

**US and SOUTH AMERICA
GRAIN WEATHER
ISSUES**

**as of FRIDAY
20 OCTOBER 2017**



LOCATED in Richmond VA

Featured frequently on AGRI-MONEY

EMAIL WXRISK@VERZION .NET



@WXRISK.COM



<https://www.facebook.com/WxRisk>

wxrisk@gmail.com

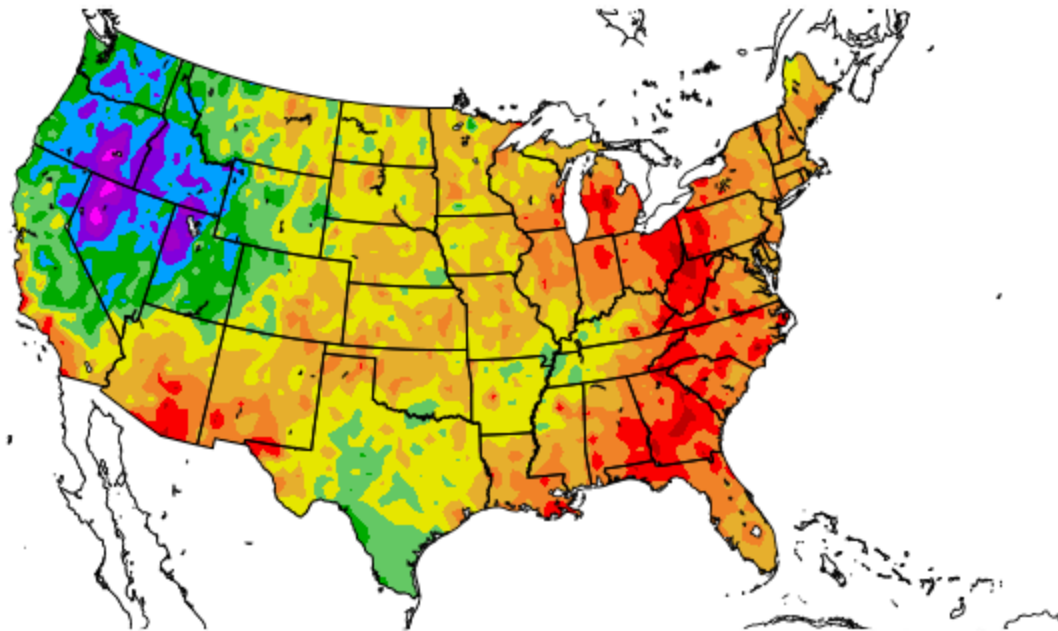


Who we are

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.

TEMP ANOMALIES LAST 7 DAYS

Departure from Normal Temperature (F)
10/12/2017 - 10/18/2017



Generated 10/19/2017 at HPRCC using provisional data.

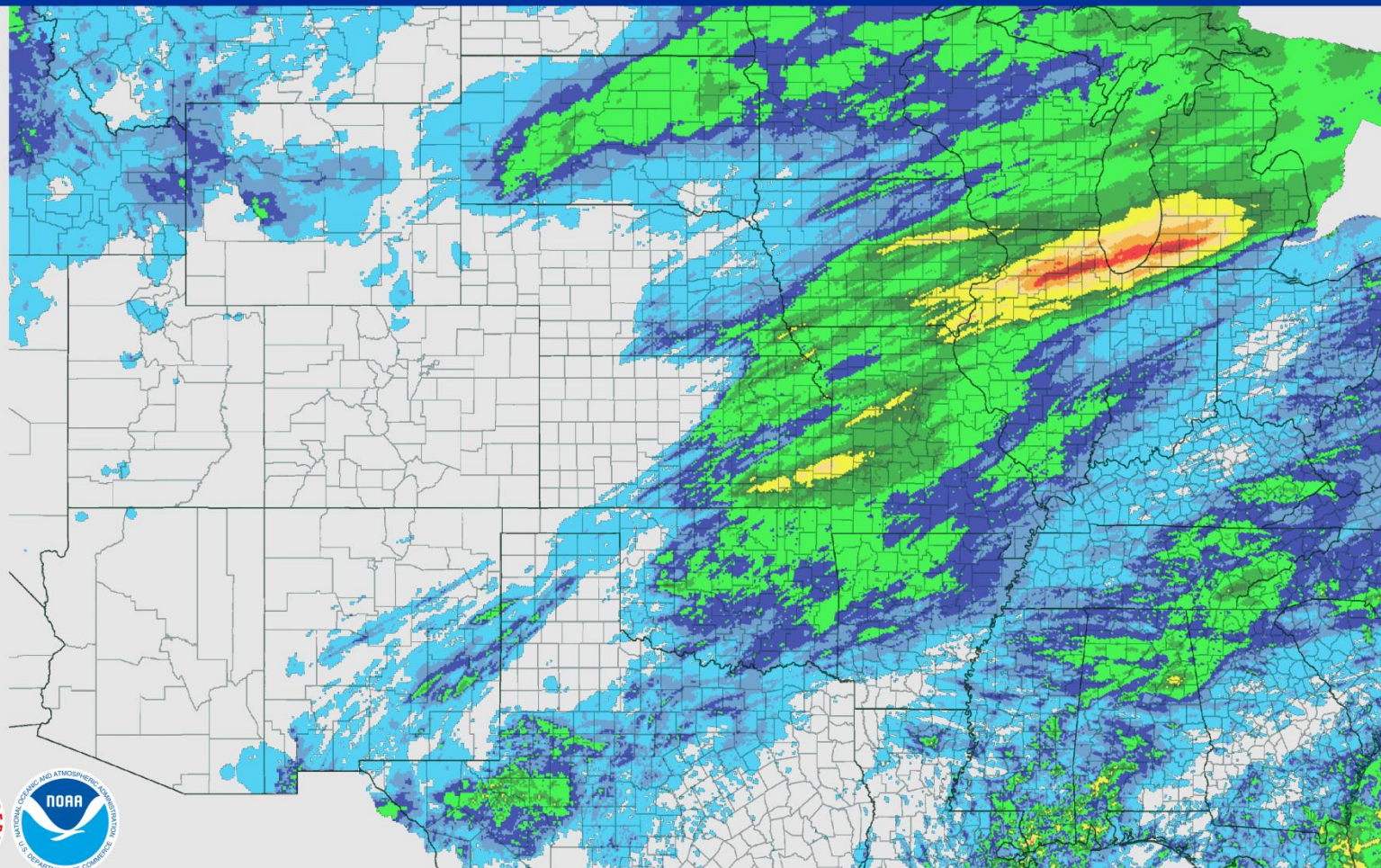
NOAA Regional Climate Centers

RAINFALL PAST 7 DAYS—

October 19, 2017 7-Day Observed Precipitation

Created on: October 20, 2017 - 04:40 UTC

Valid on: October 19, 2017 12:00 UTC



Inches

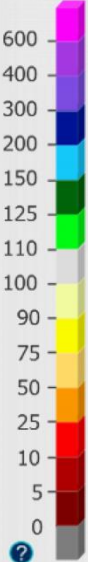
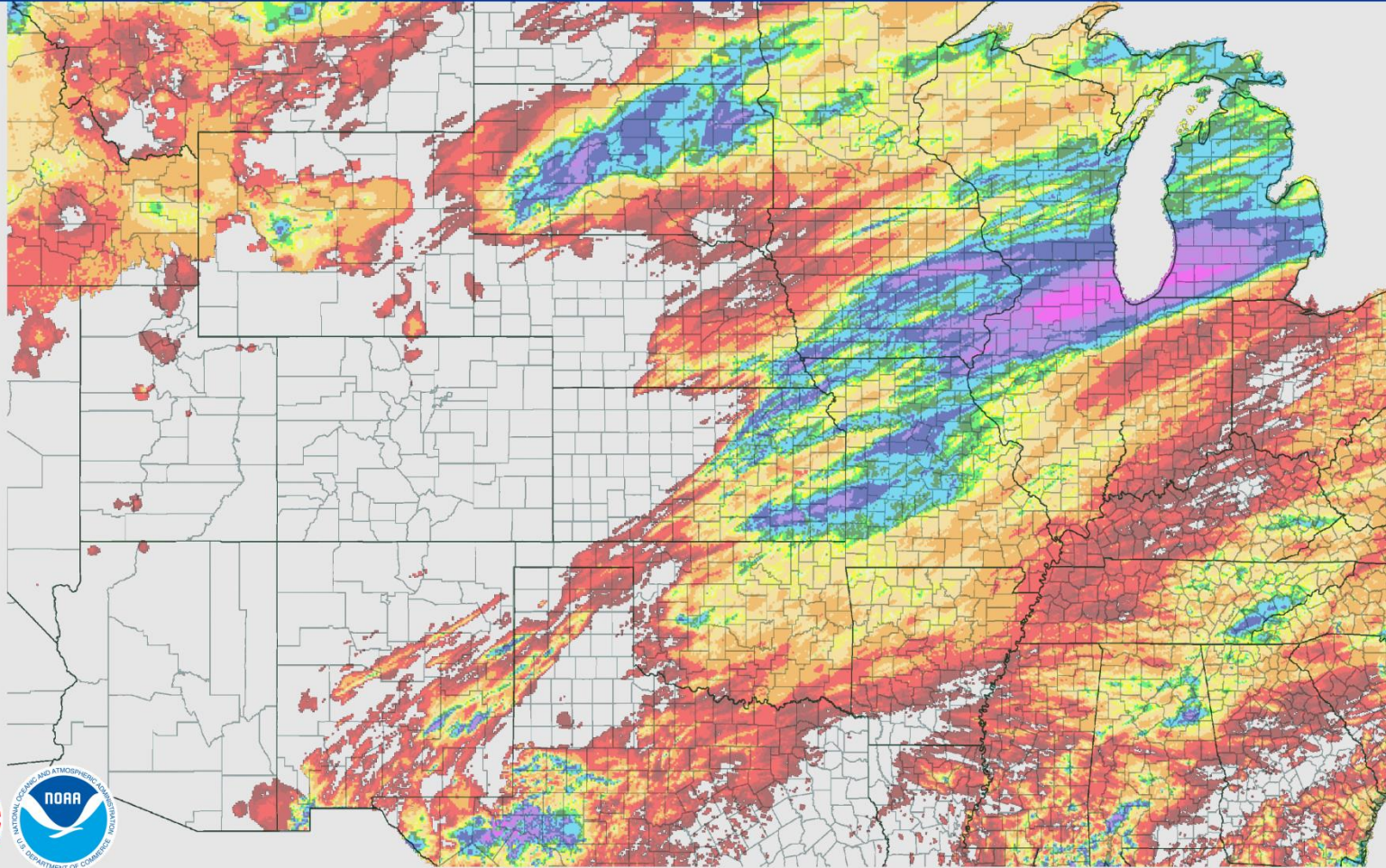


PRECIP ANOMALIES PAST 7D- Feast or Famine

October 19, 2017 7-Day Percent Precipitation

Created on: October 20, 2017 - 04:41 UTC

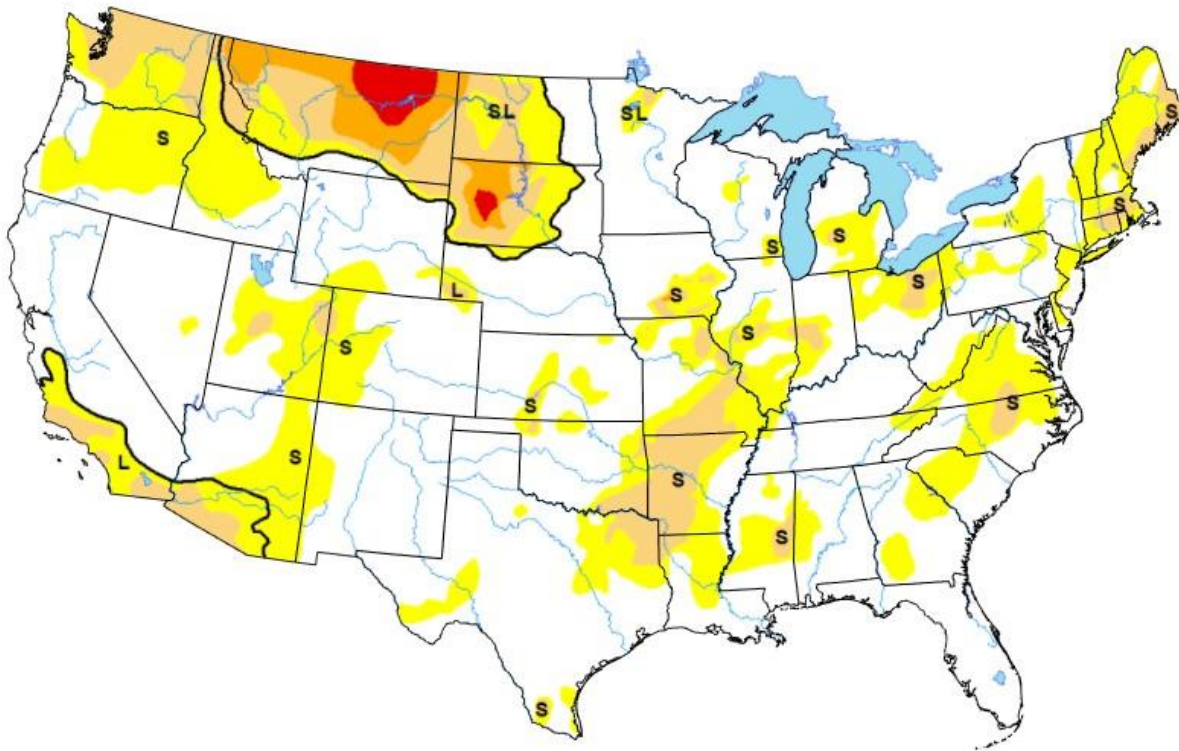
Valid on: October 19, 2017 12:00 UTC



Moderate Drought over ND SD MT has Continued Lt-Mod drought east IA south ILL east MO ARK north OH VA

Map for October 19, 2017

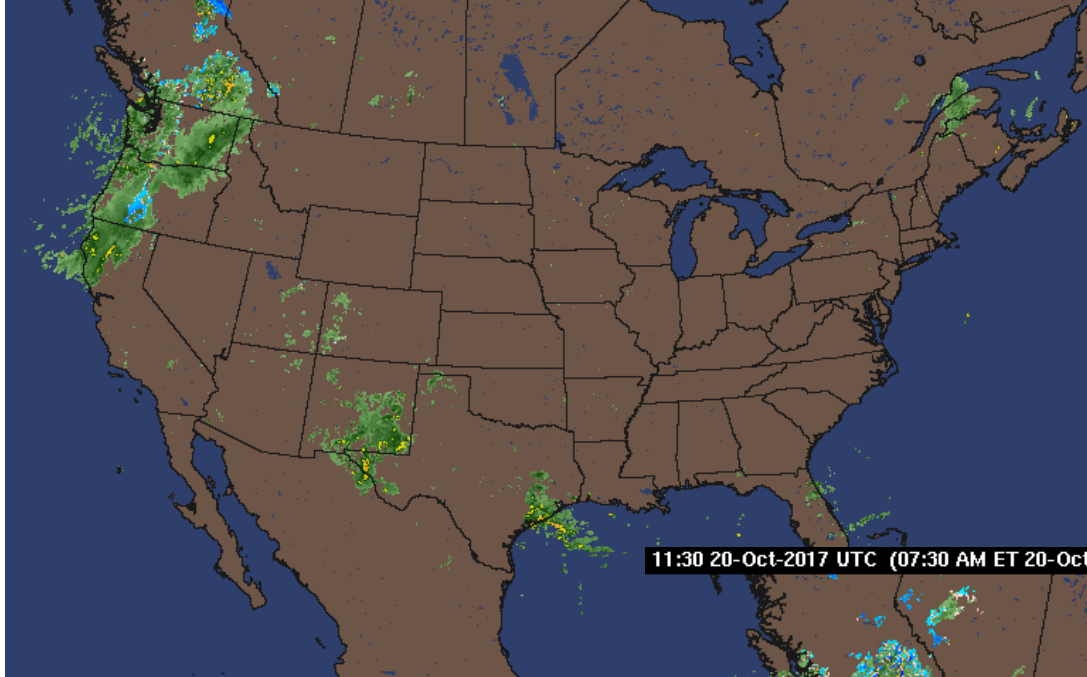
Data valid: October 17, 2017 | Author: [Jessica Blunden](#), NOAA/NCEI



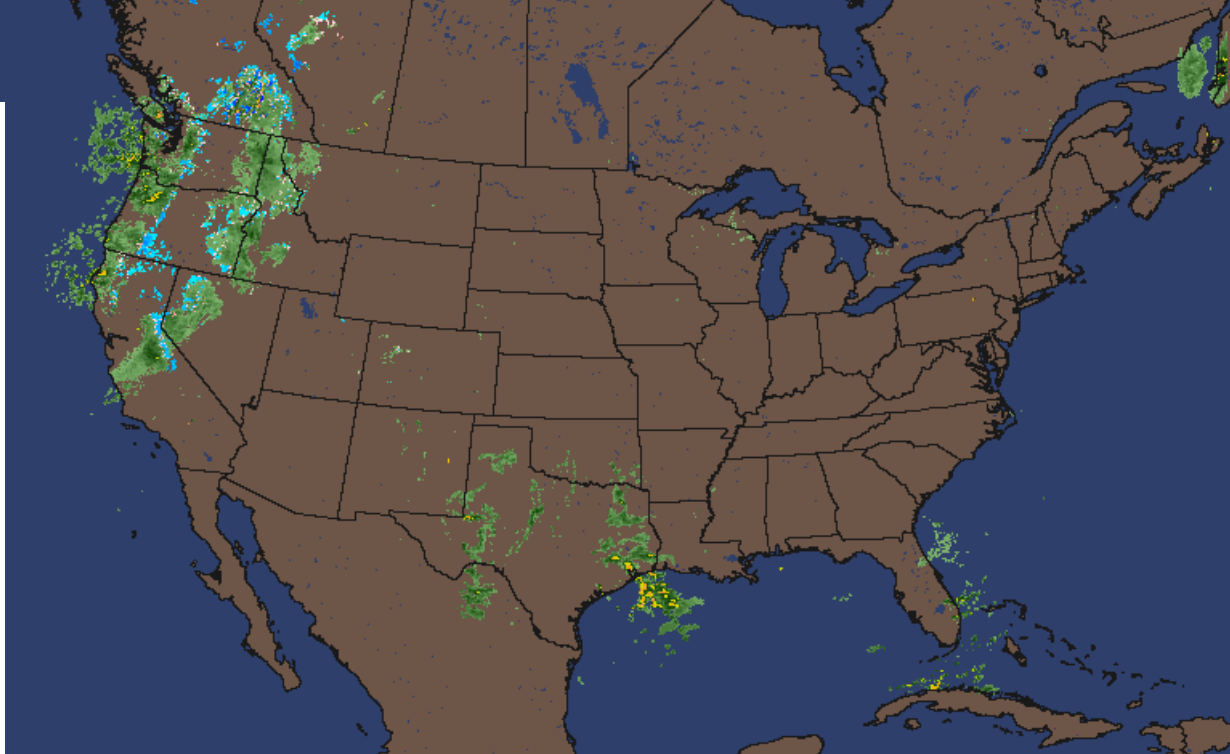
RADAR 12 AM /7AM

FRIDAY

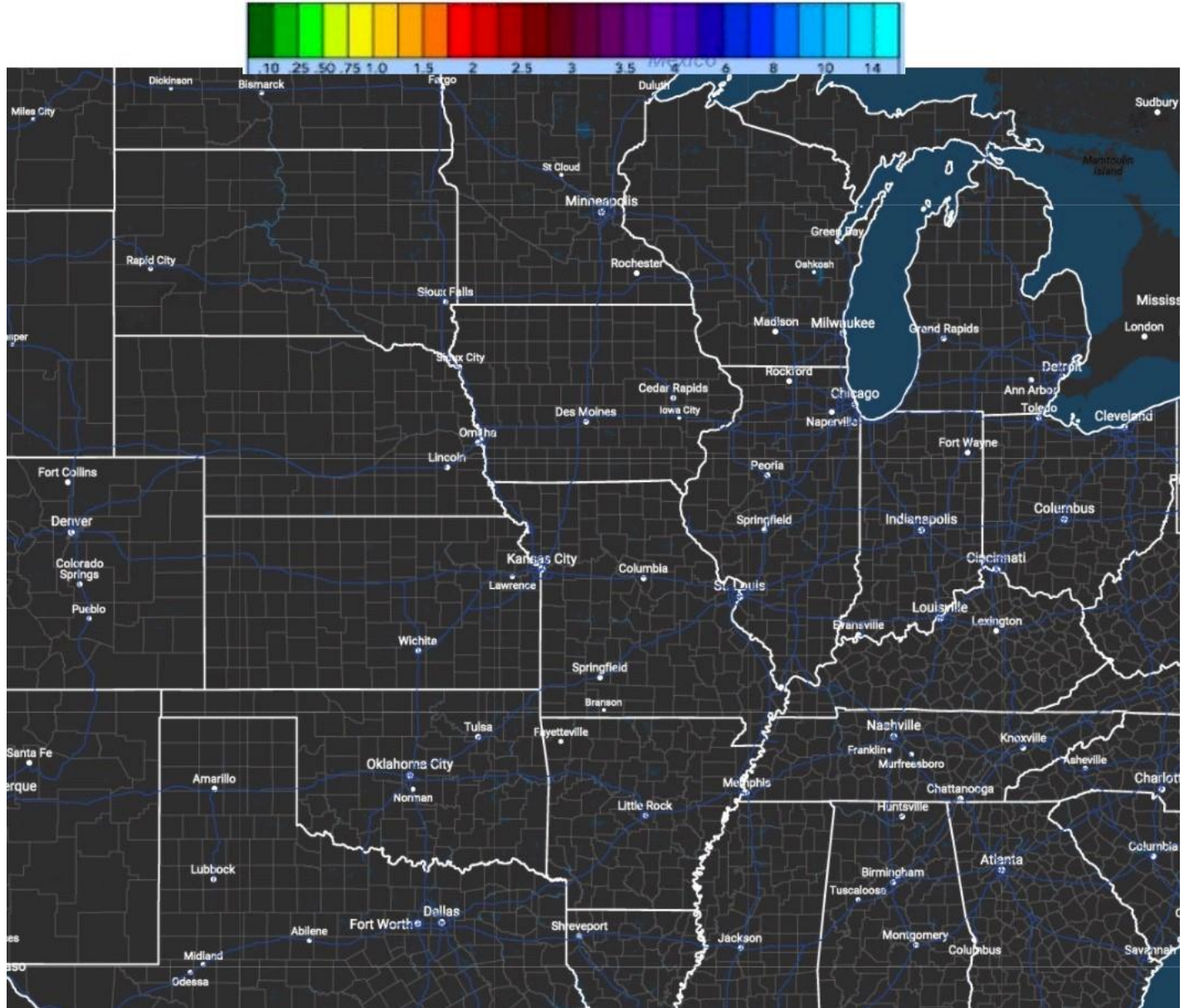
04:30 20-Oct-2017 UTC (12:30 AM ET 20-Oct-2017) WSI[®] Light Rain Heavy Light Ice Heavy Light Snow Heavy



