

# SUNDAY US / SOUTH AMERICA GRAIN WEATHER

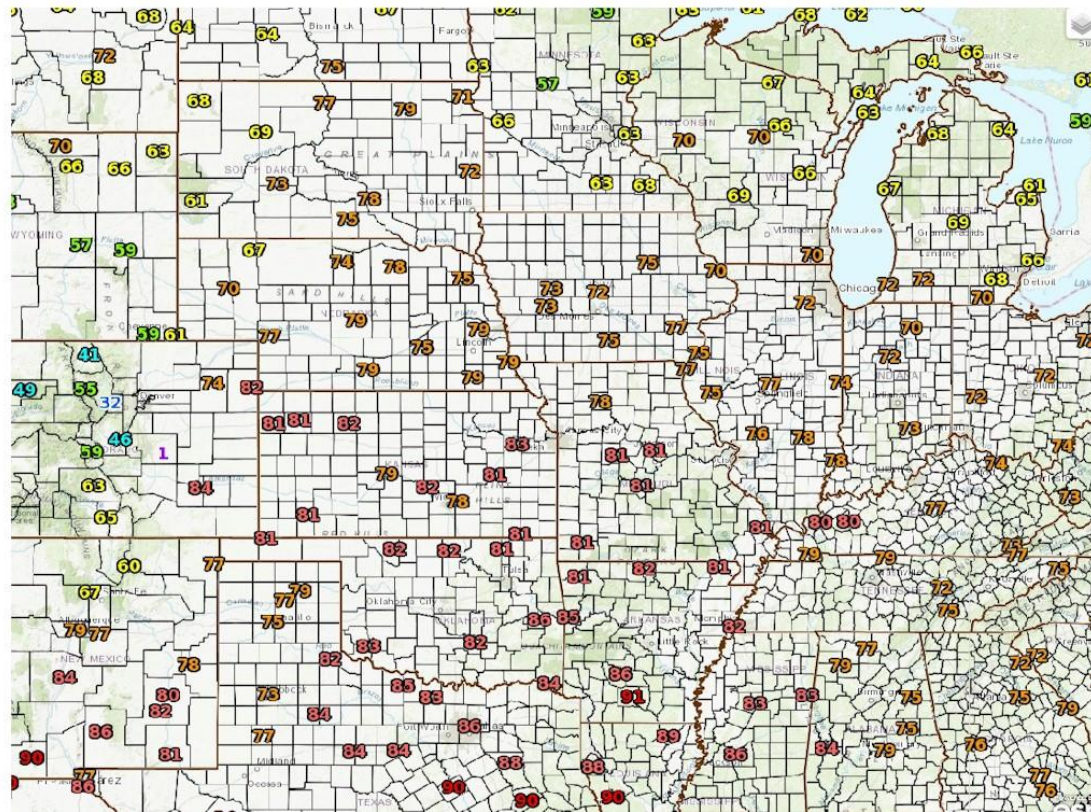
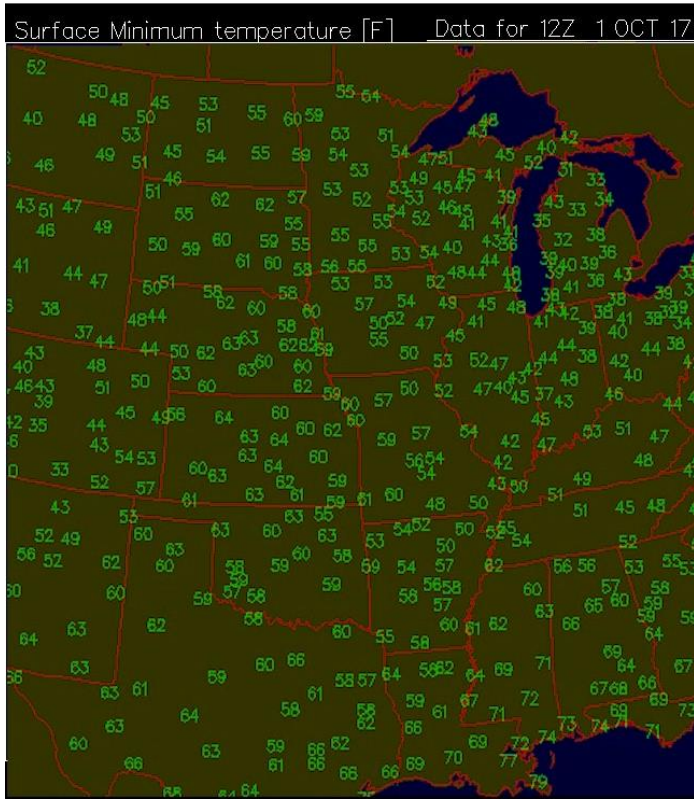
**10/1/17 OVERVIEW**

