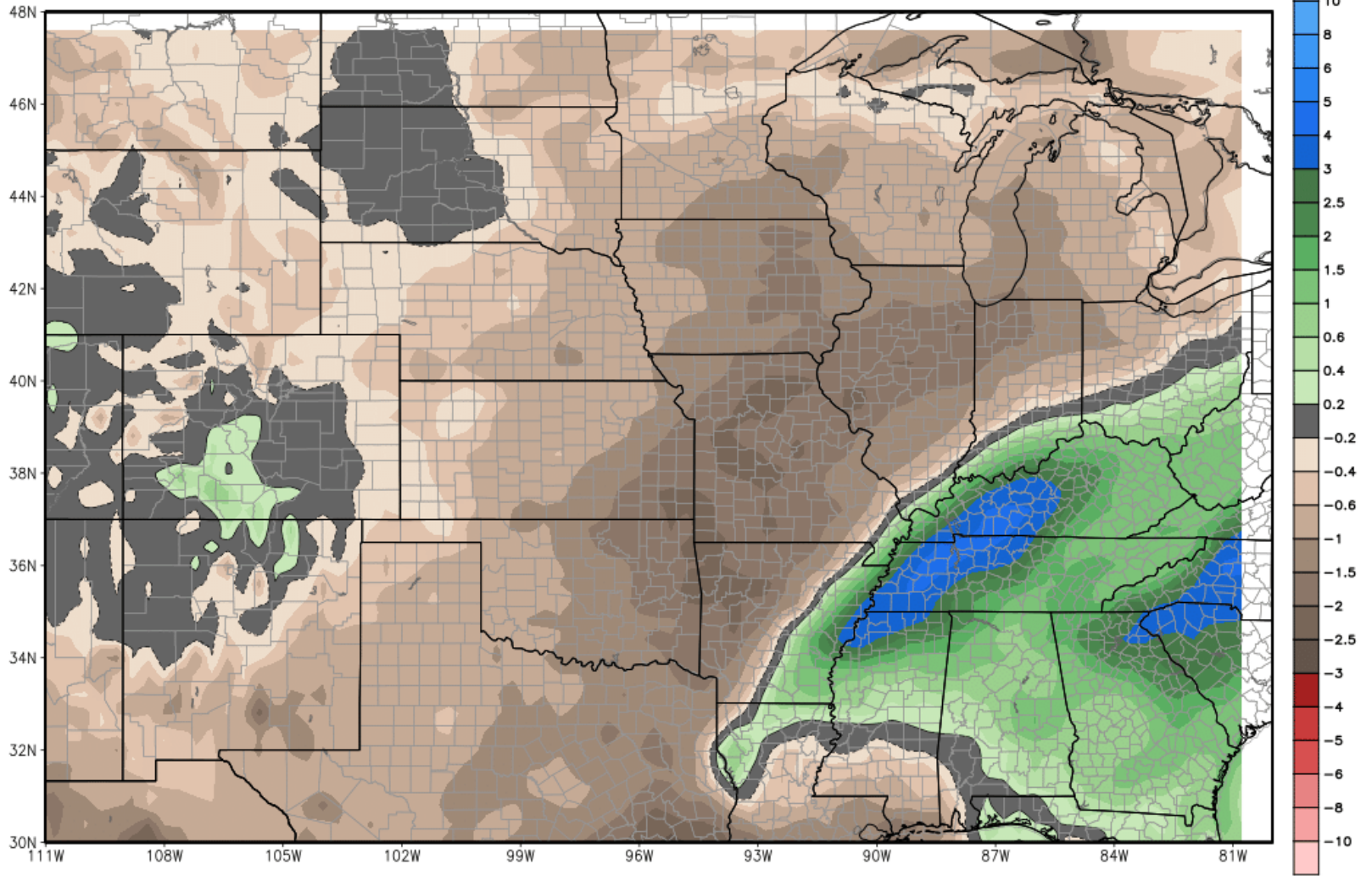
Average between 00Z31AUG2017-00Z02OCT2017 | ECMWF EPS 1996-2015 Hindcast Climatology