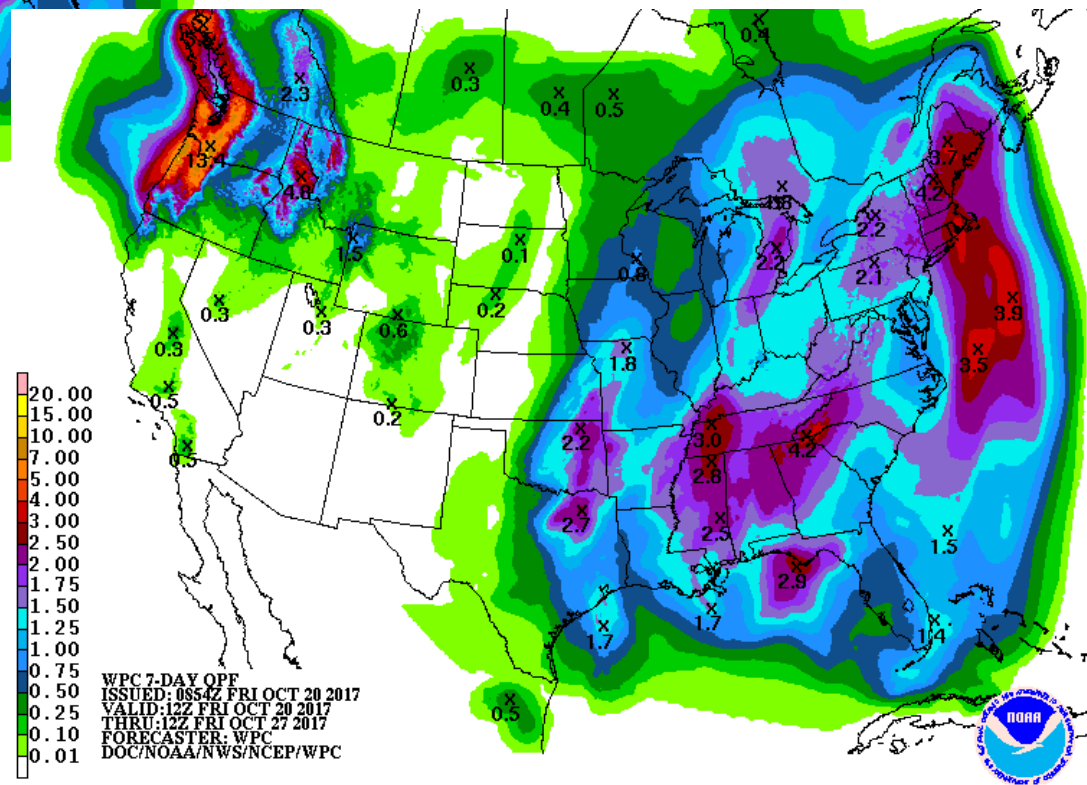
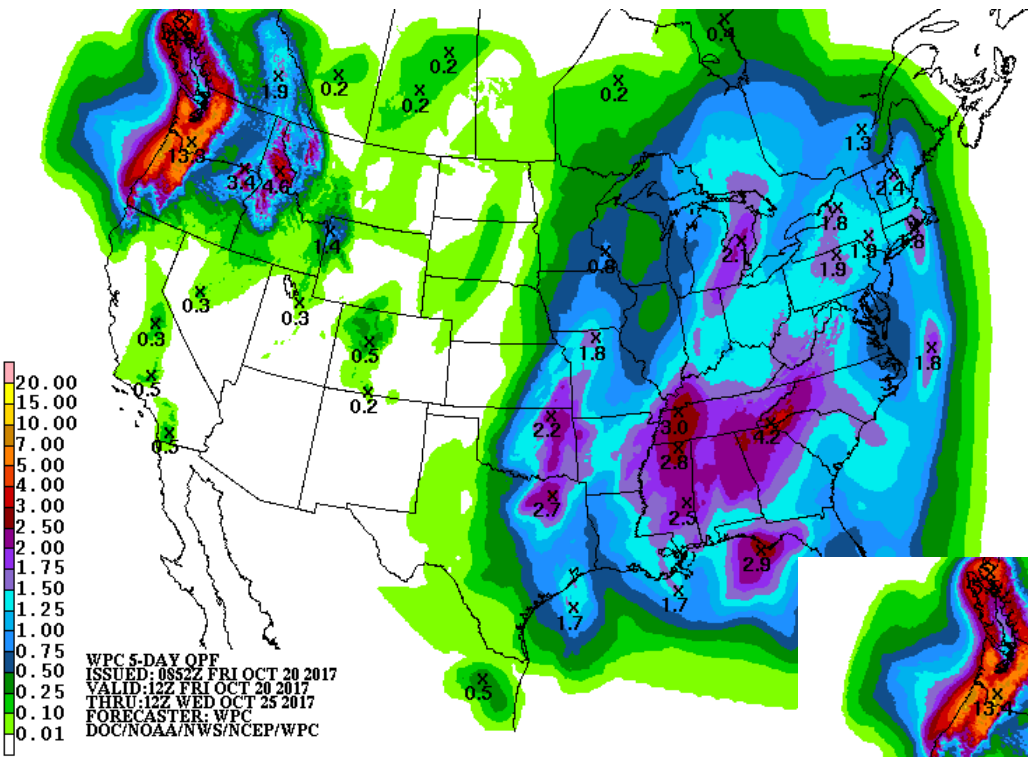
11:30 20-Oct-2017 UTC (07:30 AM ET 20-Oct-2017) WSI[®] Light Rain Heavy Light Ice Heavy Light Snow Heavy



RAINFALL LAST 24 HRS AS OF 20 OCT



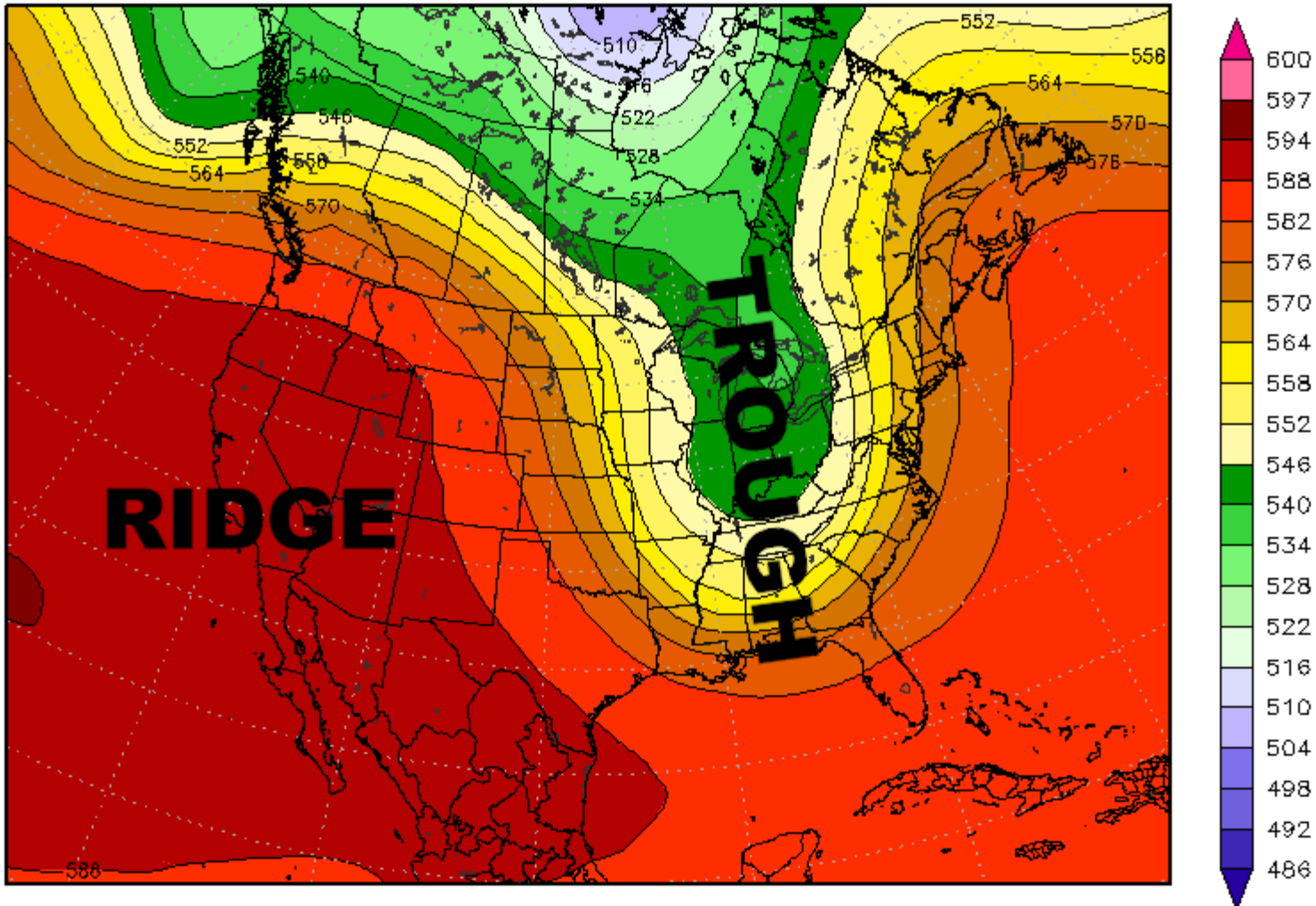
NWS OFFICIAL RAINFALL NEXT 5 DAYS



500mb map 24-25 OCT

500 mb Height
Valid: 00z Wed 25 Oct 2017

ECMWF
Hour: 120



NEXT 5 DAYS

GFS LEFT

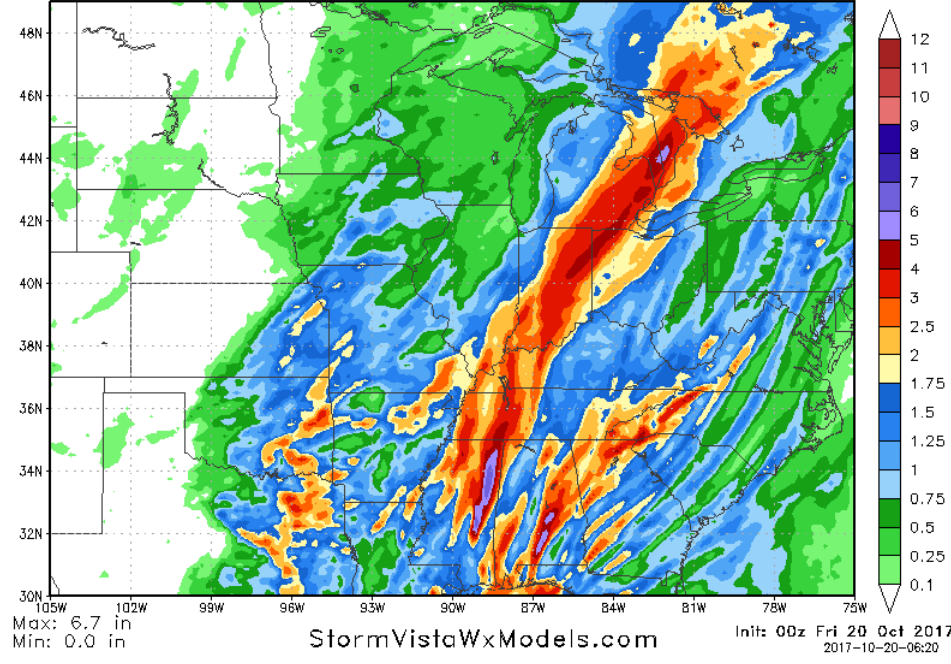
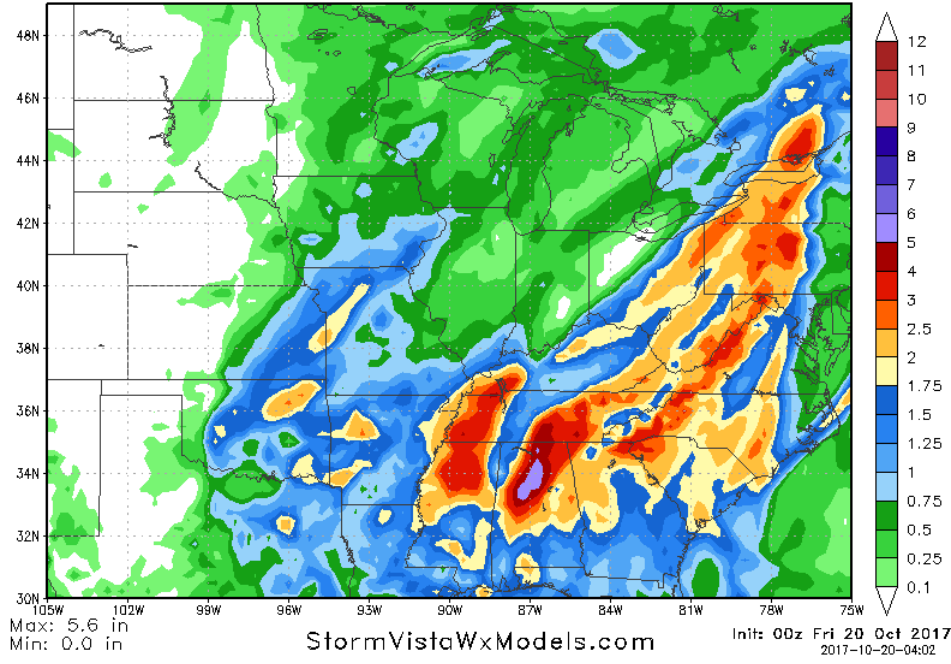
EURO RIGHT

120 Hour Total Precipitation (in)
Valid: 00z Fri 20 Oct 2017 - 00z Wed 25 Oct 2017

GFS-MAXRES
Hour: 0 - 120

120 Hour Total Precipitation (in)
Valid: 00z Fri 20 Oct 2017 - 00z Wed 25 Oct 2017

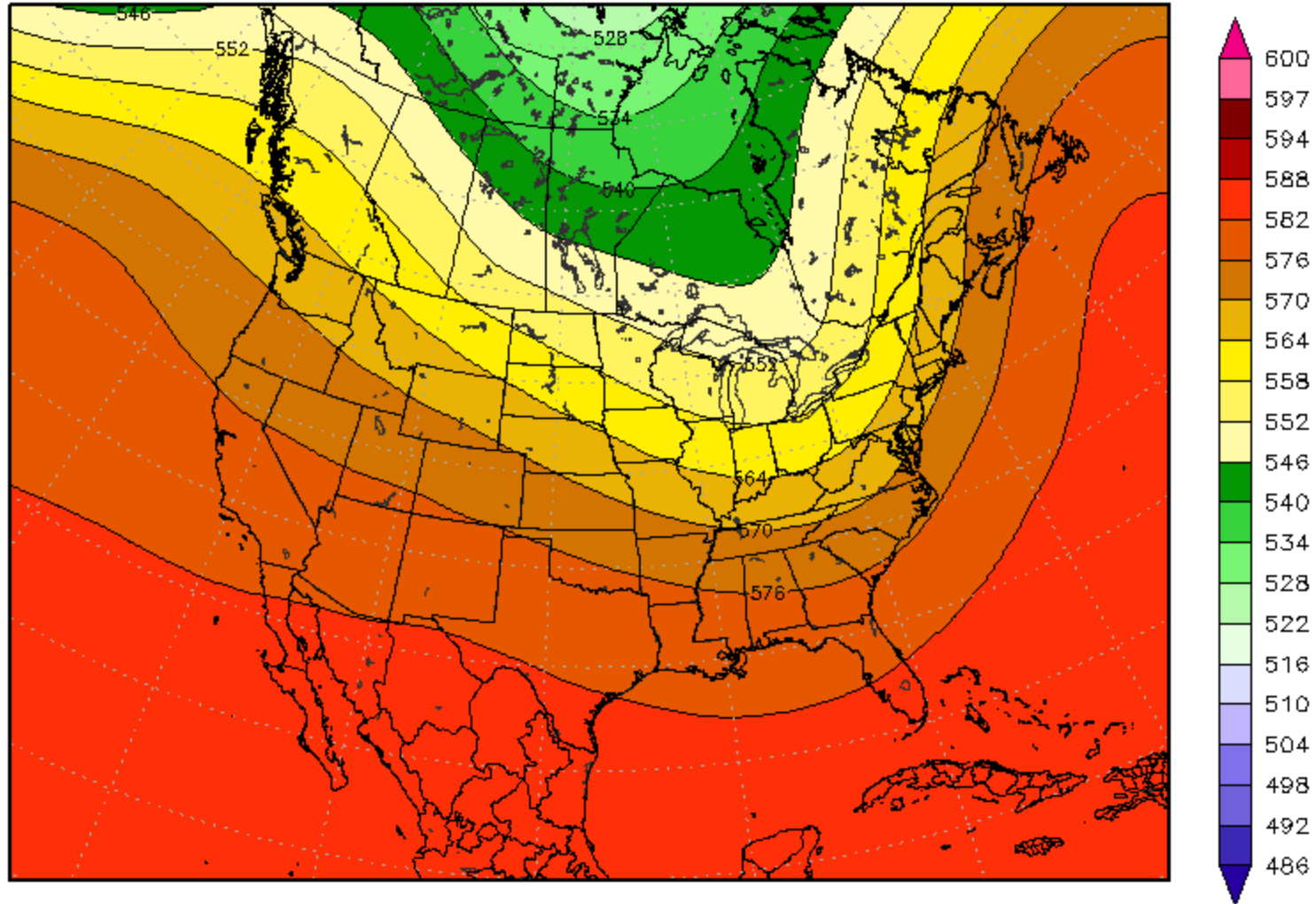
ECMWF-MAXRES
Hour: 0 - 120



6-10 DAY

500 mb Height
Valid: 00z Mon 30 Oct 2017

ECMWF-EP5
Hour: 240



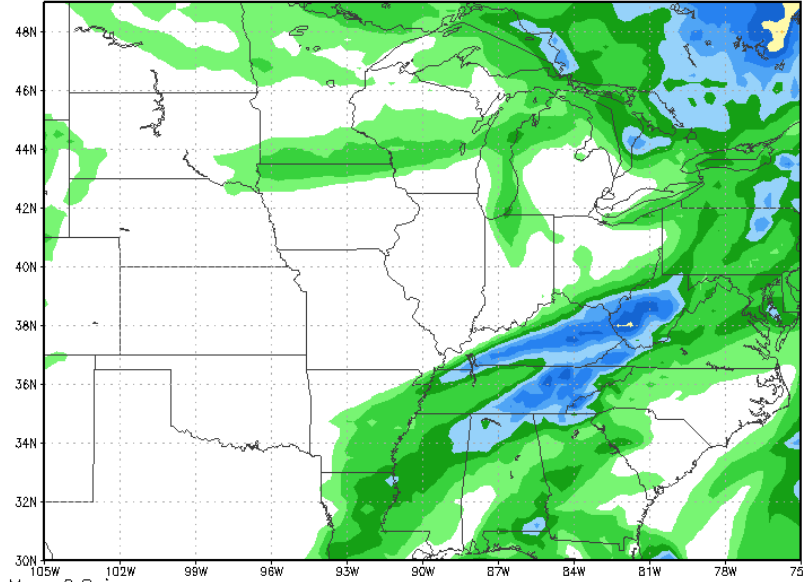
6-10 DAY RAINFALL

120 Hour Total Precipitation (in)

Valid: 00z Wed 25 Oct 2017 - 00z Mon 30 Oct 2017

GFS-MAXRES

Hour: 120 - 240



Max: 2.0 in
Min: 0.0 in

StormVistaWxModels.com

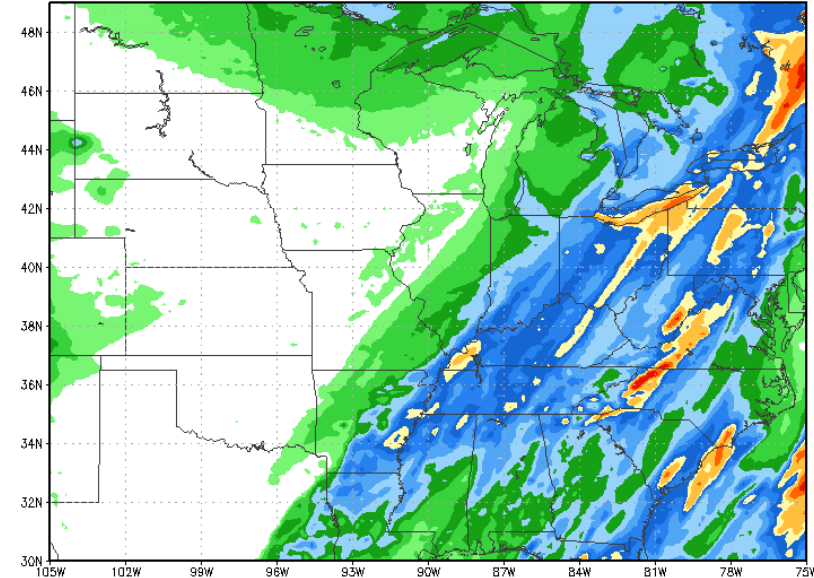
Init: 00z Fri 20 Oct 2017

120 Hour Total Precipitation (in)

Valid: 00z Wed 25 Oct 2017 - 00z Mon 30 Oct 2017

ECMWF-MAXRES

Hour: 120 - 240



Max: 4.1 in
Min: 0.0 in

StormVistaWxModels.com

Init: 00z Fri 20 Oct 2017

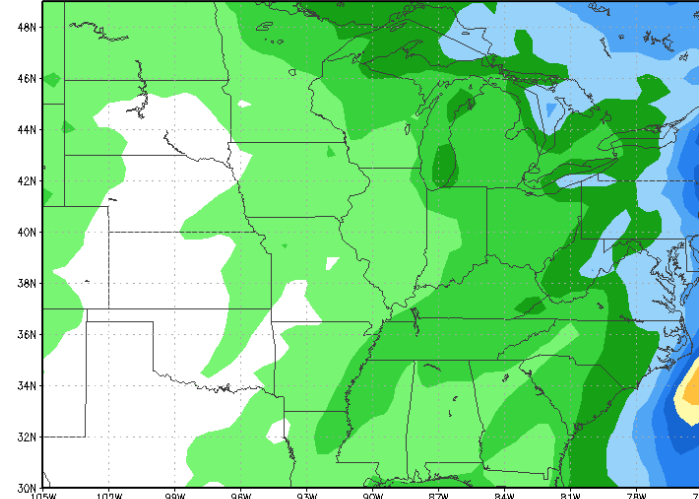
6-10 DAY ENSEMBLES -

120 Hour Total Precipitation (in)

Valid: 00z Wed 25 Oct 2017 - 00z Mon 30 Oct 2017

GFS-ENS-MAXRES

Hour: 120 - 240



Max: 2.3 in
Min: 0.0 in

StormVistaWxModels.com

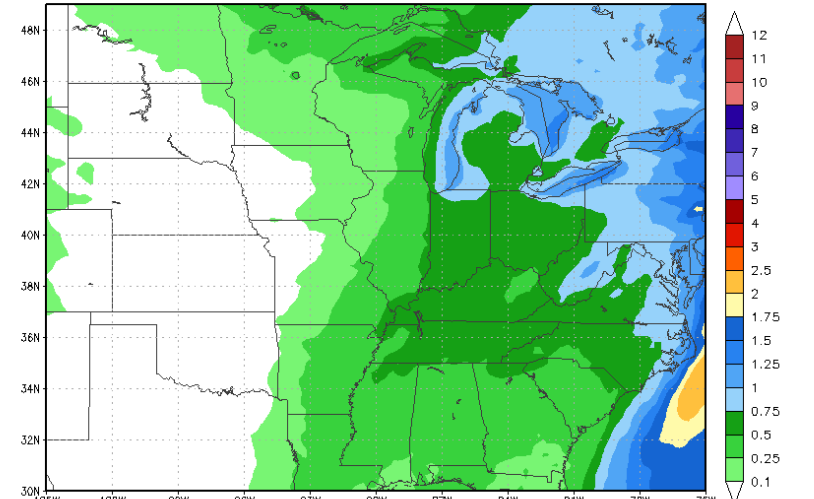
Init: 00z Fri 20 Oct 2017

120 Hour Total Precipitation (in)

Valid: 00z Wed 25 Oct 2017 - 00z Mon 30 Oct 2017

ECMWF-EPS-MAXRES

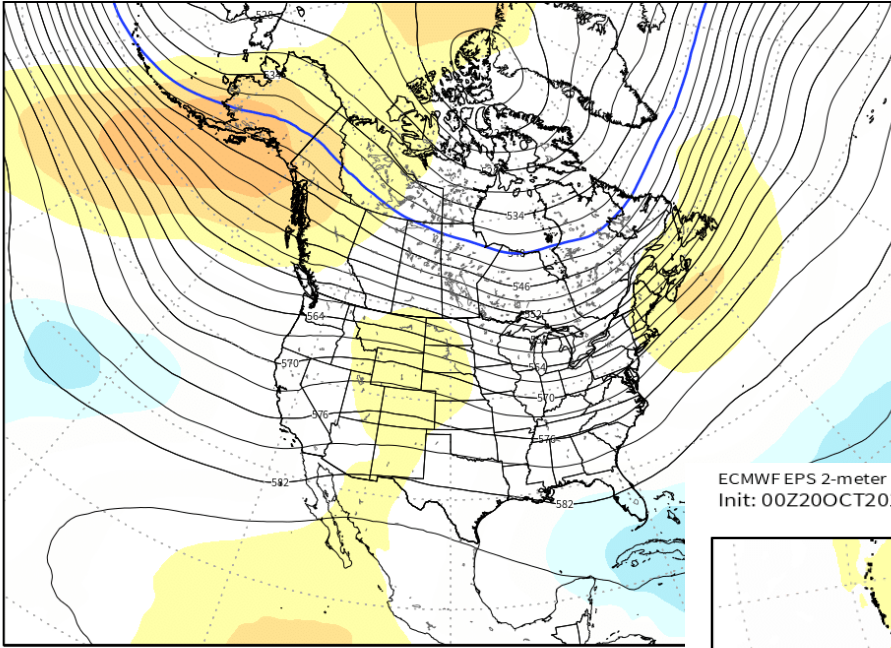
Hour: 120 - 240



Max: 2.4 in
Min: 0.0 in

StormVistaWxModels.com

Init: 00z Fri 20 Oct 2017

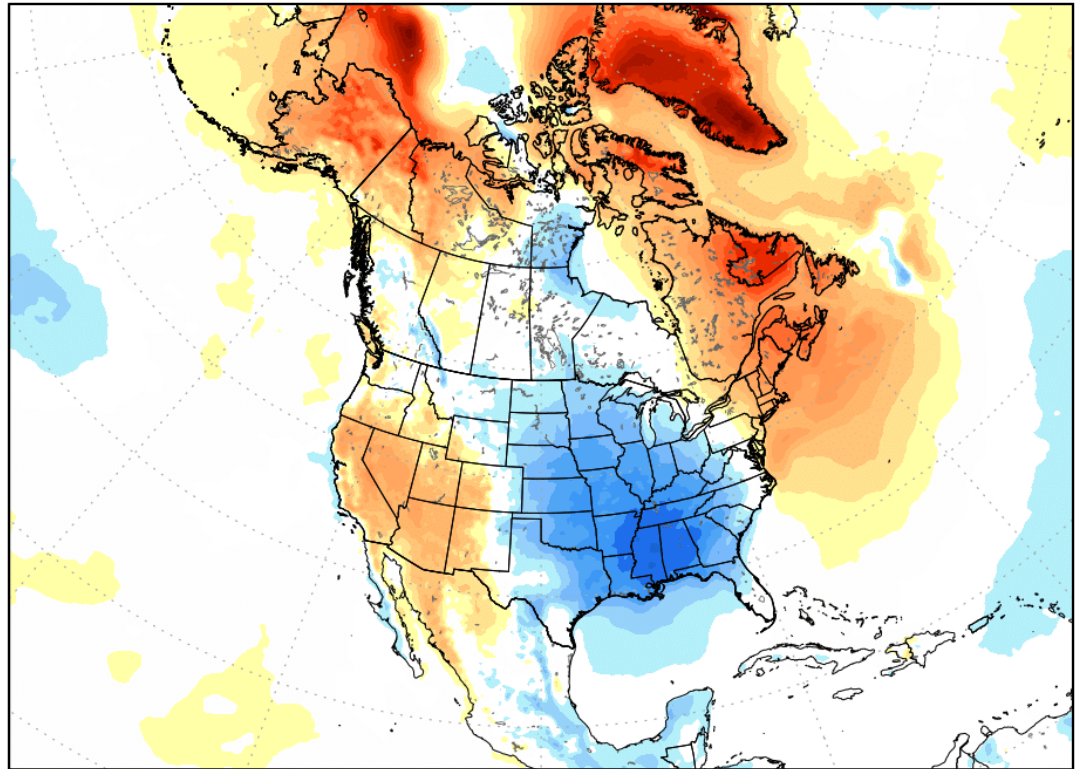


11-15 DAY ENSEMBLES

chilly over Midwest/ Deep south into East coast

ECMWF EPS 2-meter Temperature Anomaly [°C] | 5-day Ensemble Mean --> 00Z29OCT2017 & 00Z03NOV2017 Day 9 - Day 14
Init: 00Z20OCT2017 -- [336] hr --> Valid Fri 00Z03NOV2017