## SUMMARY

The never ending tropical season of 2017 continues but there are important changes going on over North America itself. Last week the models indicate a major trough is going to form over the western third of the country and a major ridge is going to form over the eastern third of the country. That has not changed as of Sunday night Monday morning. All the weather models show a massive trough quite impressive for mid September developing over the western third of the country. This trough will bring below much below normal temperatures to the West Coast the Pacific Northwest Southern Canada and most of the Rockies. At the surface the cold front will try and push through the plains states but the powerful ridge over the eastern third of the country will force this front to crawl very slowly eastward. This will allow for significant rain developing mostly in the 6-10D. Complicating this will be the arrival of another category four hurricane .... This one called I Maria which will be in the Bahamas by this weekend and moving through the Bahamas early next week. This looks like a East Coast threat. Finally the model data is pretty strong that a major trough is going to move through the Midwest by the end of the month and possibly bring about the first frost for some areas

# MAX TEMPS 16 SEPT and 17 SEPT

Max temperatures on Saturday saw readings in the 60s over eastern WY/ COL as well as ND SD MN WI ... and over Tx Panhandle into southwest TX . 70s were common over central TX and OH IND ILL KY IA NEB KS and 80s in OK LA ARK MO TN MS AL GA. – SUNDAY AFTERNOON MAX TEMPS saw lots of 70s over Upper Plains and the Midwest.. 80s over central and lower Plains and Delta