VERY DRY over next 30 days over Plains WCB and part of ECB

ECMWF EPS Ensemble Mean 32-day Avg Precipitation Anomaly [inch]

Min|Max Anom: -2.7 | 4.5 inch

Init: 00Z31AUG2017 -- [768] hr --> Valid on Mon 00Z02OCT2017 Day 0 - Day 32



Accumulation between 00Z31AUG2017-00Z02OCT2017 | ECMWF EPS 1996-2015 Hindcast Climatology

CFS FOR SEPT RAINFALL-- large area of Below Normal rainfall over Plains/ Midwest & southern Canada Prairies

CFS

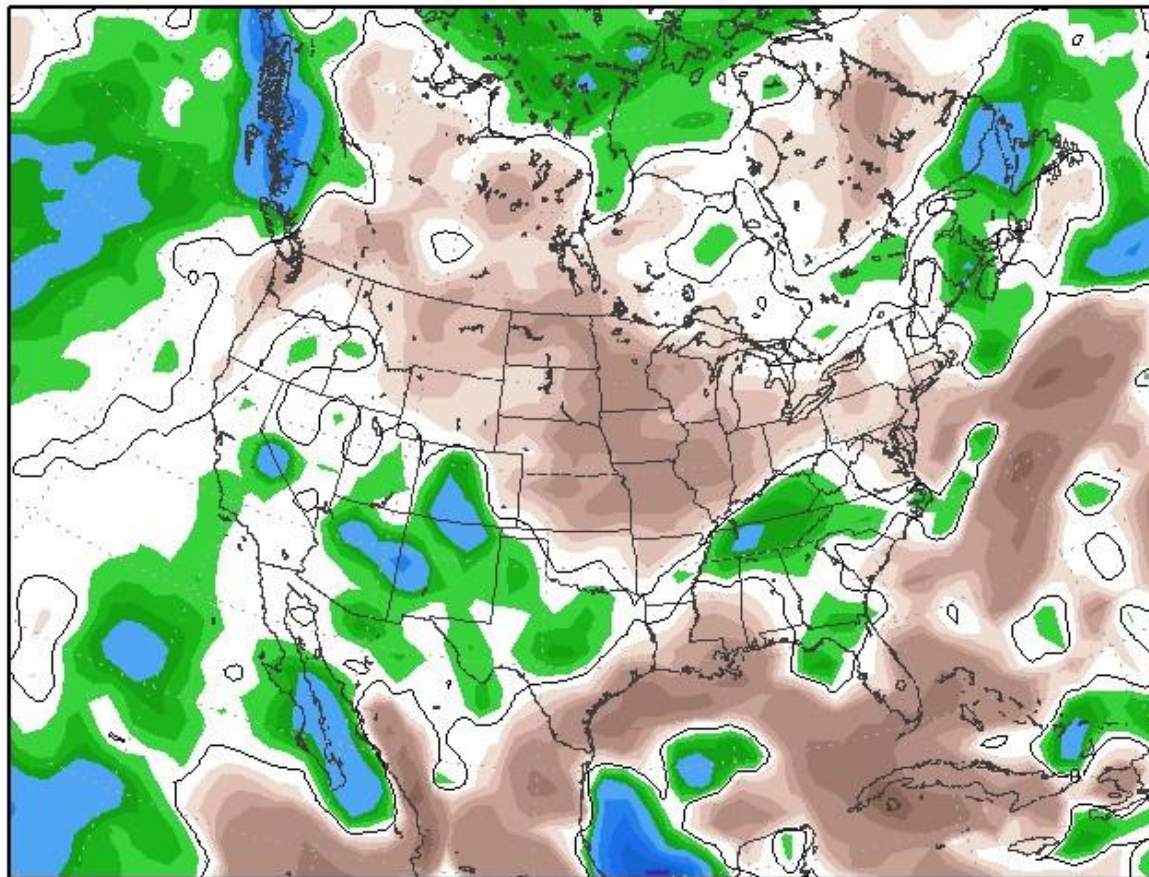
Monthly Precipitation Anom. (in)