This service is based on data and products of the European Centre for Medium-range Weather Forecasts (ECMWF)



11-15 DAY ENSEMBLES

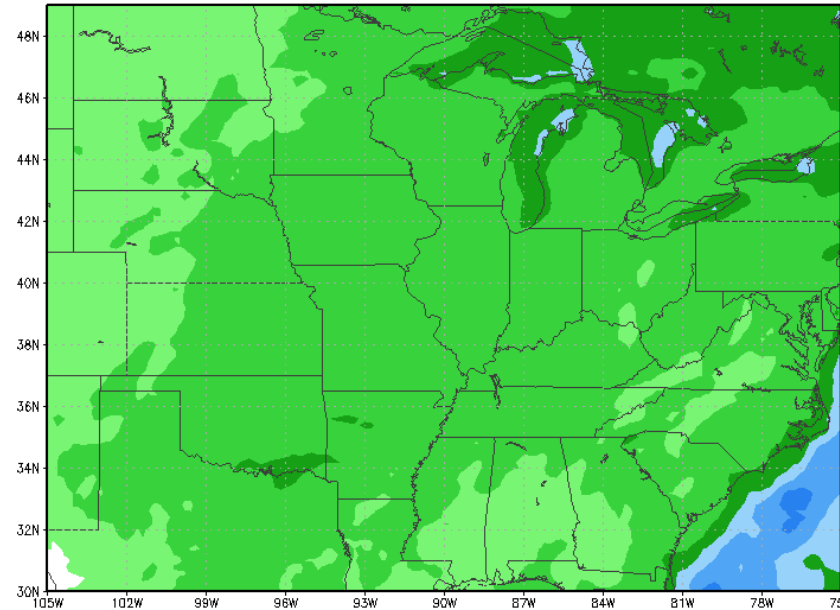
GFS (left) EURO (right) moderate wet over Midwest mid OCT

120 Hour Total Precipitation (in)

Valid: 00z Mon 30 Oct 2017 - 00z Sat 04 Nov 2017

ECMWF-EPS-MAXRES

Hour: 240 - 360



Max: 1.4 in
Min: 0.1 in

StormVistaWxModels.com

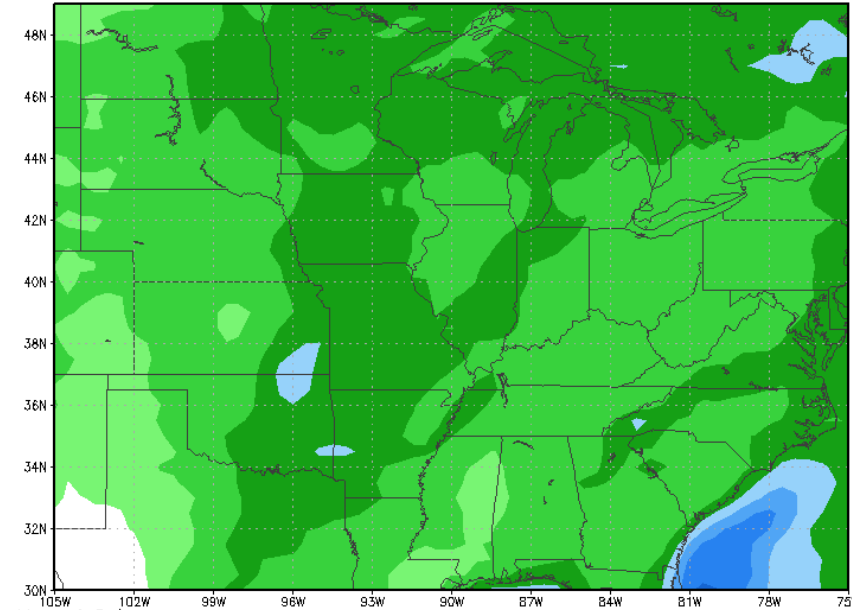
Init: 00z Fri 20 Oct 2017
2017-10-20-08:03

120 Hour Total Precipitation (in)

Valid: 06z Mon 30 Oct 2017 - 06z Sat 04 Nov 2017

GFS-ENS-MAXRES

Hour: 246 - 366

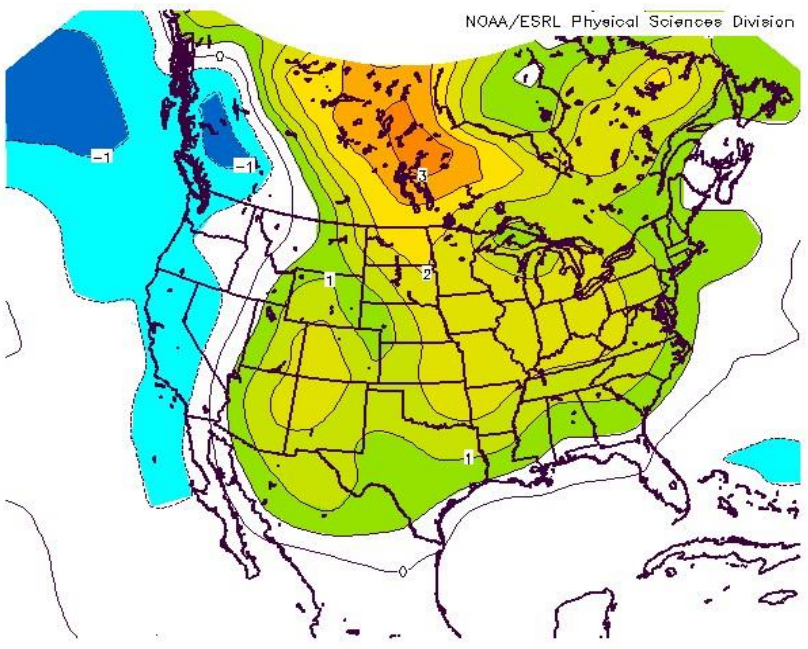
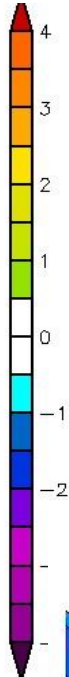


Max: 1.6 in
Min: 0.0 in

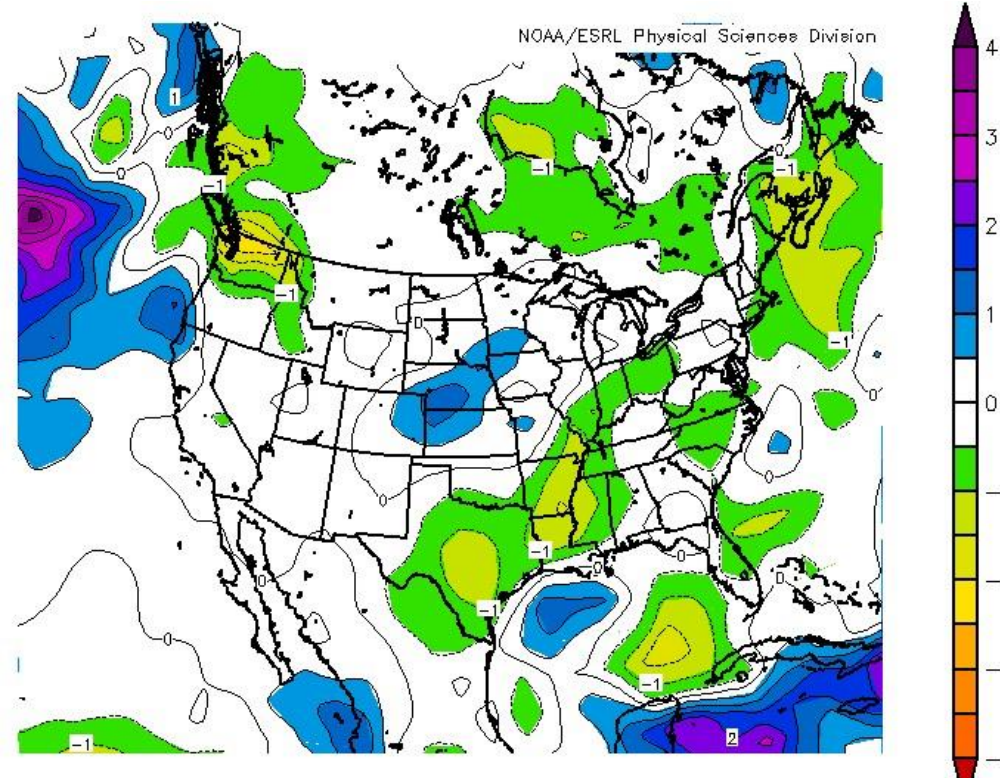
StormVistaWxModels.com

Init: 00z Fri 20 Oct 2017
2017-10-20-05:29

16-20D Rollover Model from 10/12... MILD over most of Plains / Midwest/ Delta with dry conditions of Delta



Surface Air Temperature (K) Composite Anomaly (1981–2010 Climatology)
CPC Analog 16–20 Day Composite
NCEP/NCAR Reanalysis

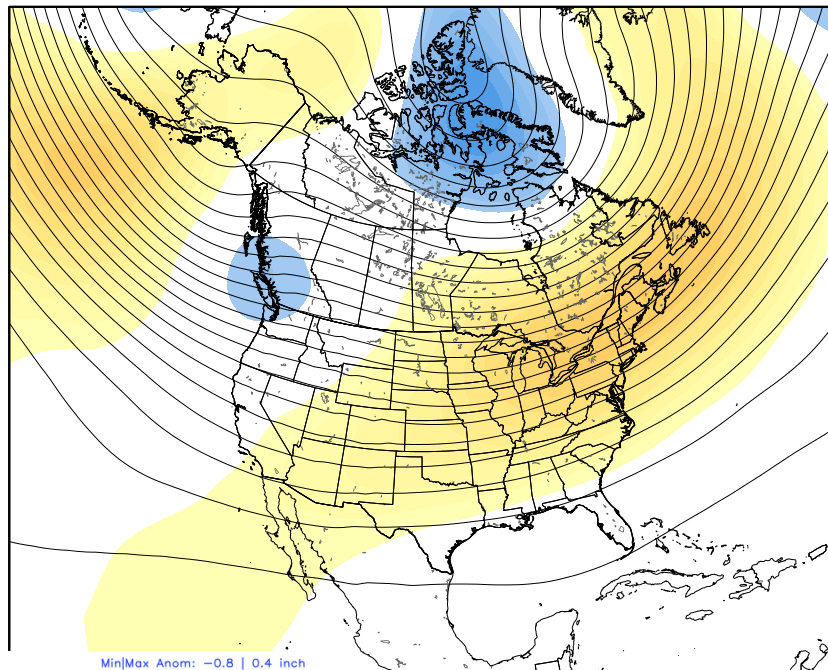


Surface Precipitation Rate (mm/day) Composite Anomaly (1981–2010 Climatology)
CPC Analog 16–20 Day Composite
NCEP/NCAR Reanalysis

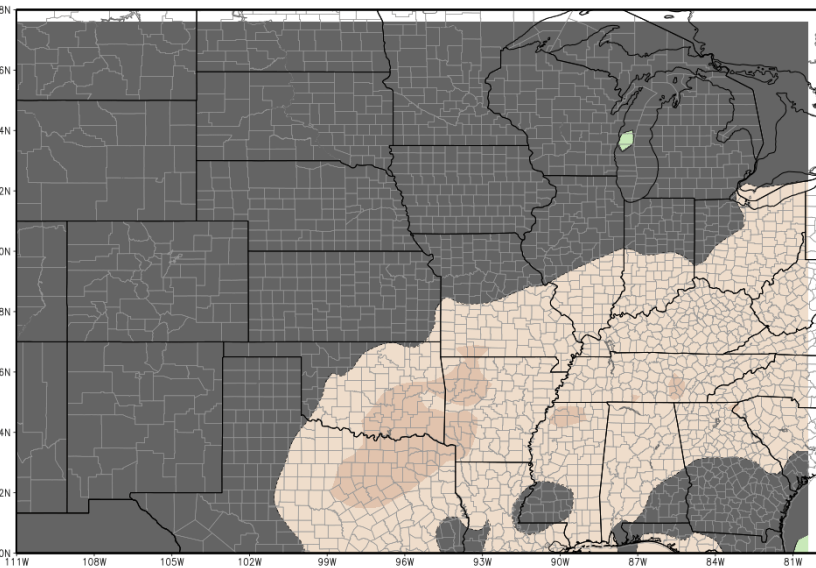
OCT 19 EURO WEEKLIES 500 mb map valid

NOV 9-----

ECMWF EPS Ensemble Mean 7-day Avg 500 hPa Geopotential Height Anomaly [m] Min|Max: -33.6 | 55.2 m
 Init: 00Z19OCT2017 -- [504] hr --> Valid on Thu 00Z09NOV2017 Day 14 - Day 21

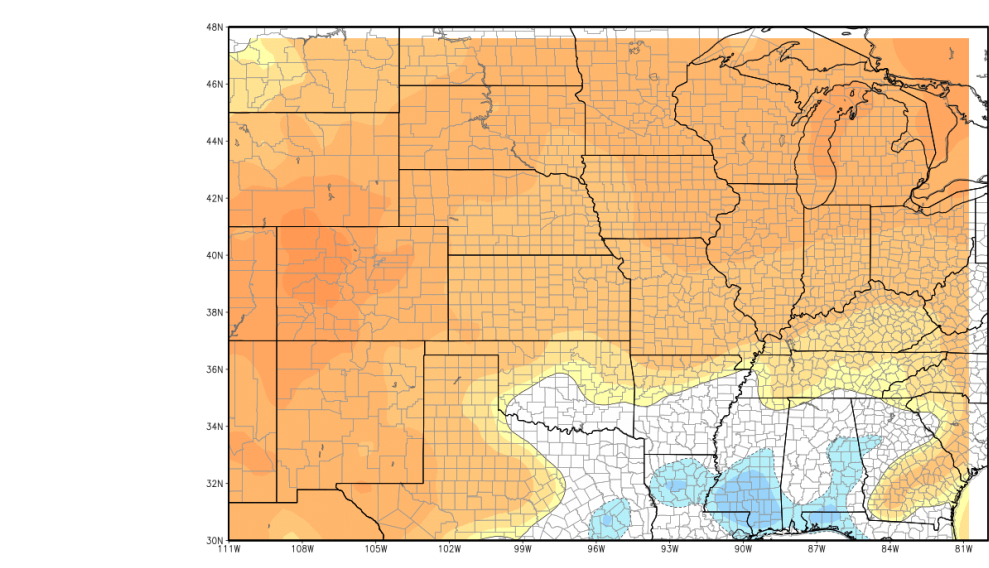


ECMWF EPS Ensemble Mean 7-day Avg Precipitation Anomaly [inch]
 Init: 00Z19OCT2017 -- [504] hr --> Valid on Thu 00Z09NOV2017 Day 14 - Day 21



Accumulation between 00Z02NOV2017-00Z09NOV2017 | ECMWF EPS 1997-2016 Hindcast Climatology

ECMWF EPS Ensemble Mean 7-day Avg 2m Temperature Anomaly [°C] Min|Max: -0.5° | 2.5°C
 Init: 00Z19OCT2017 -- [504] hr --> Valid on Thu 00Z09NOV2017 Day 14 - Day 21

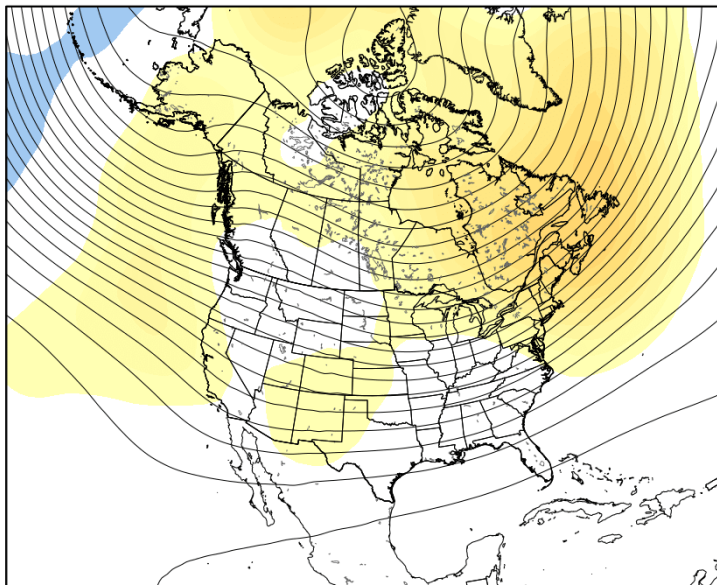


Average between 00Z02NOV2017-00Z09NOV2017 | ECMWF EPS 1997-2016 Hindcast Climatology

OCT 19 EURO WEEKLIES 500 mb map valid

NOV 16----

ECMWF EPS Ensemble Mean 7-day Avg 500 hPa Geopotential Height Anomaly [m] Min|Max: -15.6 | 49.9 m
 Init: 00Z19OCT2017 -- [672] hr --> Valid on Thu 00Z16NOV2017 Day 21 - Day 28



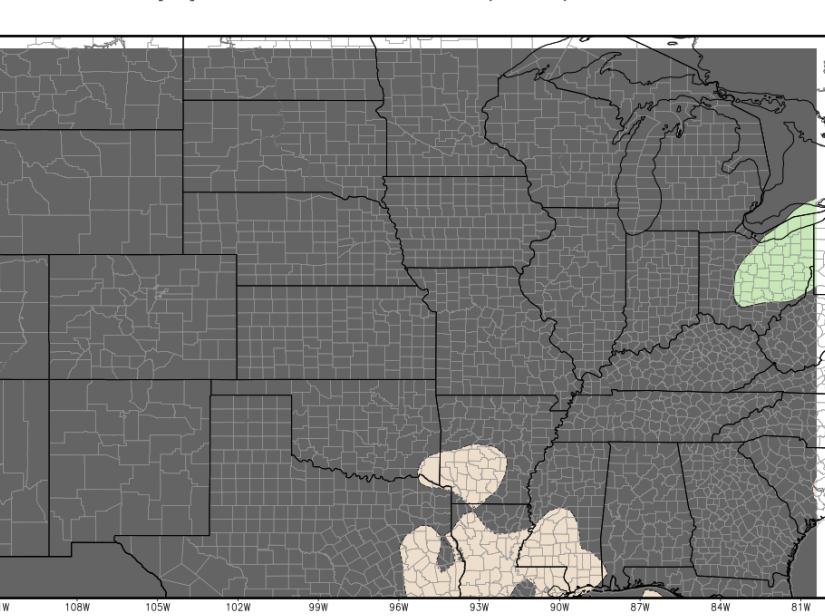
Average between 00Z09NOV2017-00Z16NOV2017 | ECMWF EPS 1996-2015 Hindcast Climatology

Min|Max Anom: -0.3 | 0.3 inch

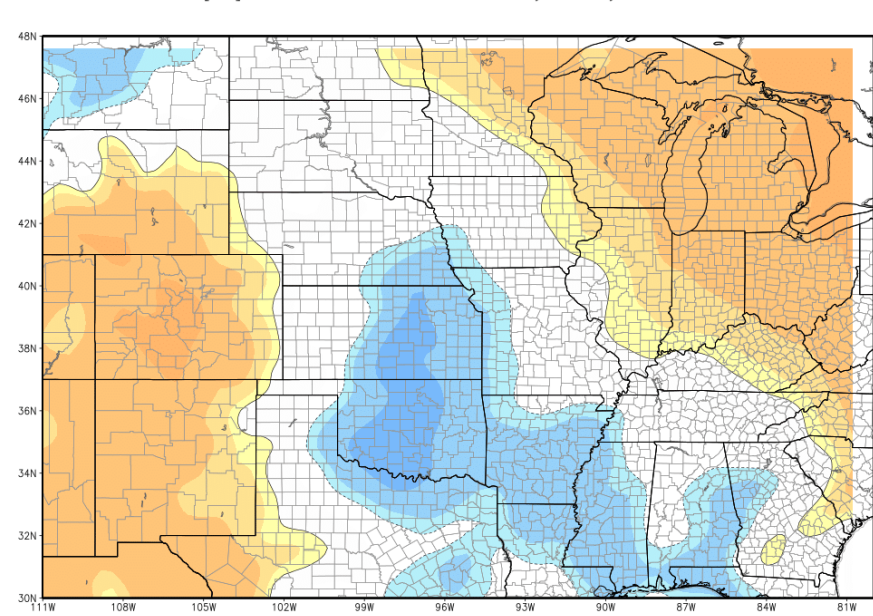
ECMWF EPS Ensemble Mean 7-day Avg 2m Temperature Anomaly [°C] Min|Max: -0.7° | 1.6°C

Init: 00Z19OCT2017 -- [672] hr --> Valid on Thu 00Z16NOV2017 Day 21 - Day 28

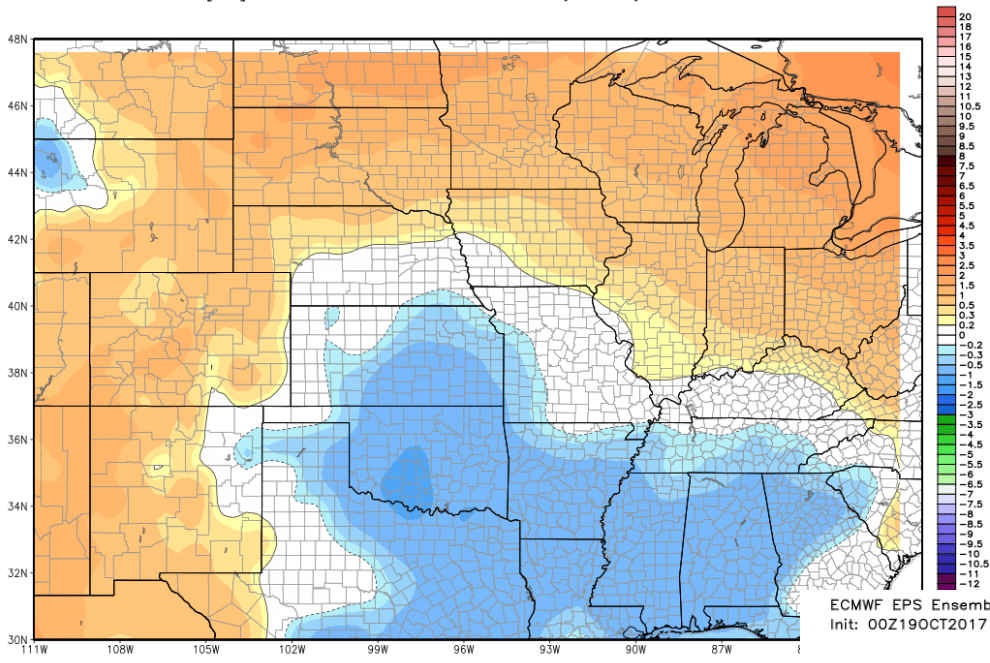
ECMWF EPS Ensemble Mean 7-day Avg Precipitation Anomaly [inch]
 Init: 00Z19OCT2017 -- [672] hr --> Valid on Thu 00Z16NOV2017 Day 21 - Day 28



