

**US .. SOUTH AMERICA
and AUSTRALIA**

**GRAIN WEATHER
ISSUES**

**as of FRIDAY
10 NOVEMBER 2017**



LOCATED in Richmond VA

Featured frequently on AGRI-MONEY

EMAIL WXRISK@VERZION .NET



@WXRISK.COM



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

wxrisk@gmail.com

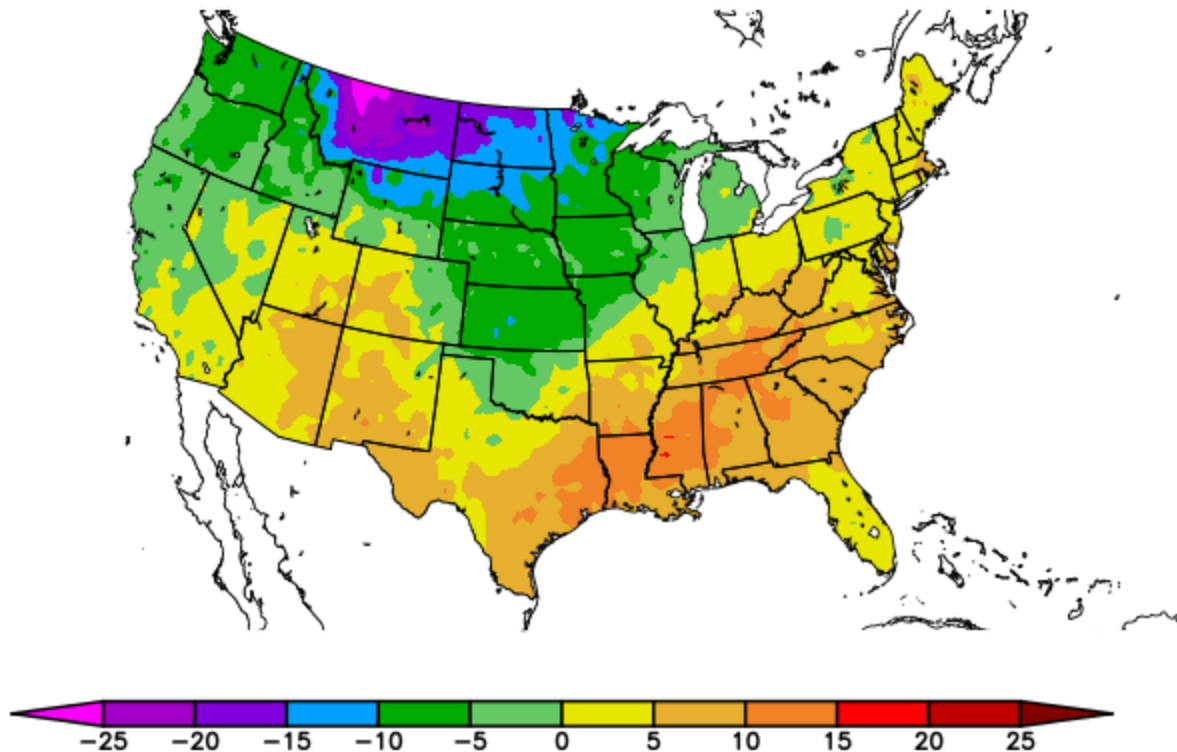


Who we are

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)
11/3/2017 - 11/9/2017

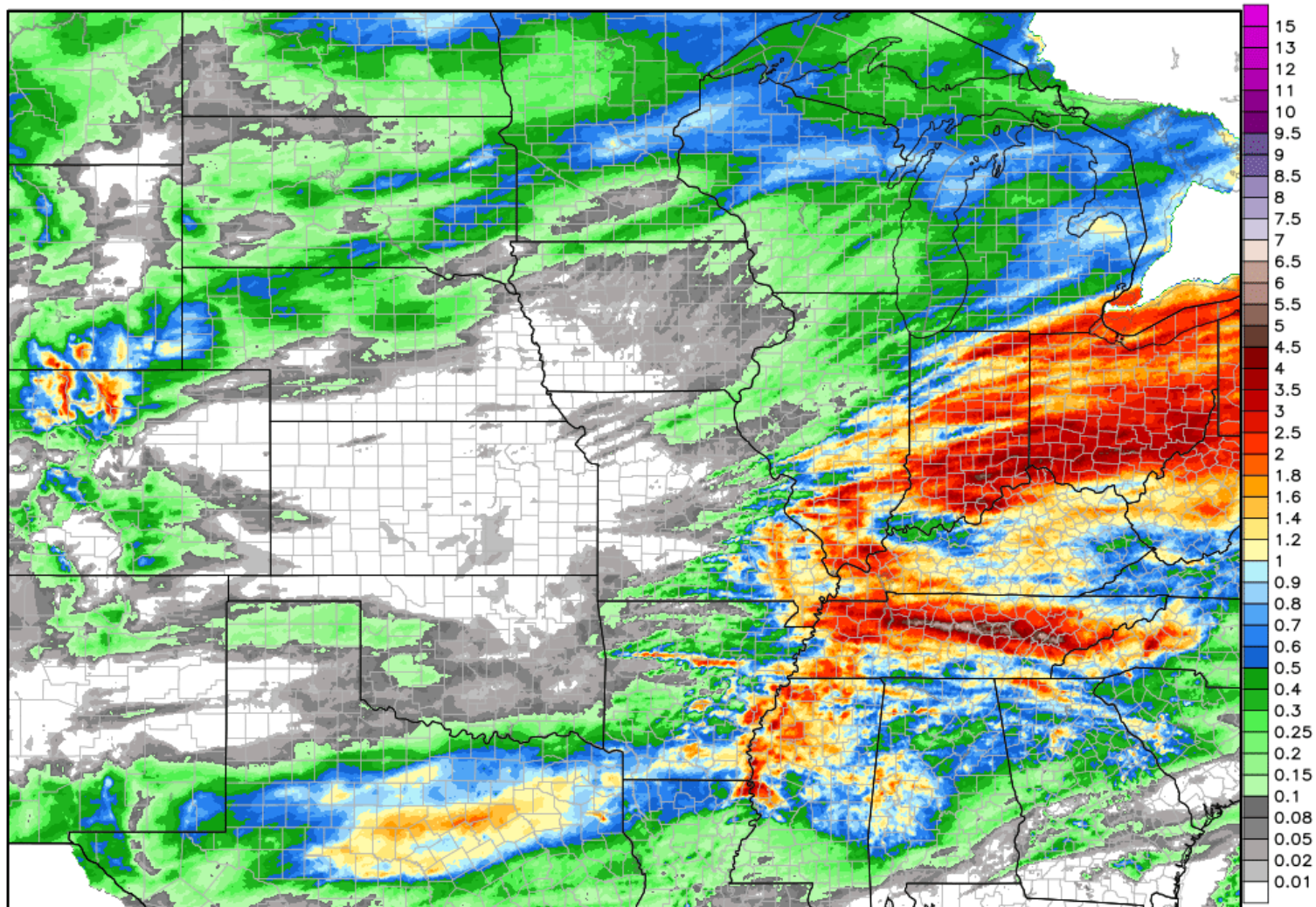


Generated 11/10/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

RAINFALL PAST 7 DAYS—

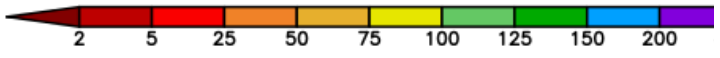
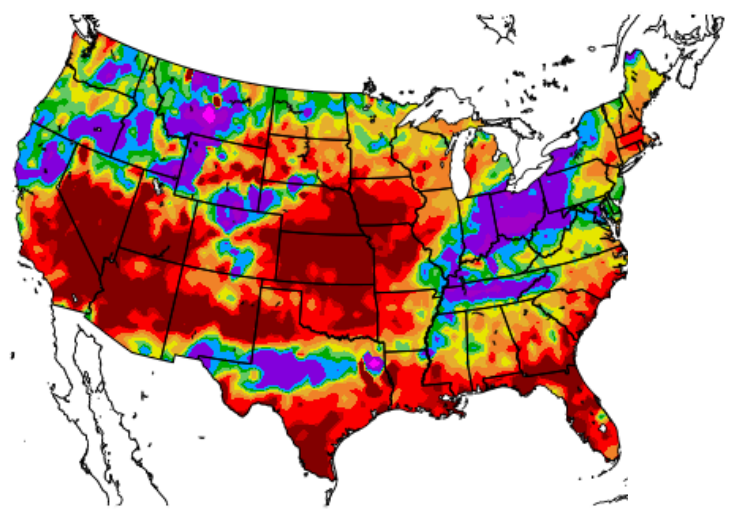
NWS Precipitation Analysis 4-km HRAP Grid -- 7-day Total Accumulation Domain Max: 7.0 in.
Total Precipitation [inches] 7 days 12Z02NOV2017 --> through --> 12Z09NOV2017



4 km HRAP grid | End of hydrological day at 1200 UTC | <http://water.weather.gov/precip>

PRECIP ANOMALIES PAST 7D

Percent of Normal Precipitation (%)
11/3/2017 - 11/9/2017

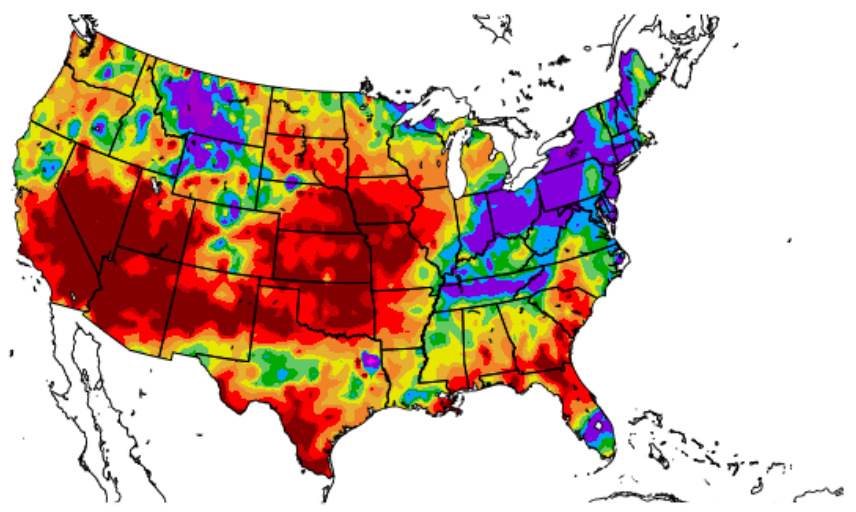


Generated 11/10/2017 at HPRCC using provisional data.

NOA

PRECIP ANOMALIES PAST 14D

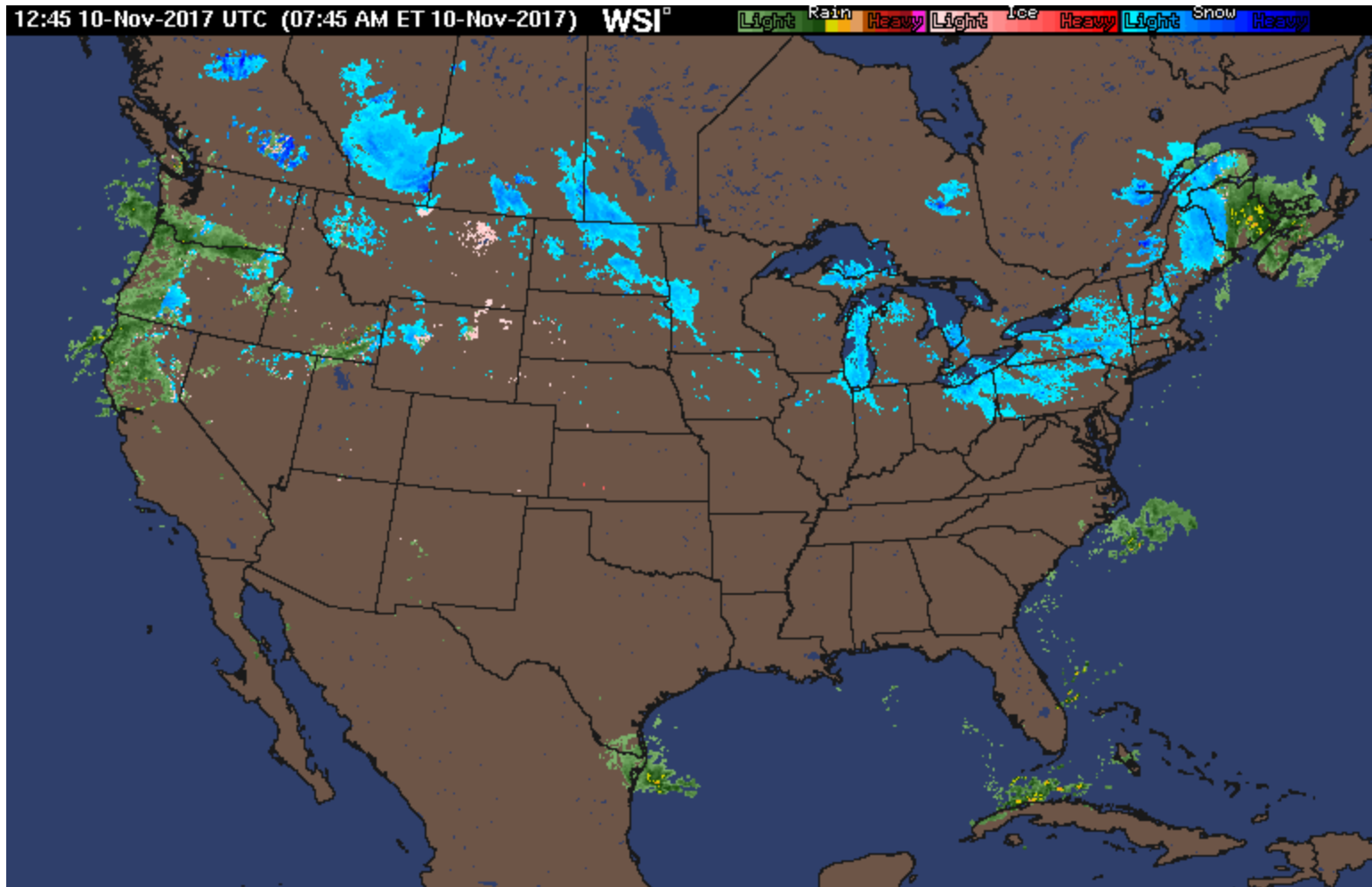
Percent of Normal Precipitation (%)
10/27/2017 - 11/9/2017



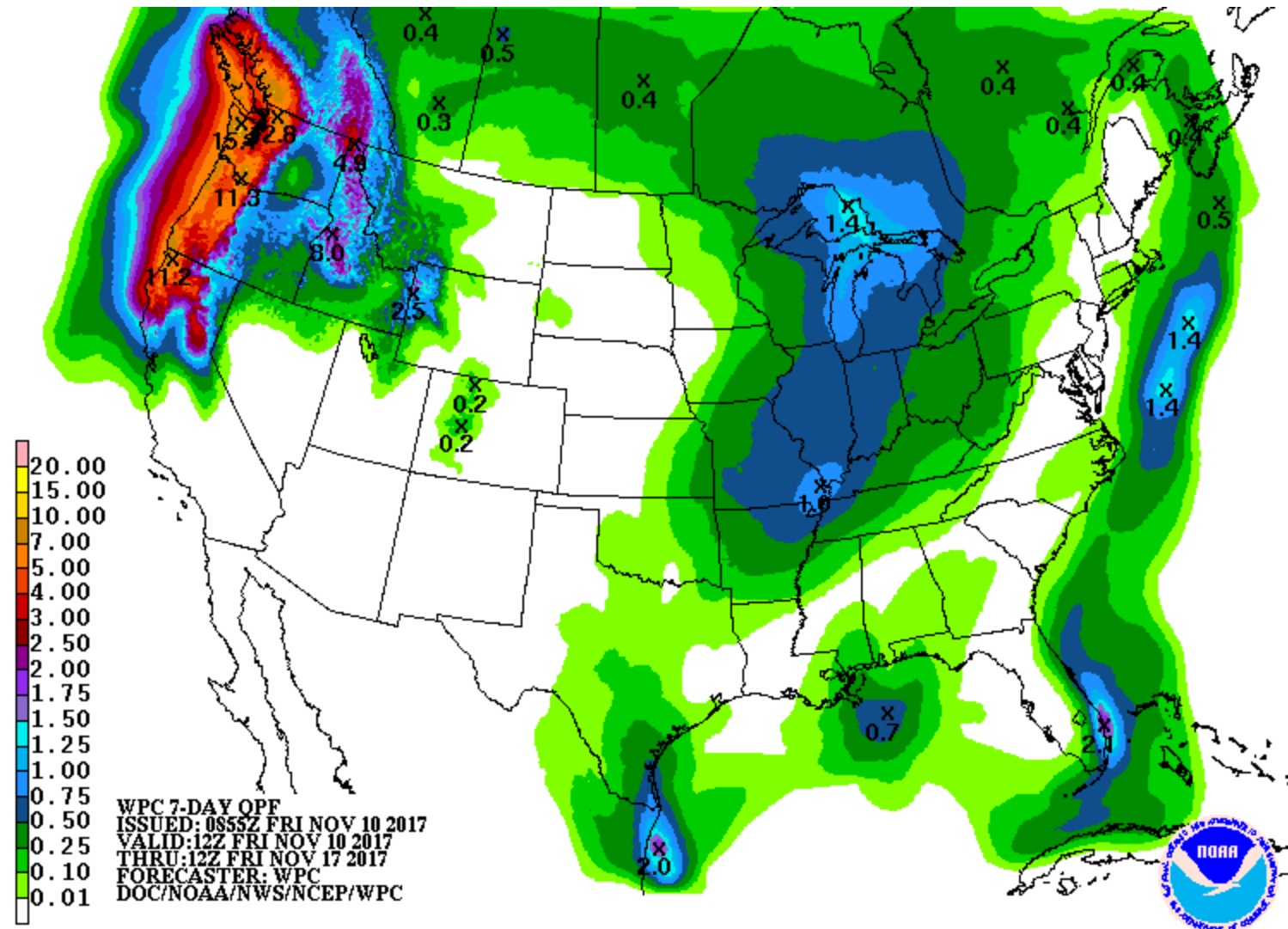
Generated 11/10/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

RADAR 7AM FRIDAY



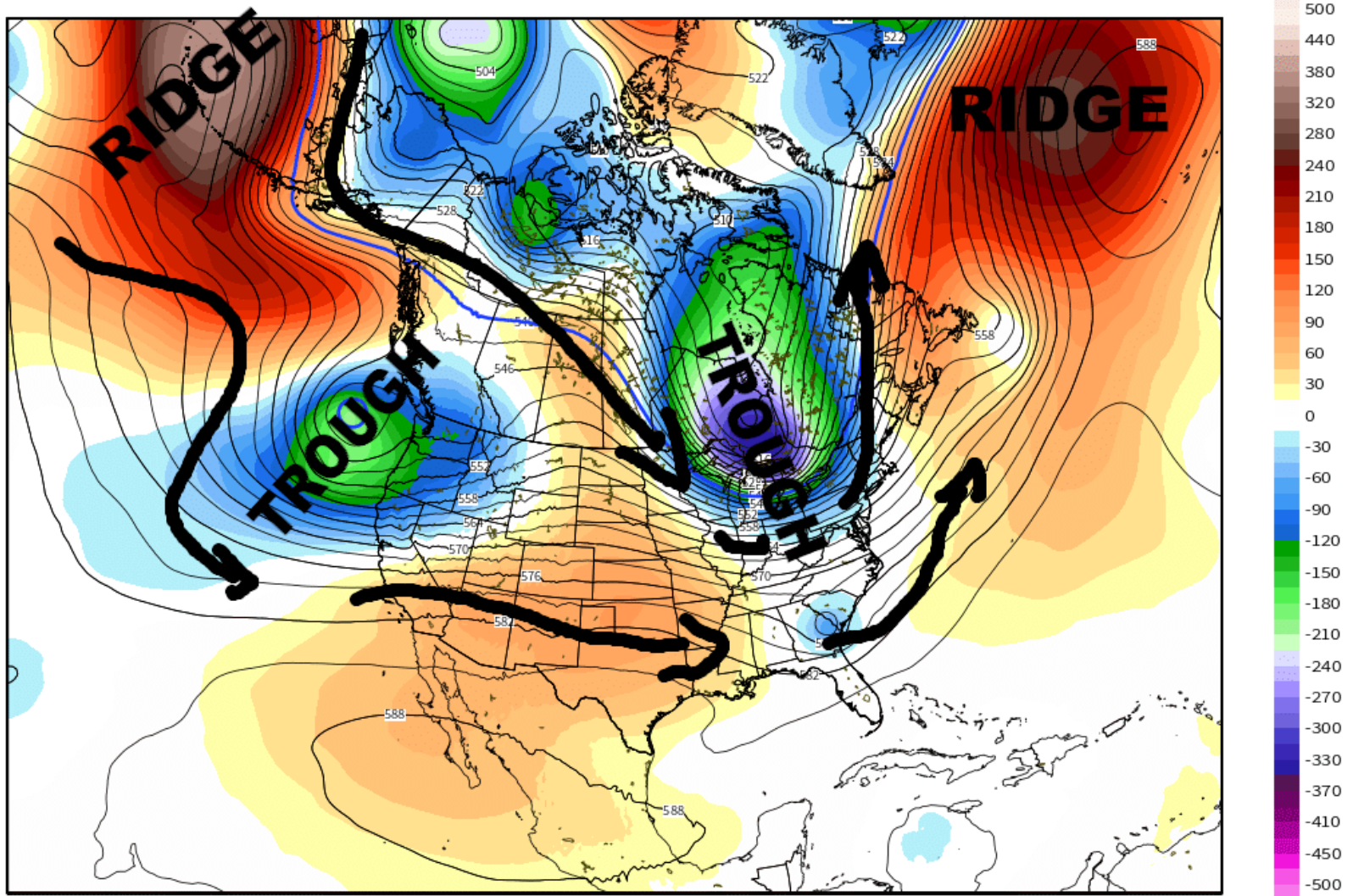
NWS OFFICIAL RAINFALL NEXT 7 DAYS



500mb map 10 NOV

NCEP GFS 500 hPa Geopotential Height [dm] & Anomaly [m]
Init: 00Z10NOV2017 -- [0] hr --> Valid Fri 00Z10NOV2017