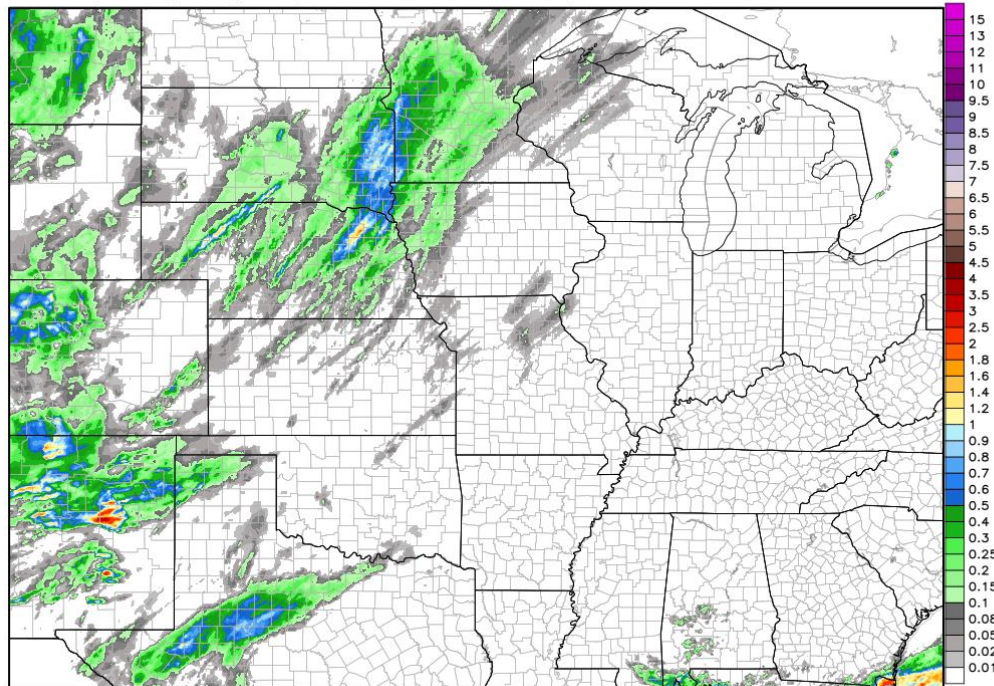


## RAINFALL SATURDAY 30 SEPTEMBER 0700 cdt - SUNDAY 1 OCTOBER 0700 CDT

Rainfall Saturday into Sunday saw a band of moderate rains 0.25-1.0"/ 6-25mm 60% coverage over southeast third of South Dakota into southwest third of Minnesota . There were additional scattered showers over 50% pf central/ northern Nebraska into Northwest Iowa. Southwest TX saw a band of rain 0.25-1.0" / 6-25mm. All other areas were dry.

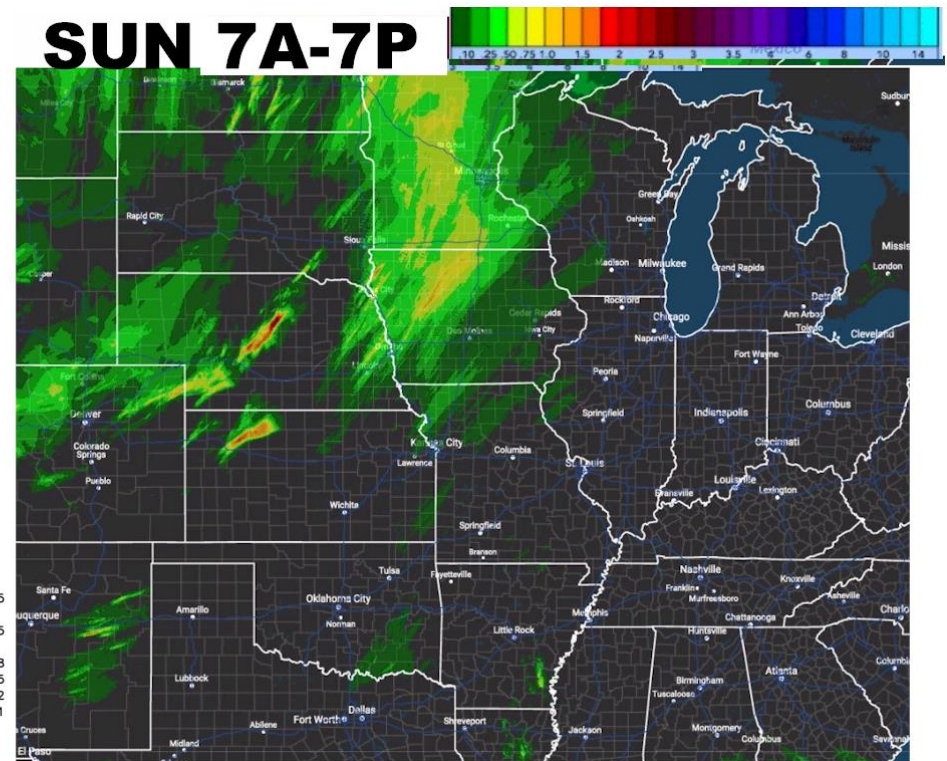
Rainfall SUNDAY 7AM – 7PM CDT saw moderate rains of 0.25-1.0"/6-25mm with 70% coverage over all of Minnesota and the northwest third of Iowa. Scattered small bands of showers and storms dropped 0.25-2.0"/6-50mm over 40% of southwest Nebraska .

NWS Precipitation Analysis 4-km HRAP Grid -- 1-day Total Accumulation Domain Max: 3.7 in.  
Total Precipitation [inches] 1 days 12Z30SEP2017 --> through --> 12Z01OCT2017