Average between 00Z09NOV2017-00Z16NOV2017 | ECMWF EPS 1997-2016 Hindcast Climatology



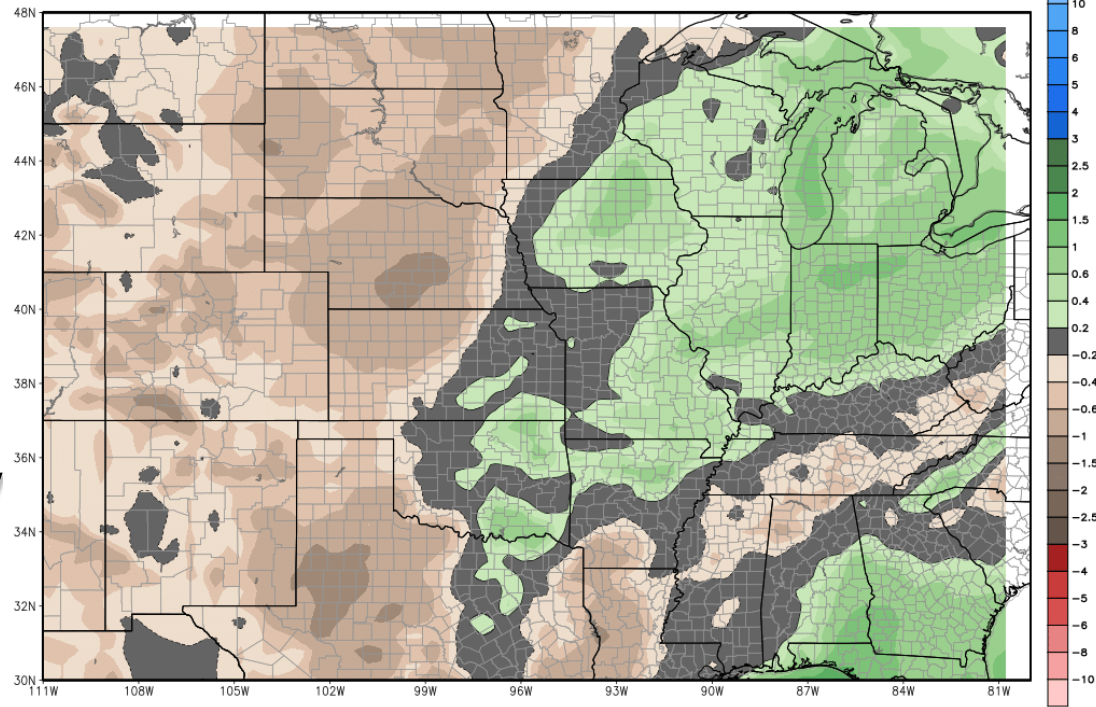
Average between 00Z09NOV2017-00Z16NOV2017 | ECMWF EPS 1997-2016 Hindcast Climatology



OCT 19- NEXT 30 DAYS TEMP ANOMALIES EURO WEEKLIES

Min|Max Anom: -1.4 | 2.1 inch

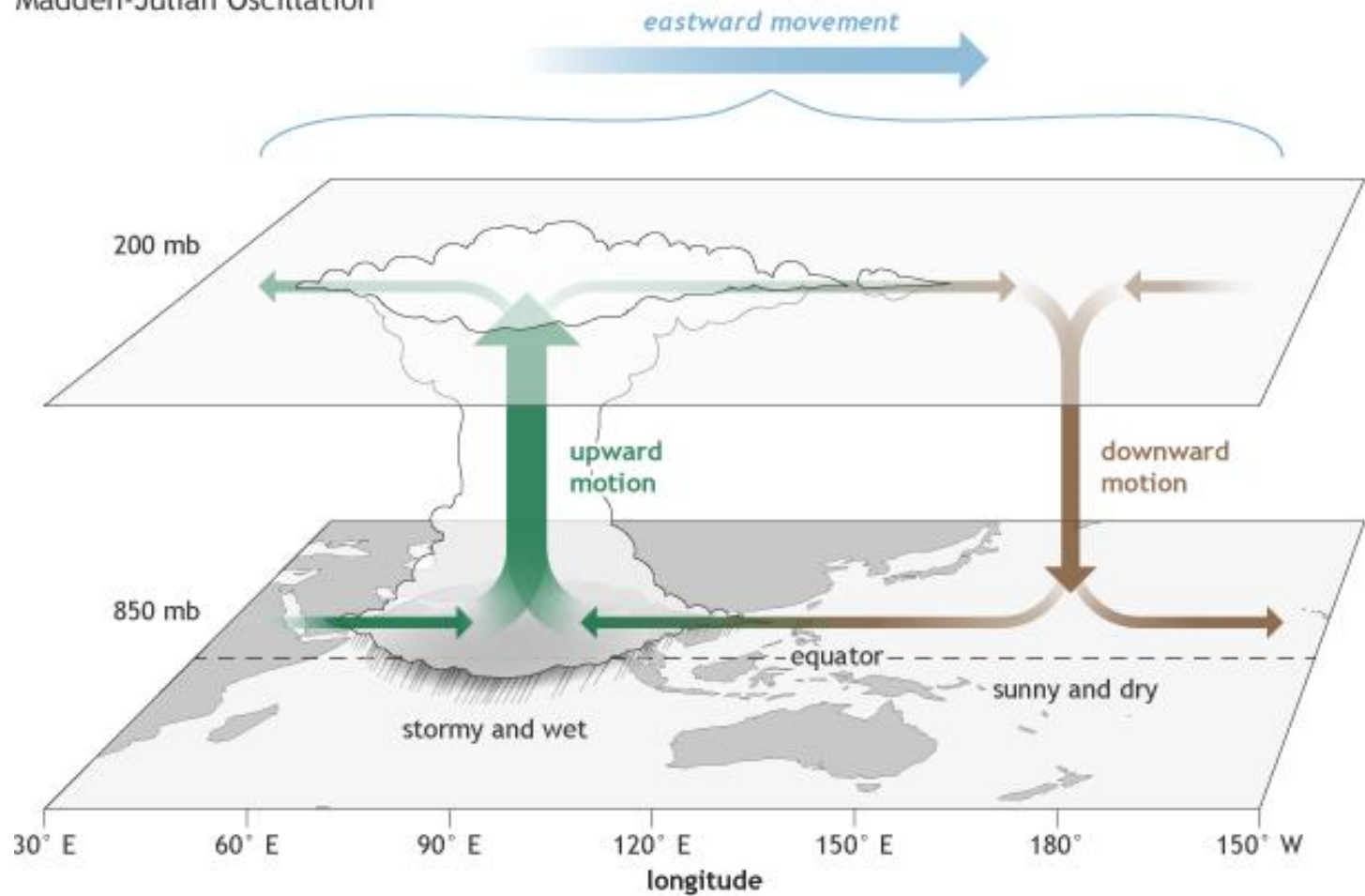
Average between 00Z19OCT2017-00Z20NOV2017 | ECMWF EPS 1996-2015 Hindcast Climatology



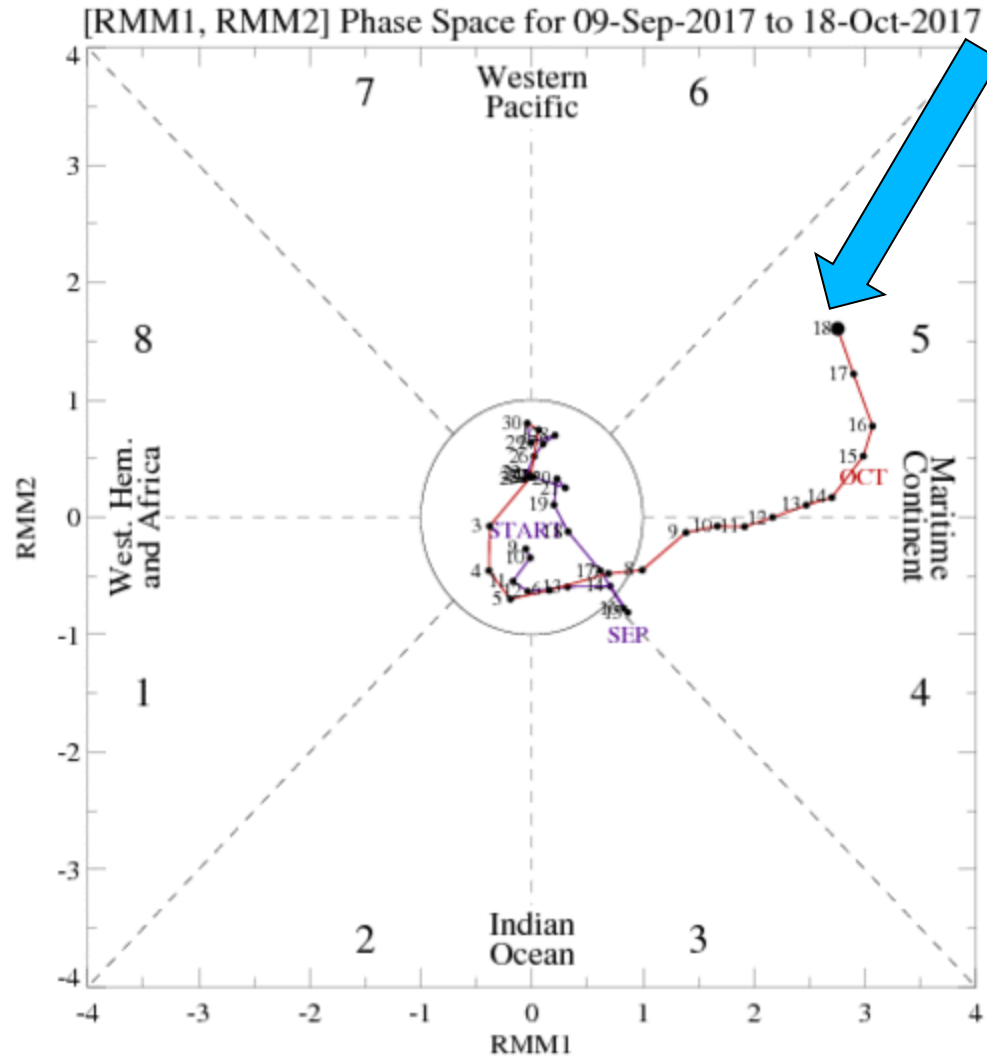
**OCT 12 .. EURO
WEEKLIES next 30 day
PRECIP ANOMALIES
wet Midwest Dry Plains**

LETS TALK MJO/ENSO

Madden-Julian Oscillation



MJO IS STRONG

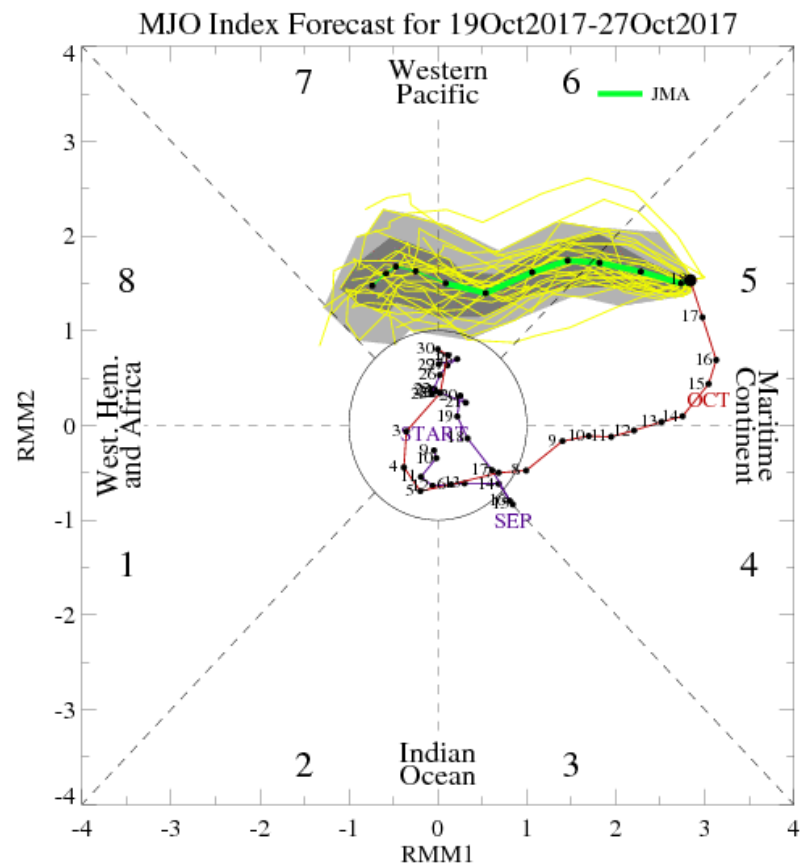
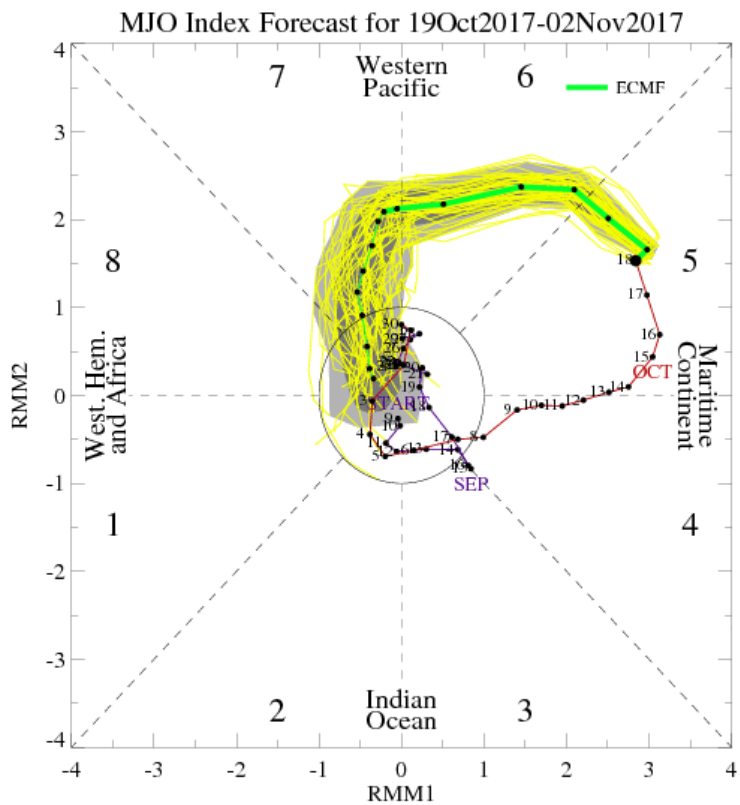


MJO NOW STRONGLY IN PHASE 5

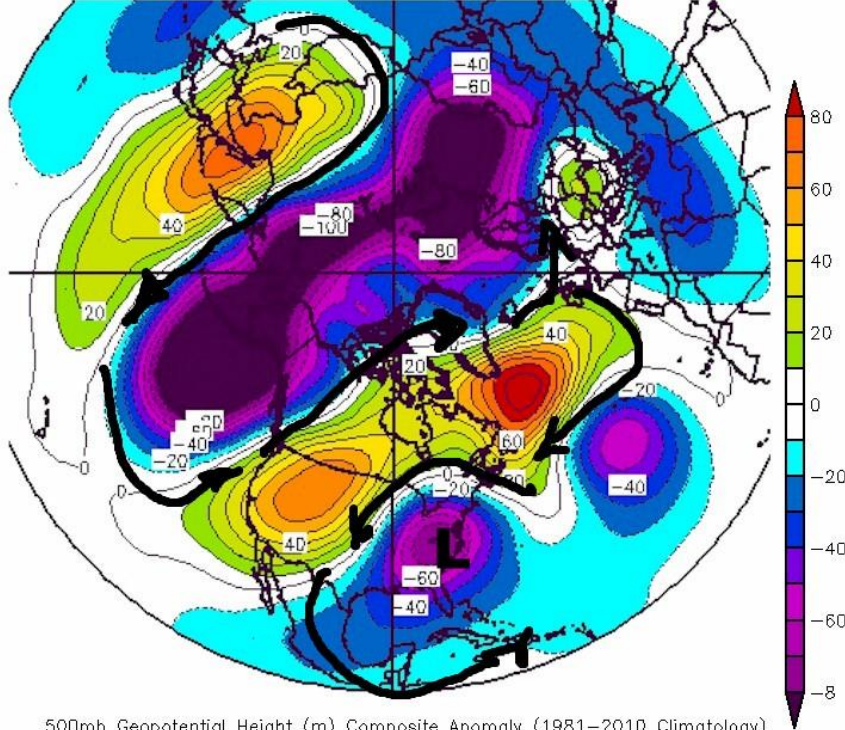
...WILL MOVE INTO PHASE 6-7 BY NOV 3

... POSSIBLY INTO PHASE 8 BY NOV 8

8 --WHICH MEANS WHAT?

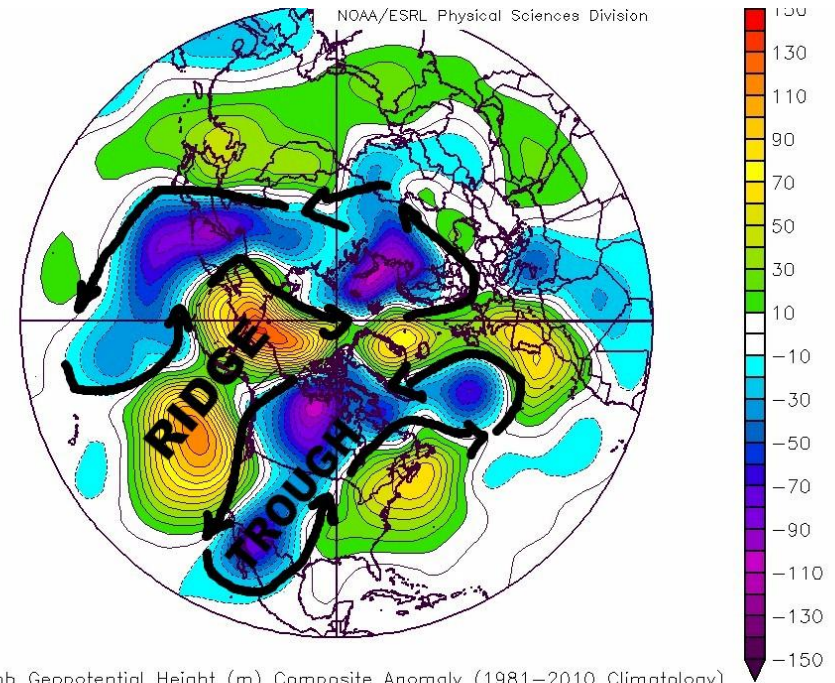


LATE OCT PHASE 6 UPPER AIR PATTERN DEEP TROUGH OVER EASTERN US - COLD BLAST for Midwest wet East coast



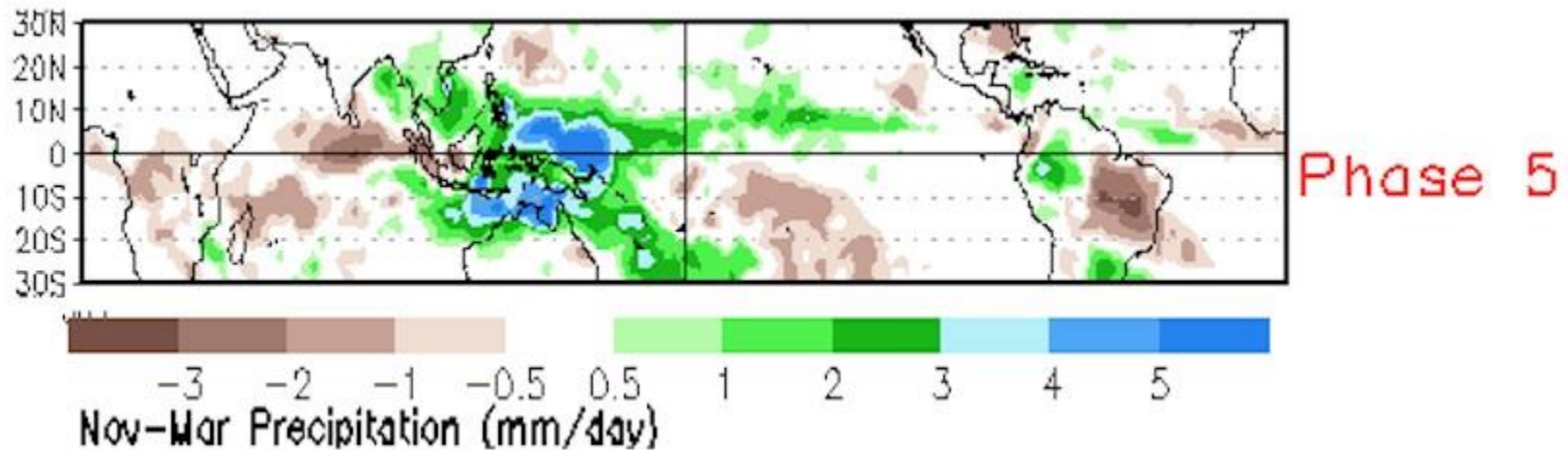
500mb Geopotential Height (m) Composite Anomaly (1981–2010 Climatology)
CPC Analog 16–20 Day Composite
NCEP/NCAR Reanalysis

**NOV PHASE 7 UPPER
AIR PATTERN DEEP
TROUGH WESTERN US -
wet for Plains dry
Midwest turning wet**

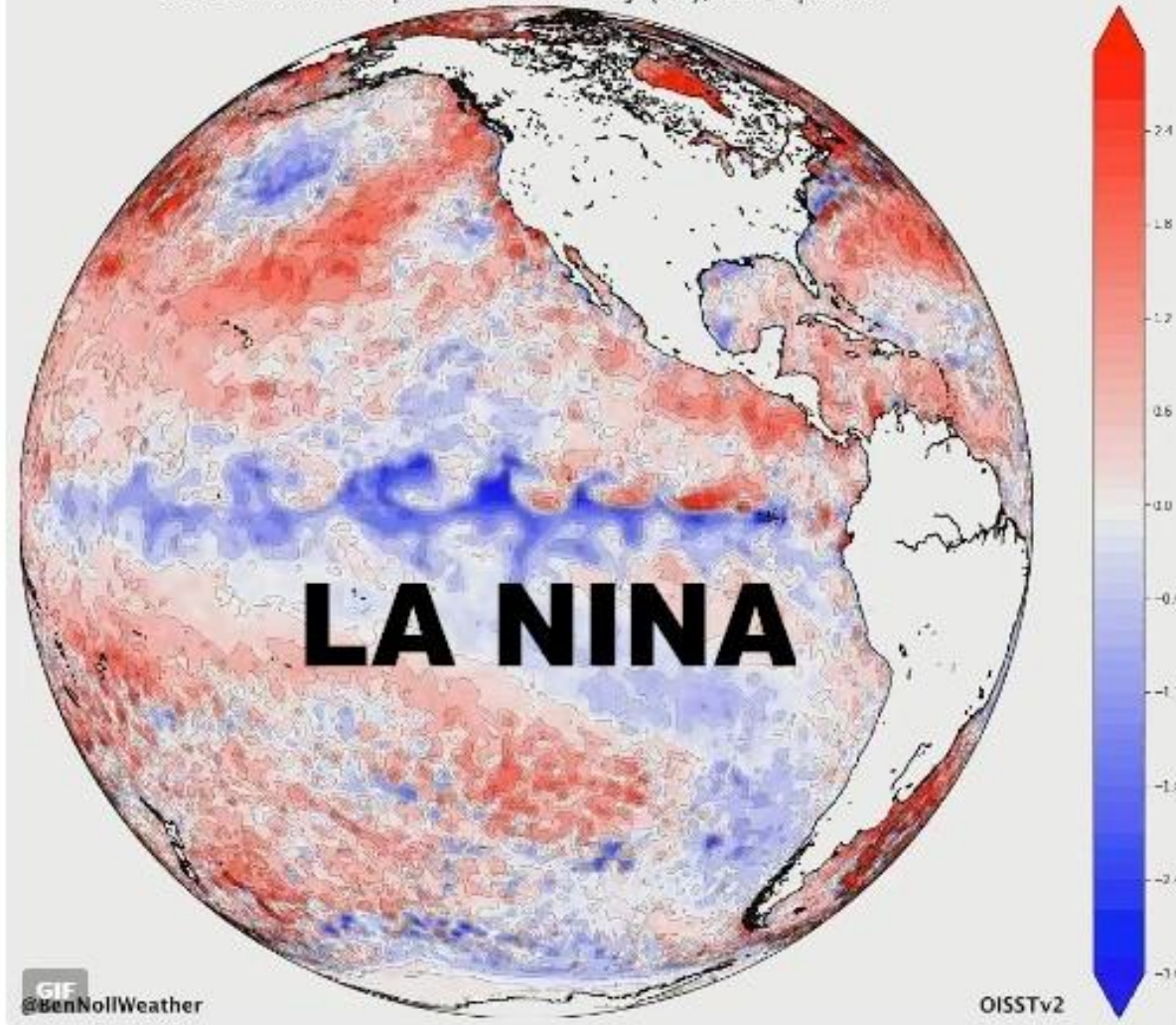


500mb Geopotential Height (m) Composite Anomaly (1981–2010 Climatology)
October – Negative ENSO – MJO Phase 7
NCEP/NCAR Reanalysis