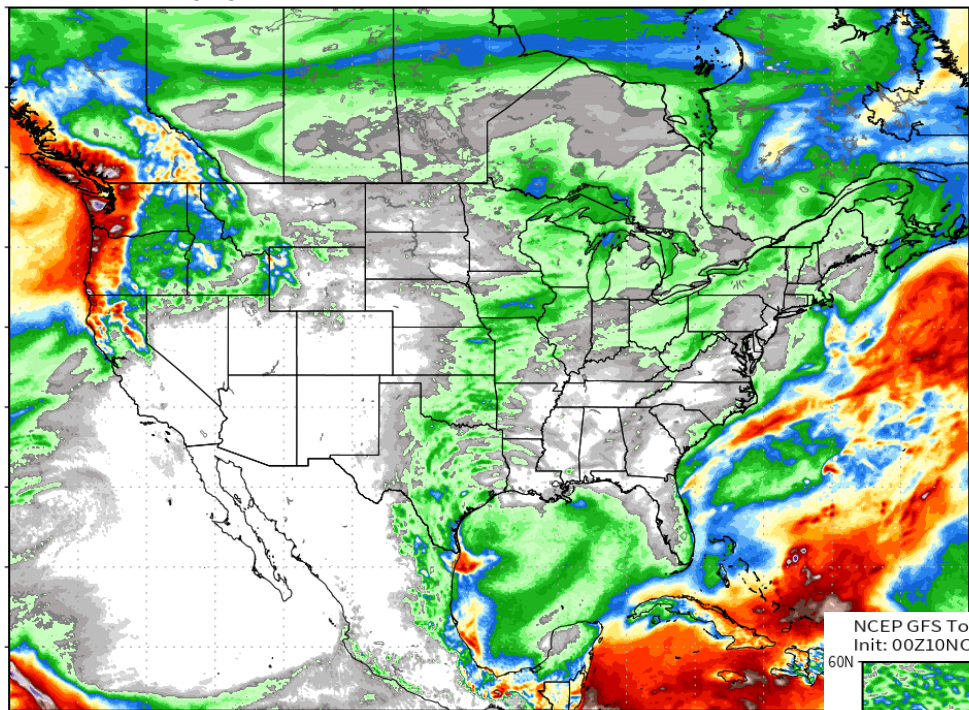
MIN|MAX: -345.7 | 371.5 m



ECMWF Total Precipitation [inch]
Init: 00Z10NOV2017 -- [126] hr --> Valid Wed 06Z15NOV2017

MAX: 13.5 inch

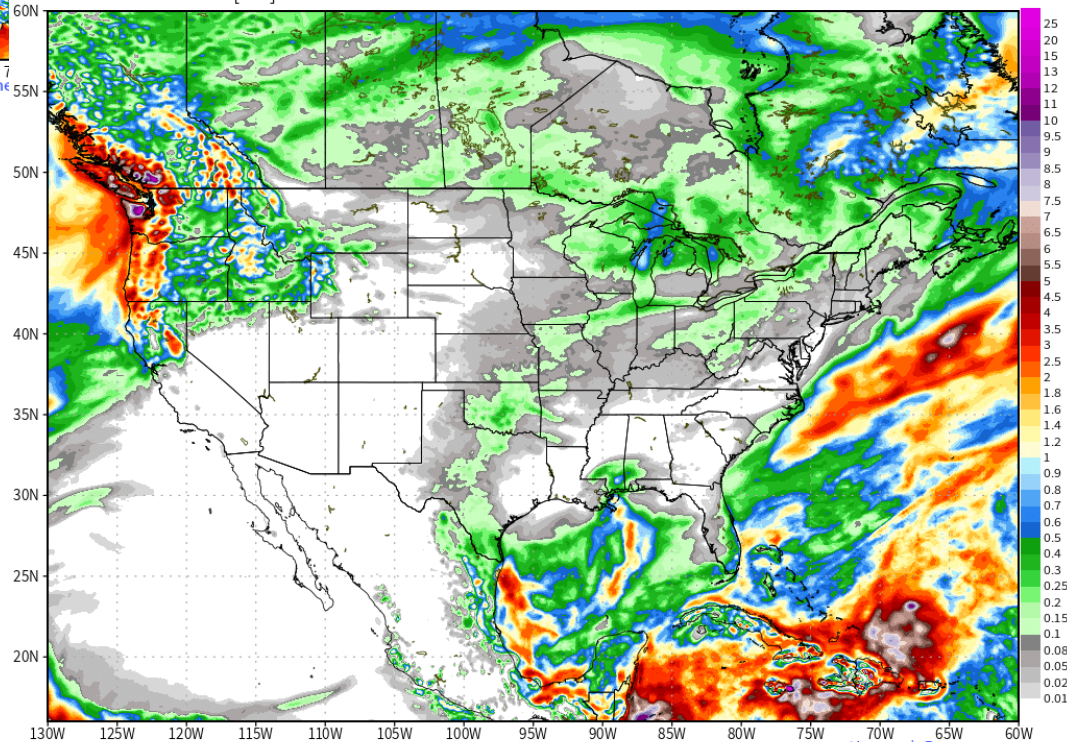
EURO RAINFALL NEXT 5 DAYS



NCEP GFS Total Precipitation [inch]
Init: 00Z10NOV2017 -- [120] hr --> Valid Wed 00Z15NOV2017

MAX: 21.1 inch

GFS RAINFALL NEXT 5 DAYS



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

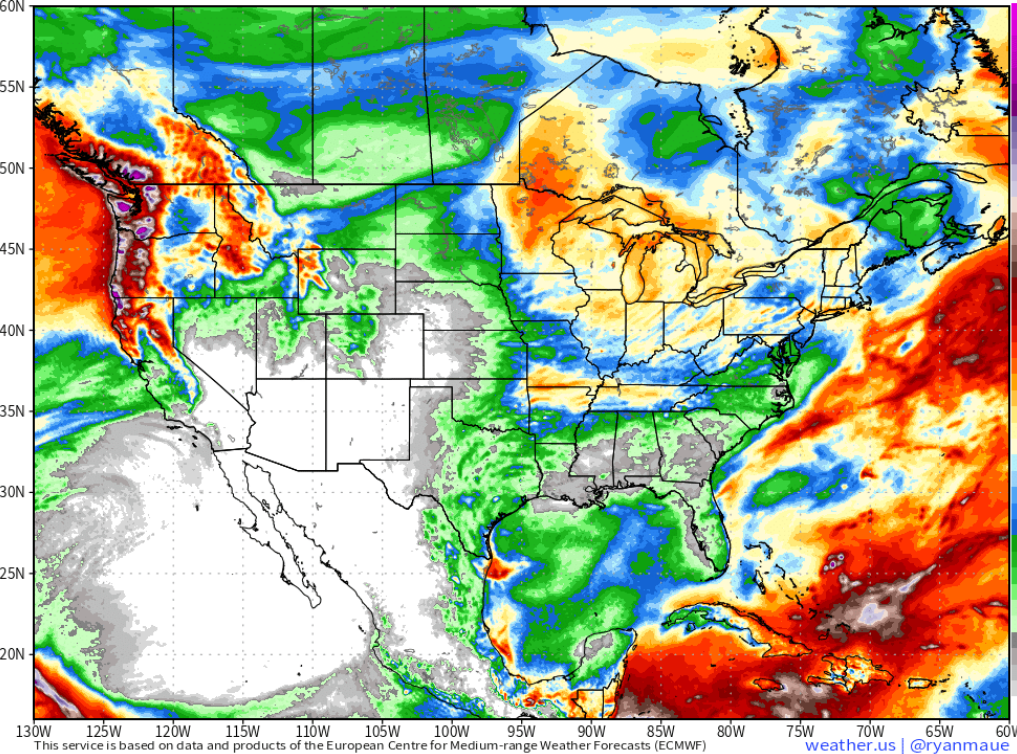
weather

weather.us | @ryanmaue

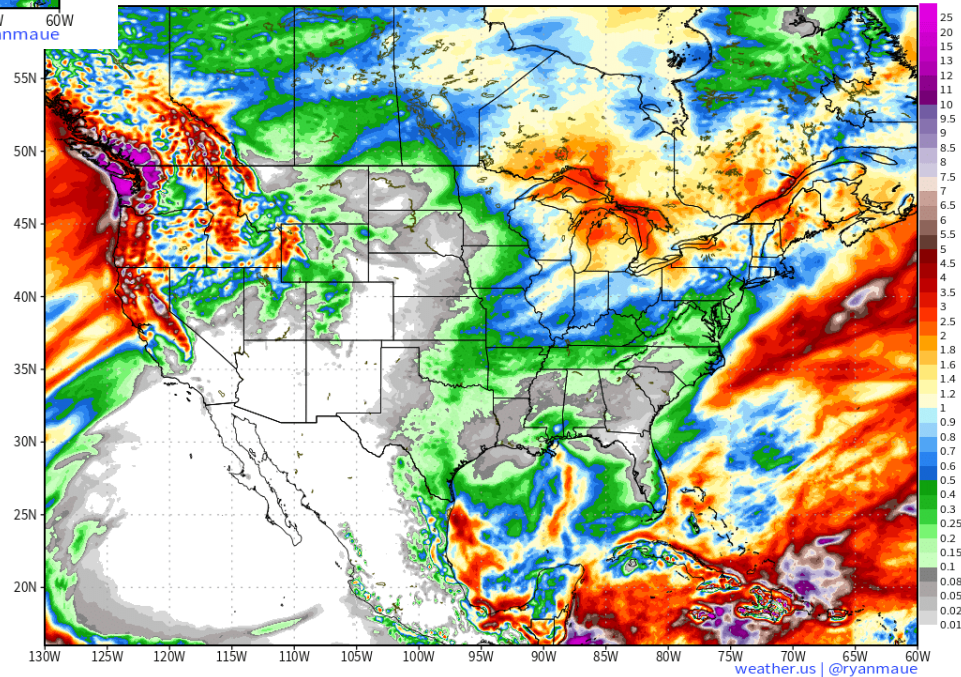
ECMWF Total Precipitation [inch]
Init: 00Z10NOV2017 -- [240] hr --> Valid Mon 00Z20NOV2017

MAX: 16.6 inch

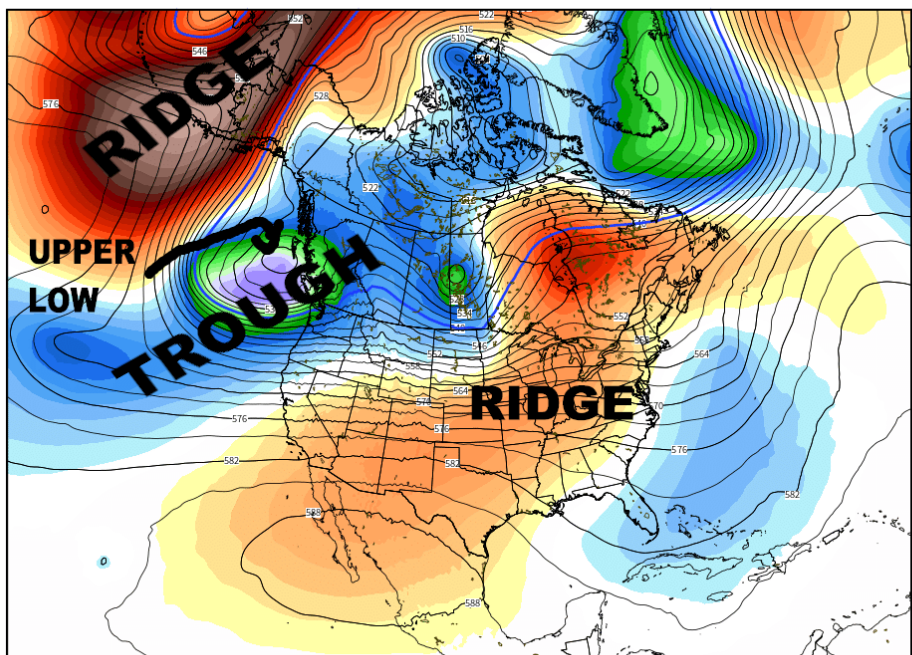
EURO RAINFALL NEXT 10 DAYS



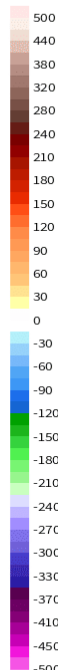
GFS RAINFALL NEXT 10 DAYS



weather.us | @ryanmaue

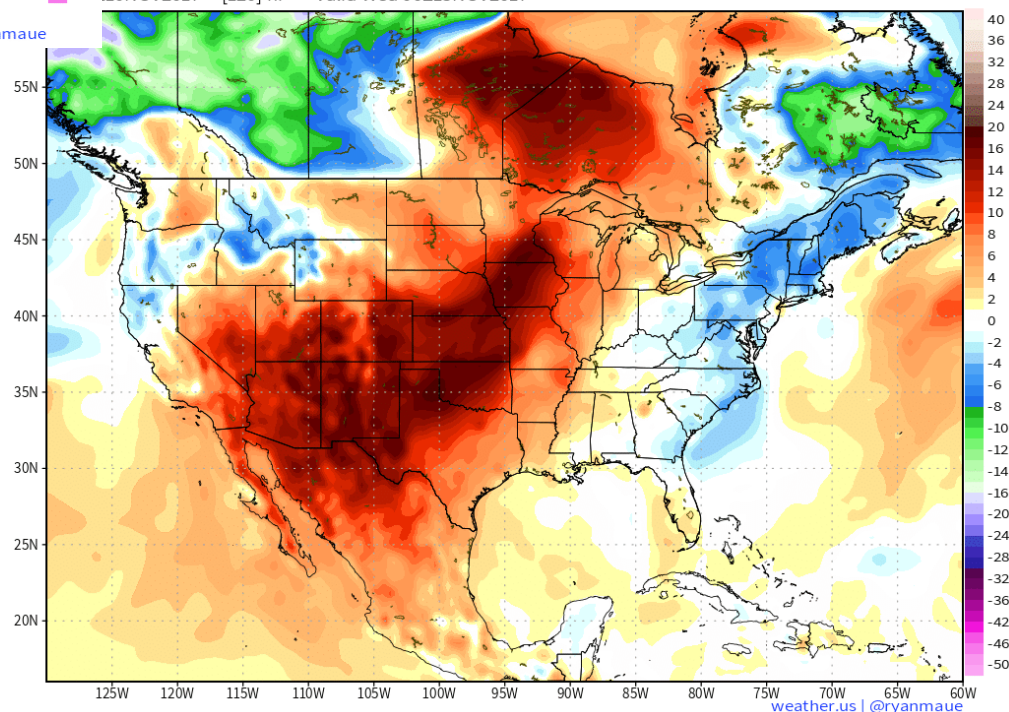


Pattern warms up middle of next week over Plains/ Midwest



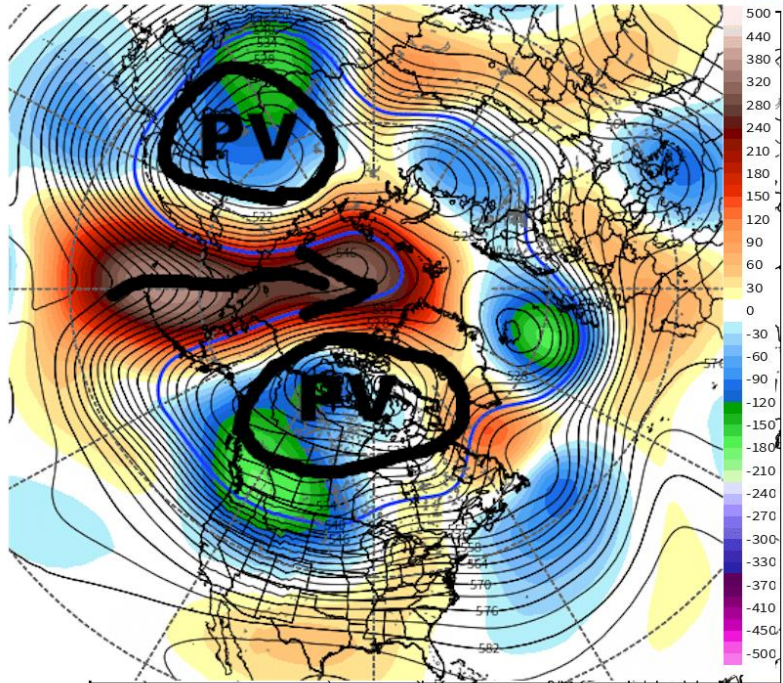
FS 2-m Temperature Anomaly [°F]
-500:10NOV2017 -- [120] hr --> Valid Wed 00Z15NOV2017

weather.us | @ryanmaue



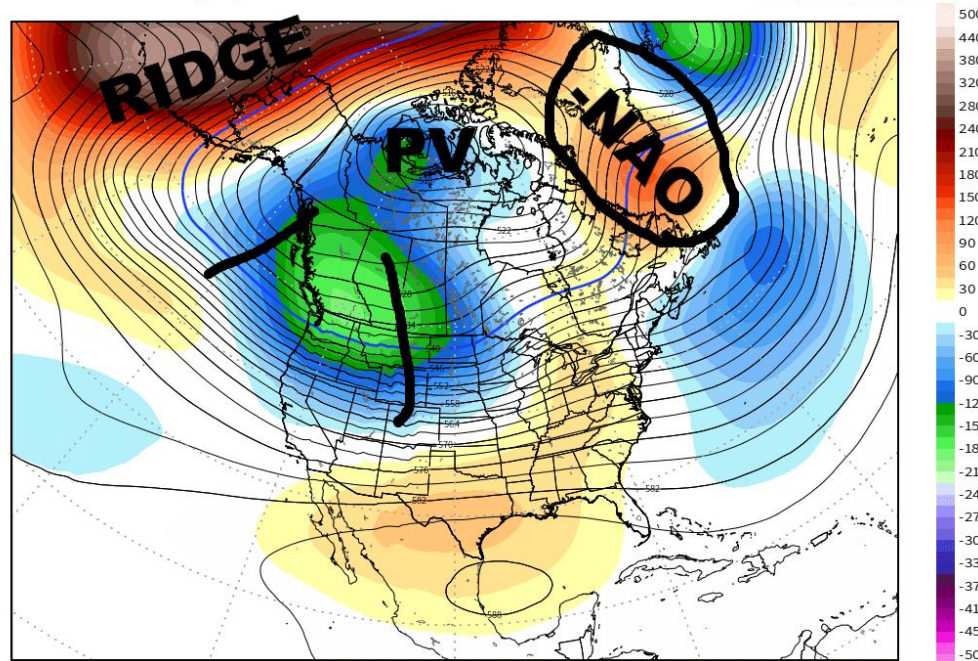
Massive RIDGE over central N Pacific Sea / Bering Sea expands into arctic Region. This causes the pattern to begin to change. Large Upper Low- the PV forms over nw Canada which allows arctic air to pool over western Canada AND causes a 'BLOCK' in the Jet stream to form over Greenland

ECMWF EPS 500 hPa Geopotential Height [dm] & Anomaly [m] | Ensemble Mean | 1997-2006 Hindcast M-Climat
 Init: 12Z09NOV2017 -- [180] hr --> Valid Fri 00Z17NOV2017