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

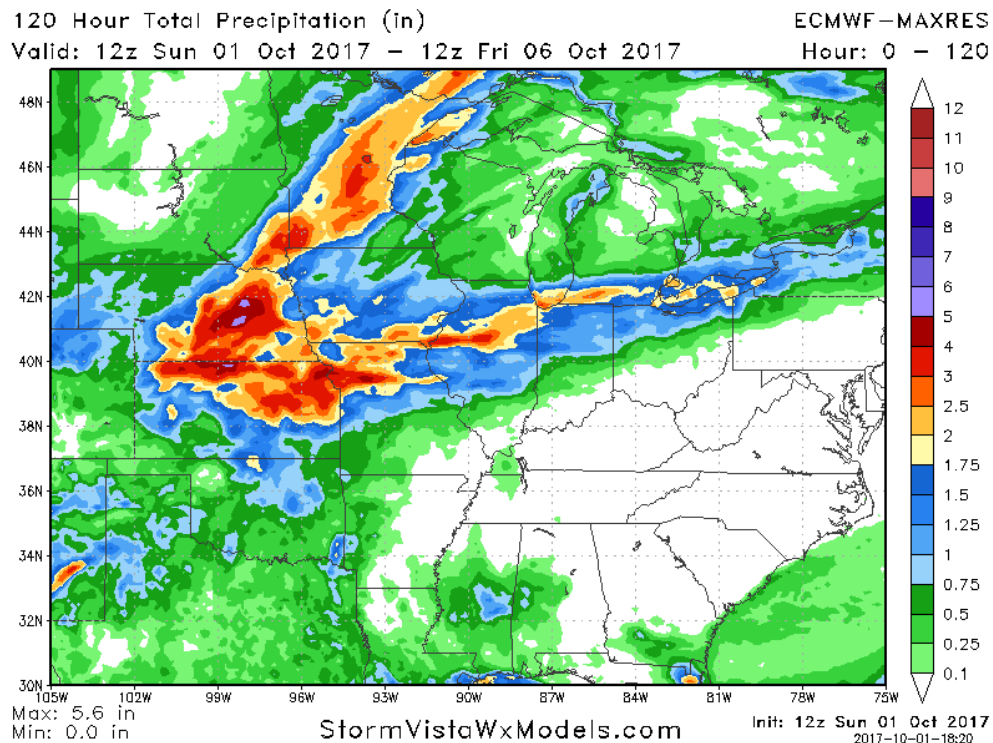
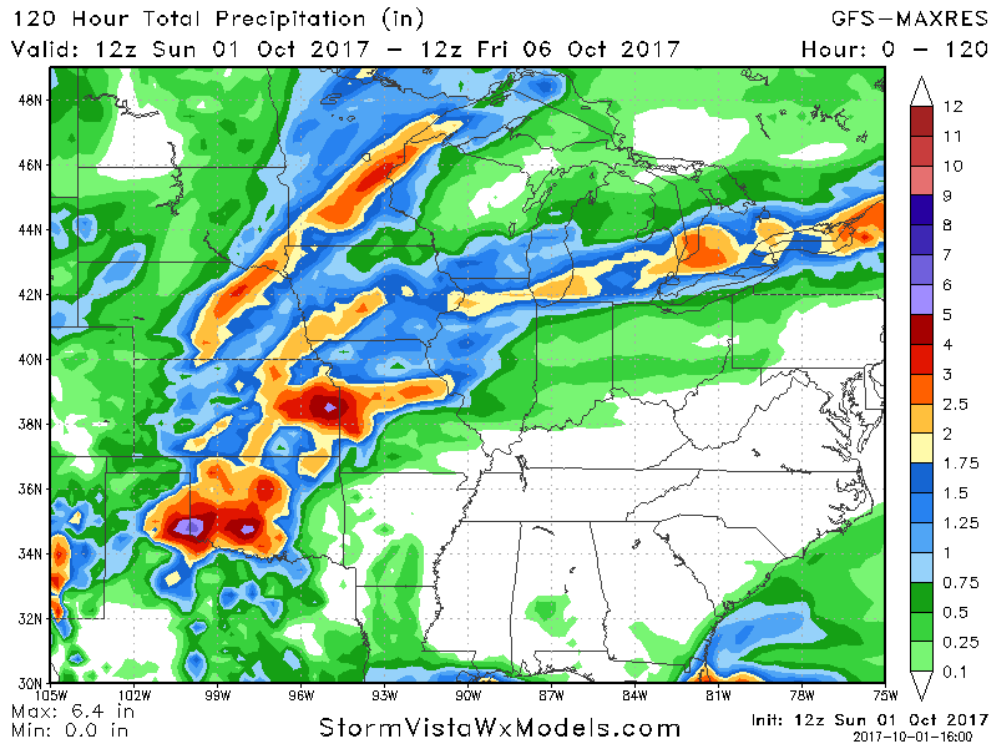
## SUN 7A-7P