Month: 01

Init: 12z Sat 26 Aug 2017 to 06z Thu 31 Aug 2017

Valid: Sep 2017

Members: 20



WEEK 4 CFS TEMPS - WARM over Canadian Prairies near normal all other areas

CFS

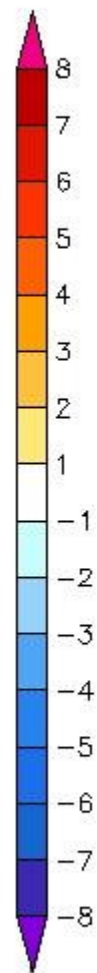
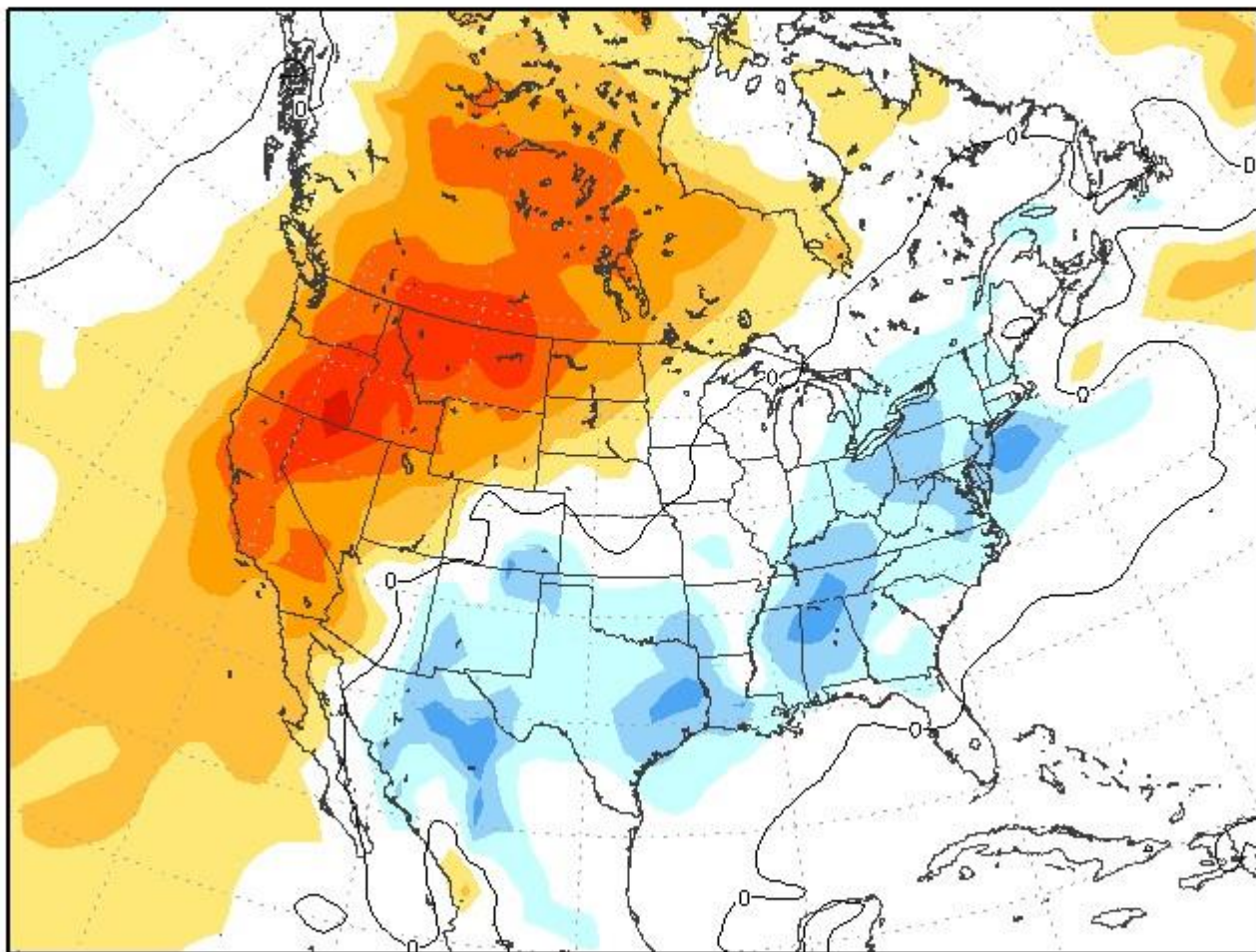
Monthly 2m T Anom. (F)