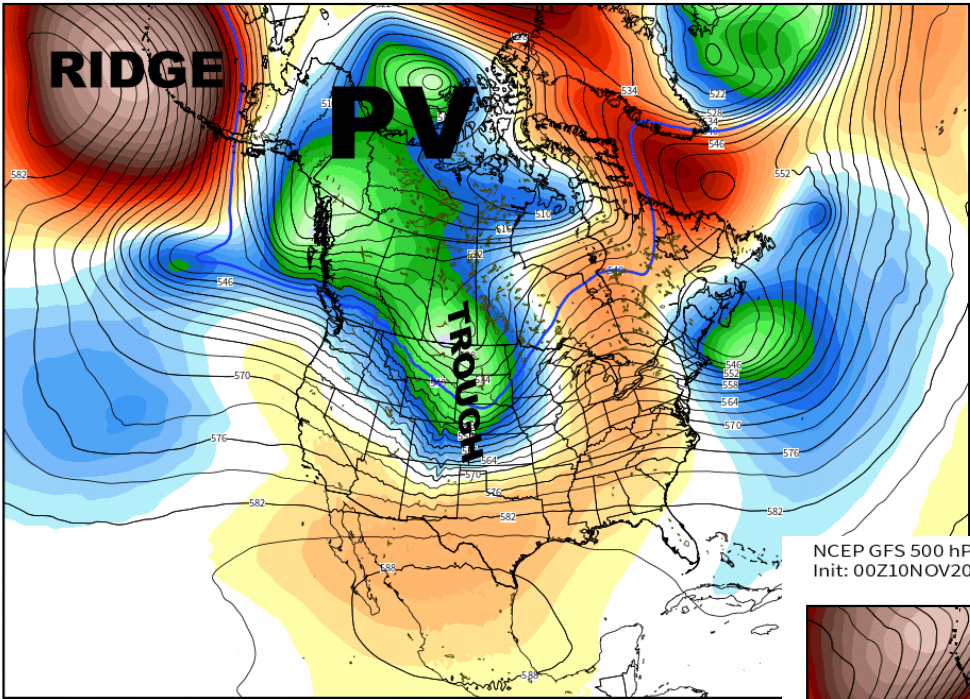


This service is based on data and products of the European Centre for Medium-range Weather Forecasts (ECMWF) weather.us

ECMWF EPS 500 hPa Geopotential Height [dm] & Anomaly [m] | Ensemble Mean | 1997-2006 Hindcast M-Climat
 Init: 12Z09NOV2017 -- [180] hr --> Valid Fri 00Z17NOV2017 MIN|MAX: -183.3 | 372.7 m



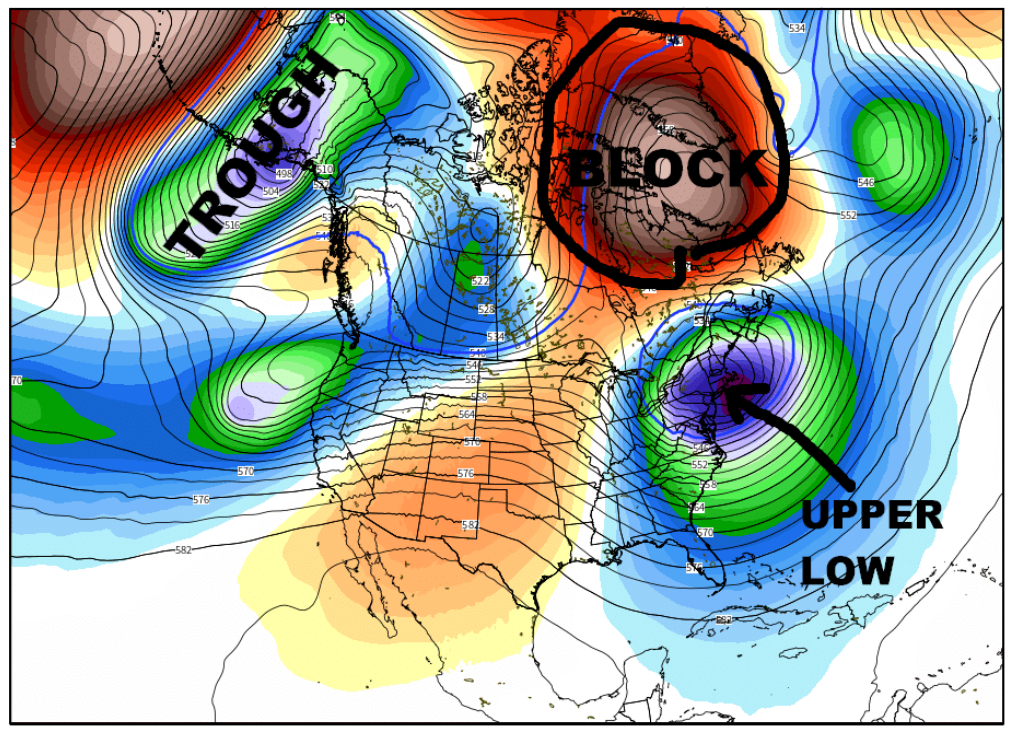
This service is based on data and products of the European Centre for Medium-range Weather Forecasts (ECMWF) weather.us | @ryanmaue



**Piece of energy
comes out of pac
NW into Rockies ...**

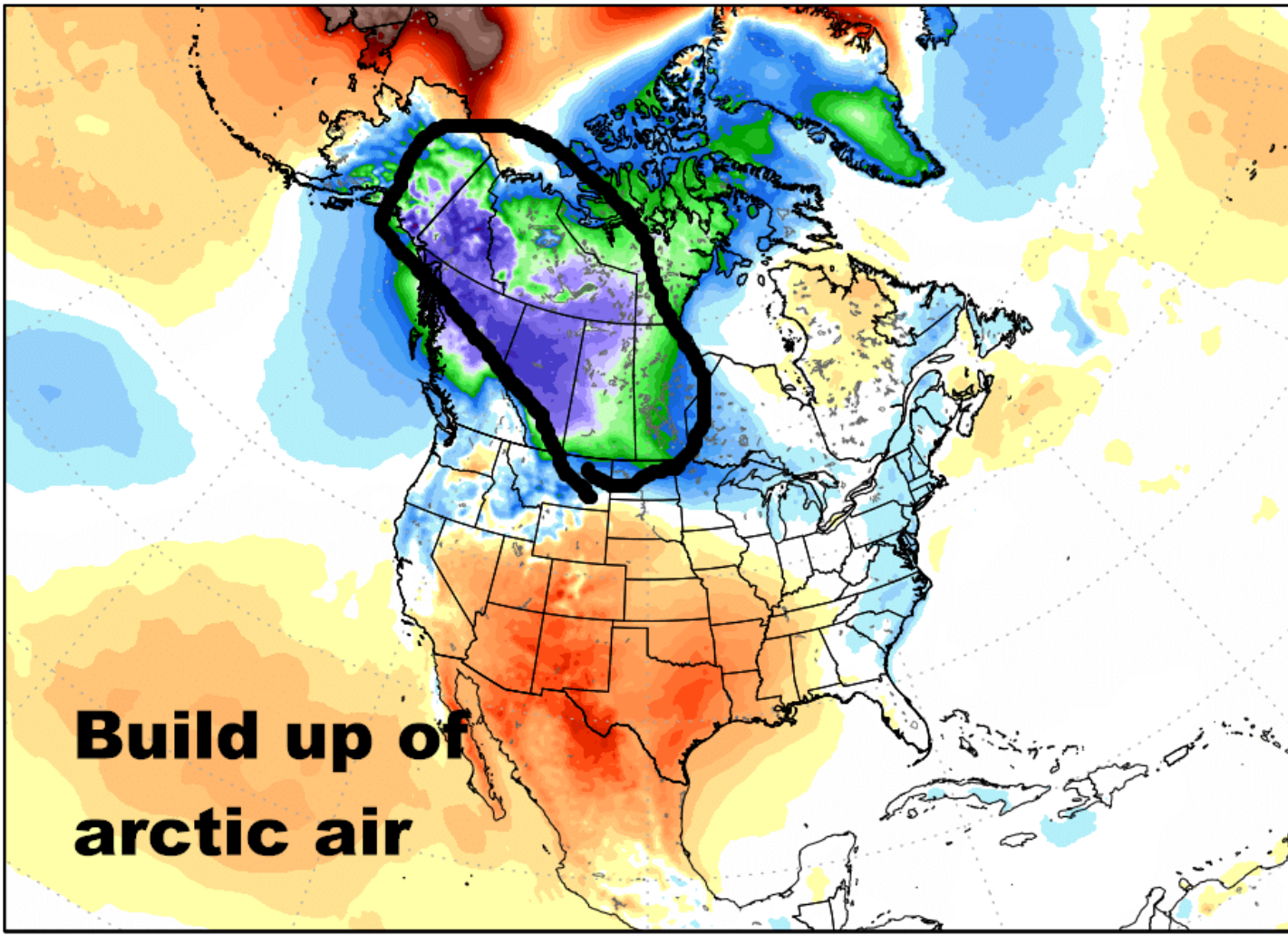
NCEP GFS 500 hPa Geopotential Height [dm] & Anomaly [m]
Init: 00Z10NOV2017 -- [240] hr --> Valid Mon 00Z20NOV2017

**Which models
develop BIG east
Coast LOW NOV 18-
19 – note BLOCK
over ne Canada/
Greenland**



ECMWF EPS 2-meter Temperature Anomaly [°C] | 5-day Ensemble Mean --> 00Z15NOV2017 & 00Z20NOV2017 Day 5 - Day 10
Init: 00Z10NOV2017 -- [240] hr --> Valid Mon 00Z20NOV2017

MIN|MAX -15.6° | 13.7°C



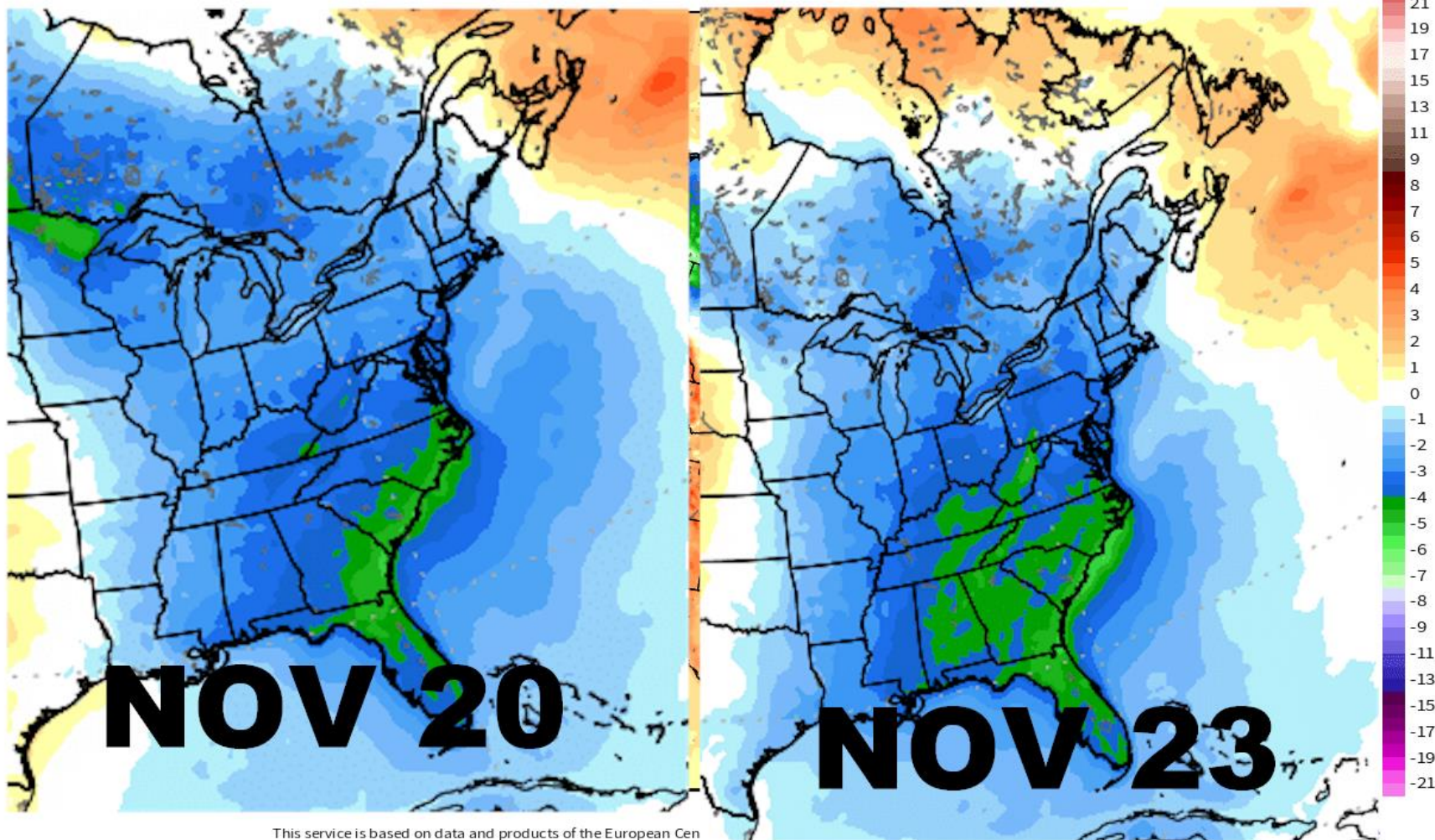
**Build up of
arctic air**

Thanksgiving week looks chilly/ cold over eastern US - east of Mississippi river

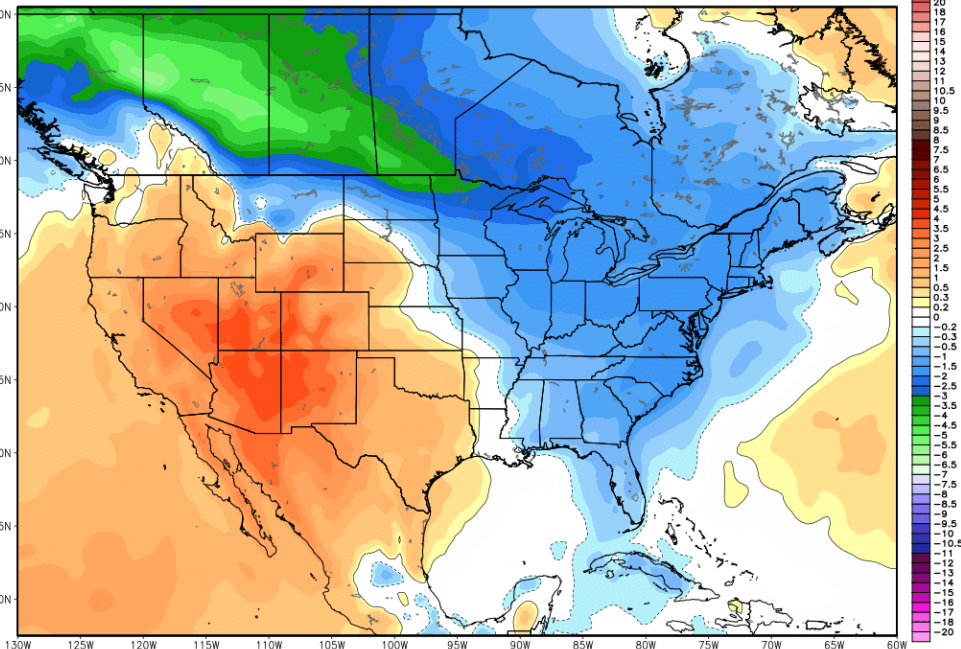
SURFACE TEMP ANOMALIES

ECMWF EPS 2-meter Temperature Anomaly [°C] | Ensemble Mean | 1997-2016 M-Climate Hindcast Climatology
Init: 12Z09NOV2017 -- [336] hr --> Valid Thu 12Z23NOV2017

MIN|MAX -11.6° | 9.1°C



NOV 10 .. EURO WEEKLIES next 30 day TEMP ANOMALIES

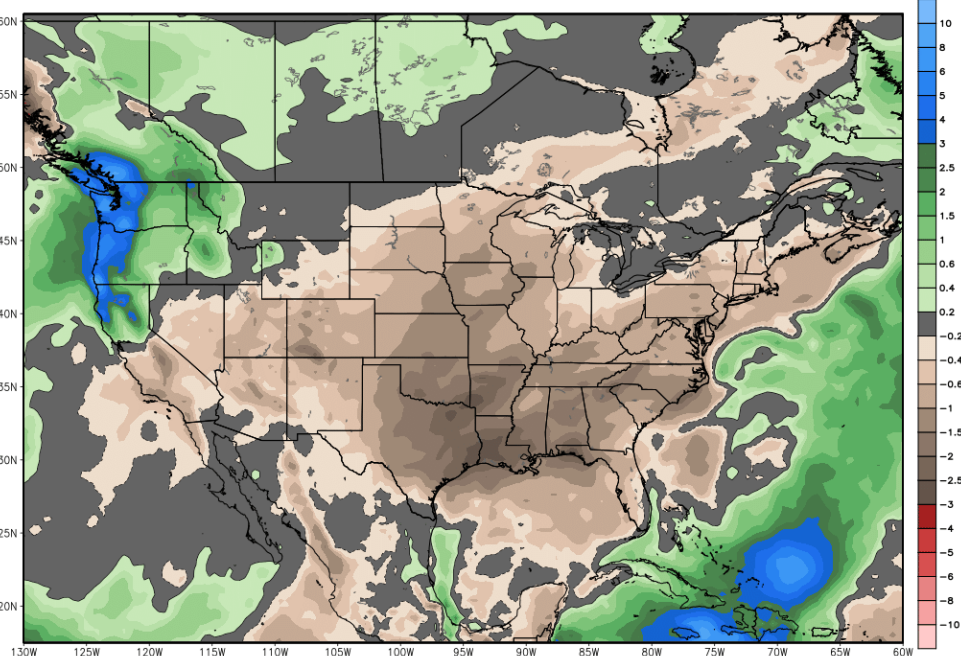


Average between 00Z09NOV2017-00Z11DEC2017 | ECMWF EPS 1996-2015 Hindcast Climatology

NOV 10 .. EURO WEEKLIES next 30 day PRECIP ANOMALIES

ECMWF EPS Ensemble Mean 32-day Avg Precipitation Anomaly [inch]
Init: 00Z09NOV2017 -- [768] hr --> Valid on Mon 00Z11DEC2017 Day 0 - Day 32

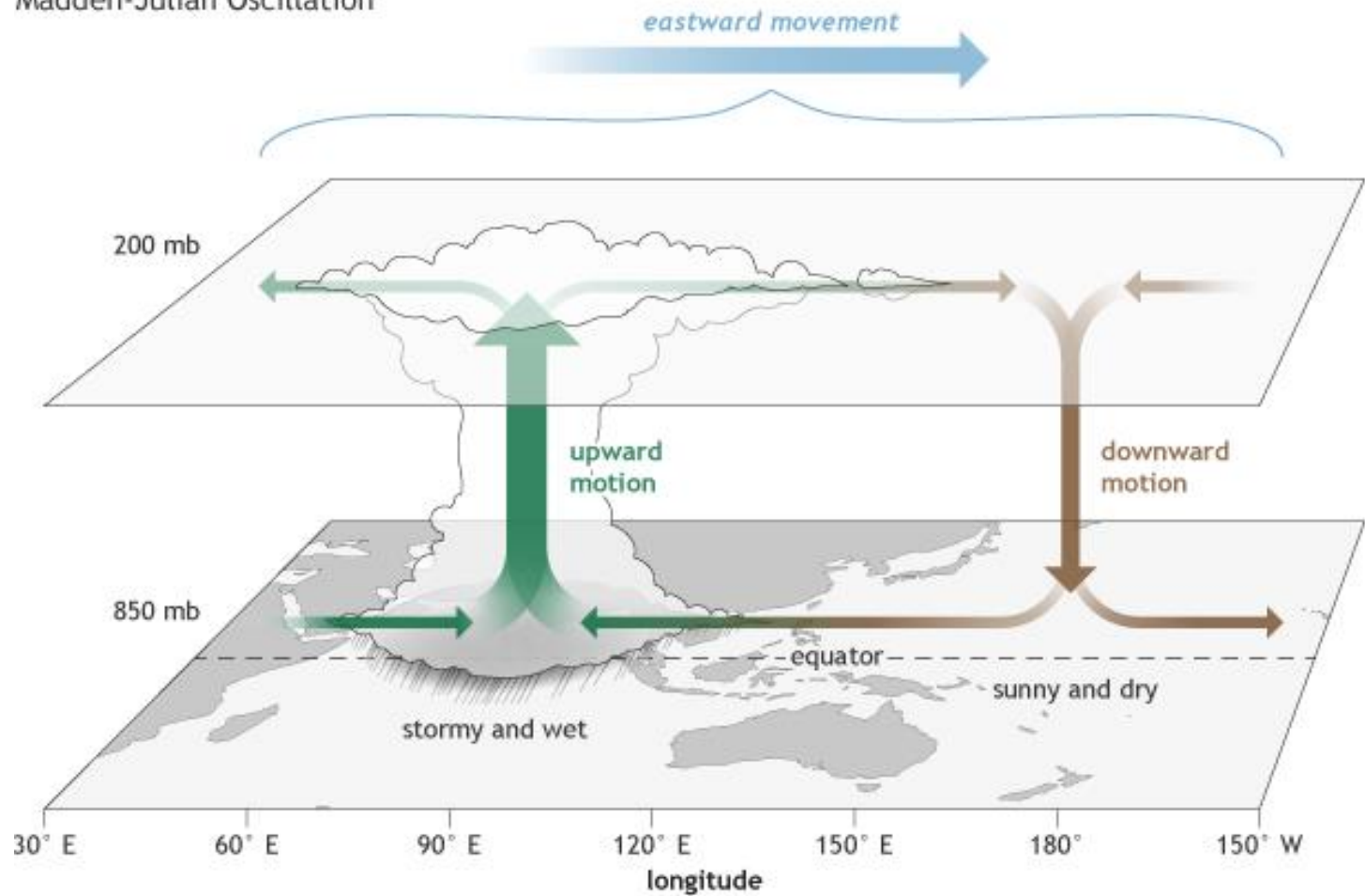
Min|Max Anom: -3.4 | 9.1 inch



Accumulation between 00Z09NOV2017-00Z11DEC2017 | ECMWF EPS 1996-2015 Hindcast Climatology