## 1-5 DAY

All the models are pretty wet all the next 5 days with significant rains of 1-3"/ 25-75mm covering 75%+ central Oklahoma 80% of Kansas ...all of Missouri except for the southeast third... 75% of central and eastern Nebraska... 80%+ of Iowa ..the northwest half of Illinois ...far

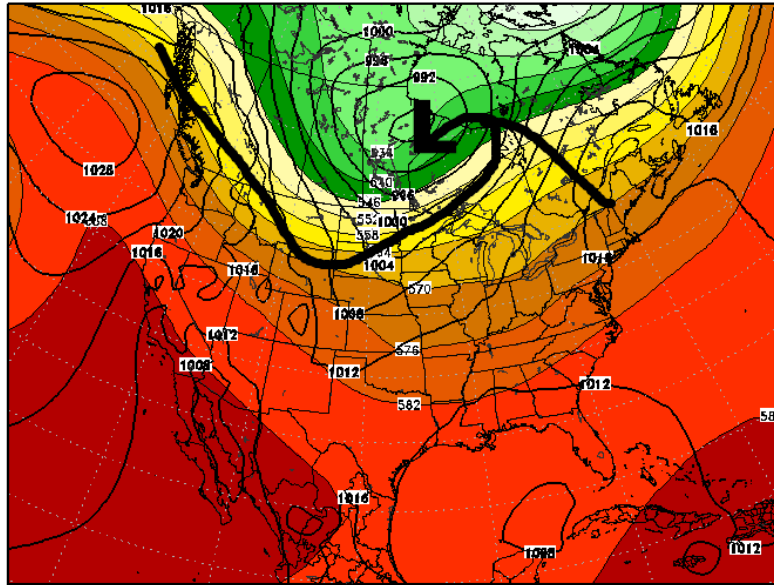
southeastern South Dakota ...all of Minnesota and the western half of WI. Most of the ECB stays dry but the northern portions of Indiana Ohio will see light to moderate rains of 0.50-1.5"/ 12-38mm during the next 5. The Deep south and delta regions stay 100% dry.



## 6-10 DAY.

The models are not in good agreement in 6-10 D. All the models show major Upper trough and a strong surface cold front that sweeps out of south central Canada OCT 7-8 and through the Plains and the Midwest OCT 9-10. But the GFS has no significant rain with this cold front passage while the European does.