Month: 01

Init: 12z Sat 26 Aug 2017 to 06z Thu 31 Aug 2017

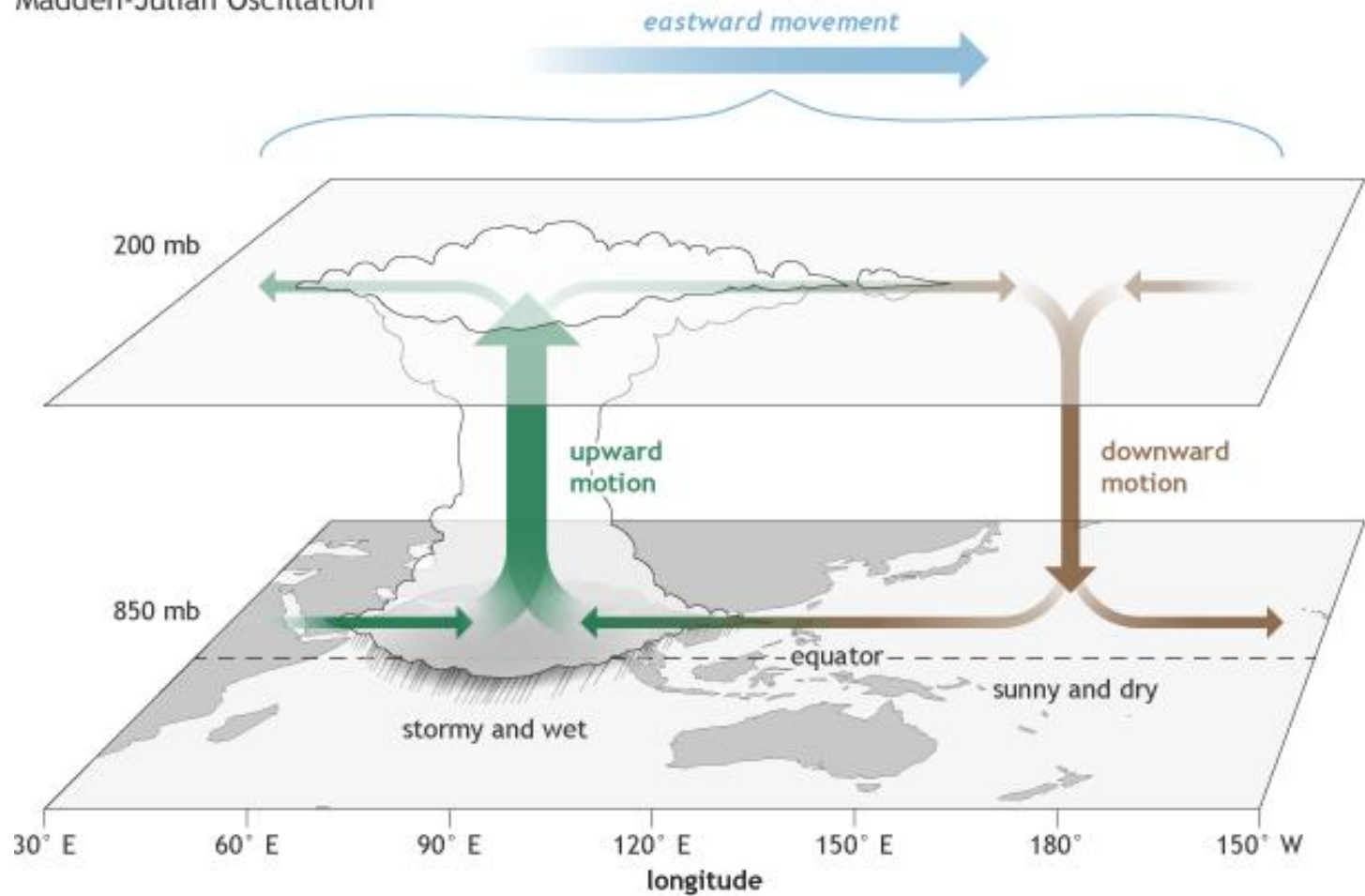
Valid: Sep 2017

Members: 20

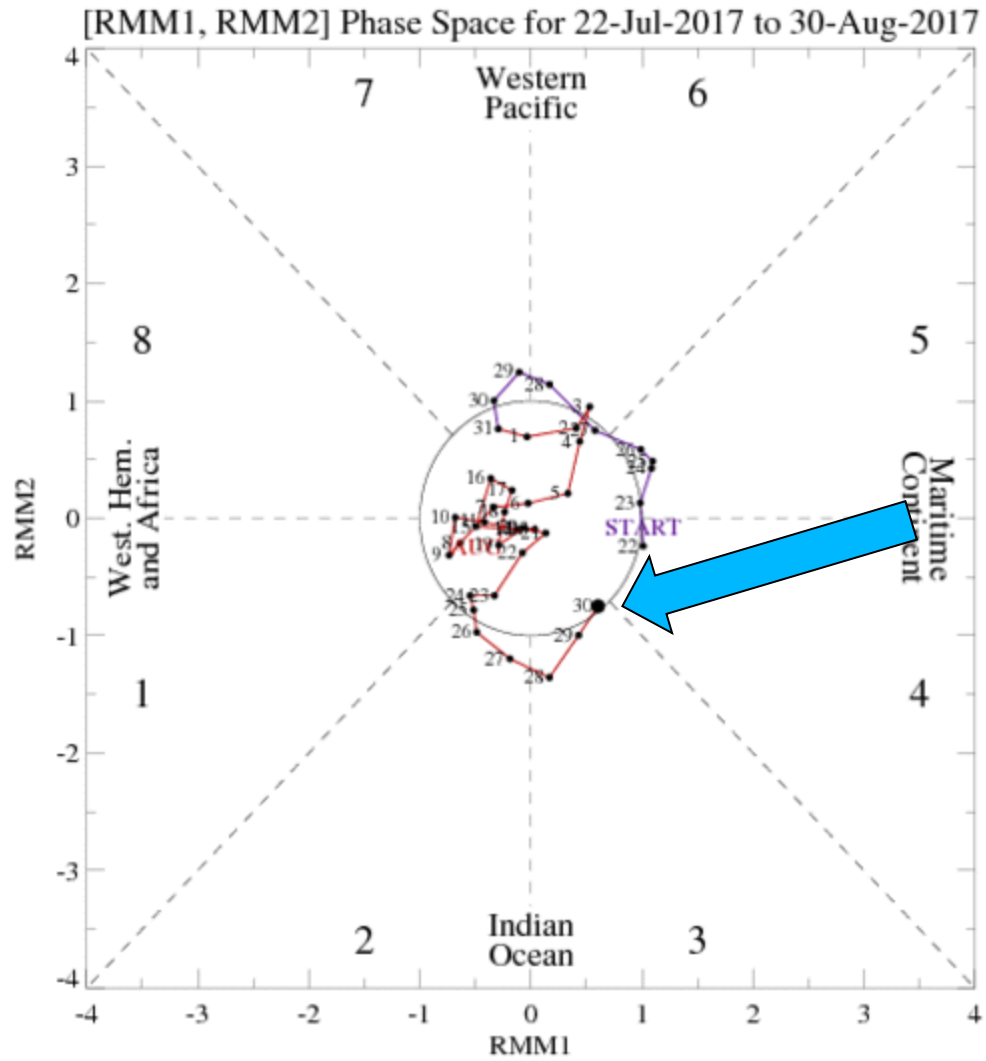