**CURRENT MJO PHASE 5 = DRY PATTERN
OVER ALL OF WESTERN... CENTRAL...
EAST CENTRAL BRAZIL ... WET OVER SE
Brazil**



Sea Surface Temperature Anomaly (°C), 10 Sep 2017



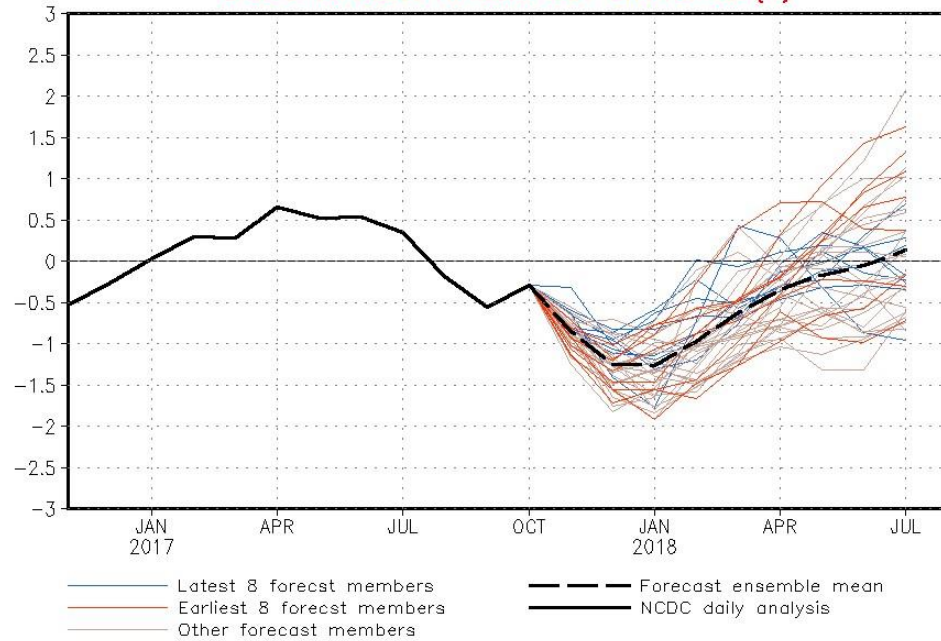
6:29 AM - 13 Sep 2017

LATEST CFS MODEL PROJECTION = **

BACKING OFF IDEA OF MODERATE LA NINA FOR THE WINTER.. Most other models favoring WEAK LA Nina

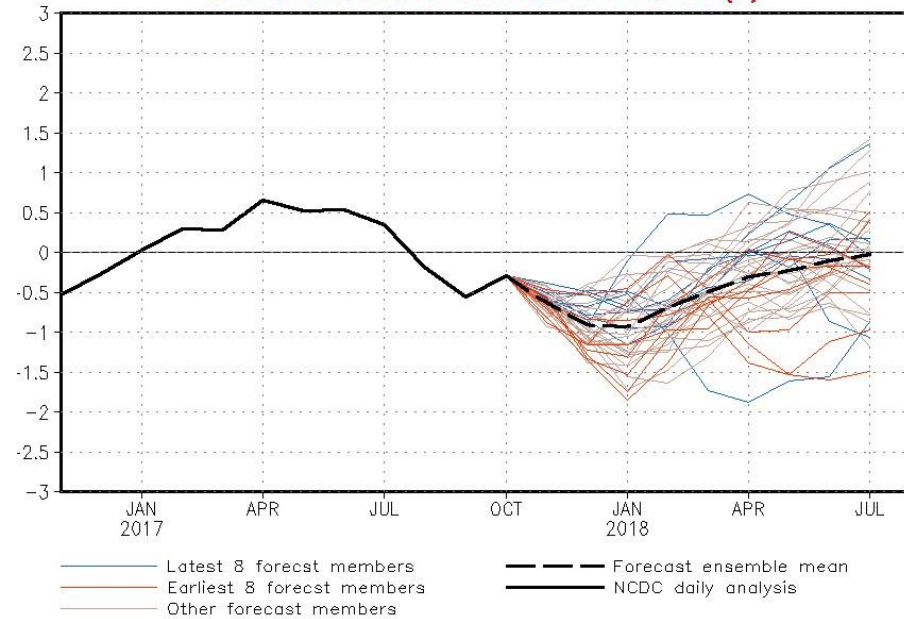
NWS/NCEP/CPC
 Last update: Thu Oct 19 2017
 Initial conditions: 29Sep2017-8Oct2017

CFSv2 forecast Nino3.4 SST anomalies (K)

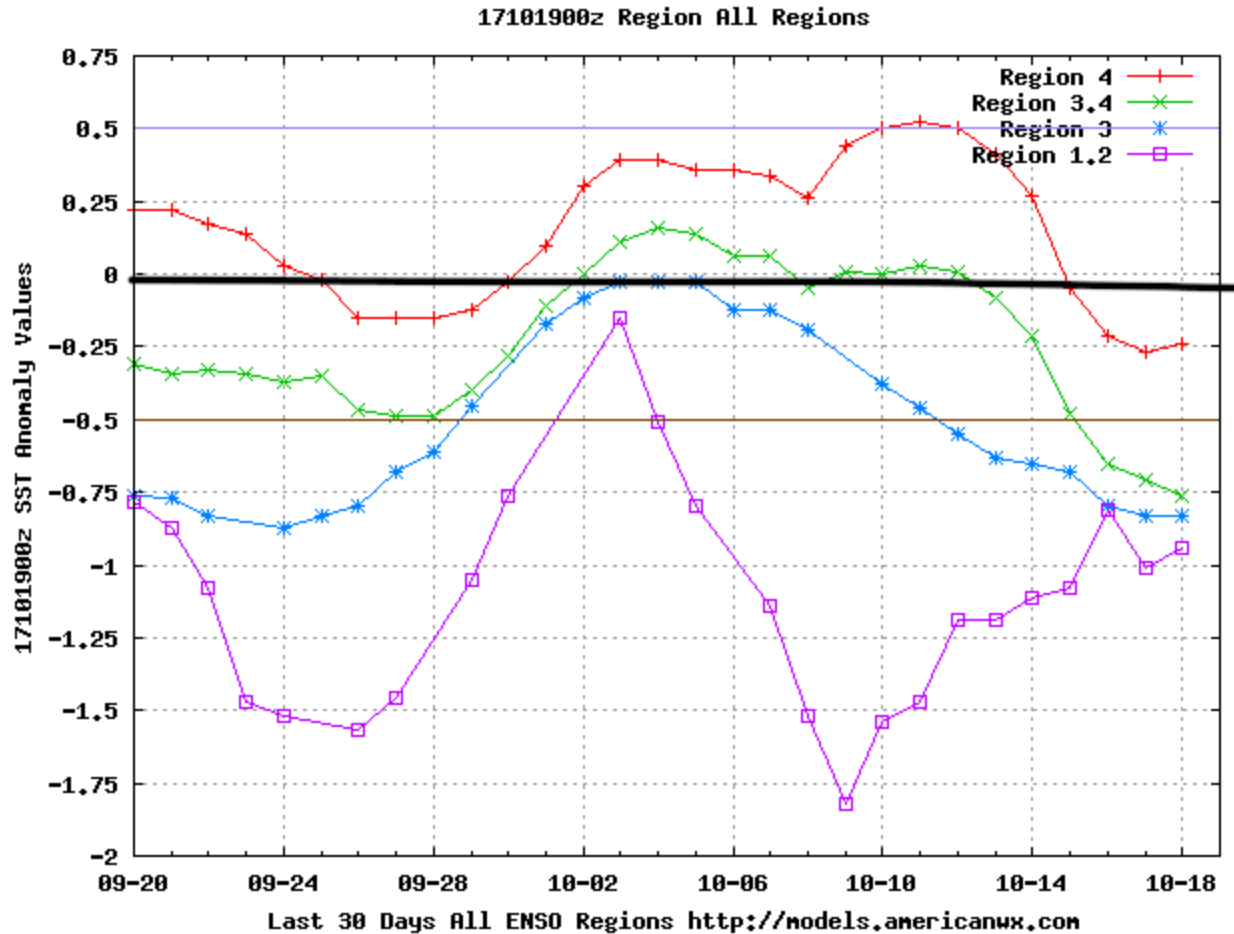


NWS/NCEP/CPC
 Last update: Thu Oct 19 2017
 Initial conditions: 8Oct2017-18Oct2017

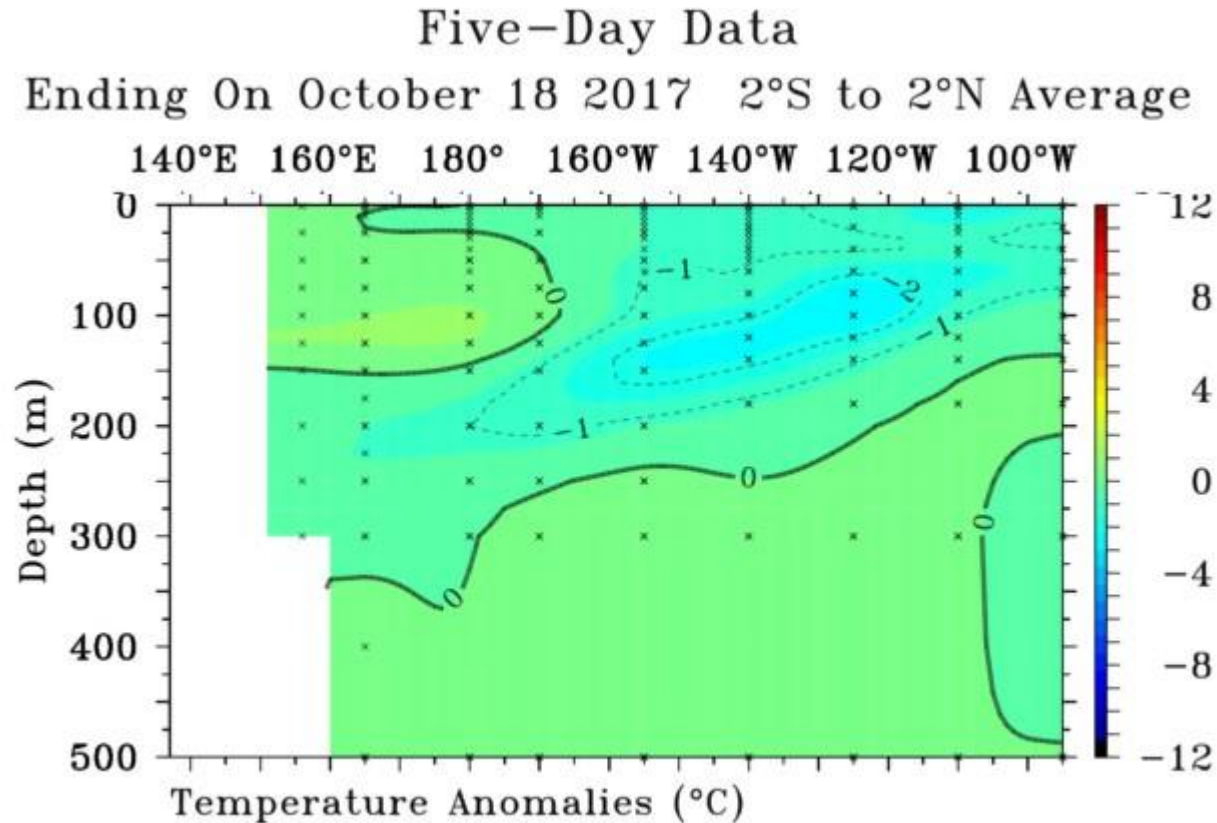
CFSv2 forecast Nino3.4 SST anomalies (K)



ACTUAL SEA SURFACE TEMP ANOMALIES – not projection .. Large area of cold water surface and sub surface

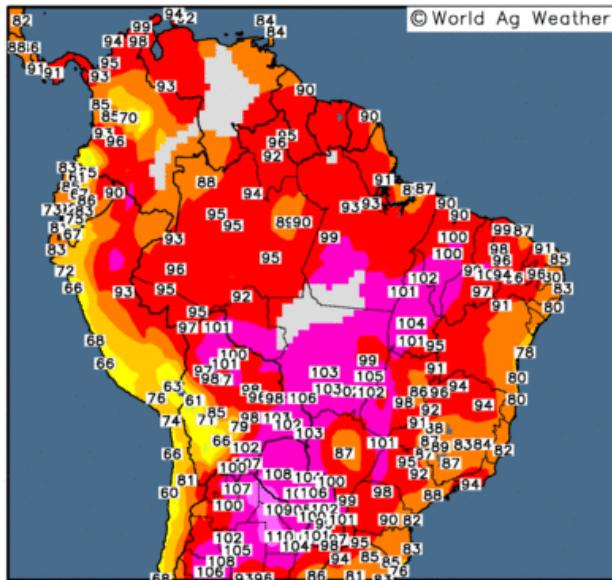


TAO – ACTUAL SEA SURFACE TEMP ANOMALIES – not projection .. Large area of cold water surface and sub surface



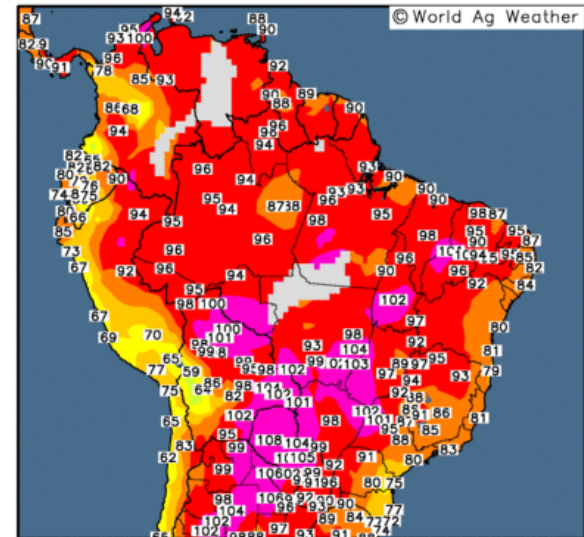
HEAT WAVE IN BRAZIL enhanced by prolonged dryness of past several seasons

Observed Maximum Temperature (°F)
18 Oct 2017



Map updates daily by approximately 16:00 UTC

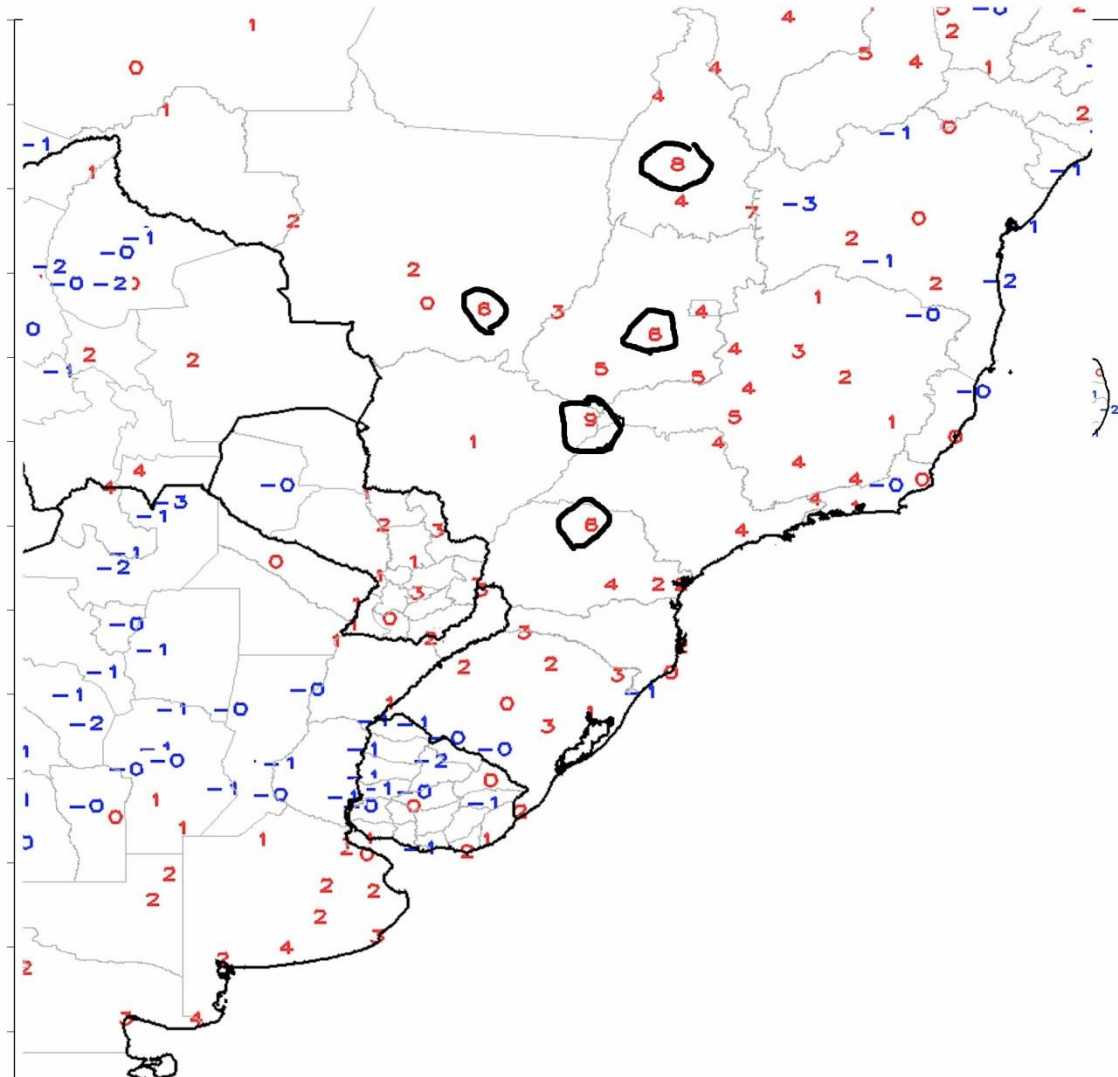
Observed Maximum Temperature (°F)
17 Oct 2017



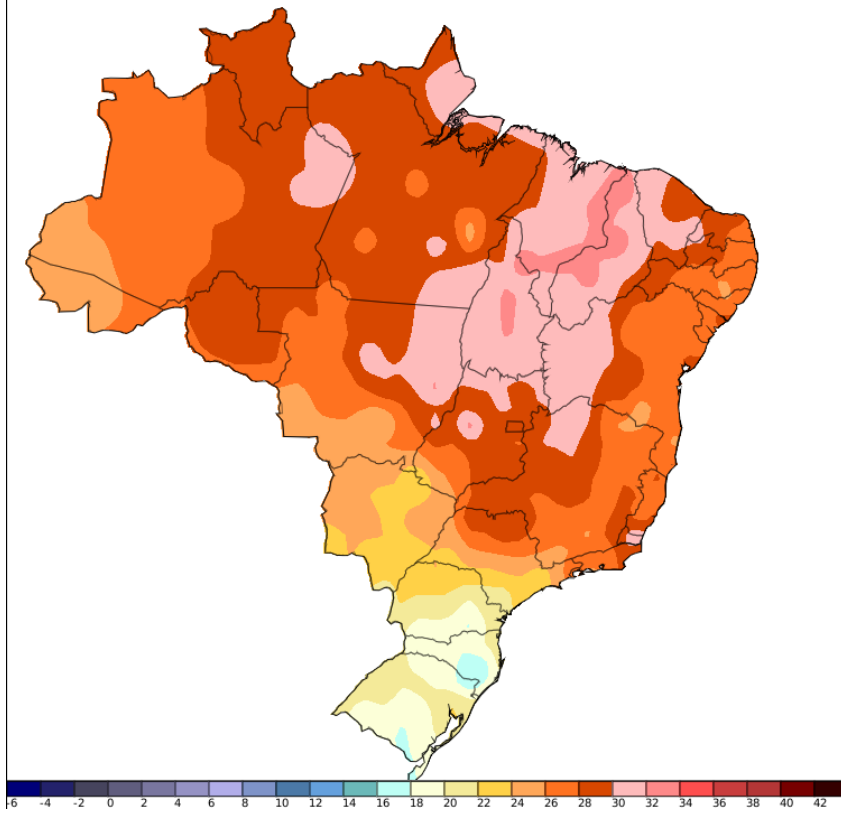
Map updates daily by approximately 16:00 UTC

**Over past 7 days
EXTREME HEAT
has produced
impressive temp
anomalies!!
Values of +8 and
+9c = + 3 to +17 F
above Normal**

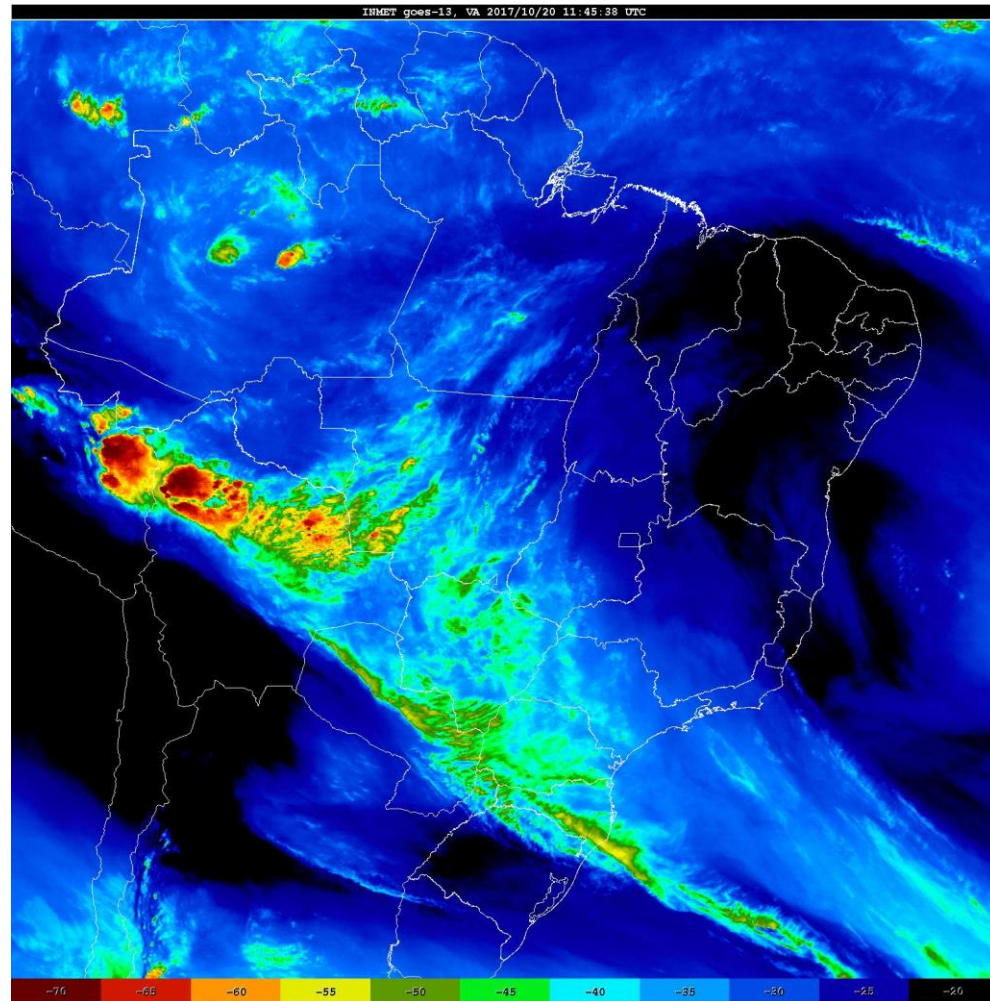
GTS Station Running 7-Day Average Temperature Anomaly (C)
Period: 120ct2017 - 180ct2017