500 mb Height & MSLP  
Valid: 06z Sun 08 Oct 2017

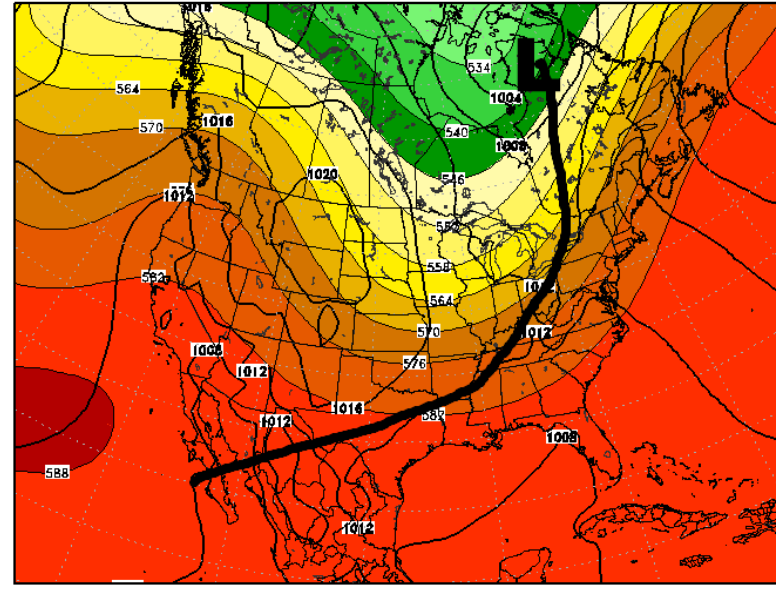


Max: 592.1 dm  
Min: 517.9 dm

StormVistaWxModels.com

Init: 12z Sun 01 Oct 2017  
2017-10-01-15:27

ECMWF-EPS 500 mb Height & MSLP  
Hour: 16Z Valid: 00z Tue 10 Oct 2017

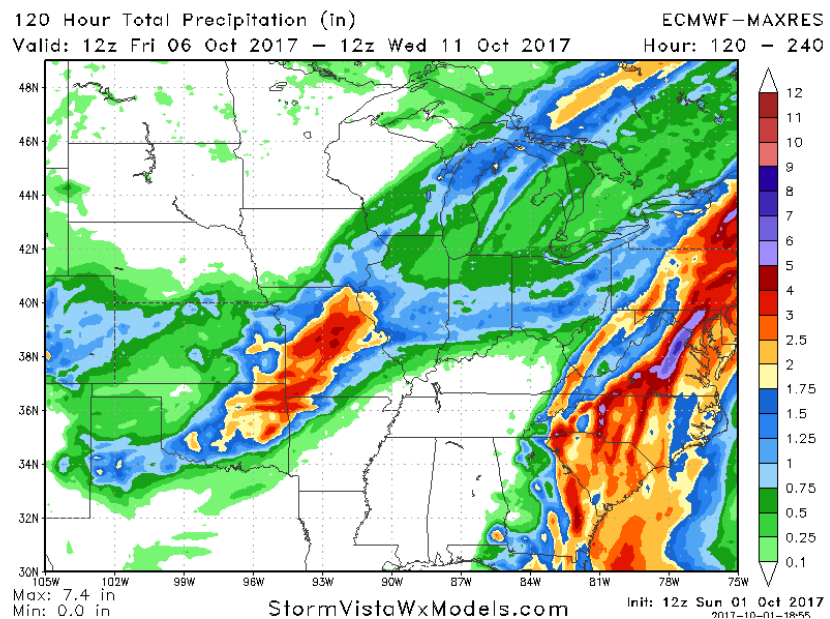
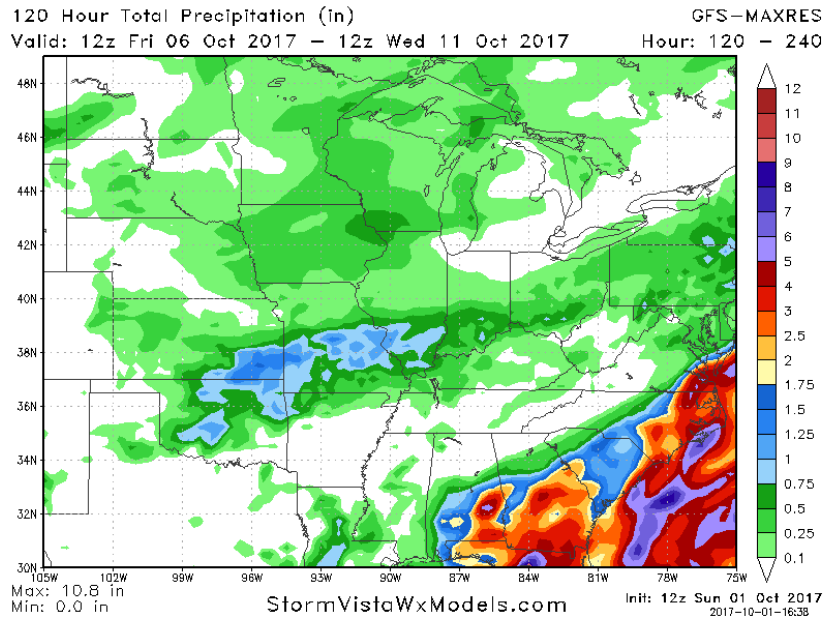