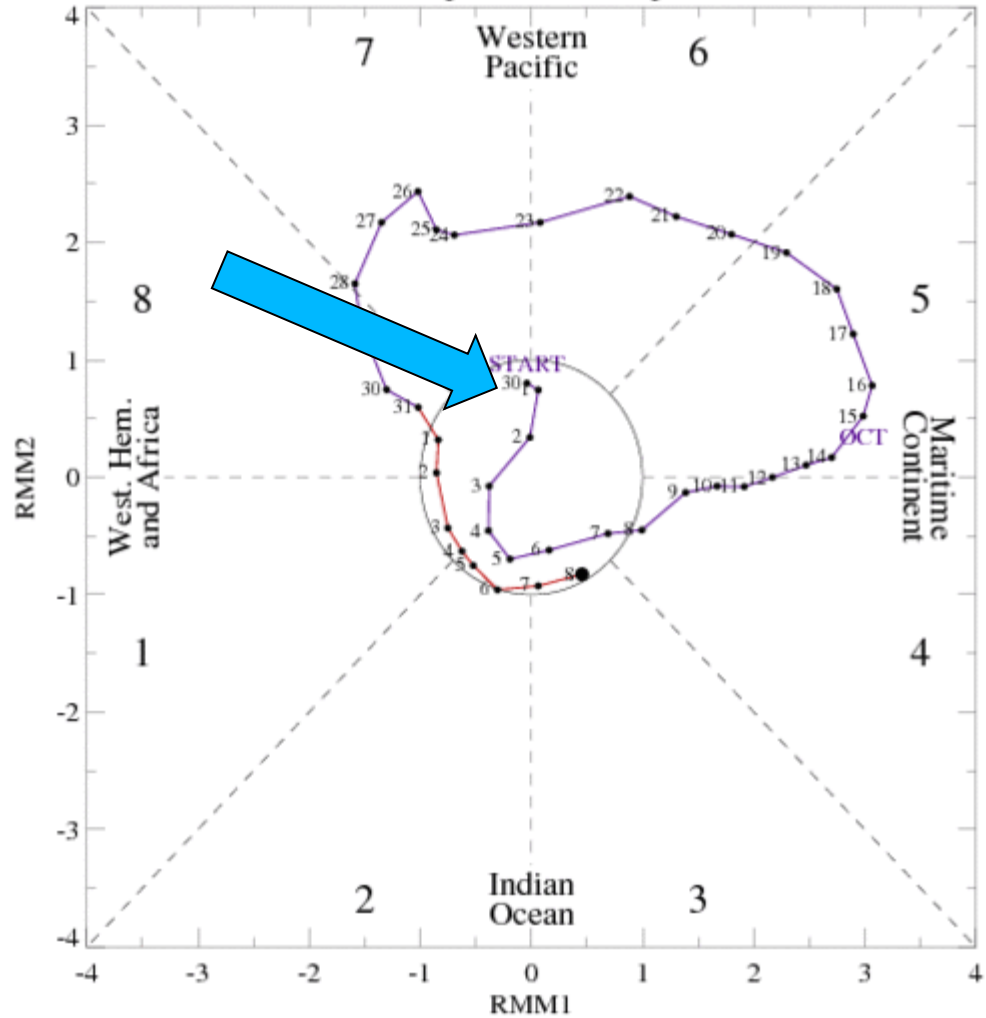
LETS TALK MJO/ENSO

Madden-Julian Oscillation



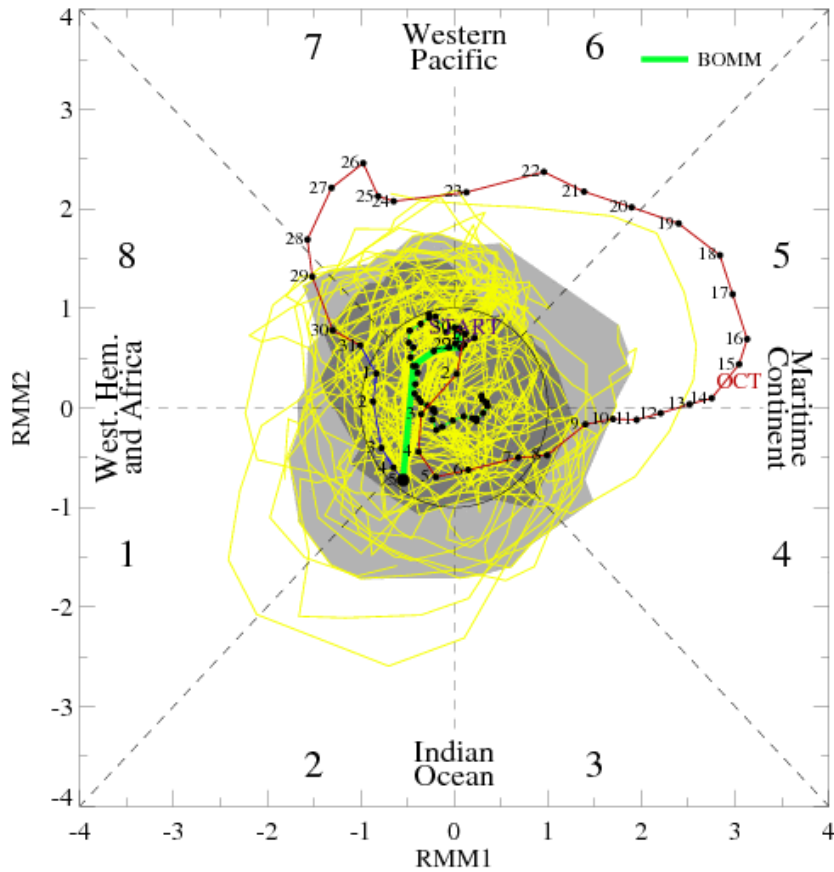
MJO IS DEAD

[RMM1, RMM2] Phase Space for 30-Sep-2017 to 08-Nov-2017

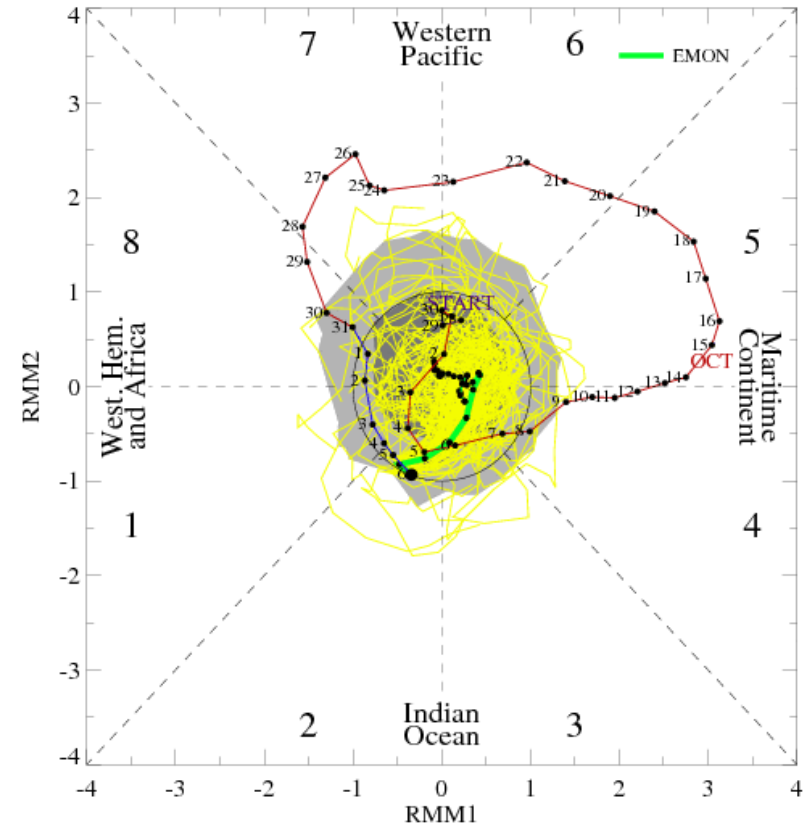


MJO DEAD ...NO MOVEMENT / DEVELOPMENT THRU MID DEC

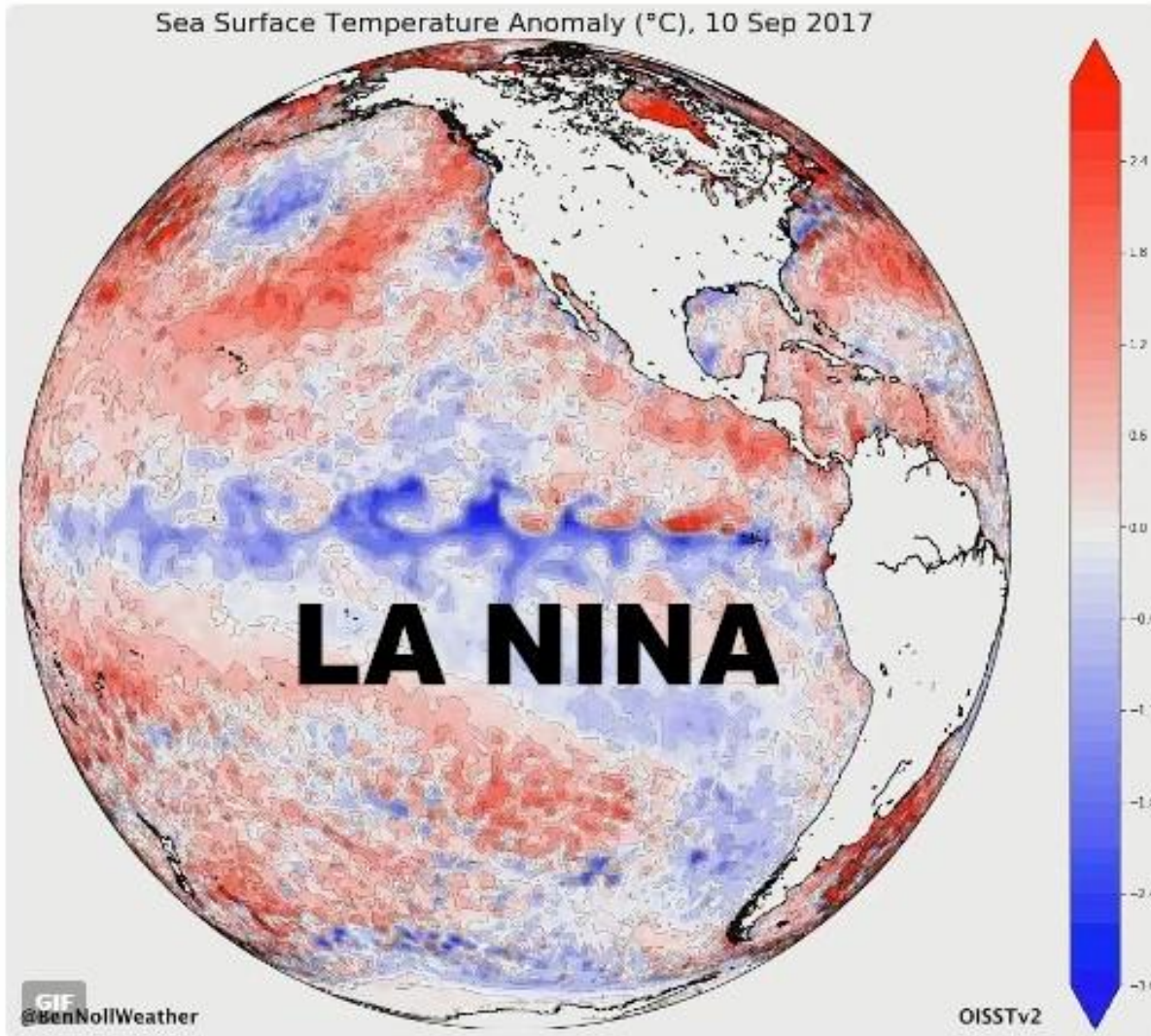
MJO Index Forecast for 05Nov2017-17Dec2017



MJO Index Forecast for 07Nov2017-08Dec2017



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



6:29 AM - 13 Sep 2017

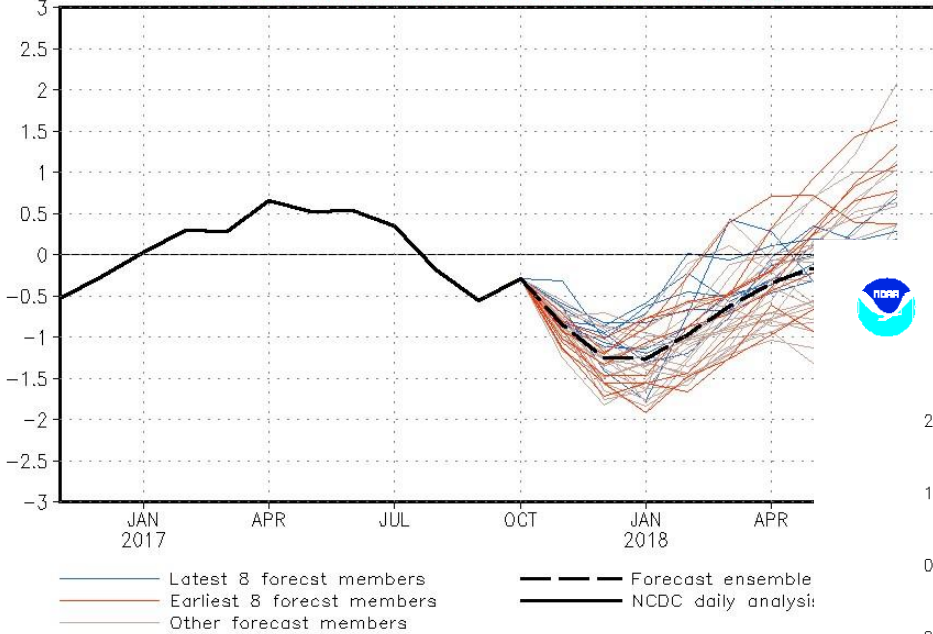
LATEST CFS MODEL PROJECTION = ** BACKING OFF IDEA OF MODERATE LA NINA FOR THE WINTER ... WEAK LA NINA FAVORED



NWS/NCEP/CPC

Last update: Thu Oct 19 2017
 Initial conditions: 29Sep2017-8Oct2017

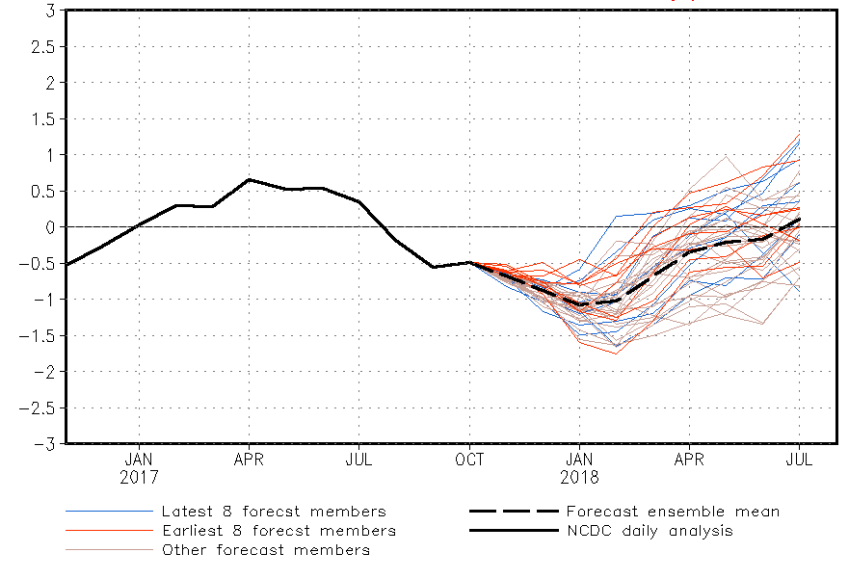
CFSv2 forecast Nino3.4 SST anomalies (K)



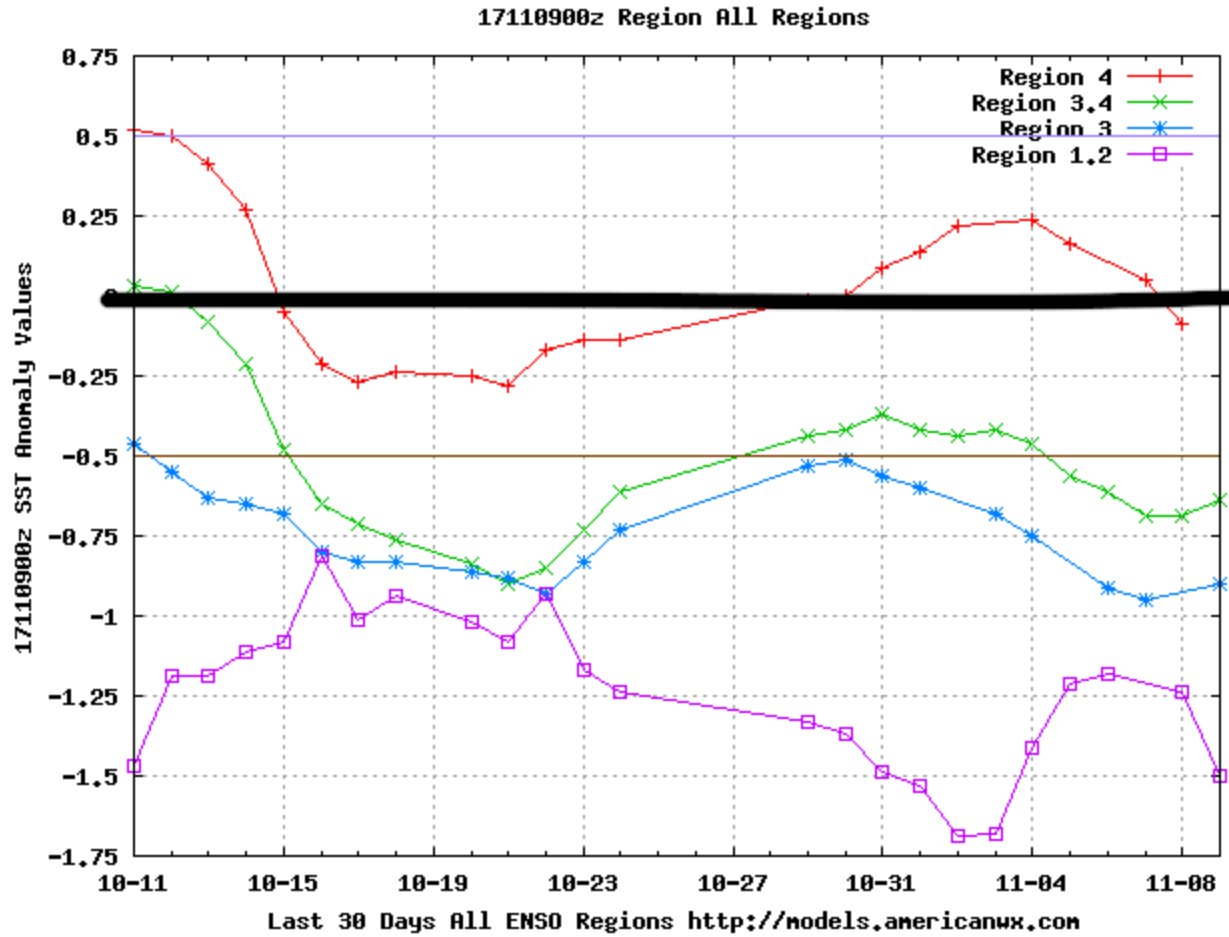
NWS/NCEP/CPC

Last update: Tue Nov 7 2017
 Initial conditions: 27Oct2017-5Nov2017

CFSv2 forecast Nino3.4 SST anomalies (K)