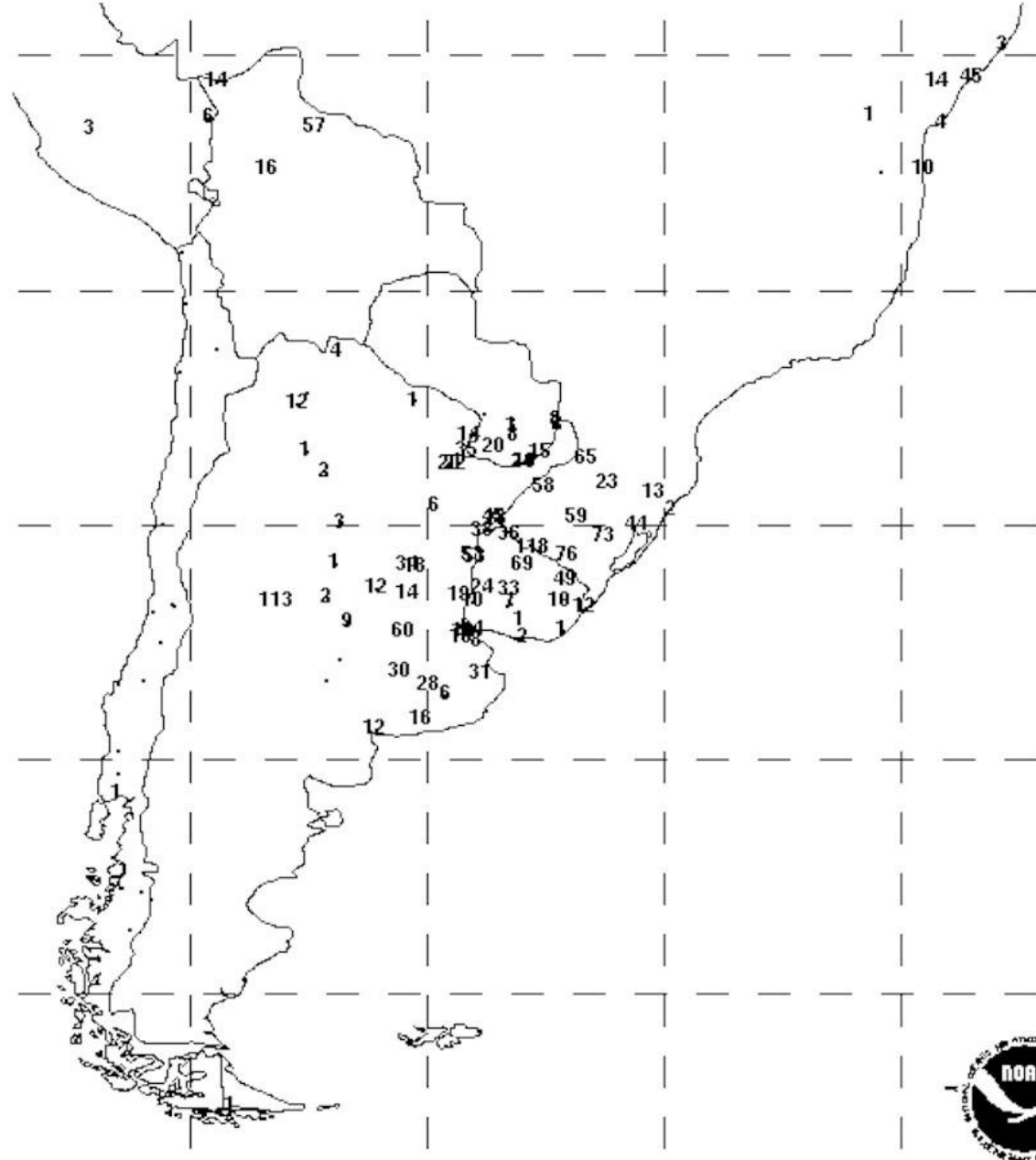


MAX TEMPS OCT 19– NOT AS HOT OVER BRAZIL INTERIOR



**showers & storms
MGDS sw Mato Grosso
into Parana**



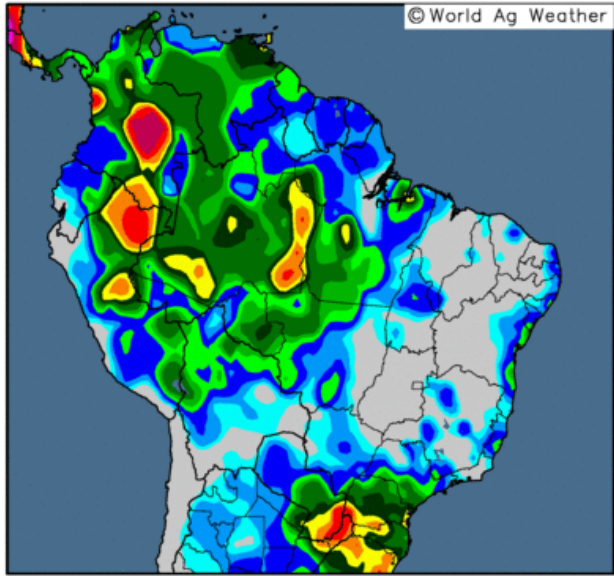


— 24-HR OBSERVED PRECIPITATION (mm) - SYNOPTIC —
Ending at 1200Z 19 Oct 2017
(black dots are trace amounts)



14-day Precipitation Analysis

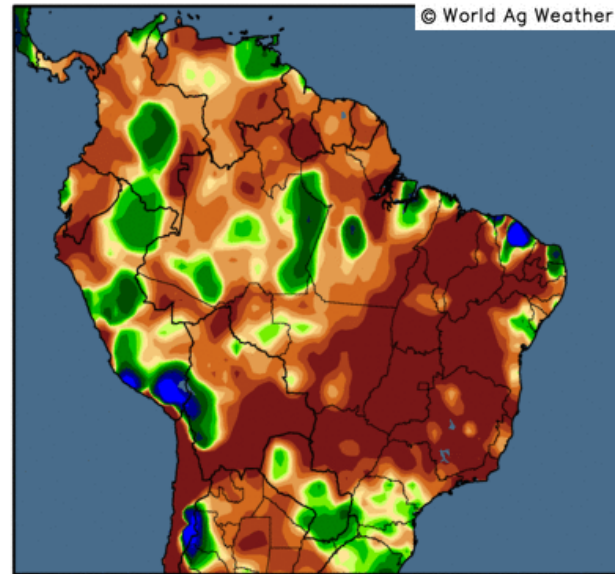
Observed precipitation (inches) through 12 UTC 18 Oct 2017



Map updates daily by approximately 20:30 UTC

14-day Precipitation Analysis

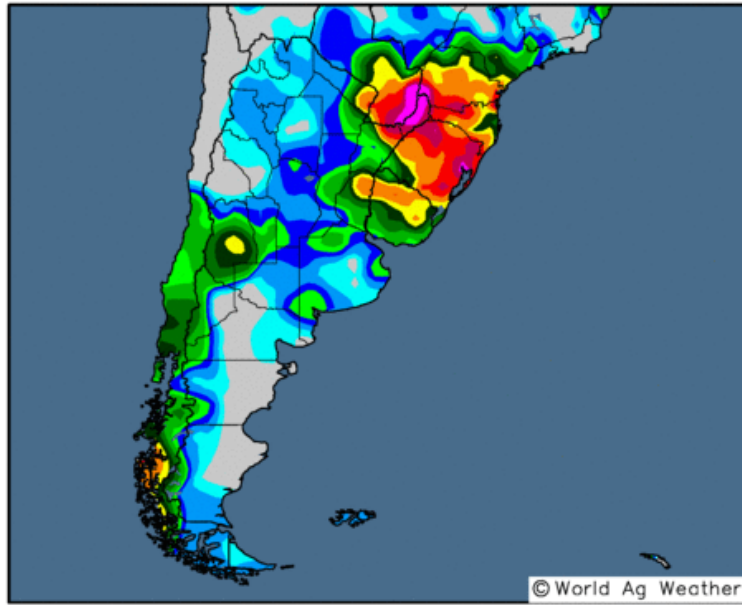
Percent of normal through 12 UTC 18 Oct 2017



Map updates daily by approximately 20:30 UTC

14-day Precipitation Analysis

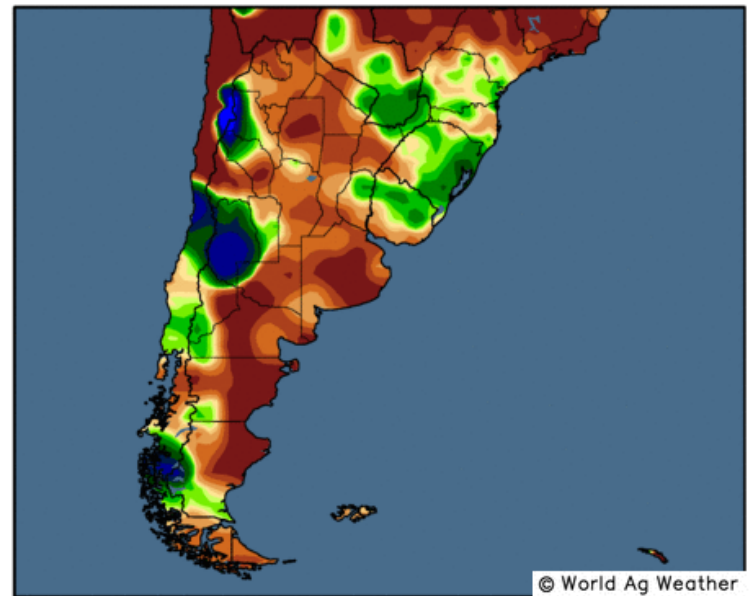
Observed precipitation (inches) through 12 UTC 18 Oct 2017



Map updates daily by approximately 20:30 UTC

14-day Precipitation Analysis

Percent of normal through 12 UTC 18 Oct 2017

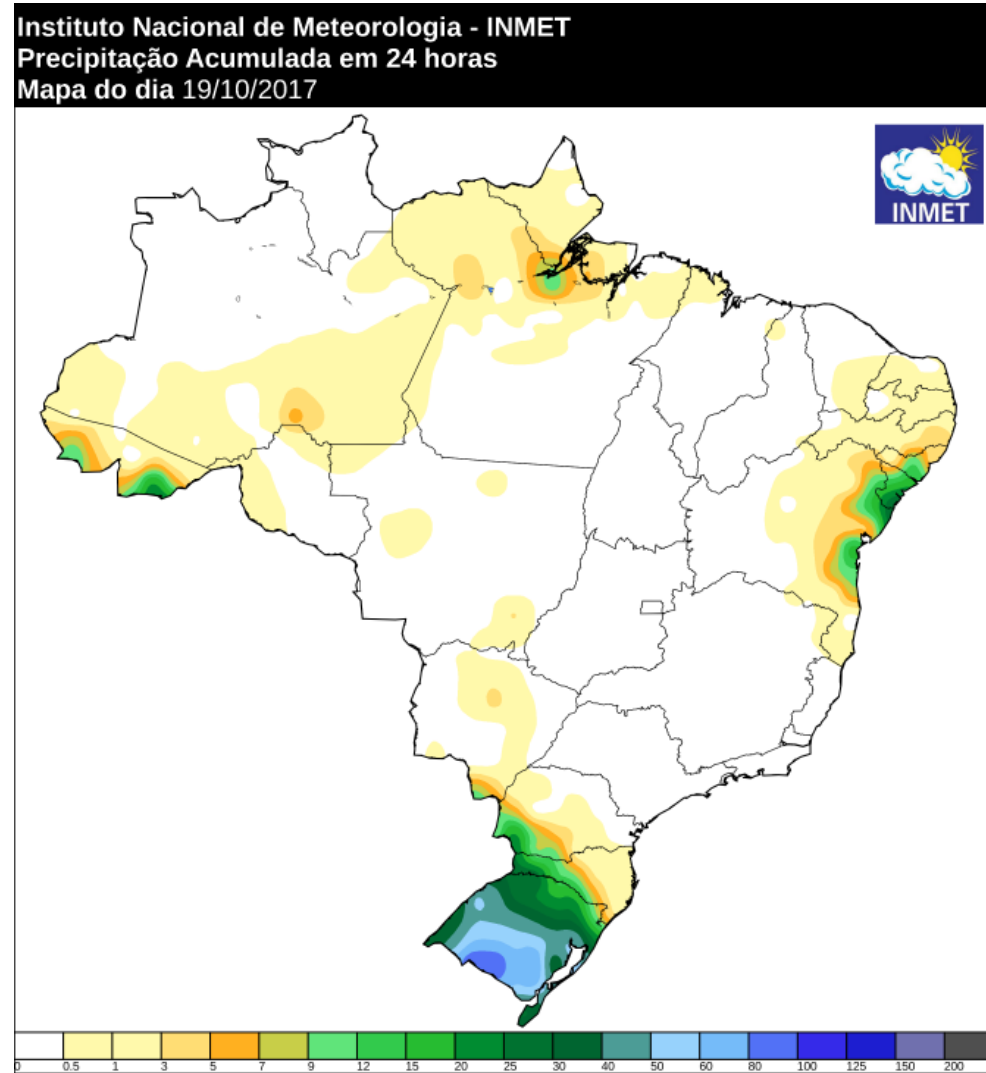
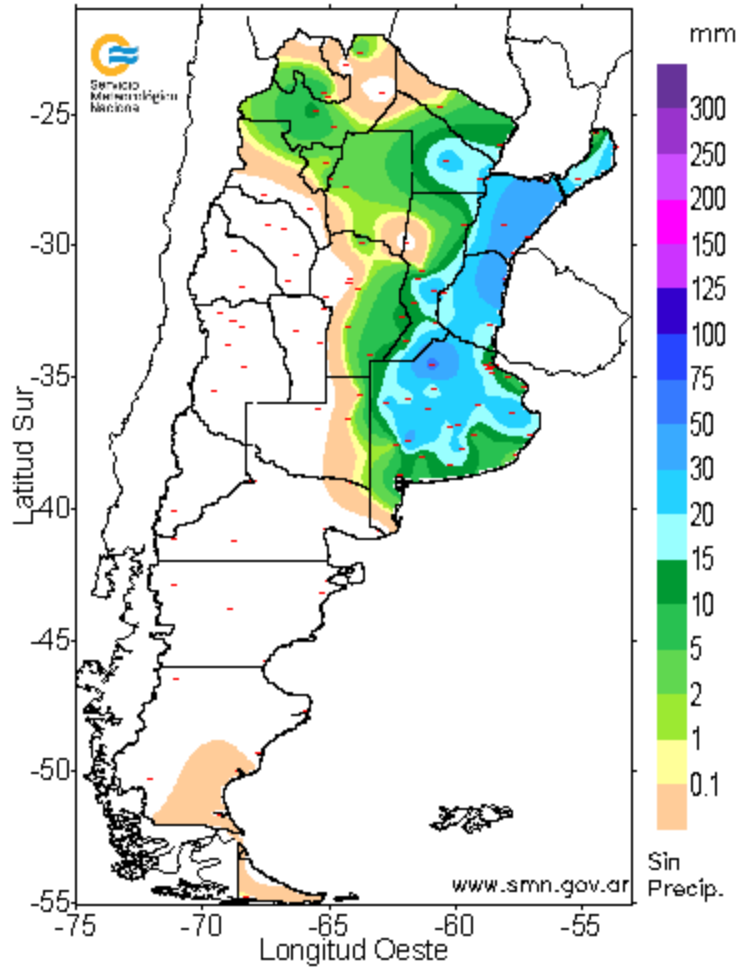


Map updates daily by approximately 20:30 UTC

Servicio Meteorológico Nacional

PRECIPITACION (EN MILIMETROS) ACUMULADA EN 24 HORAS

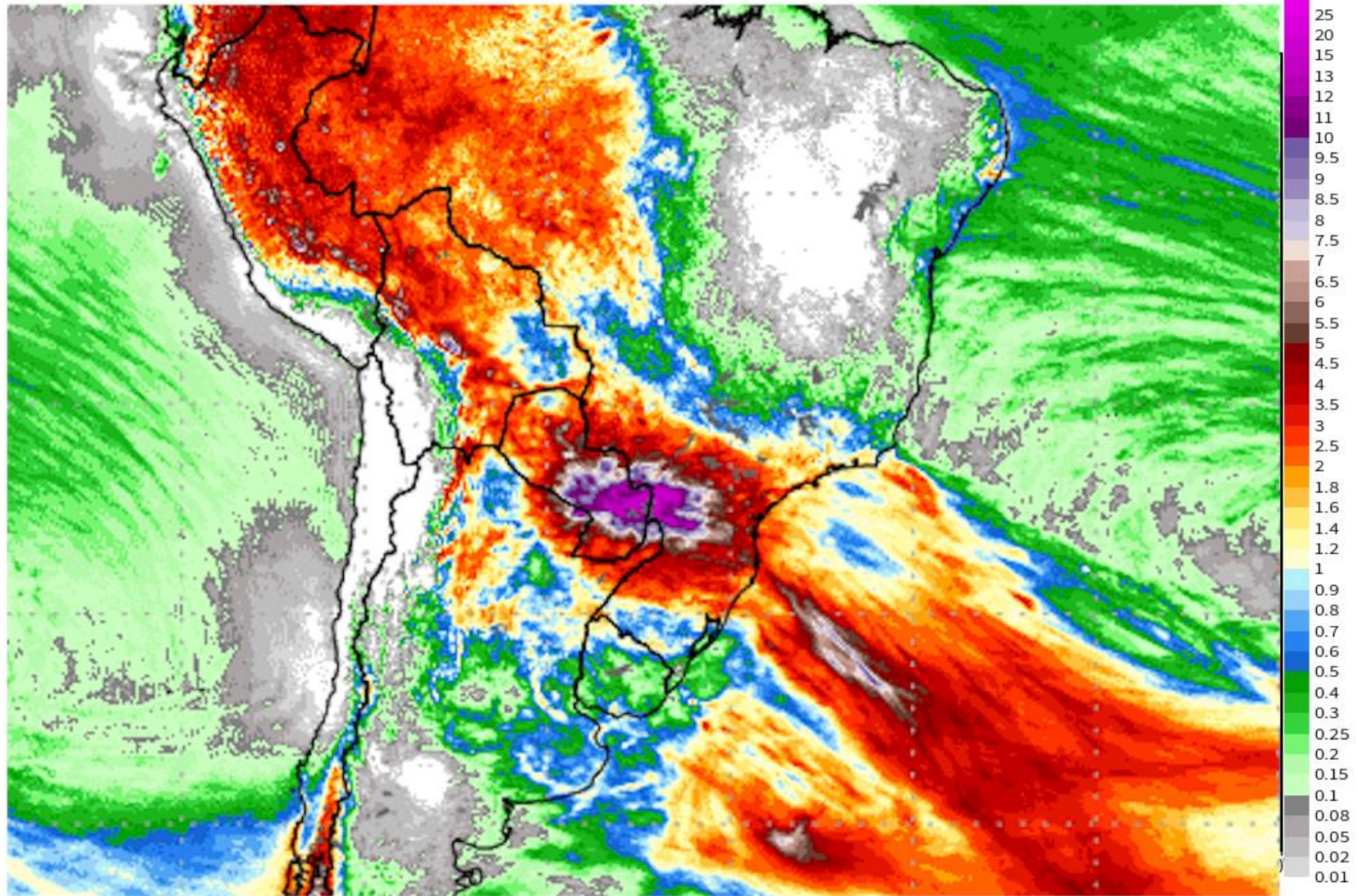
Los valores corresponden al periodo comprendido entre las
9 hs. del 18 / 10 / 2017 y las 9 hs. del 19 / 10 / 2017



EURO TOTAL RAINFALL DAY 10

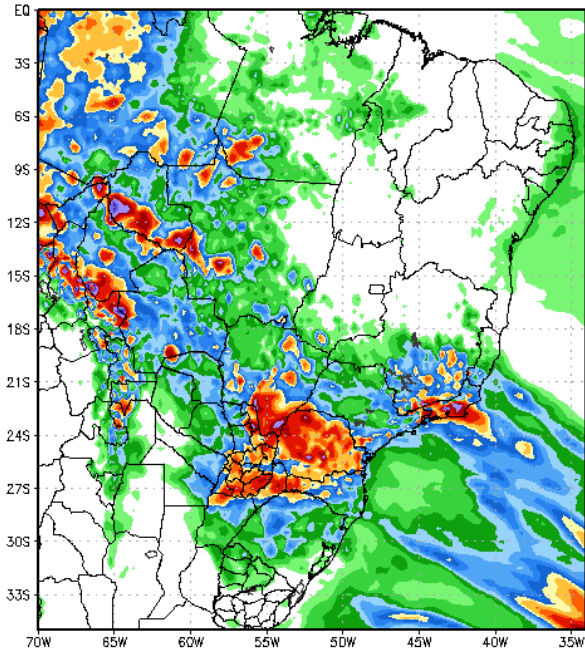
ECMWF Total Precipitation [inch]
Init: 00Z20OCT2017 -- [240] hr --> Valid Mon 00Z30OCT2017

MAX: 35.8 inch



NEXT 5 DAYS GFS LEFT EURO RIGHT

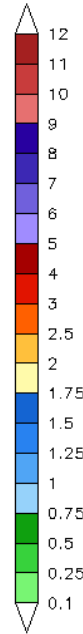
120 Hour Total Precipitation (in)
Valid: 00z Fri 20 Oct 2017 - 00z Wed 25 Oct 2017



Max: 12.0 in
Min: 0.0 in

StormVistaWxModels.com

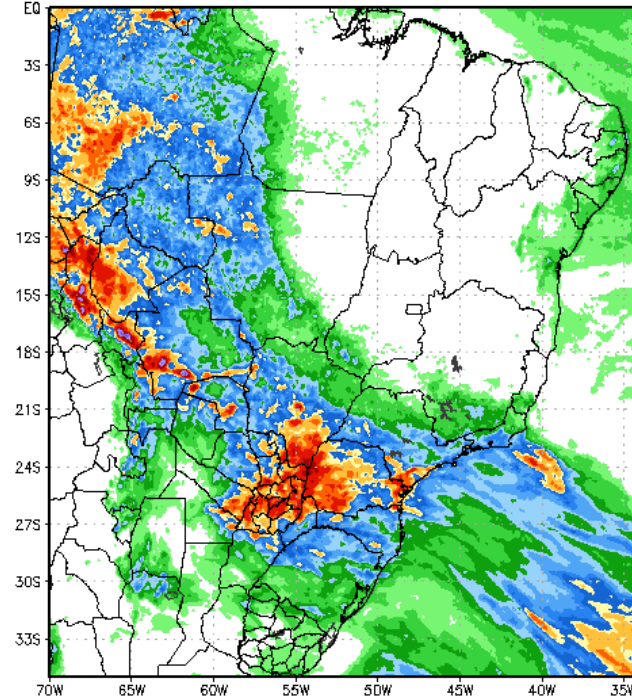
GFS-MAXRES
Hour: 0 - 120



Init: 00z Fri 20 Oct 2017
2017-10-20-04:02

EXCELLENT MODEL agreement

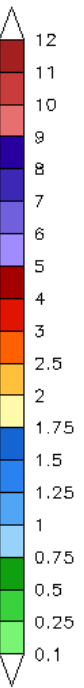
Total Precipitation (in)
Fri 20 Oct 2017 - 00z Wed 25 Oct 2017



Max: 7.3 in
Min: 0.0 in

StormVistaWxModels.com

ECMWF-MAXRES
Hour: 0 - 120



Init: 00z Fri 20 Oct 2017
2017-10-20-08:20

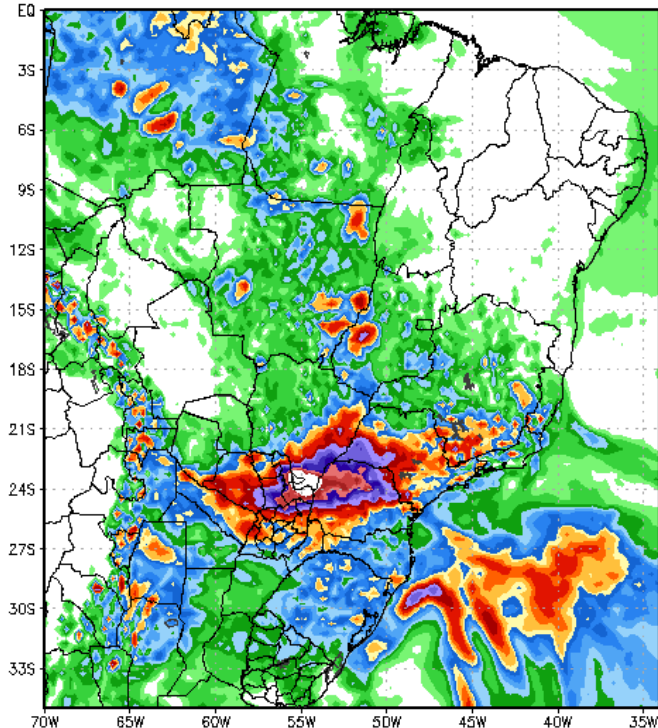
120 Hour Total Precipitation (in)