Max: 589.5 dm  
Min: 530.5 dm

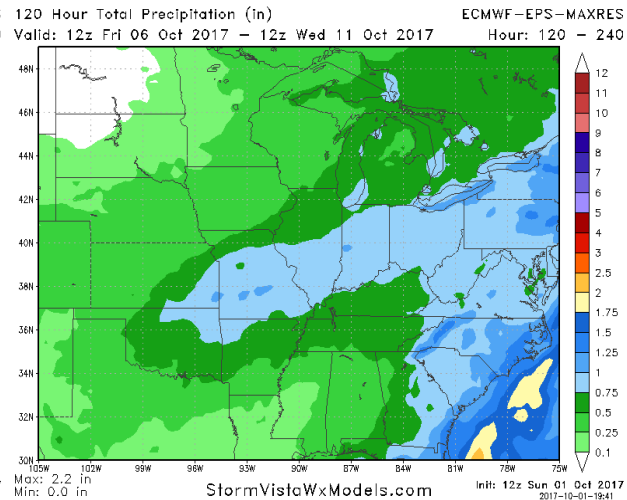
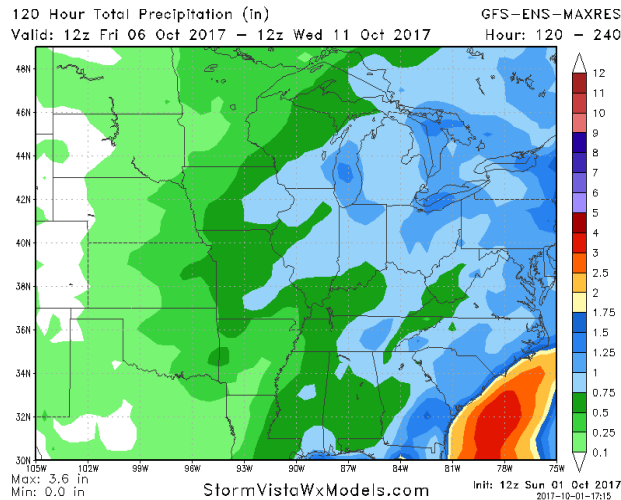
StormVistaWxModels.com

Init: 12z Sun 01 Oct 2017  
2017-10-01-15:34

The operational or regular GFS only has a band of 0.25-1.0"/ 6-25mm rains over central and southern Missouri ...far southern Illinois ..southeast Kansas and northeastern Oklahoma. All other areas see almost no rain whatsoever in the 6-10D. The operational European model is much different as it has a much stronger front that cuts across Oklahoma ...Missouri ...Illinois into southern Wisconsin and Michigan. This results in a band of 1-4"/ 25-100mm rains centered over northeastern Oklahoma ... and into southwestern ...central and northeastern Missouri. Additional rains of 0.5-1.5"/ 12-38mm shows up over southeastern Iowa ...central and southern Illinois much of Indiana and Ohio and into the Texas panhandle and western Kansas