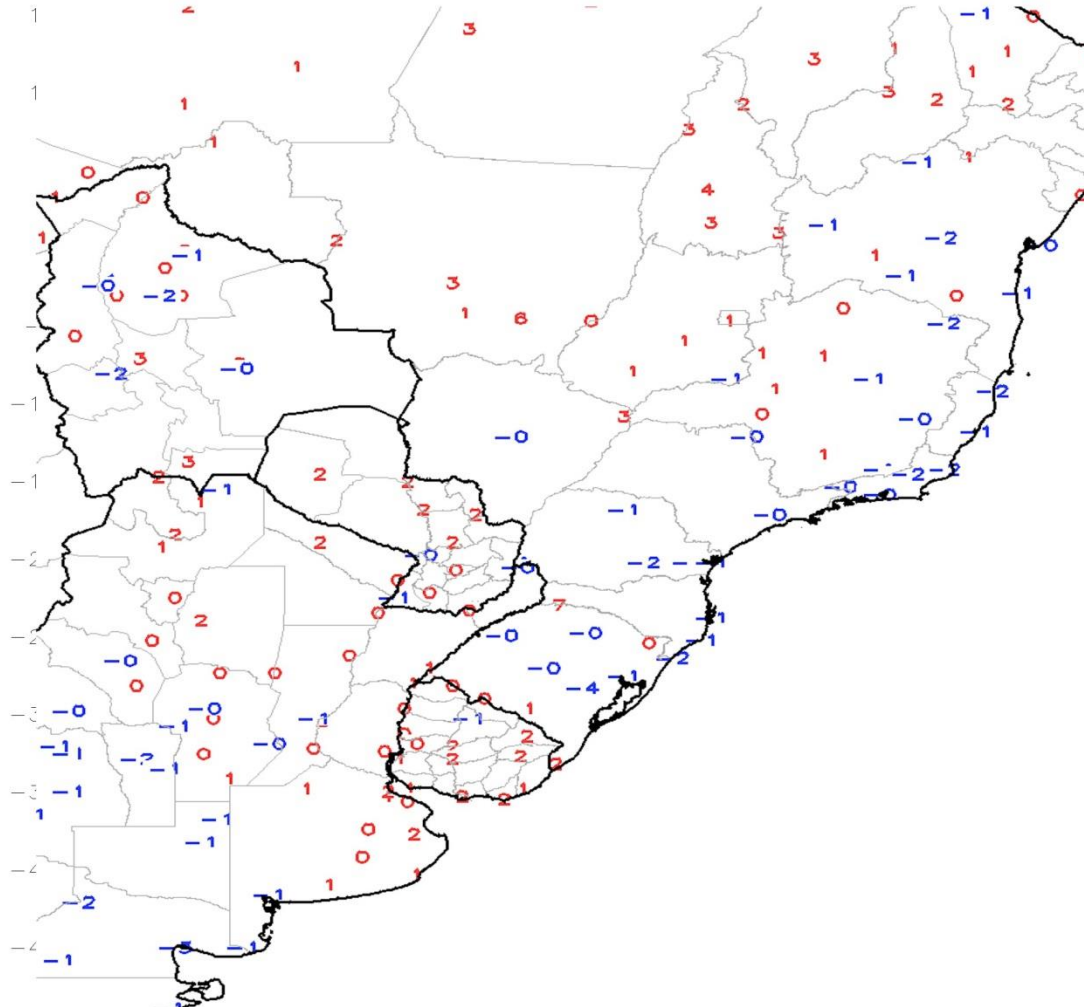


ACTUAL SEA SURFACE TEMP ANOMALIES – not projection .. Large area of cold water surface and sub surface -- weak LA NINA is here

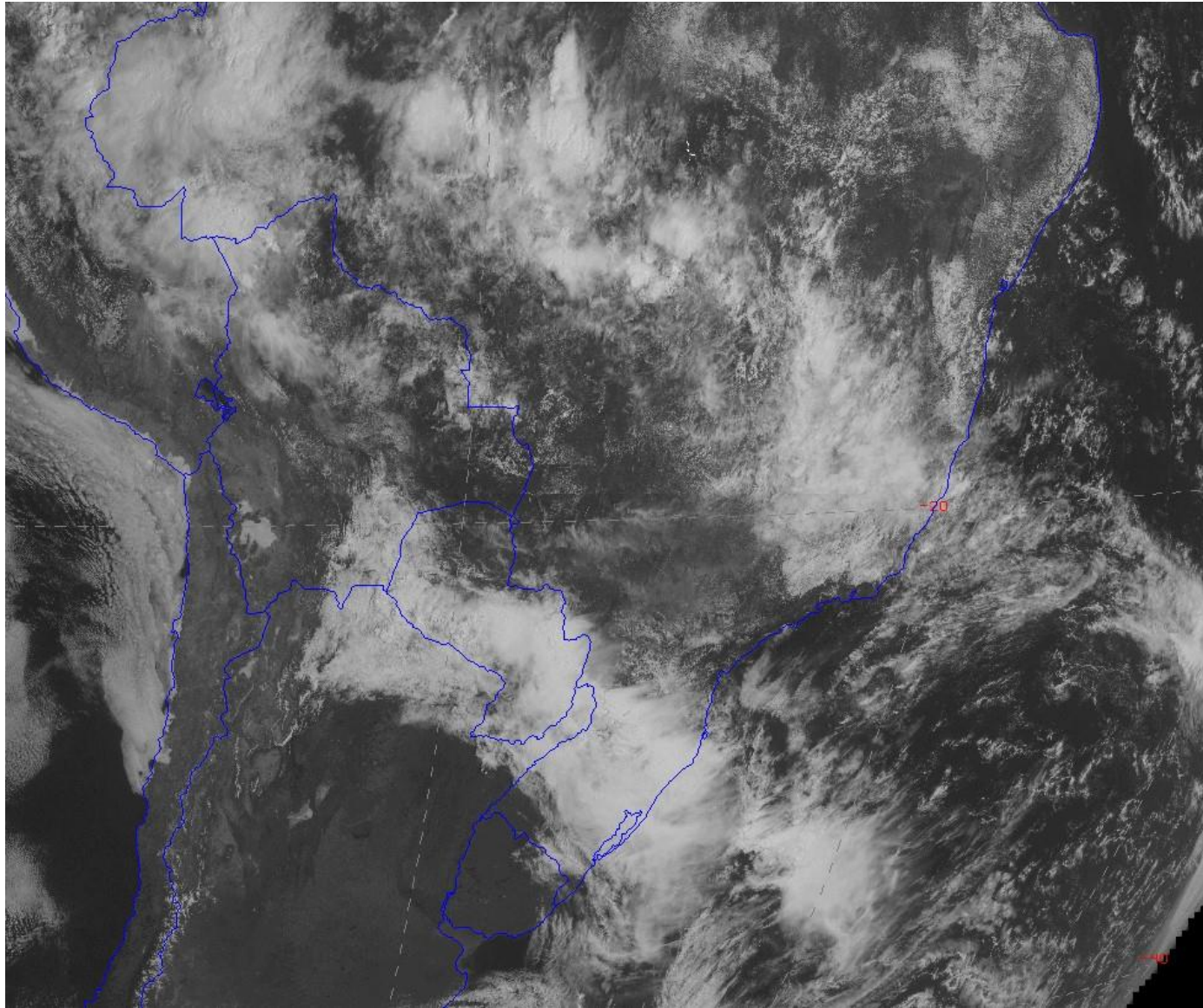


Much cooler temps over all of Brazil relative to normal

GTS Station Running 7-Day Average Temperature Anomaly (C)
Period: 02Nov2017 - 08Nov2017



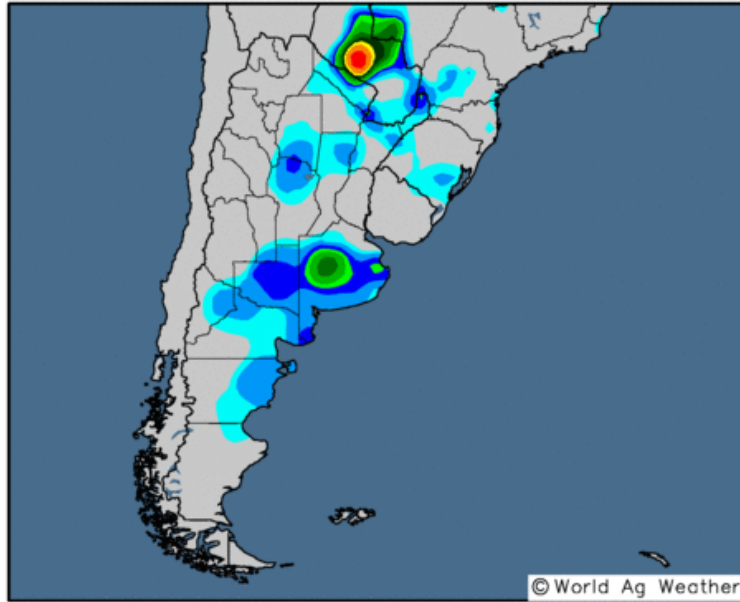
Storms over Parg into RGDS into se Brazil and over Minas Gerais...and over ne Mato Grosso/ Tocantins



NOV 8 RAINS ... 1-3" over 50% Goais/ Tocantins rest of rains over western / east Brazil UNDERPERFORM

24-hour Precipitation Analysis

Observed precipitation (inches) through 12 UTC 8 Nov 2017

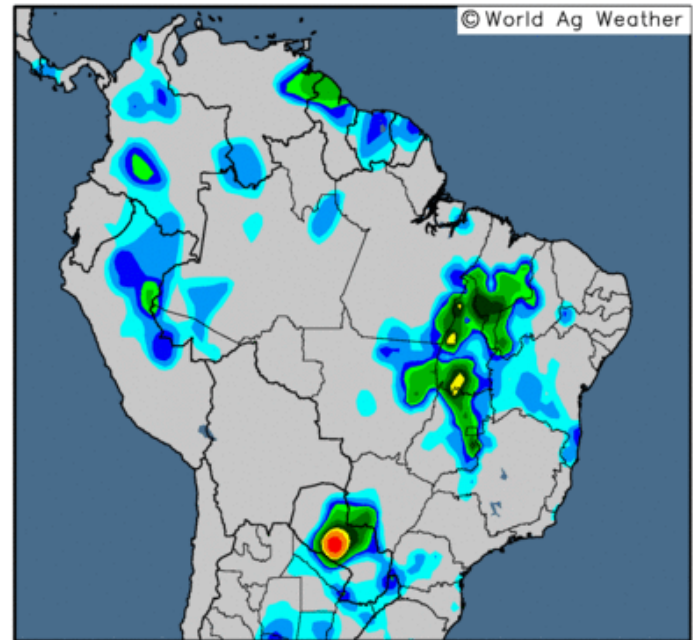


0.1 0.25 0.5 0.75 1 1.5 2 2.5 3 4 5 6 8

Map updates daily by approximately 20:30 UTC

24-hour Precipitation Analysis

Observed precipitation (inches) through 12 UTC 8 Nov 2017

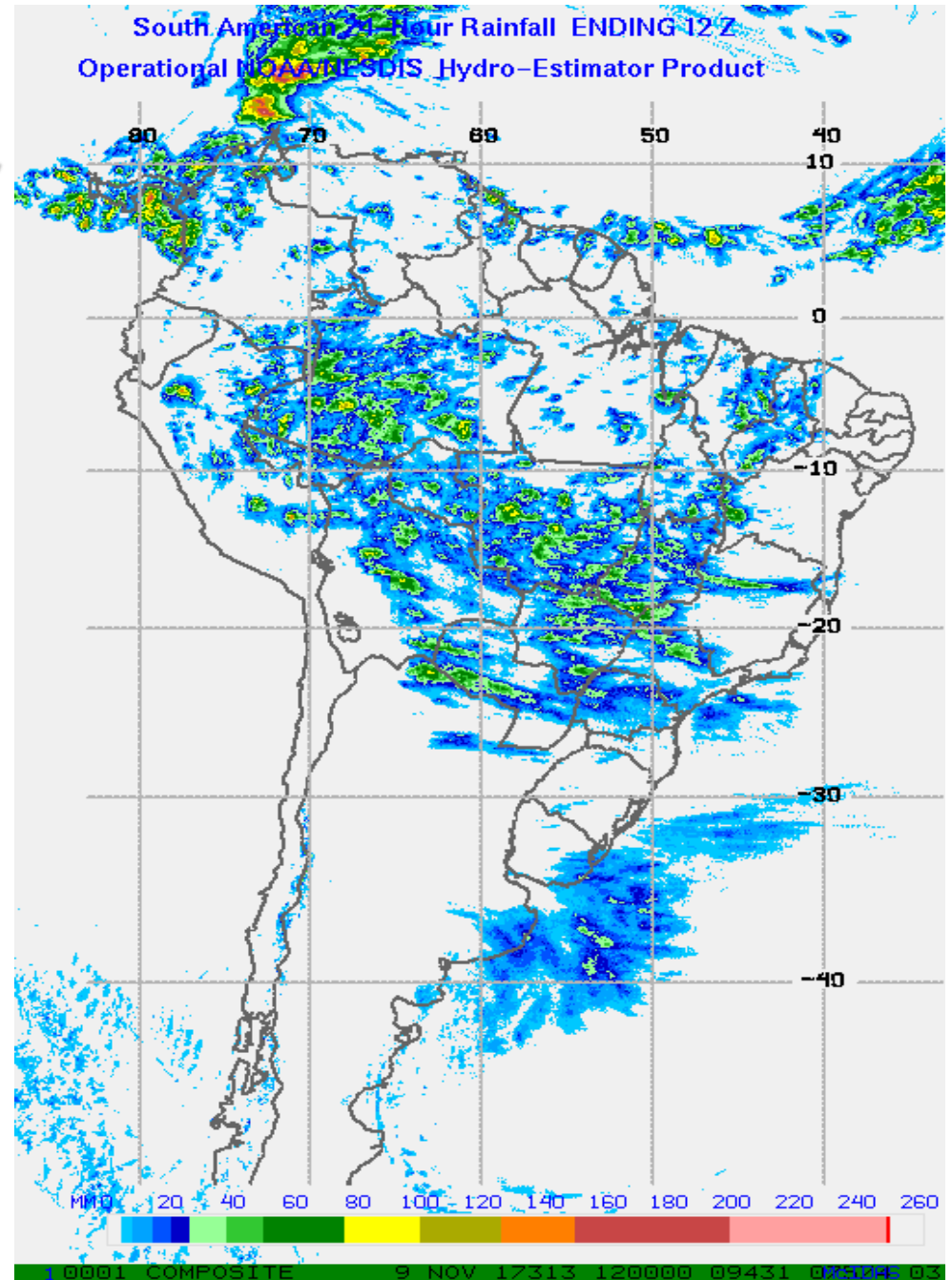


0.1 0.25 0.5 0.75 1 1.5 2 2.5 3 4 5 6 8 10

Map updates daily by approximately 20:30 UTC

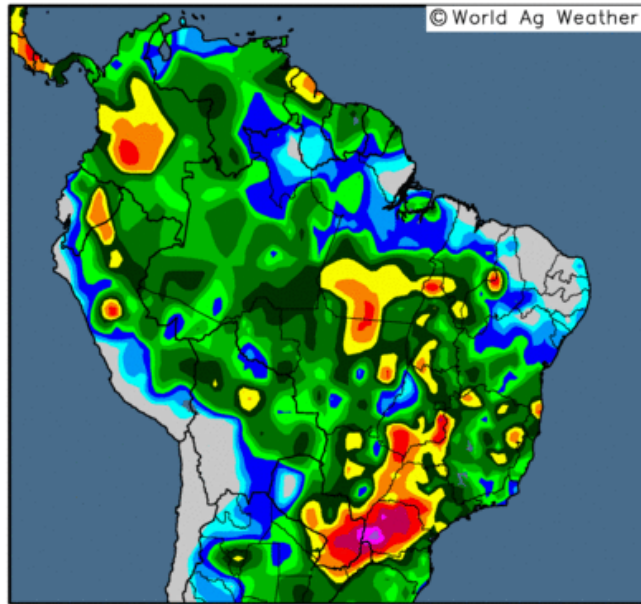
RAINS NOV 8-9...
Widely scattered 10-
30mm/ 0.2 to 1.5" over
50% Mato Grosso
MGDS ... Goias ...

Again under
performing



14-day Precipitation Analysis

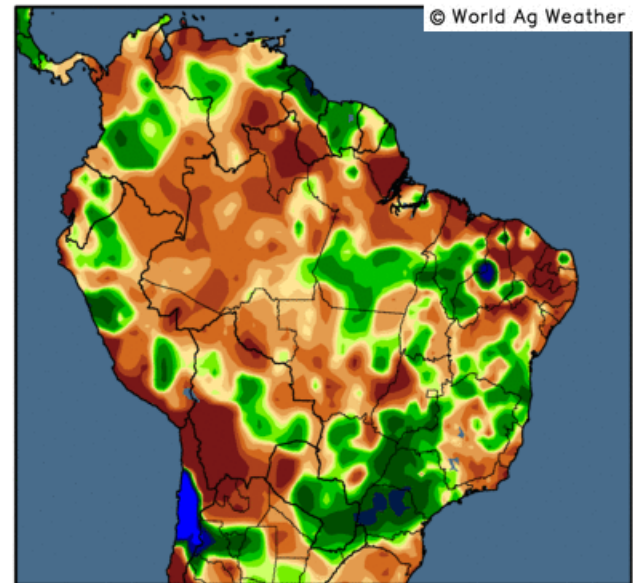
Observed precipitation (inches) through 12 UTC 8 Nov 2017



**Over past 14D ...4-10"/
100-300mm over se Parg
into most of Parana
west Sao Paulo se
Goias ... 1-4"/ 25-
100mm over North
Minas/ south Bahia**

14-day Precipitation Analysis

Percent of normal through 12 UTC 8 Nov 2017



0.1 0.25 0.5 1 1.5 2 3 4 5 6 8 10 12 15

Map updates daily by approximately 20:30 UTC

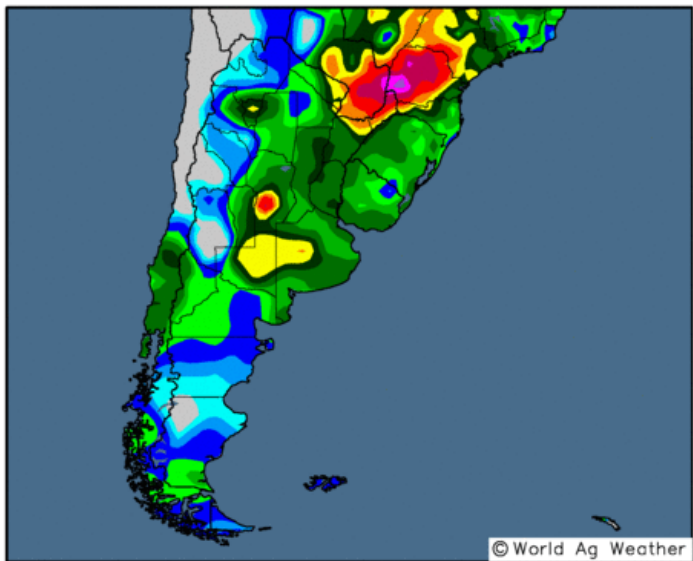
**Over east Parg/ se
Brazil 150-200% of
Normal but still well
Below Normal over much
of Minas Gerais west
Goias south Minas
Gerais**

20 40 60 80 90 100 110 125 150 200 300 400 600

Map updates daily by approximately 20:30 UTC

14-day Precipitation Analysis

Observed precipitation (inches) through 12 UTC 8 Nov 2017



0.1 0.25 0.5 1 1.5 2 3 4 5 6 8 10 12 15

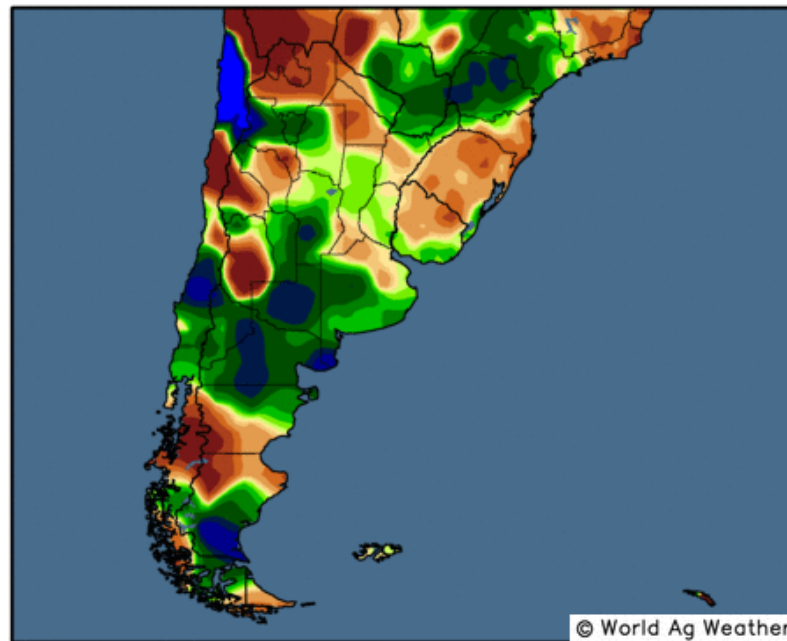
Map updates daily by approximately 20:30 UTC