Valid: 00z Wed 25 Oct 2017 - 00z Mon 30 Oct 2017

GFS-MAXRES

Hour: 120 - 240

6-10DAY GFS LEFT EURO RIGHT



Max: 17.7 in
Min: 0.0 in

StormVistaWxModels.com

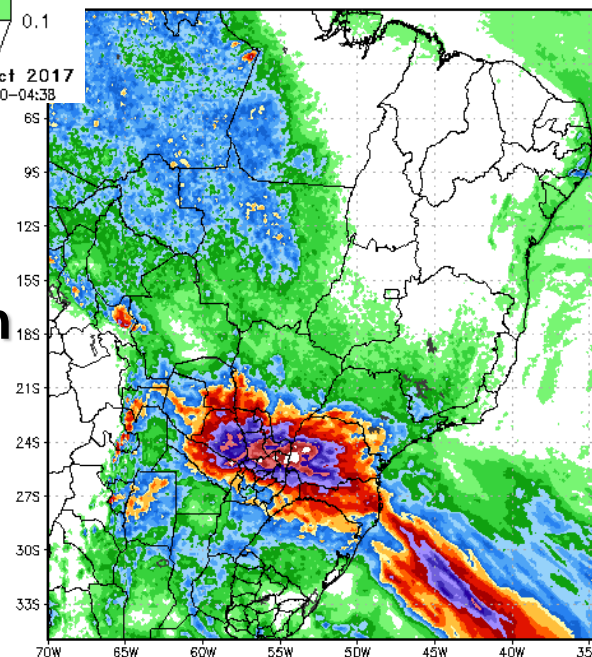
Init: 00z Fri 20 Oct 2017
2017-10-20-04:38

recipitation (in)

5 Oct 2017 - 00z Mon 30 Oct 2017

ECMWF-MAXRES

Hour: 120 - 240



Max: 15.7 in
Min: -0.0 in

StormVistaWxModels.com

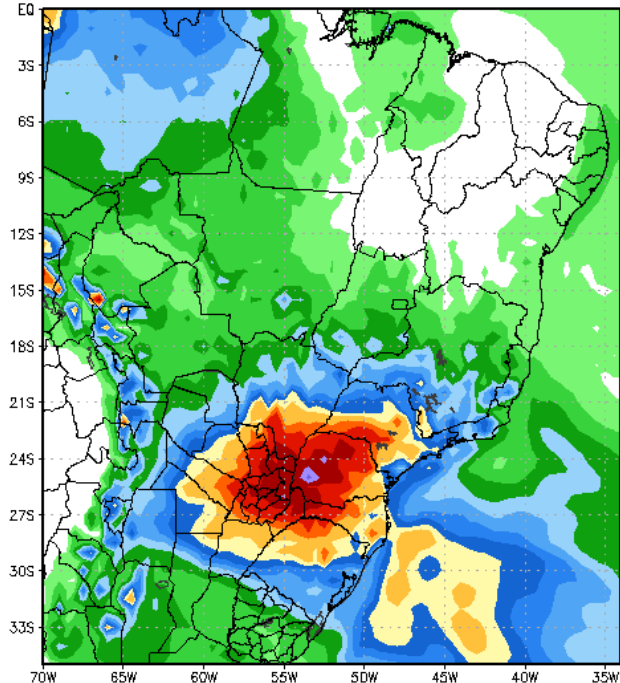
Init: 00z Fri 20 Oct 2017
2017-10-20-06:55

BOTH models show concentrated are of 5-12"/ 125-300mm rains eastern Parg/ south MGDS western Parana. GFS want to push more rain into south Sao Paulo... Light to moderate rains over most of ARG

6-10 DAY ENSEMBLES

120 Hour Total Precipitation (in)

Valid: 00z Wed 25 Oct 2017 - 00z Mon 30 Oct 2017



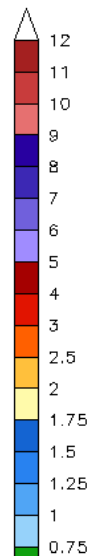
Max: 6.2 in
Min: 0.0 in

StormVistaWxModels.com

Init: 00z Fri 2
2017

GFS-ENS-MAXRES

Hour: 120 - 240



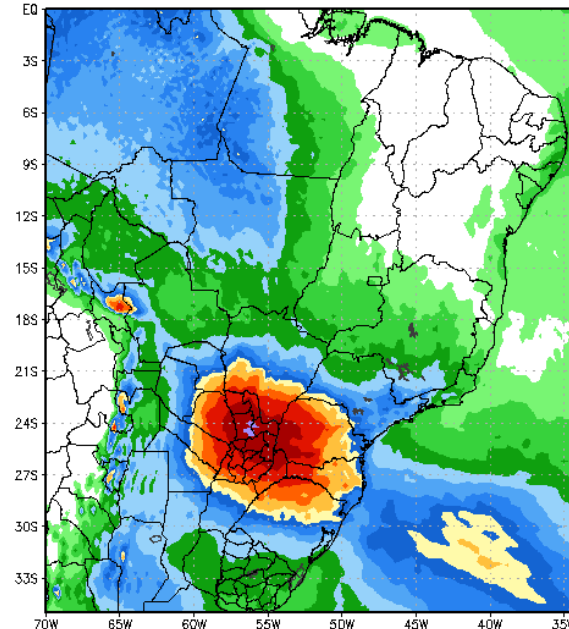
**Strong signal for 2-5''
/ 50-125mm rains in
6-10 day... odds
favor at least that
much maybe much
more**

120 Hour Total Precipitation (in)

Valid: 00z Wed 25 Oct 2017 - 00z Mon 30 Oct 2017

ECMWF-EPS-MAXRES

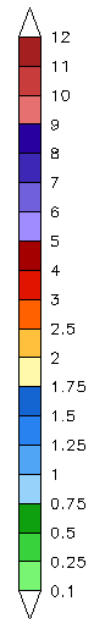
Hour: 120 - 240



Max: 5.2 in
Min: -0.0 in

StormVistaWxModels.com

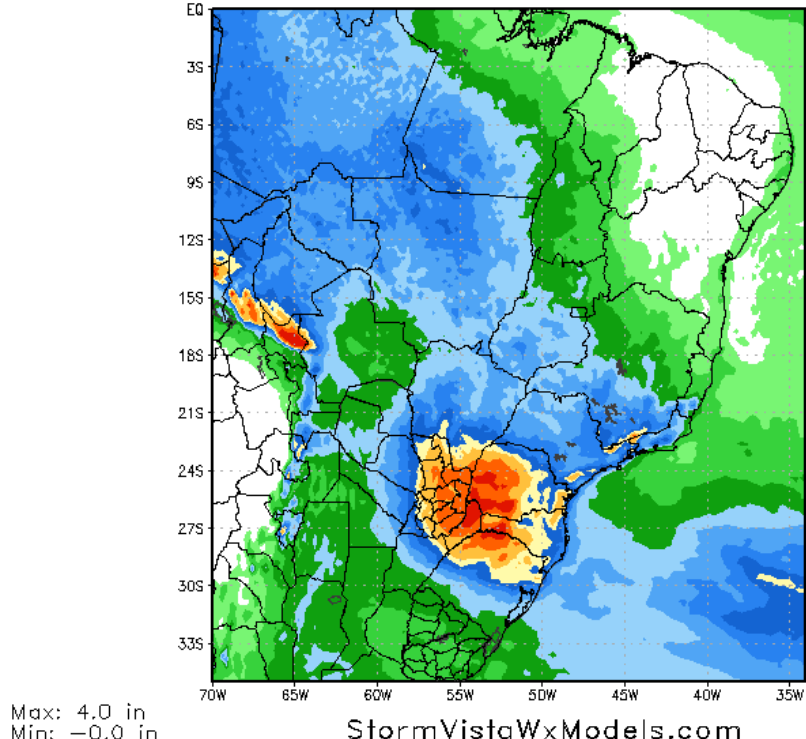
Init: 00z Fri 20 Oct 2017
2017-10-20-0241



120 Hour Total Precipitation (in)
Valid: 00z Mon 30 Oct 2017 - 00z Sat 04 Nov 2017

ECMWF-EPS-MAXRES
Hour: 240 - 360

11 - 15 DAYS GFS LEFT EURO RIGHT



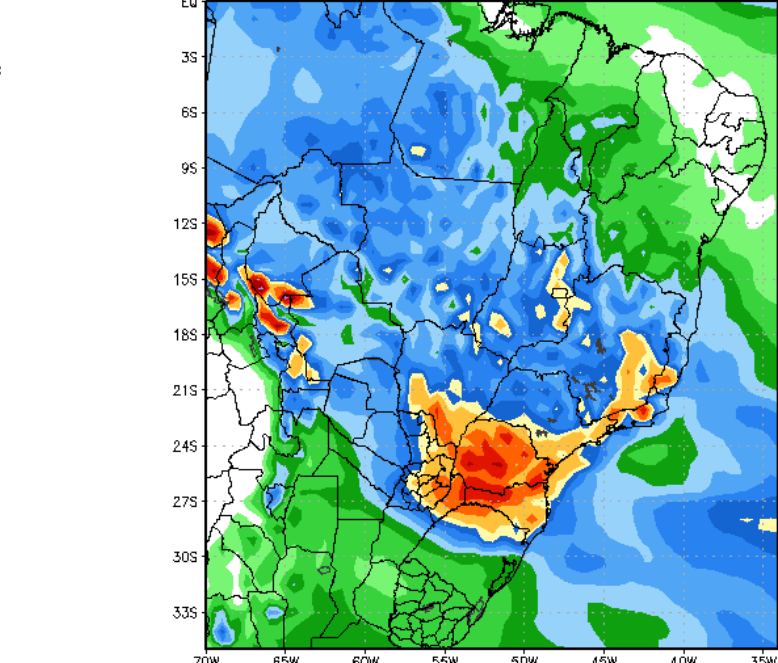
Max: 4.0 in
Min: -0.0 in

StormVistaWxModels.com

Init:

**Strong signal for 2-4”
/ 50-100mm rains in
11-15 day... RAINs
spread into much of
Brazil**

120 Hour Total Precipitation (in)
Valid: 06z Mon 30 Oct 2017 - 06z Sat 04 Nov 2017



Max: 5.3 in
Min: 0.0 in

StormVistaWxModels.com

GFS-ENS-MAXRES
Hour: 246 - 366

Init: 00z Fri 20 Oct 2017
2017-10-20-05:29

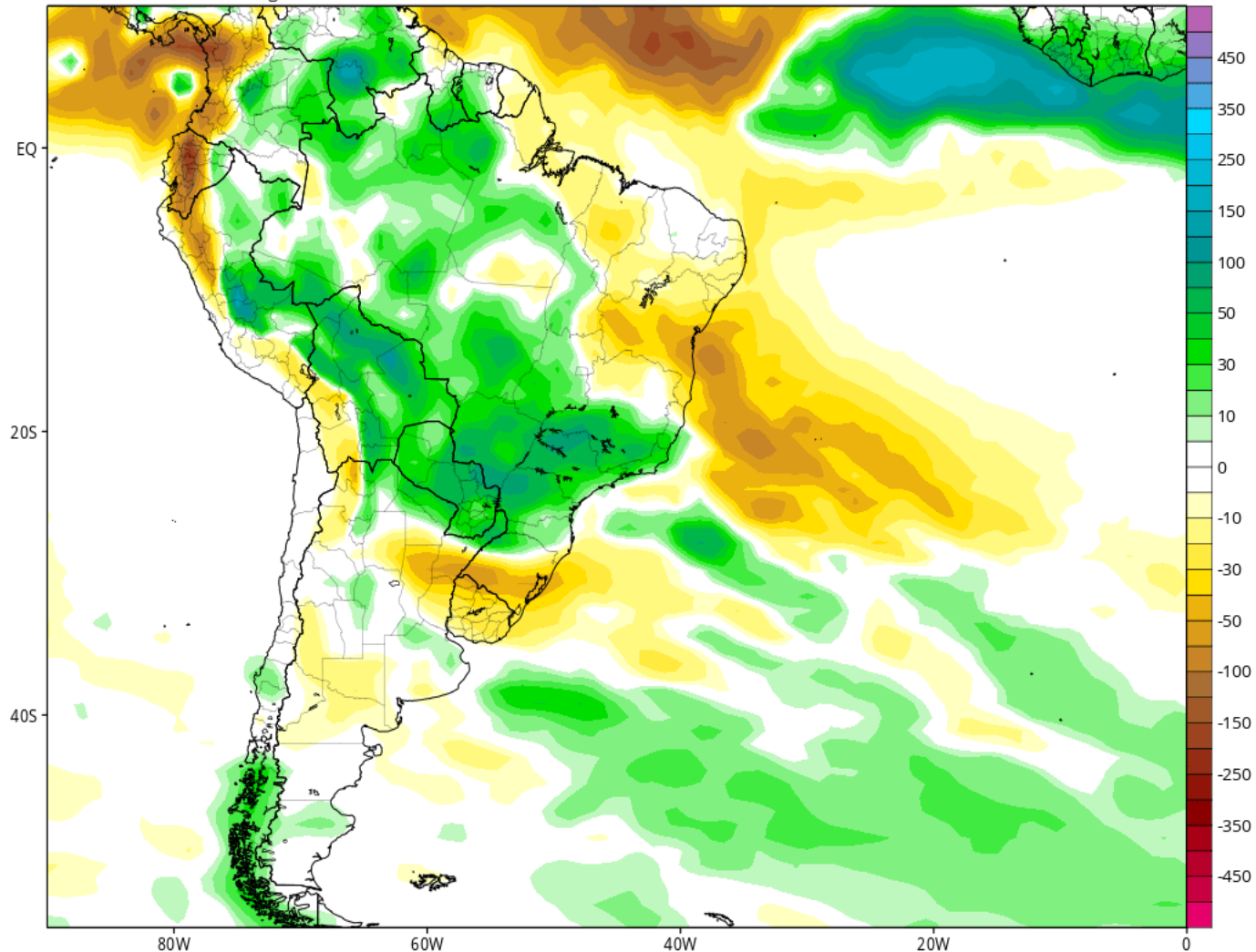
LATEST CFS Model for NOV 2017 – rains come north into mist of Brazil while SE Brazil & North ARG turns dry. Bahia – dry

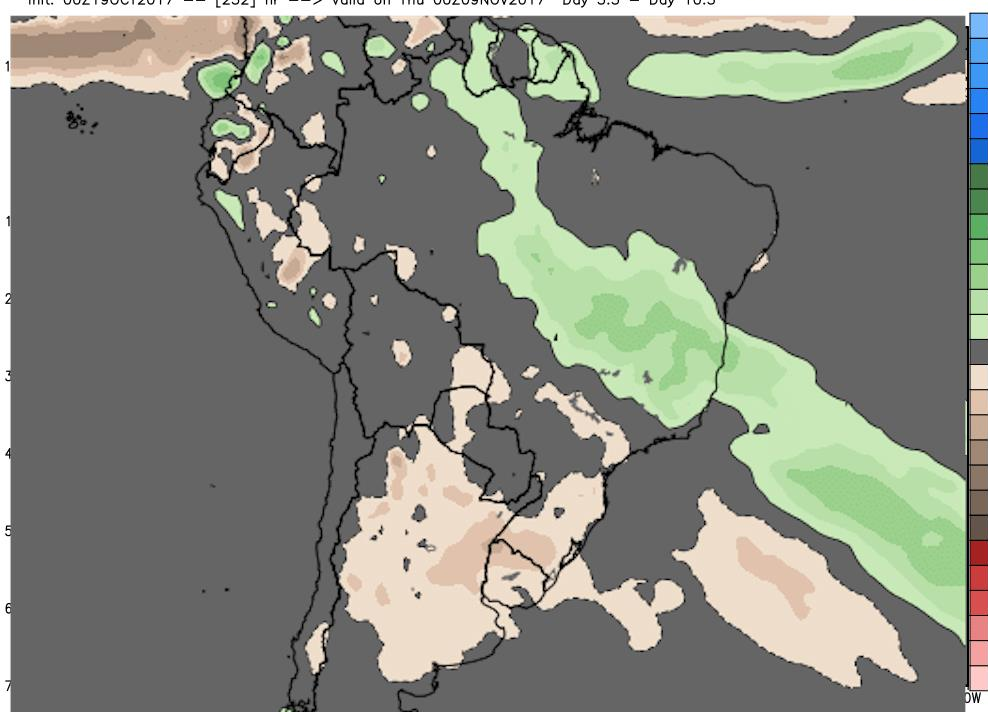
CFSv2 Total Accumulated Precipitation Anomaly (mm)

Average of last 12 forecasts (12 runs x 1 members)

Init: 18z Oct 16 2017 through 12z Oct 19 2017 Valid for: Nov 2017

TROPICALTIDBITS.COM

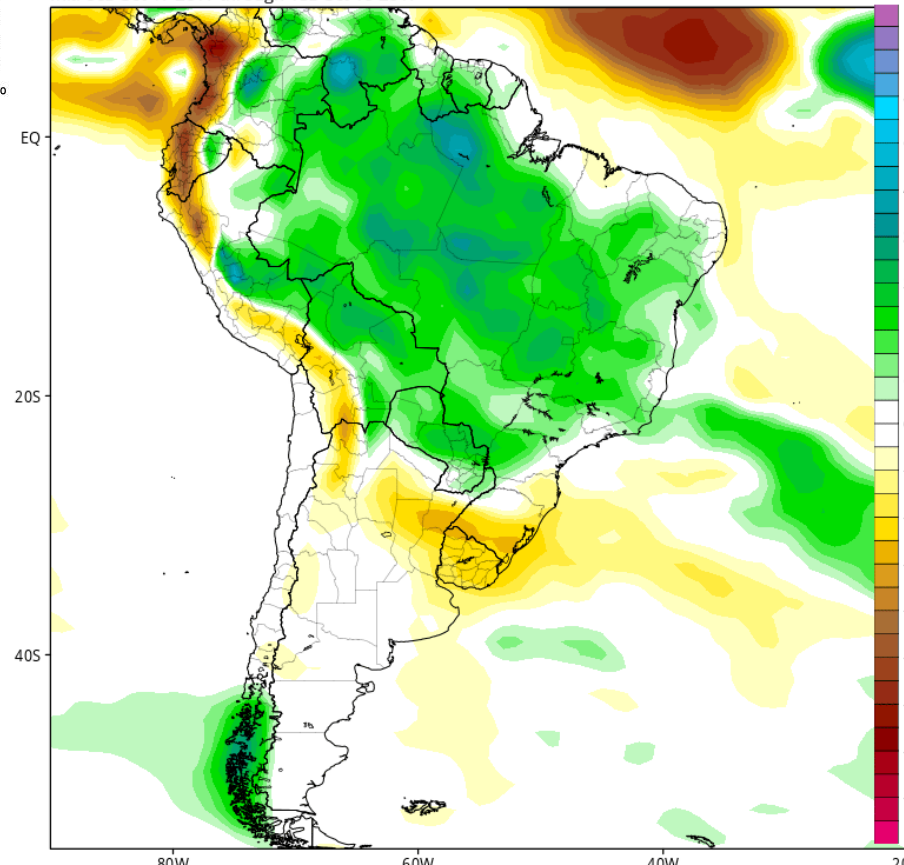




Accumulation between 00Z02NOV2017-00Z09NOV2017 | ECMWF EPS 1997-2016 Hindcast Climatology

**EURO shows central/
interior BRAZIL DRY
wet thru 11/9/17 –
DRY over ARG /
Parag./ SE Brazil**

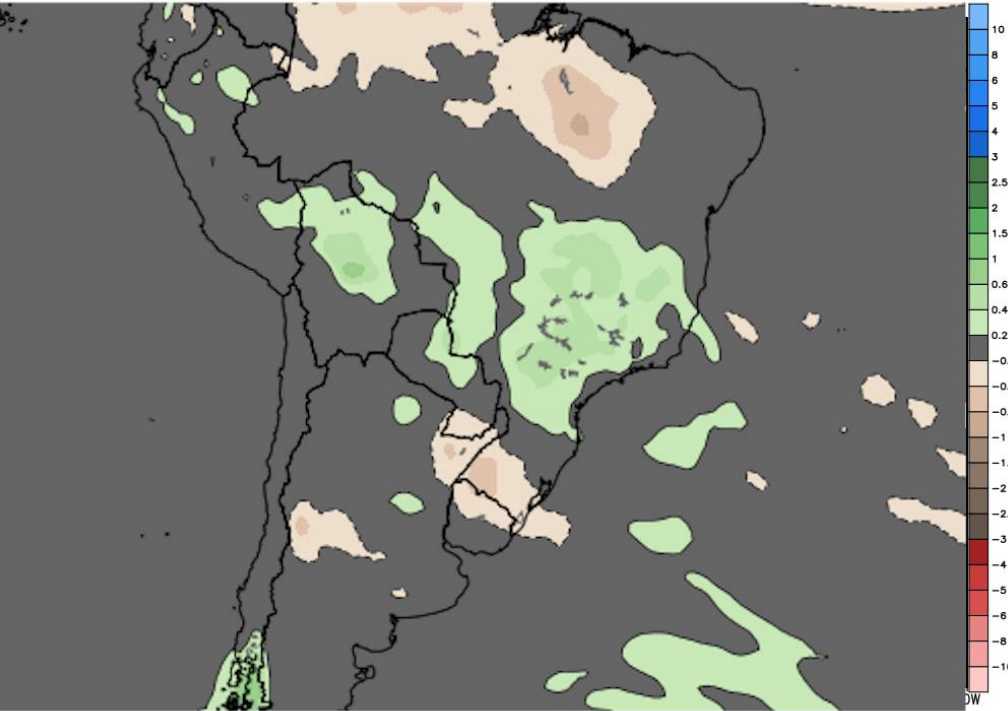
CFSv2 Accumulated Precip. Anomaly (mm) from 18z02Nov2017 to 18z09Nov2017 (Days 15-16)
Average of last 48 forecasts (12 runs x 4 members)
Init: 00z Oct 17 2017 through 18z Oct 19 2017



CFS AGREES

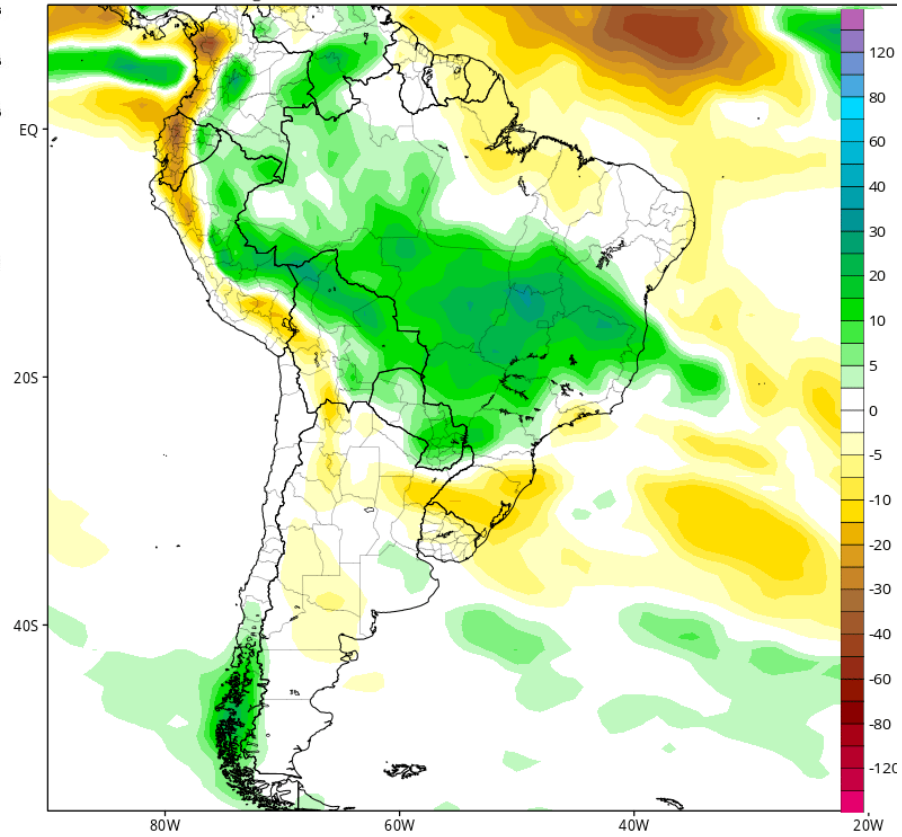
EURO & CFS by 11/16/17 shows Above normal rains much of Brazil

ECMWF EPS Ensemble Mean 7-day Avg Precipitation Anomaly [inch]
Init: 00Z19OCT2017 -- [336] hr --> Valid on Thu 00Z16NOV2017 Day 7 - Day 14
Min|Max Anom: -2.5 | 2.5 inch