LETS TALK MJO/ENSO

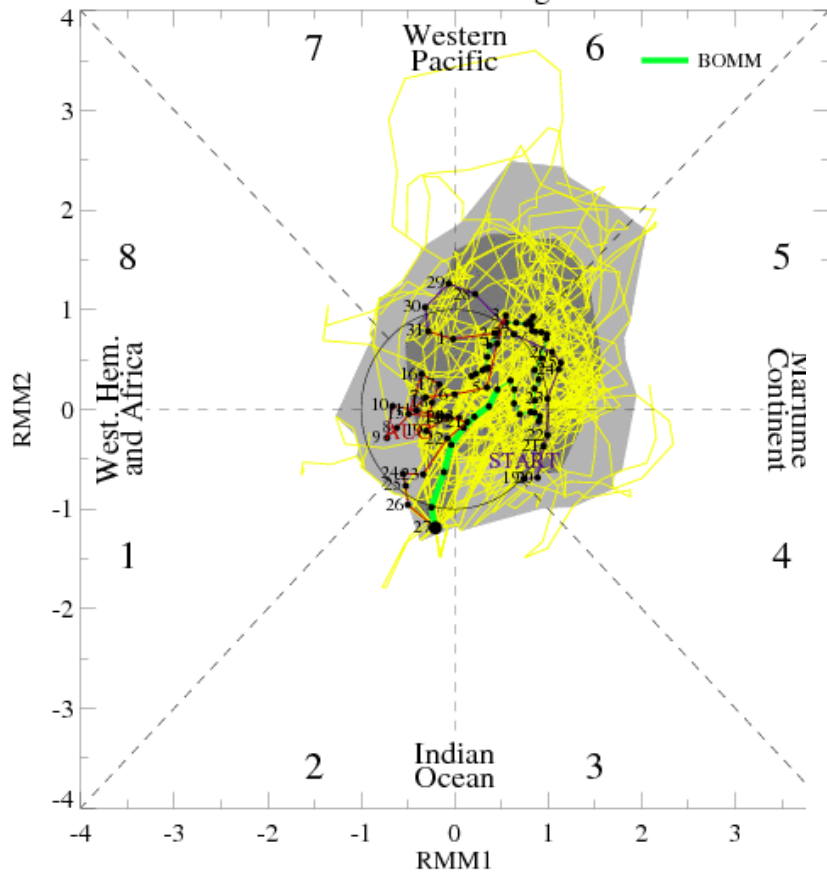
Madden-Julian Oscillation



MJO STAYS WEAK

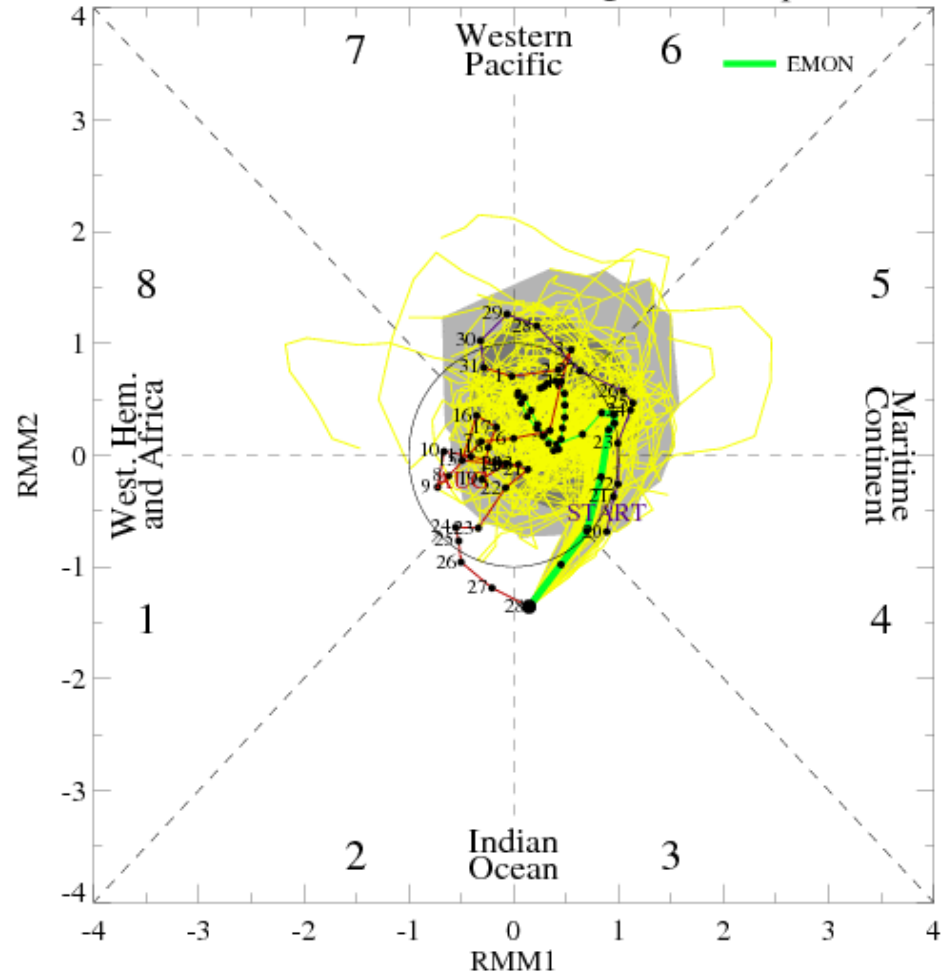


MJO Index Forecast for 27Aug2017-08Oct2017