Over past 14D ... this is near Normal rainfall over Santa Fe Entre Rios 200-400% of Normal over Cordoba La Pampa west Buenos Aires

**Over past 14D ... 1-5"/
25-125mm over 80%
North central eastern
ARG**

14-day Precipitation Analysis

Percent of normal through 12 UTC 8 Nov 2017

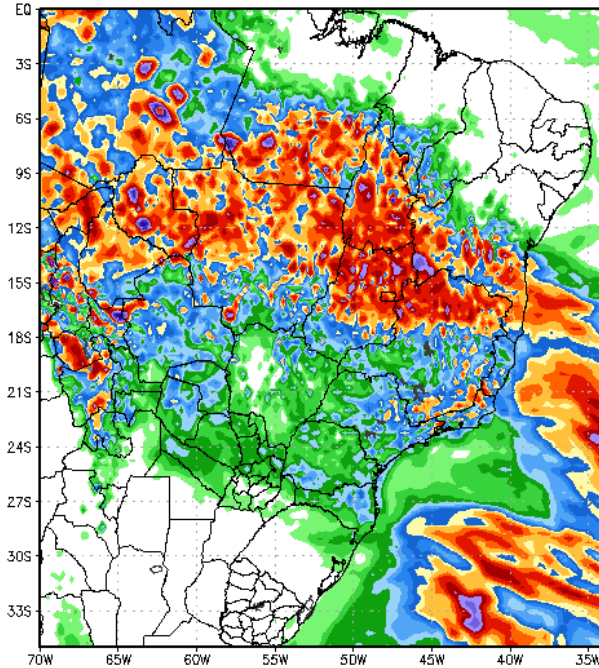


20 40 60 80 90 100 110 125 150 200 300 400 600

Map updates daily by approximately 20:30 UTC

NEXT 5 DAYS GFS LEFT EURO RIGHT

120 Hour Total Precipitation (in)
Valid: 00z Fri 10 Nov 2017 - 00z Wed 15 Nov 2017



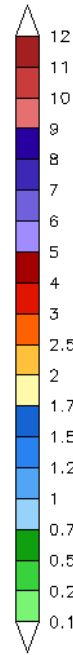
Max: 12.2 in
Min: 0.0 in

StormVistaWxModels.com

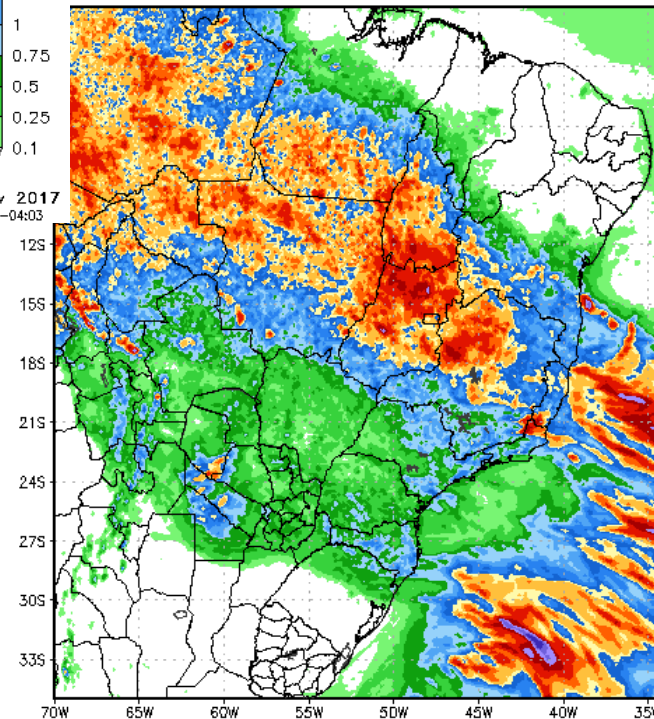
Init: 00z Fri 10 Nov 2017
2017-11-10-04:03

**Rain area is way North
centered over western
Minas Gerais & Goiás --
sw / se Brazil all of
Parg mostly dry all of
ARG 100% dry**

GFS-MAXRES
Hour: 0 - 120



Precipitation (in)
0 Nov 2017 - 00z Wed 15 Nov 2017

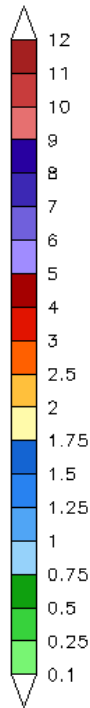


Max: 8.0 in
Min: 0.0 in

StormVistaWxModels.com

Init: 00z Fri 10 Nov 2017
2017-11-10-06:20

ECMWF-MAXRES
Hour: 0 - 120



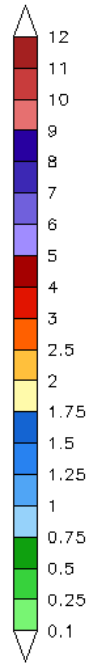
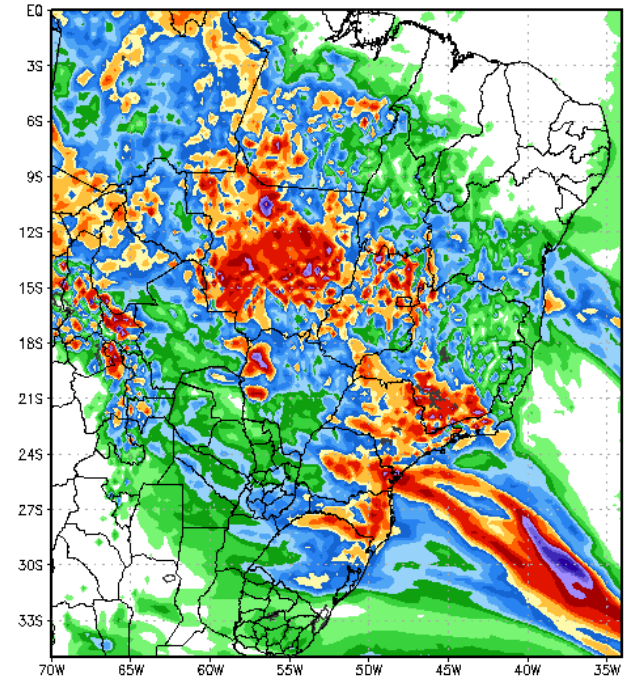
120 Hour Total Precipitation (in)
Valid: 00z Wed 15 Nov 2017 - 00z Mon 20 Nov 2017

GFS-MAXRES
Hour: 120 - 240

6-10DAY GFS LEFT

EURO RIGHT--

rains shift south and west



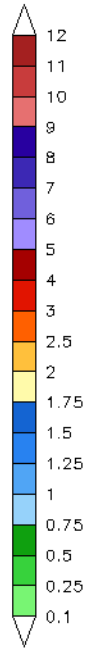
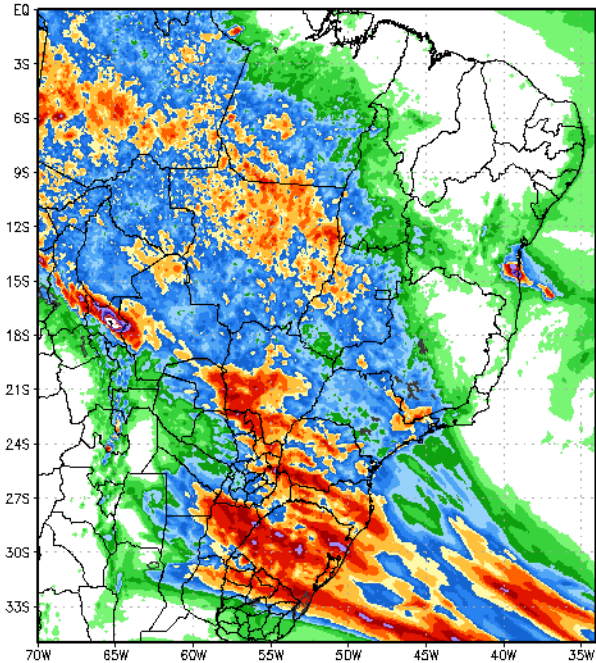
Max: 9.6 in
Min: 0.0 in

StormVistaWxModels.com

Init: 00z Fri 10 Nov 2017
2017-11-10-04:38

Total Precipitation (in)
Wed 15 Nov 2017 - 00z Mon 20 Nov 2017

ECMWF-MAXRES
Hour: 120 - 240



Max: 18.8 in
Min: 0.0 in

StormVistaWxModels.com

Init: 00z Fri 10 Nov 2017
2017-11-10-06:55

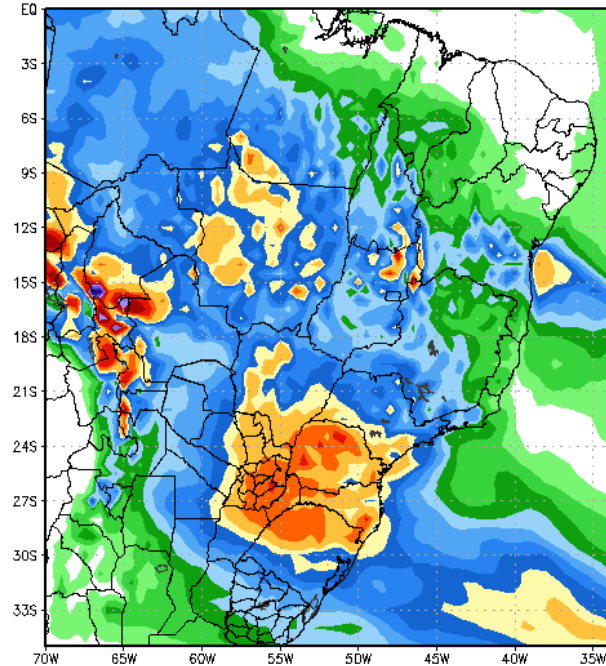
6-10 DAY ENSEMBLES

20 Hour Total Precipitation (in)

Valid: 00z Wed 15 Nov 2017 - 00z Mon 20 Nov 2017

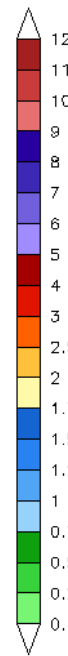
GFS-ENS-MAXRES

Hour: 120 - 240



Max: 8.9 in
Min: 0.0 in

StormVistaWxModels.com



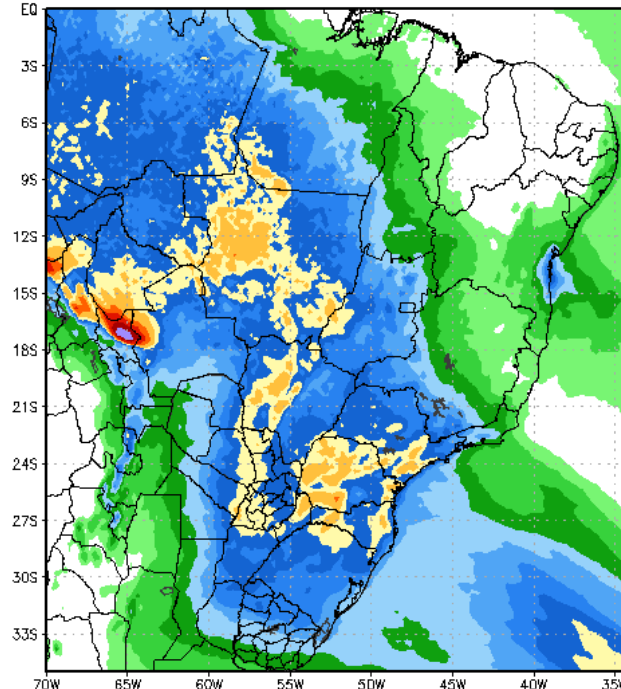
Init: 00z Fri 10 Nov 2017
2017-11-10-05:15

Total Precipitation (in)

Wed 15 Nov 2017 - 00z Mon 20 Nov 2017

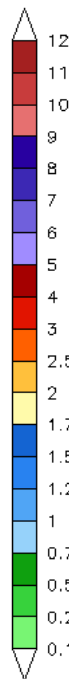
ECMWF-EPS-MAXRES

Hour: 120 - 240



Max: 6.0 in
Min: -0.0 in

StormVistaWxModels.com



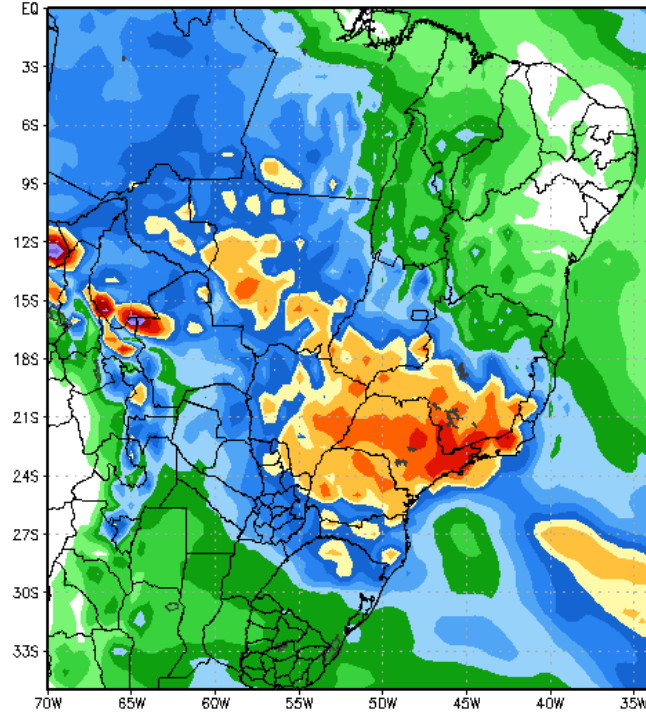
Init: 00z Fri 10 Nov 2017
2017-11-10-07:41

120 Hour Total Precipitation (in)

Valid: 06z Mon 20 Nov 2017 - 06z Sat 25 Nov 2017

GFS-ENS-MAXRES

Hour: 246 - 366



Max: 6.9 in
Min: 0.0 in

StormVistaWxModels.com

**11 - 15 DAYS
GFS LEFT EURO
RIGHT - again GFS
Much heavier with
rains this time over
southern Minas Sao
Paulo Parana MGDS
southern Goias**

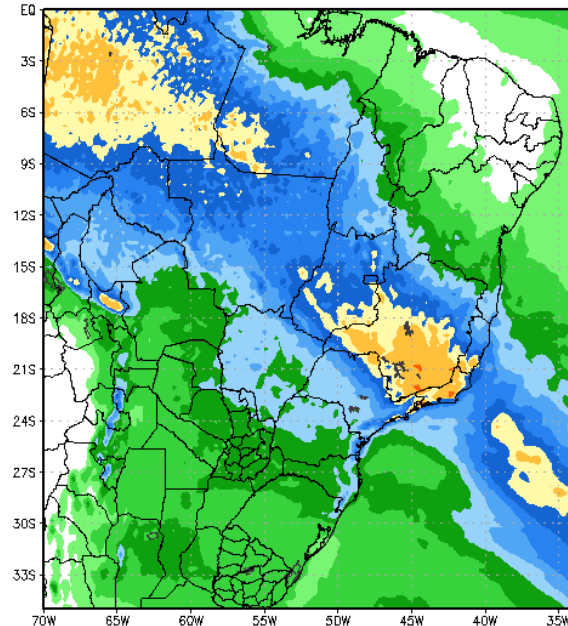
120 Hour Total Precipitation (in)

Valid: 00z Mon 20 Nov 2017 - 00z Sat 25 Nov 2017

ECMWF-EPS-MAXRES

Hour: 240 - 366

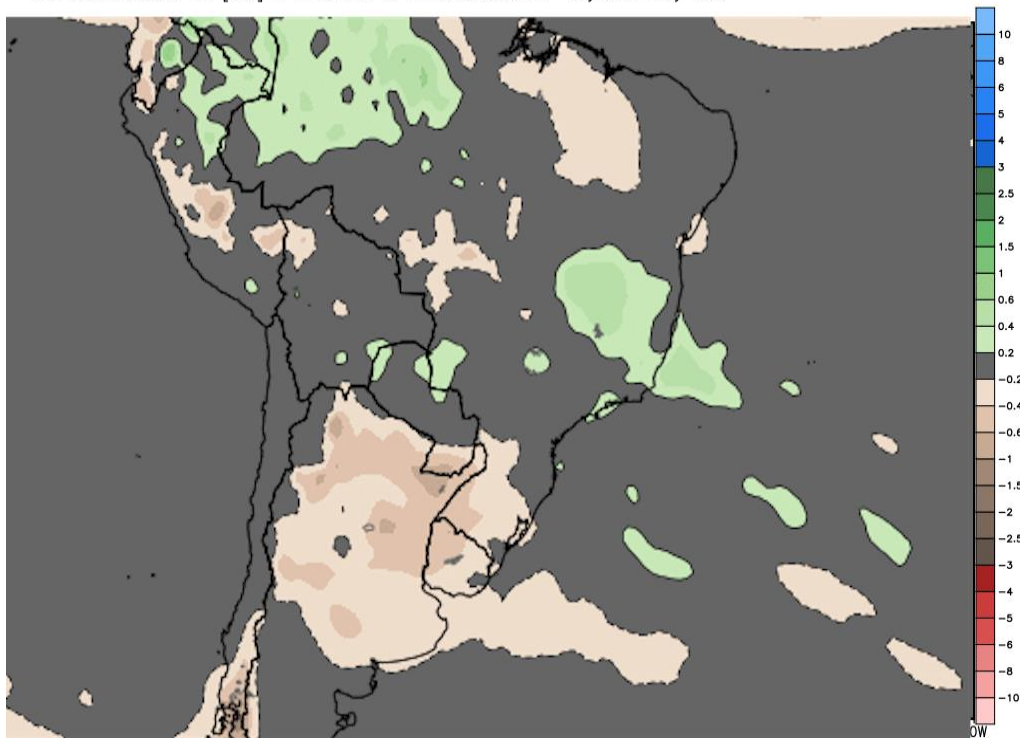
Init: 00z Fri 11
2017-



Max: 2.7 in
Min: 0.0 in

StormVistaWxModels.com

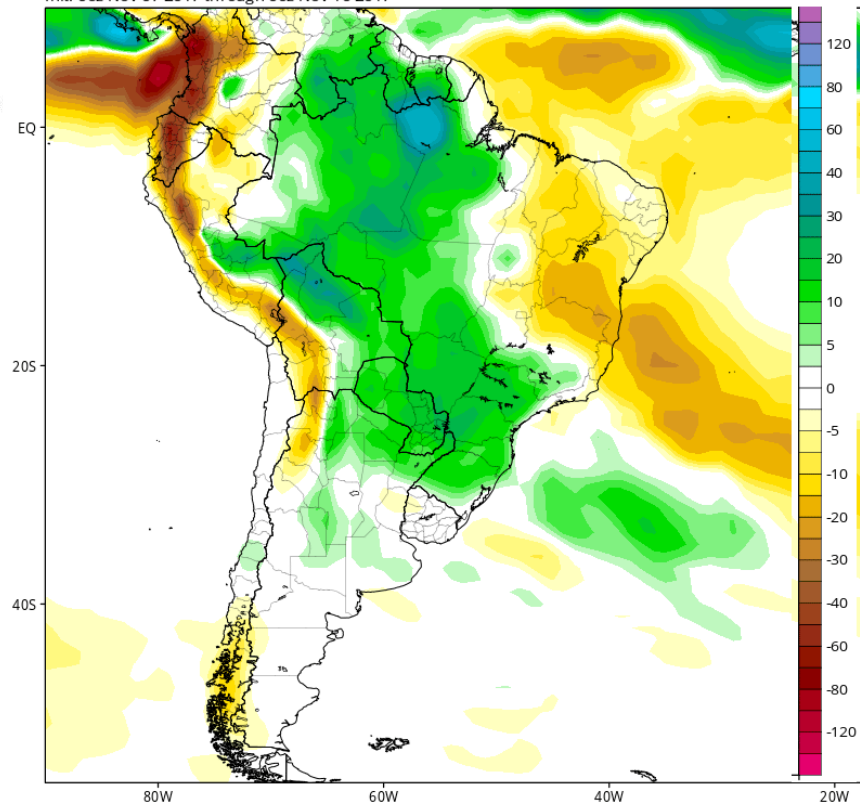
Init: 00z Fri 10 Nov 20
2017-11-10-08:00