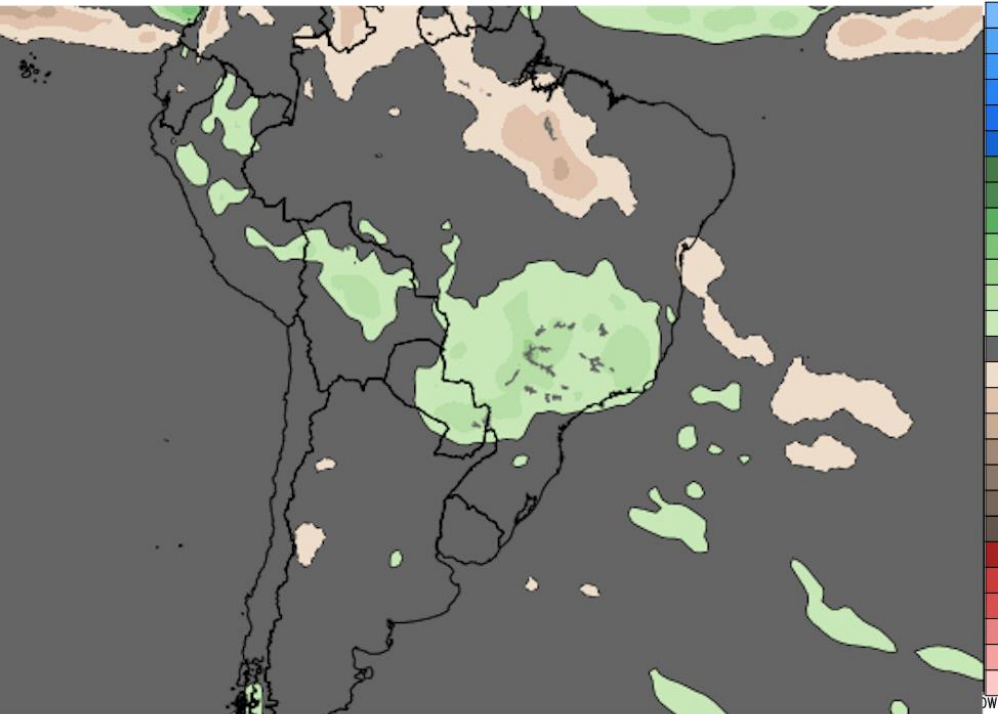


Accumulation between 00Z09NOV2017-00Z16NOV2017 | ECMWF EPS 1997-2016 Hindcast Climatology

CFSv2 Accumulated Precip. Anomaly (mm) from 18z09Nov2017 to 18z16Nov2017 (Days 22-28)
Average of last 48 forecasts (12 runs x 4 members)
Init: 00z Oct 17 2017 through 18z Oct 19 2017



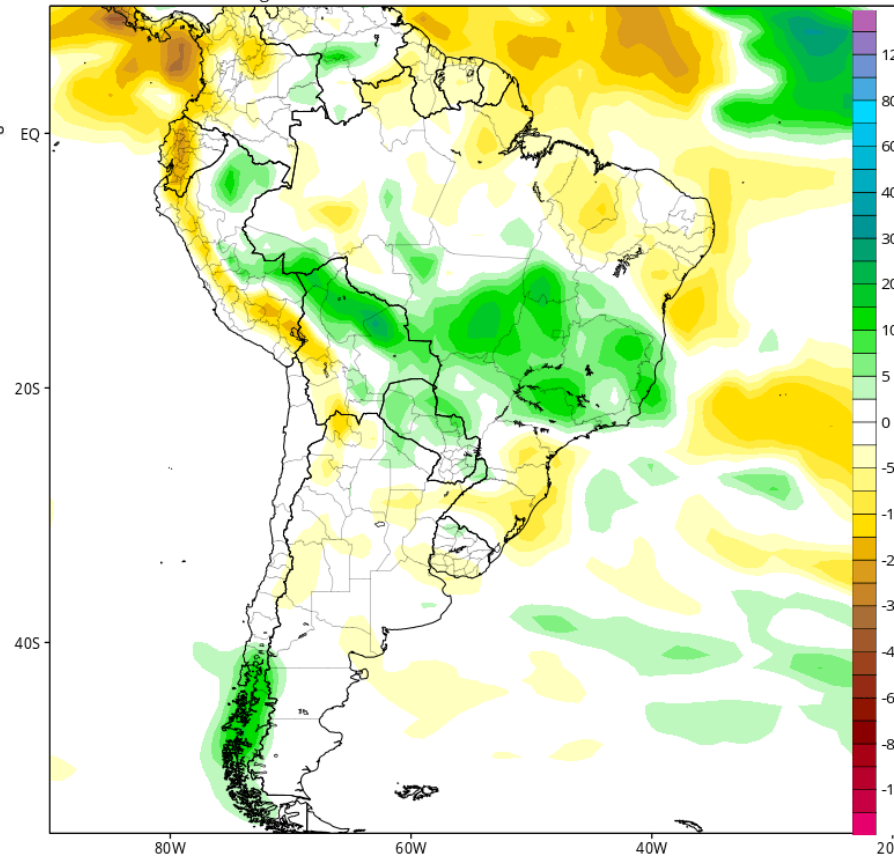
ECMWF EPS 1997-2016 Hindcast Climatology
Init: 00Z19OCT2017 --- [420] hr --> Valid on Thu 00Z23NOV2017 Day 10.5 - Day 17.5



Accumulation between 00Z16NOV2017-00Z23NOV2017 | ECMWF EPS 1997-2016 Hindcast Climatology

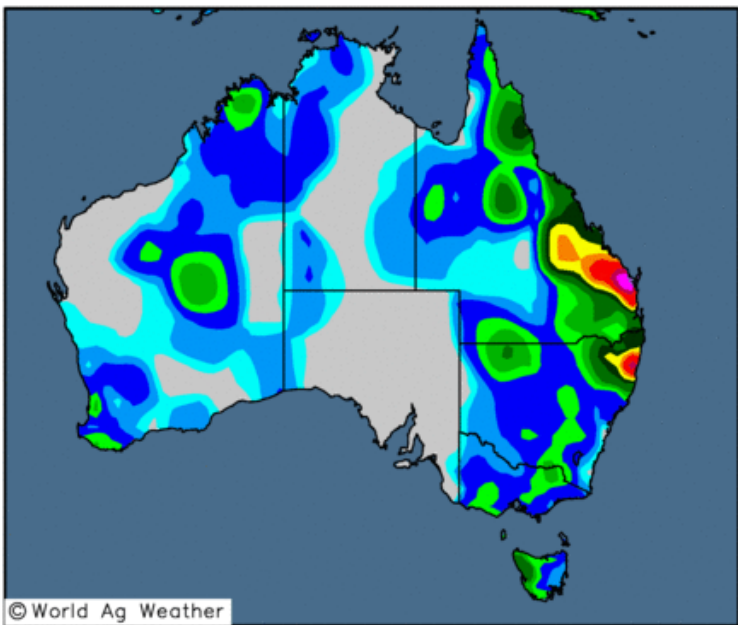
EURO & CFS by 11/23 /17 shows Above normal rains much of Brazil

CFSv2 Accumulated Precip. Anomaly (mm) from 18z16Nov2017 to 18z23Nov2017 (Days 29)
Average of last 48 forecasts (12 runs x 4 members)
Init: 00z Oct 17 2017 through 18z Oct 19 2017



14-day Precipitation Analysis

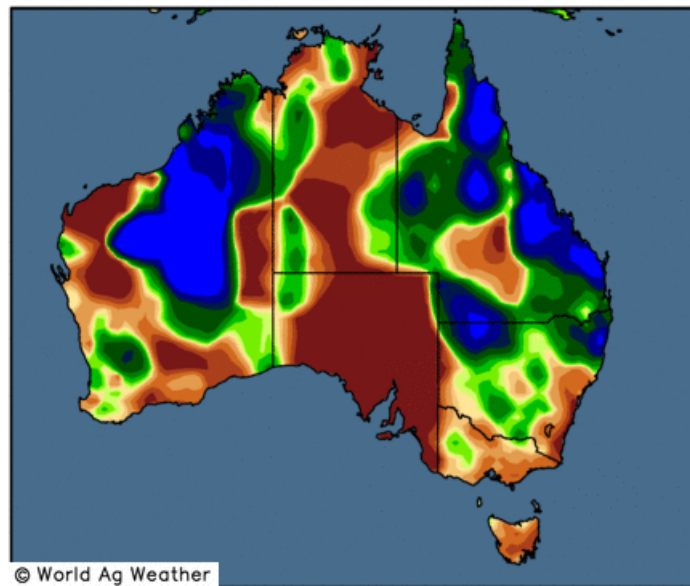
Observed precipitation (inches) through 12 UTC 18 Oct 2017



Map updates daily by approximately 20:30 UTC

14-day Precipitation Analysis

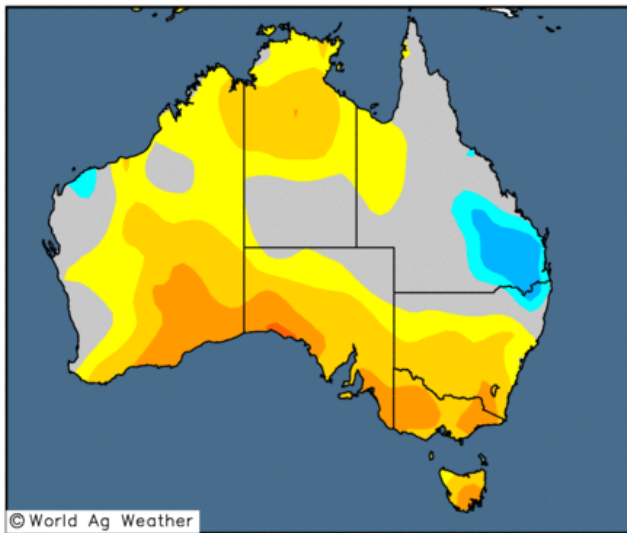
Percent of normal through 12 UTC 18 Oct 2017



Map updates daily by approximately 20:30 UTC

Maximum Temperature Departure from Normal (°F)

7 days ending 18 Oct 2017

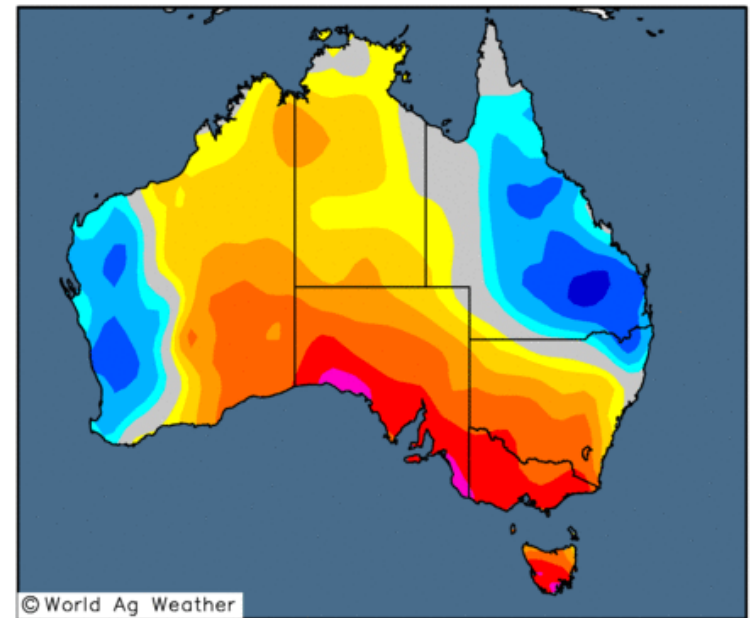


-25 -20 -15 -10 -7 -4 -2 2 4 7 10 15 20 25

Map updates daily by approximately 16:00 UTC

Maximum Temperature Departure from Normal (°F)

3 days ending 18 Oct 2017



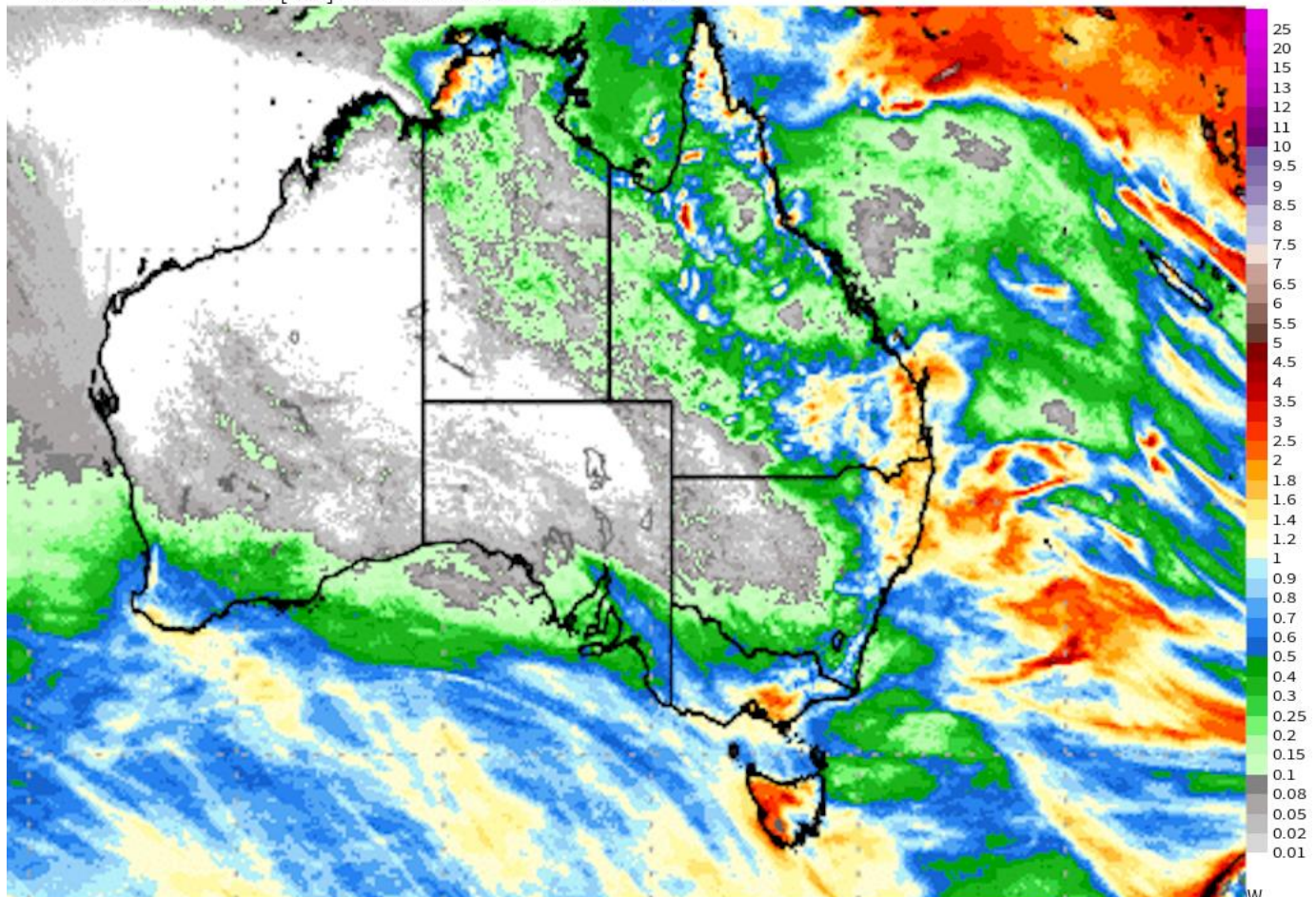
-25 -20 -15 -10 -7 -4 -2 2 4 7 10 15 20 25

Map updates daily by approximately 16:00 UTC

EURO Model 0.50-1.5"/ 12-38mm over 70% of se Queensland & ne 25% of NSW. Similar rains over far sw AUS

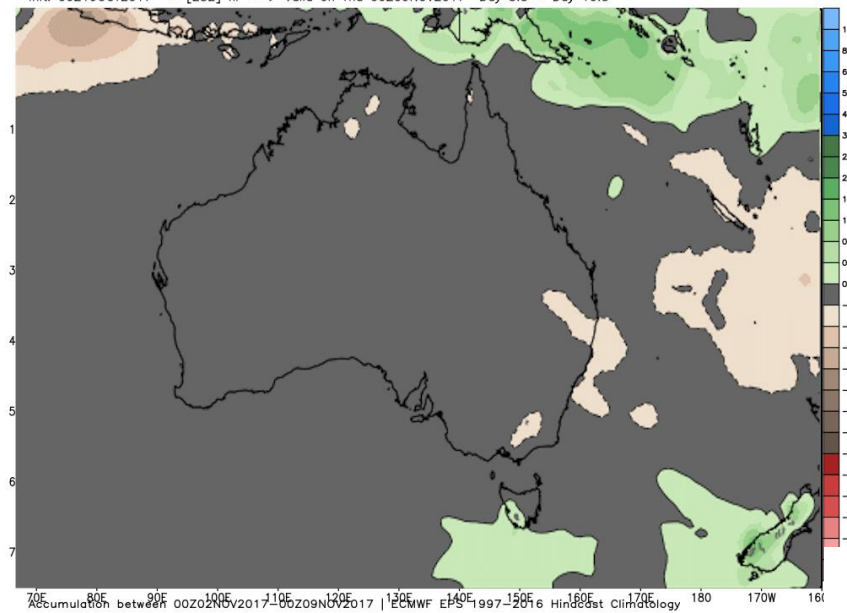
ECMWF Total Precipitation [inch]
Init: 00Z20OCT2017 -- [240] hr --> Valid Mon 00Z30OCT2017

MAX: 19.7 inch



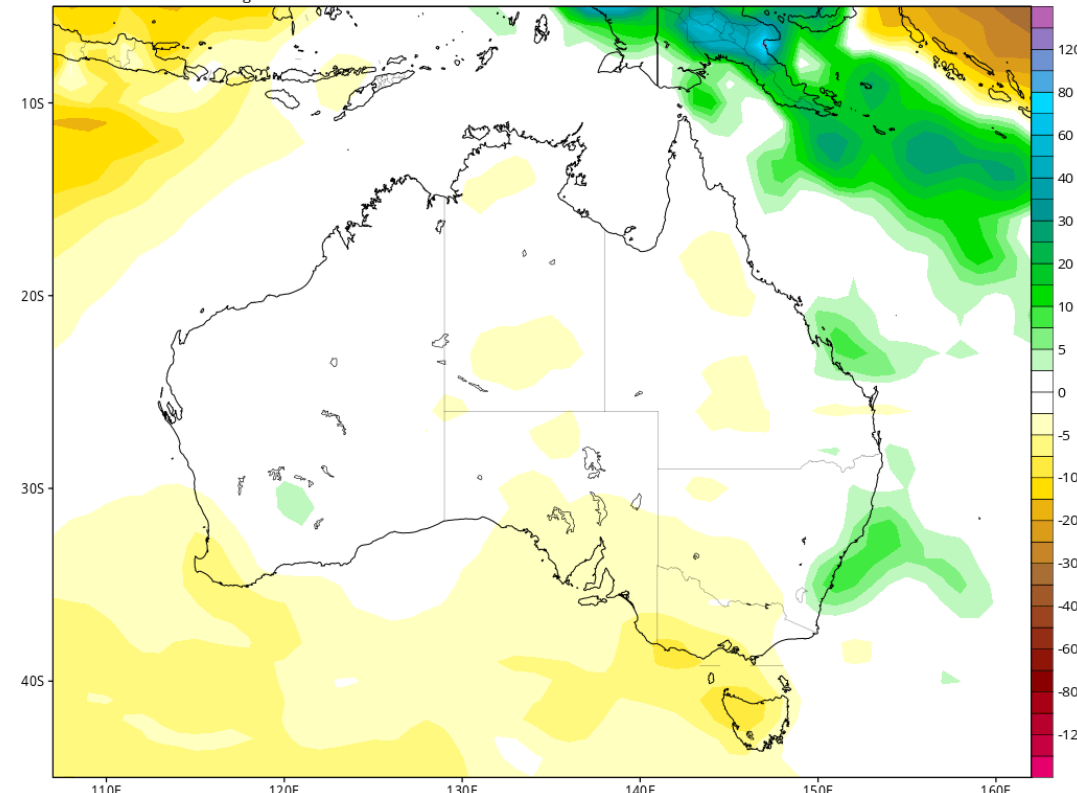
This service is based on data and products of the European Centre for Medium-range Weather Forecasts (ECMWF)

weather.us | @ryanmaue



EURO & CFS 11/2/17 to 11/9/17 near Normal conditions

CFSv2 Accumulated Precip. Anomaly (mm) from 18z02Nov2017 to 18z09Nov2017 (Days 15-21)
Average of last 48 forecasts (12 runs x 4 members)
Init: 00z Oct 17 2017 through 18z Oct 19 2017



TROPICALTIDBITS.COM

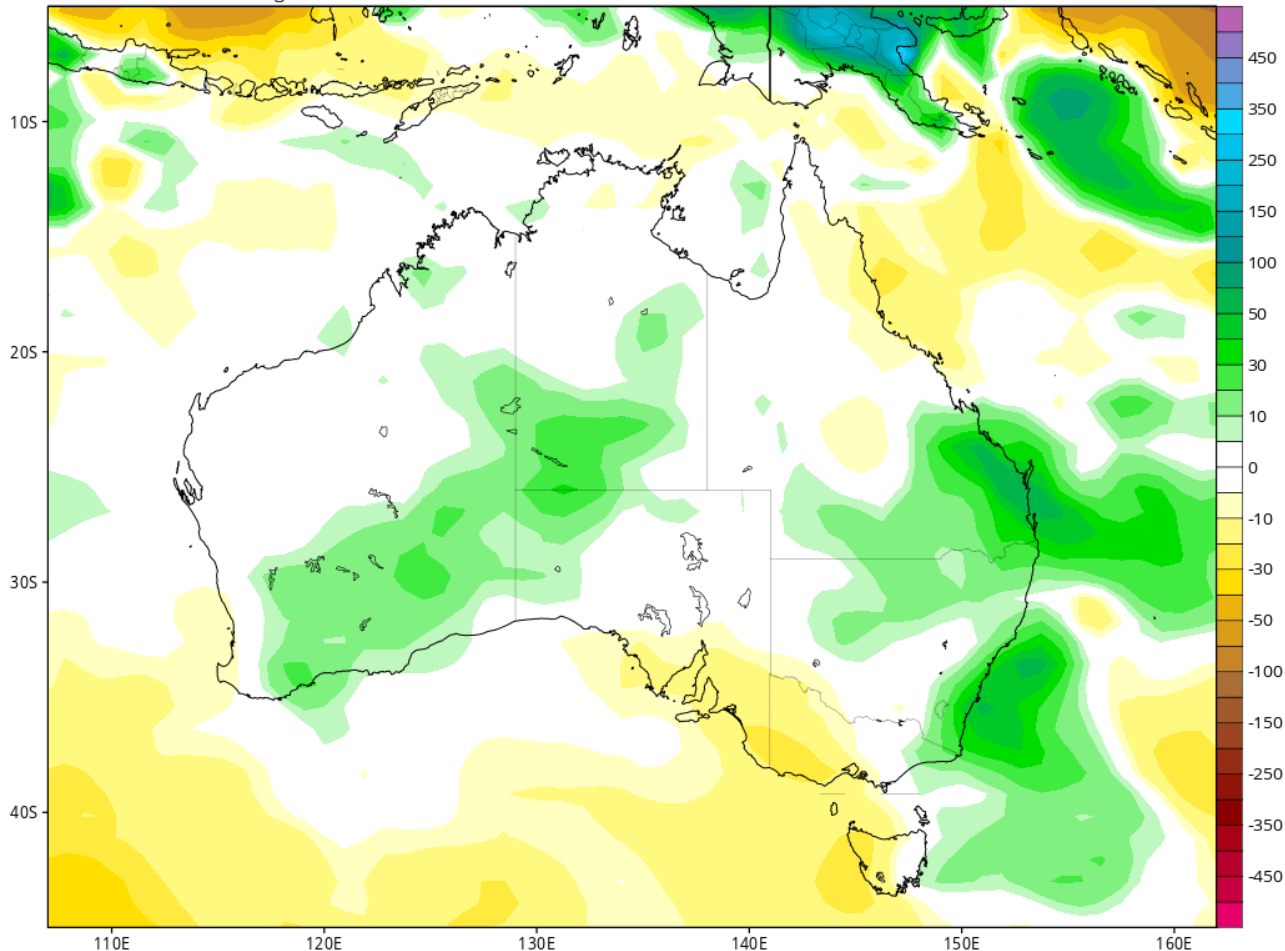
LATEST CFS FOR NOV 2017... good rains continue over se Queensland interior ne half of NSW and over sw Aus.

CFSv2 Total Accumulated Precipitation Anomaly (mm)

Average of last 12 forecasts (12 runs x 1 members)

Init: 18z Oct 16 2017 through 12z Oct 19 2017 Valid for: Nov 2017

TROPICALTIDBITS.COM



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