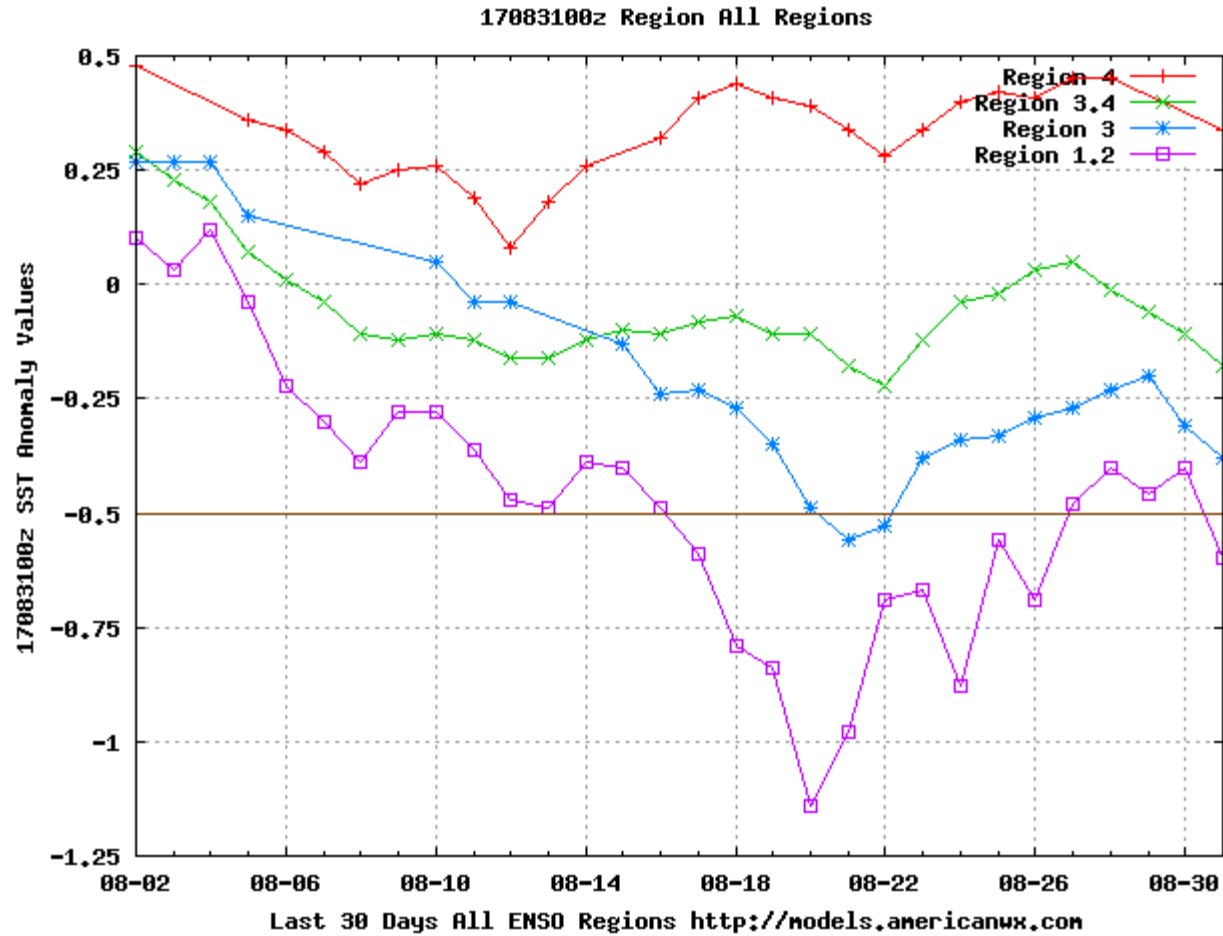


MJO STAYS Weak

MJO Index Forecast for 29Aug2017-29Sep2017



all areas now cooling and at or below Min criteria for weak El Nino