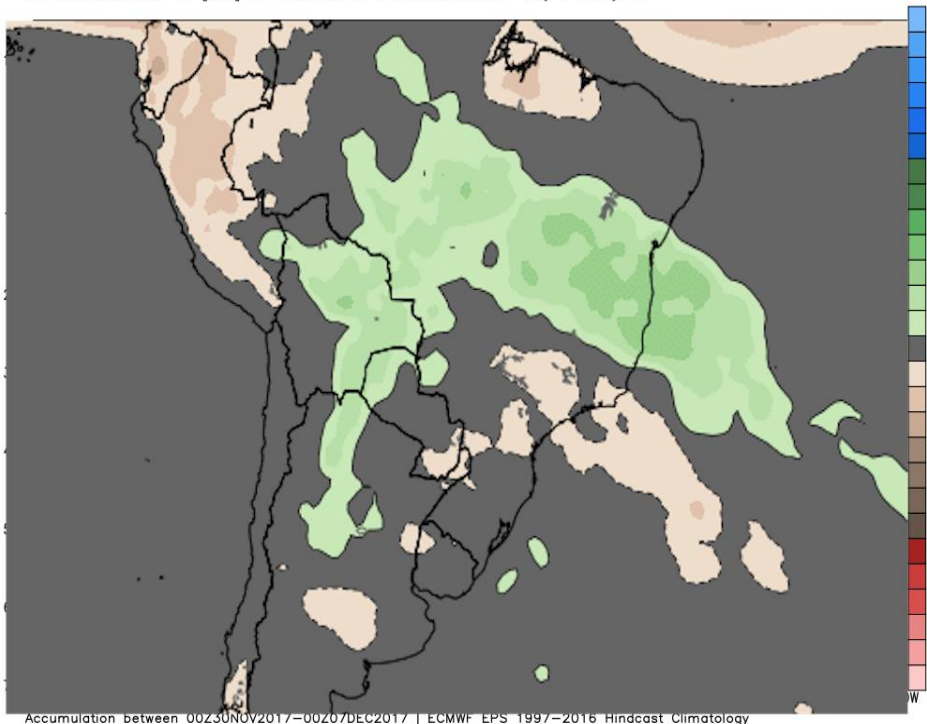
Accumulation between 00Z23NOV2017-00Z30NOV2017 | ECMWF EPS 1997-2016 Hindcast Climatology

**NOV 24-30 - EURO
dry over all of ARG ...
wet over Minas near
Normal over mist of
Brazil**

CFSv2 Accumulated Precip. Anomaly (mm) from 00z24Nov2017 to 00z01Dec2017 (Days 15-21)
Average of last 48 forecasts (12 runs x 4 members)
Init: 06z Nov 07 2017 through 00z Nov 10 2017



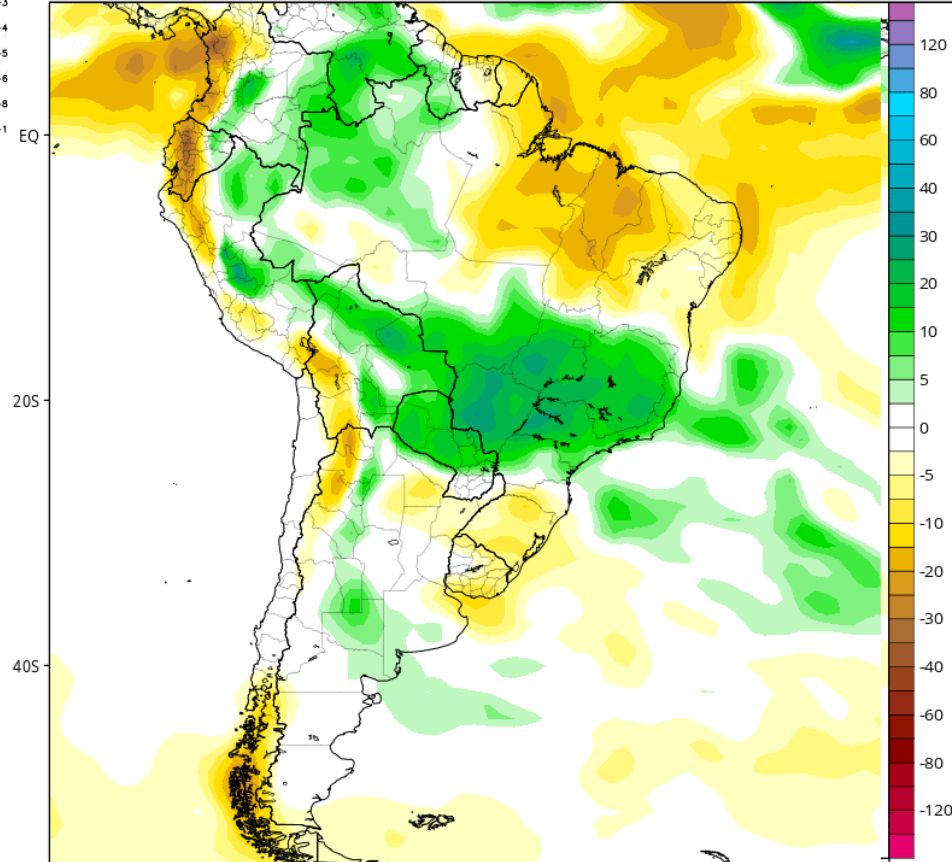
**NOV 24-30 - CFS is
very different-- very
WET over Parg sw
& se Brazil and DRY
over Minas Gerais.**



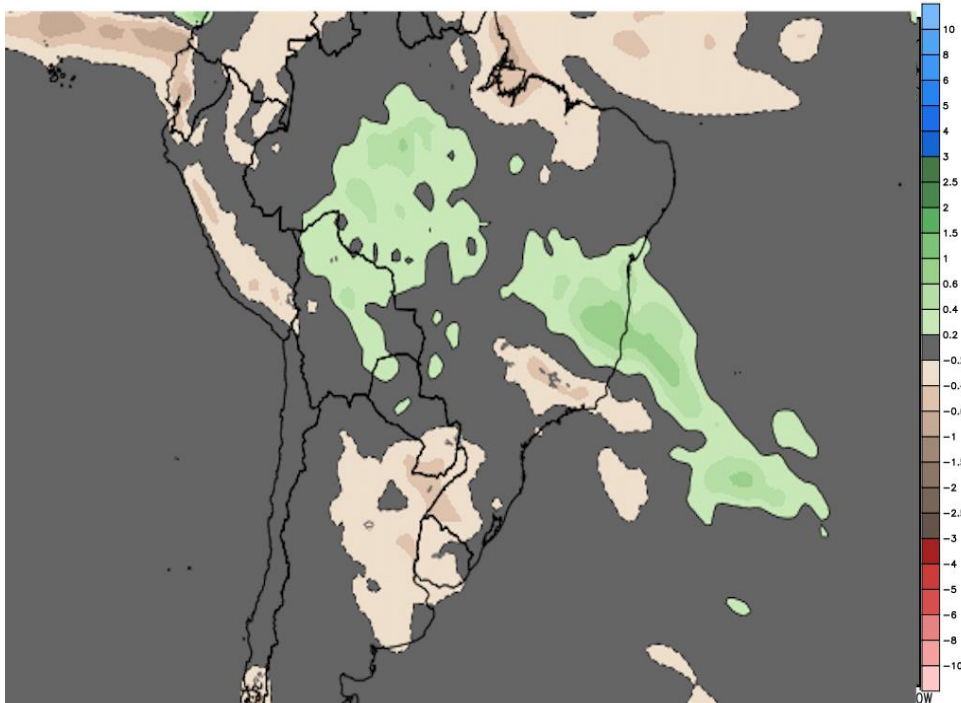
Accumulation between 00Z30NOV2017-00Z07DEC2017 | ECMWF EPS 1997-2016 Hindcast Climatology

**DEC 1-7 - EURO
WET over Minas
Bahia north Mato
Grosso DRY over
se/ sw Brazil**

CFSv2 Accumulated Precip. Anomaly (mm) from 00z01Dec2017 to 00z08Dec2017 (Days 22-28)
Average of last 48 forecasts (12 runs x 4 members)
Init: 06z Nov 07 2017 through 00z Nov 10 2017



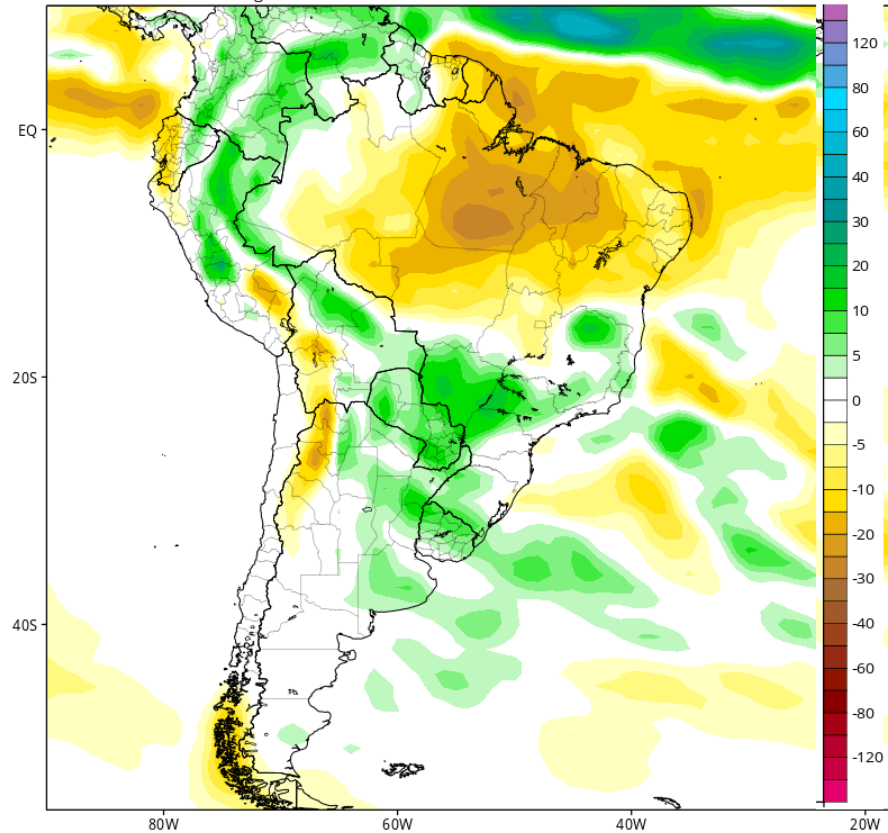
**CFS again very
different - WET over
Minas Sao Paulo
MGDS Parg... CFS
does agree that se
Brazil = dry**



Accumulation between 00Z07DEC2017-00Z14DEC2017 | ECMWF EPS 1997-2016 Hindcast Climatology

**DEC 8-14- EURO
dry over all of ARG ...
wet over Minas &
western Minas Gerais
DRY over se Brazil**

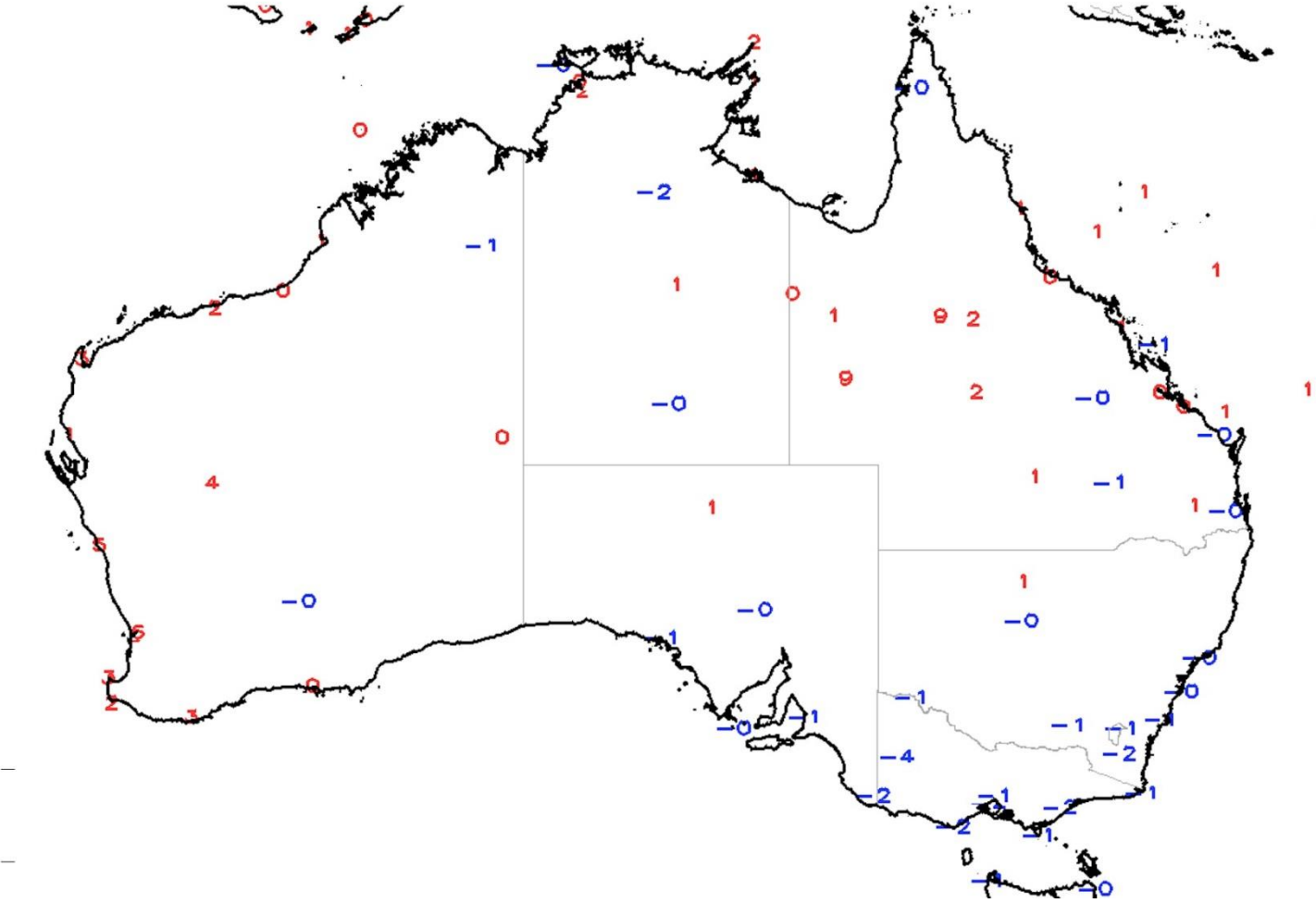
CFSv2 Accumulated Precip. Anomaly (mm) from 00z08Dec2017 to 00z15Dec2017 (Days 29-35)
Average of last 48 forecasts (12 runs x 4 members)
Init: 06z Nov 07 2017 through 00z Nov 10 2017



**CFS - very different
WET over most of
ARG into sw/ se
Brazil**

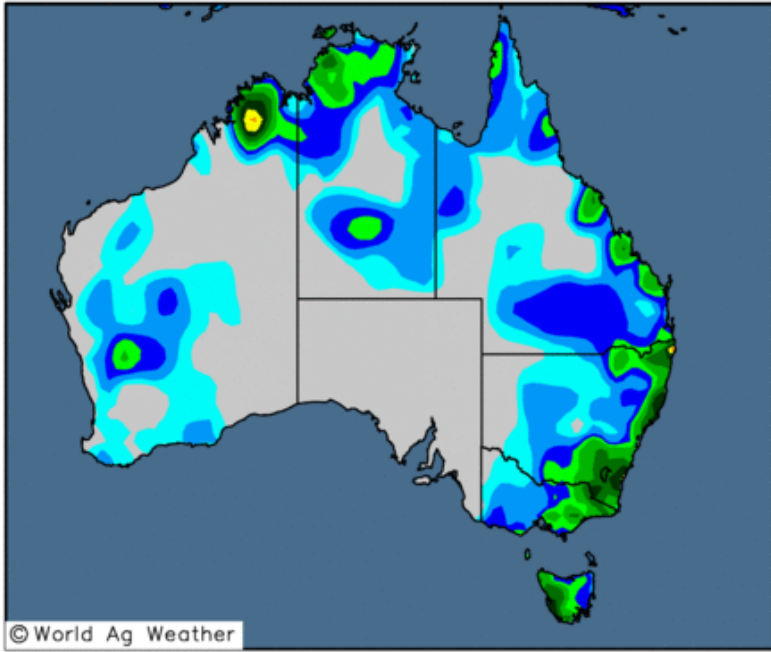
GTS Station Running 7-Day Average Temperature Anomaly (C)

Period: 03Nov2017 - 09Nov2017



14-day Precipitation Analysis

Observed precipitation (inches) through 12 UTC 9 Nov 2017

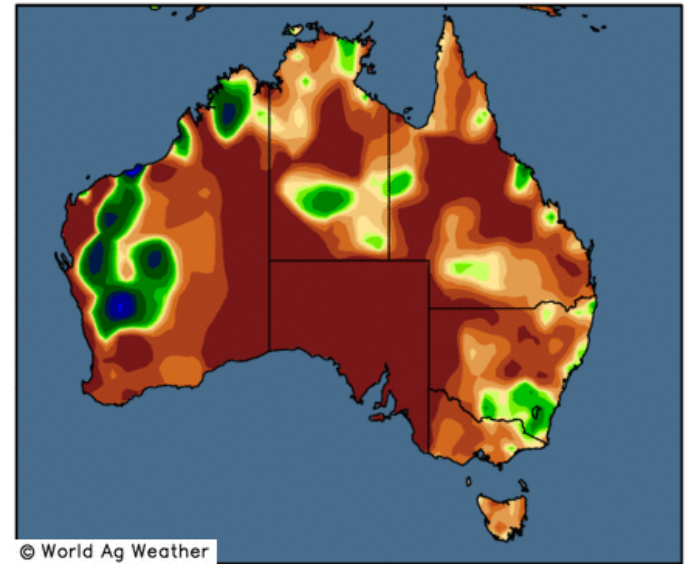


0.1 0.25 0.5 0.75 1 1.5 2 2.5 3 4 5 6 8 10

Map updates daily by approximately 20:30 UTC

14-day Precipitation Analysis

Percent of normal through 12 UTC 9 Nov 2017

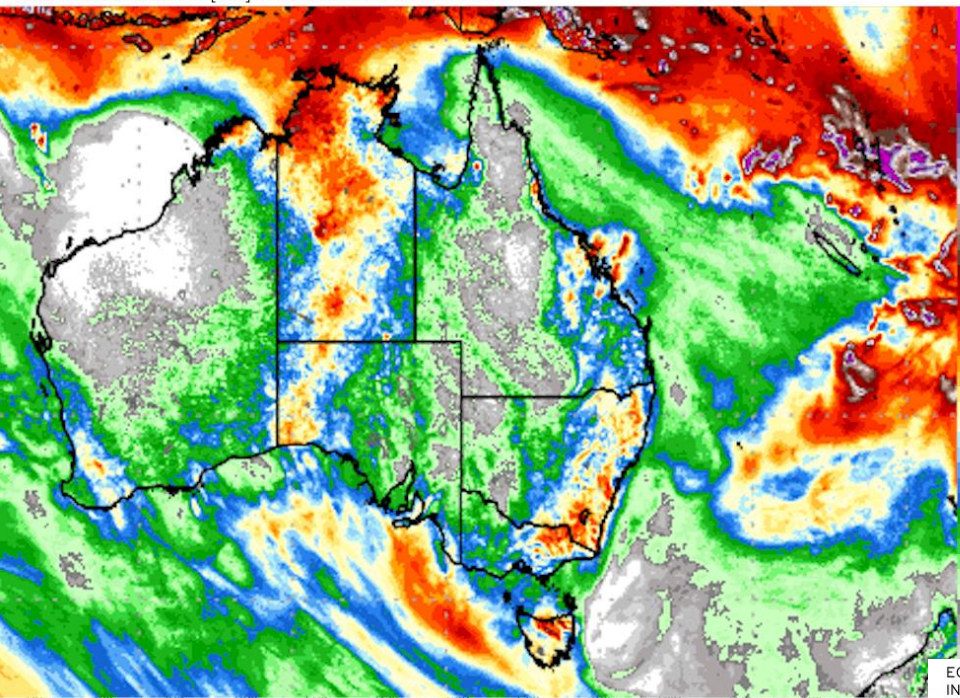


20 40 60 80 90 100 110 125 150 200 300 400 600

Map updates daily by approximately 20:30 UTC

ECMWF Total Precipitation [inch]
Init: 12Z10NOV2017 -- [240] hr --> Valid Mon 12Z20NOV2017