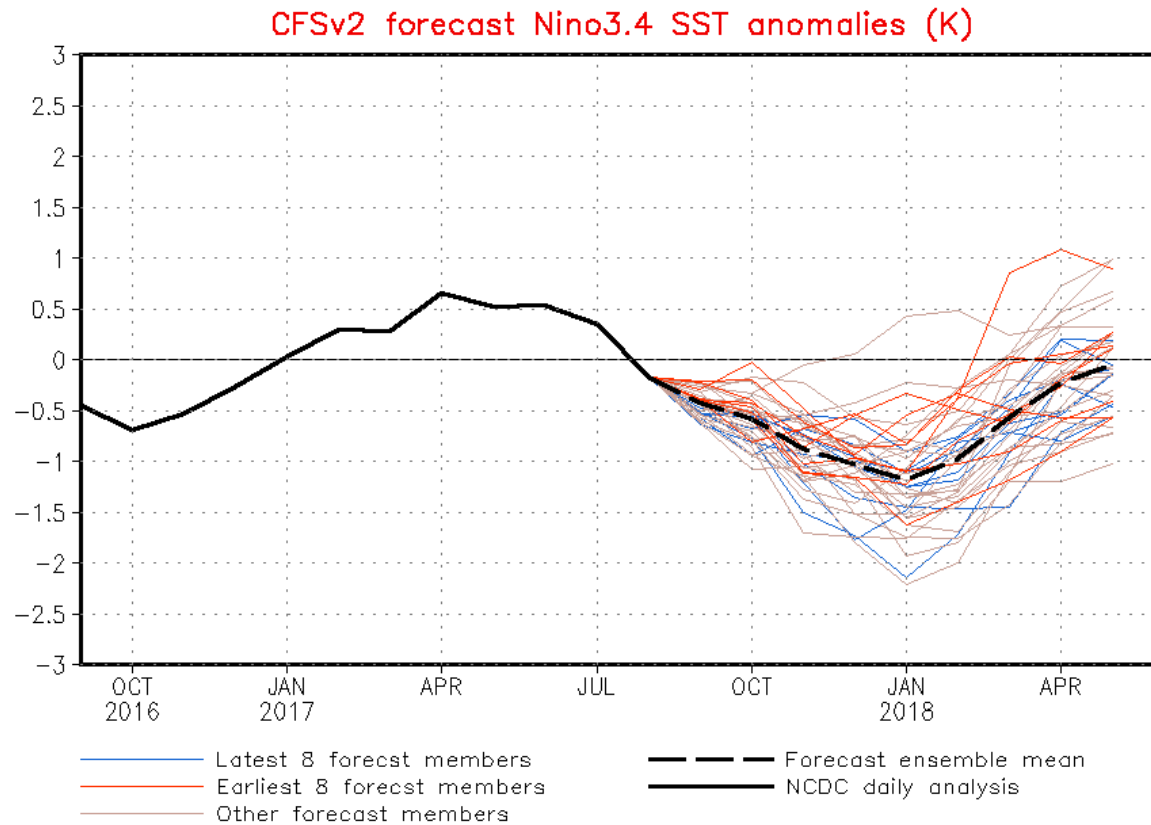


CFS enso new data = major cooling in most enso regions and WEAK a Nina winter 2017-18 ? Looks that way



NWS/NCEP/CPC

Last update: Thu Aug 31 2017
Initial conditions: 21Aug2017-30Aug2017



Sometimes I wonder whether the world is being run by smart people who are putting us on, or by imbeciles who really mean it.

MARK TWAIN