MAX: 31.2 inch



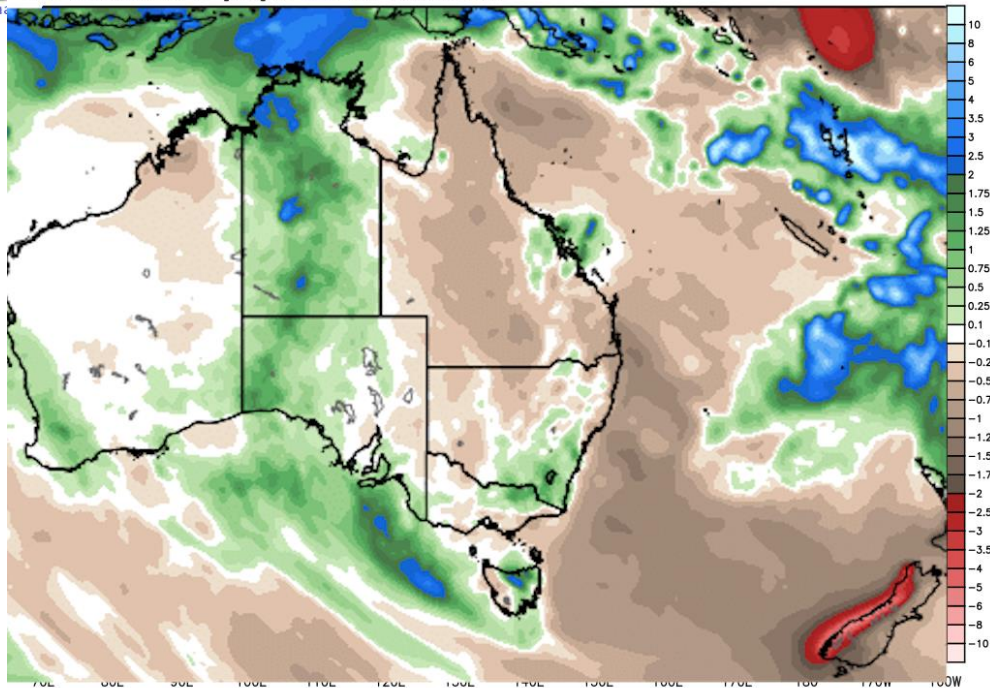
RAINFALL next 10 days

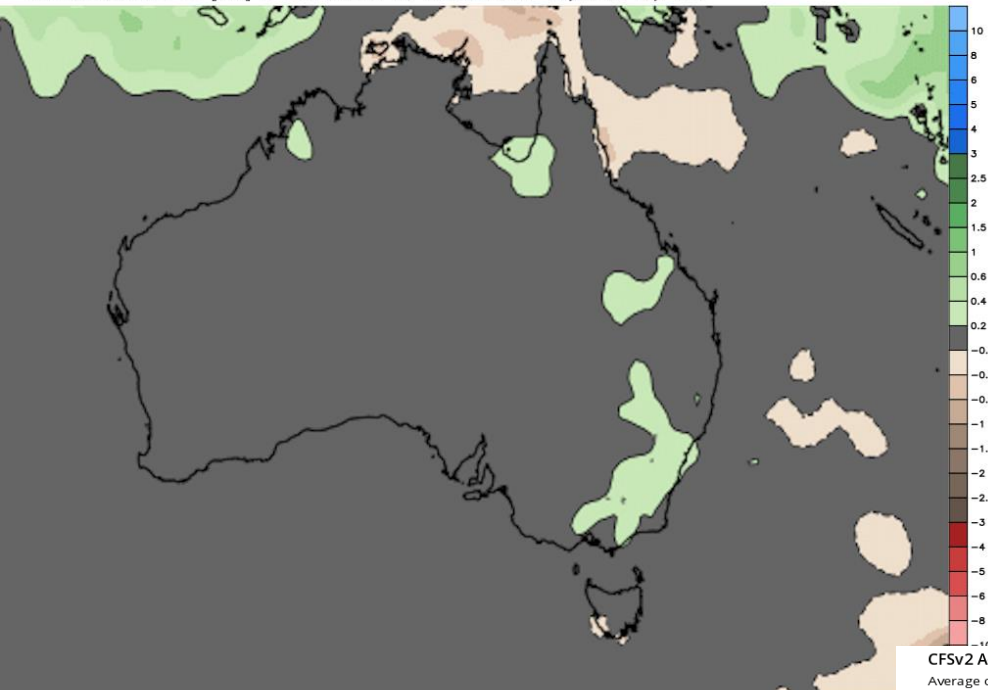
This service is based on data and products of the European Centre for Medium-range Weather Forecasts (ECMWF)

weather.us | @ryanm

ECMWF Total Precip Anomaly [inch] between 12Z10NOV2017 -- 12Z20NOV2017
INIT: 12Z10NOV2017 fx: [240] hr --> Mon 12Z20NOV2017

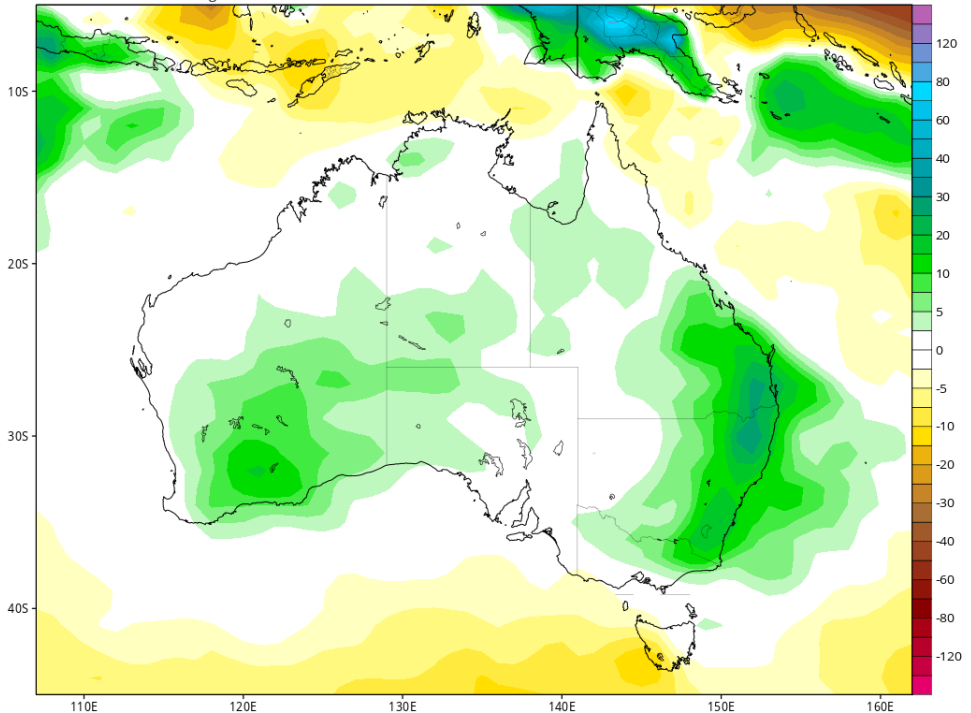
Rainfall anomalies over next 10 days



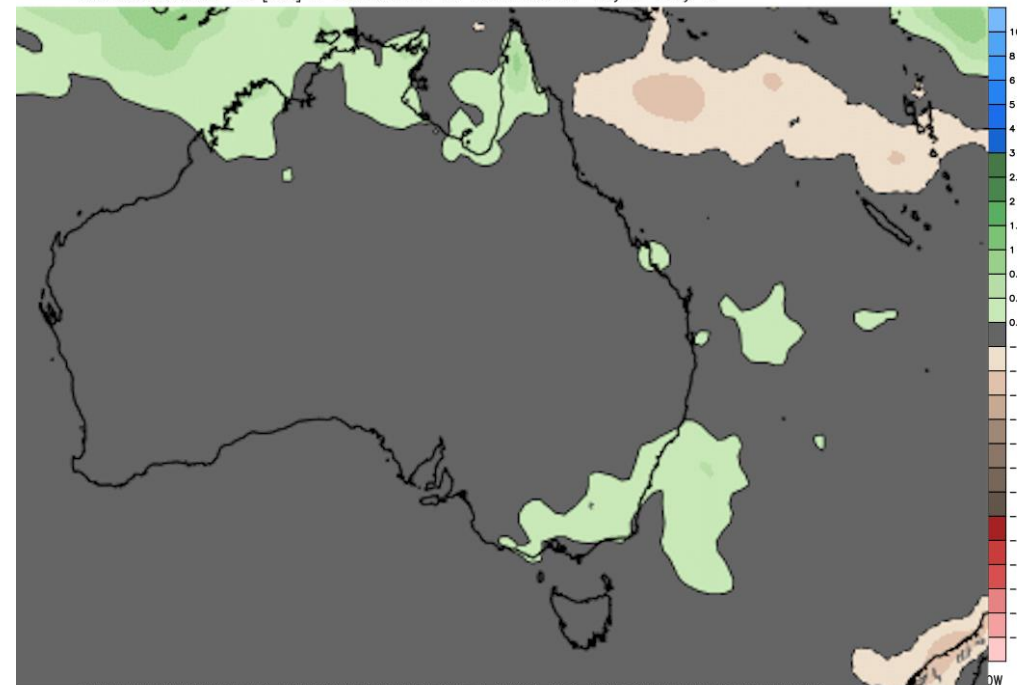


**NOV 24-30 EURO
wet over east third
NSW but CFS much
wetter over eastern
NSW into se
Queensland & sw
AUS**

CFSv2 Accumulated Precip. Anomaly (mm) from 00z24Nov2017 to 00z01Dec2017 (Days 15-21)
Average of last 48 forecasts (12 runs x 4 members)
Init: 06z Nov 07 2017 through 00z Nov 10 2017

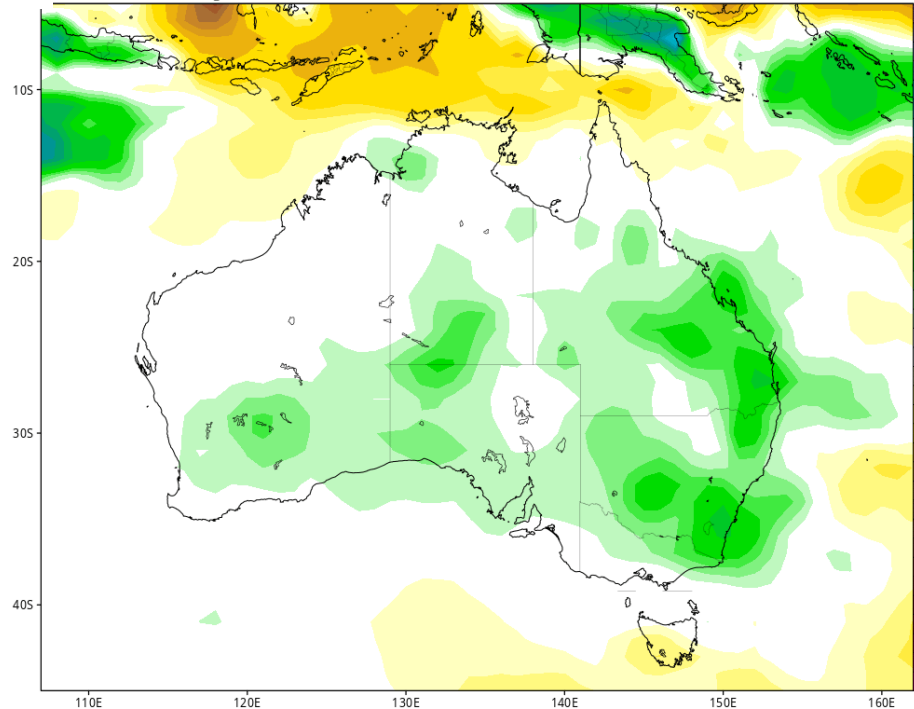


**DEC 1-5 EURO wet
over se AUS but
CFS much wetter
over eastern NSW
into se Queensland
& se portion of
S.A.T**



Accumulation between 00Z09NOV2017-00Z07DEC2017 | ECMWF EPS 1997-2016 Hindcast Climatology

Fsv2 Accumulated Precip. Anomaly (mm) from 00z01Dec2017 to 00z08Dec2017 (Days 22-28)
Average of last 48 forecasts (12 runs x 4 members)
Init: 06z Nov 07 2017 through 00z Nov 10 2017

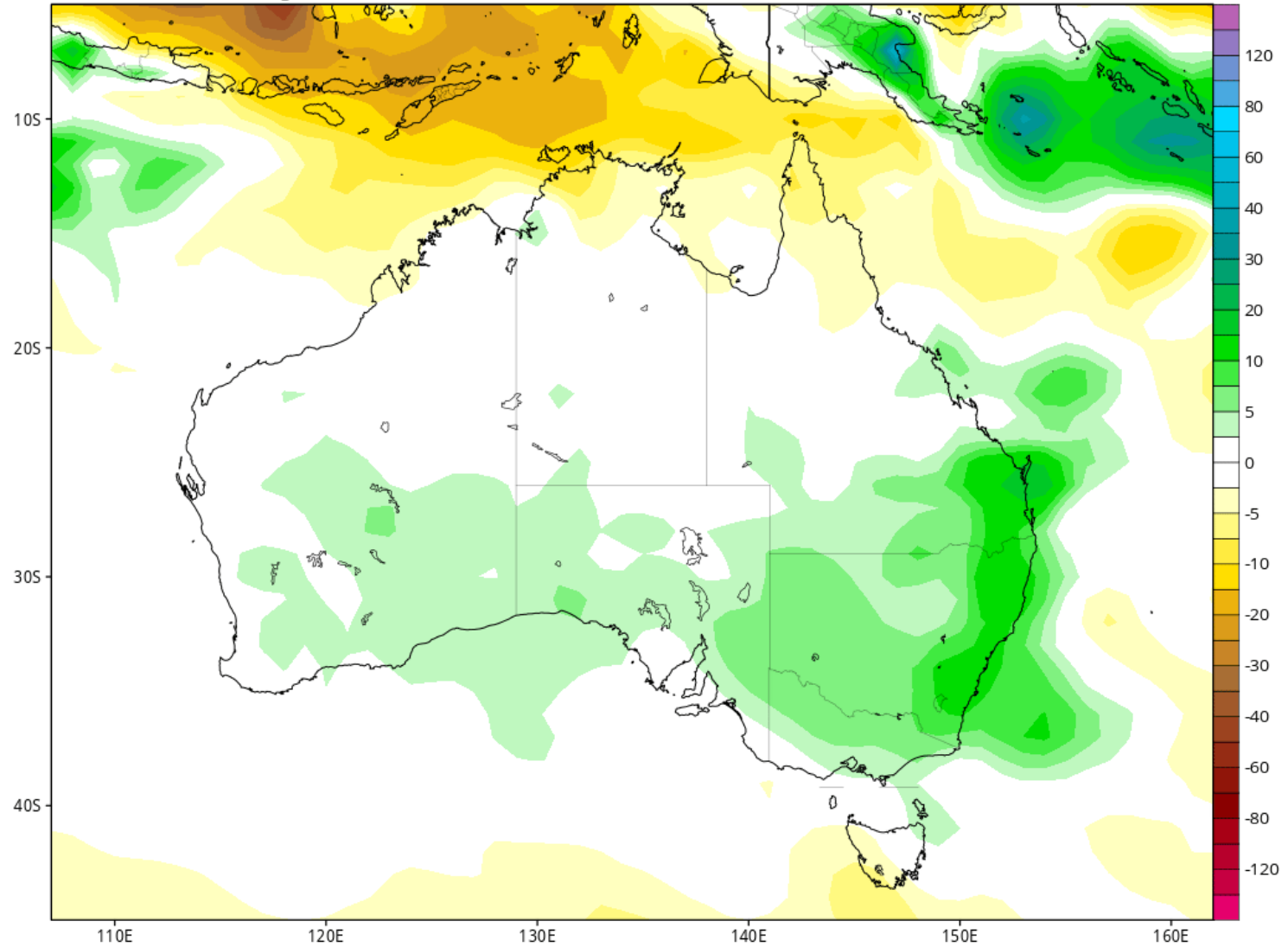


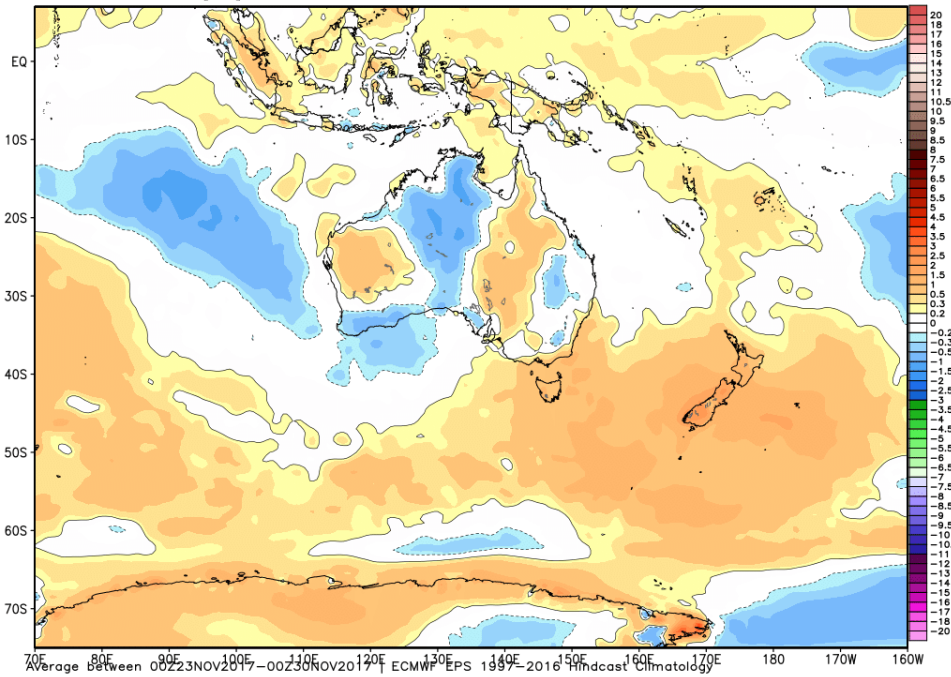
CFSv2 Accumulated Precip. Anomaly (mm) from 00z08Dec2017 to 00z15Dec2017 (Days 29-35)

Average of last 48 forecasts (12 runs x 4 members)

Init: 06z Nov 07 2017 through 00z Nov 10 2017

TROPICALTIDBITS.COM

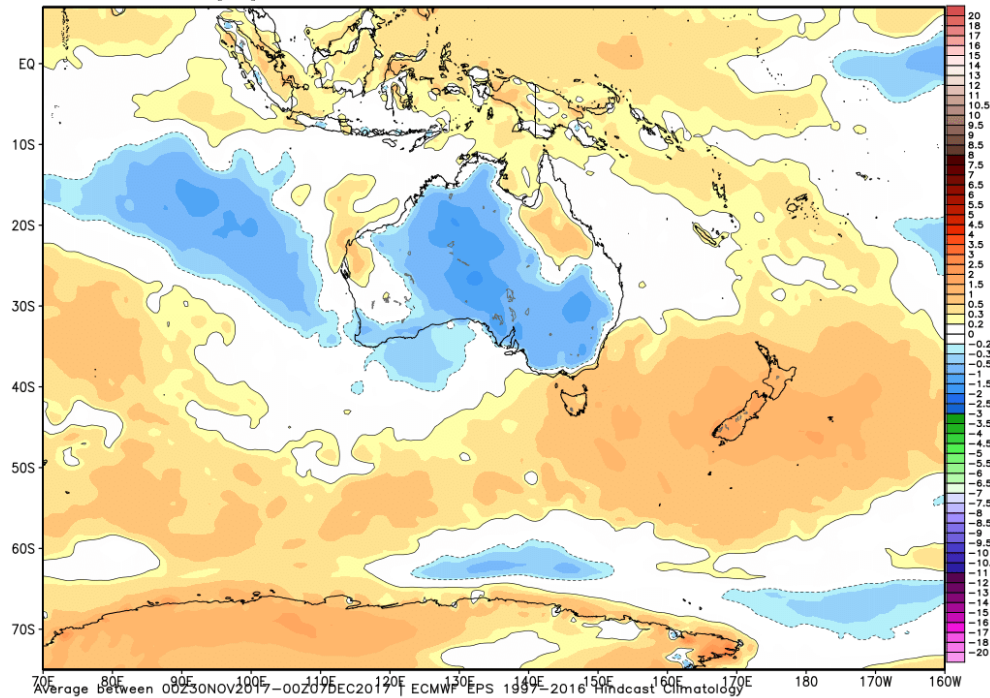




Into mid DEC -Still no sign of that impressive Aus heat that we have seen over the past several years

ECMWF EPS Ensemble Mean 7-day Avg 2m Temperature Anomaly [°C]
Init: 00Z09NOV2017 -- [672] hr --> Valid on Thu 00Z07DEC2017

Min|Max: -2.2* | 4.4°C



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