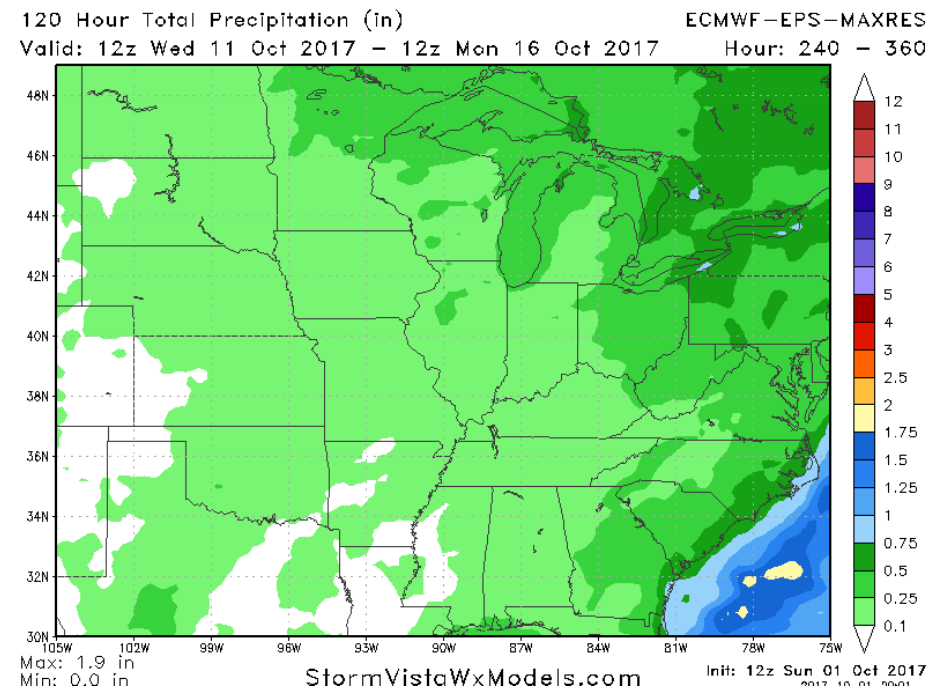
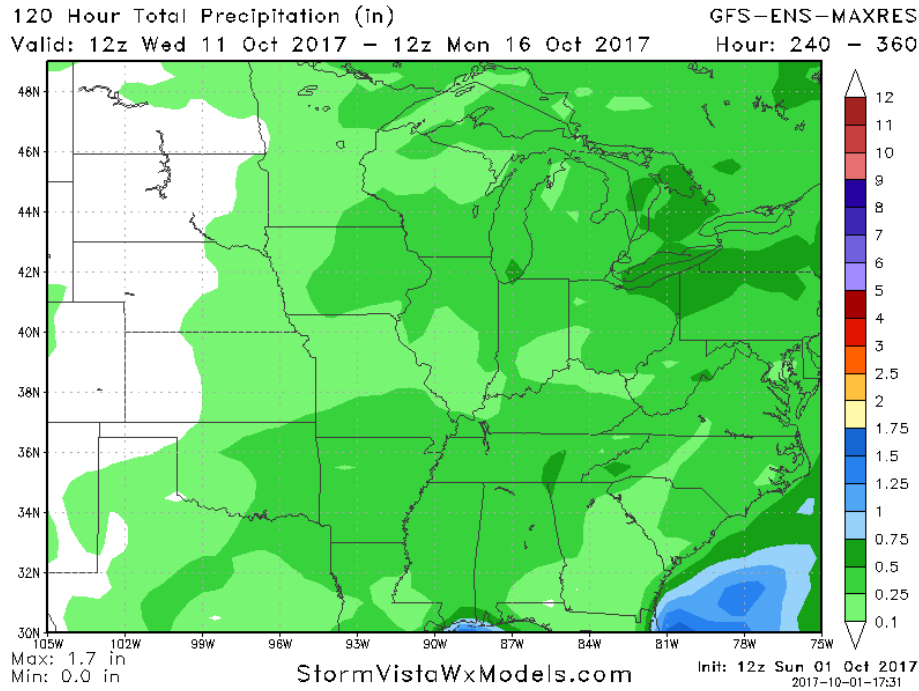


The GFS ensemble does not support the operational run. The GFS ensemble shows widespread 0.5-1.5"/ 12-38mm overall the Midwest as well as the Southeastern states and the East Coast. The European model ensemble does support its operational model in showing a large area of Moderate rain cutting across much of Oklahoma into Missouri ..Illinois ...Indiana and Ohio.



# 11-15 DAY

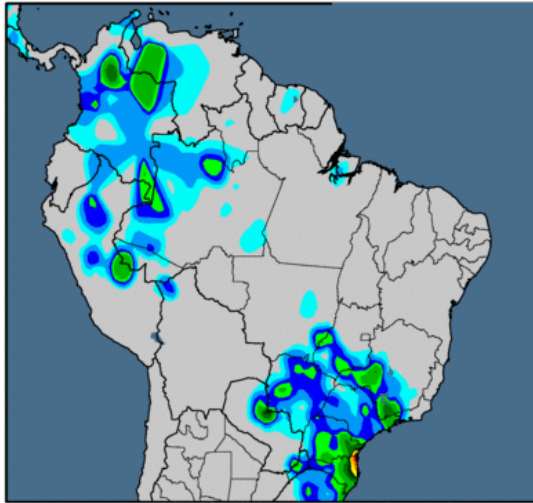
The pattern becomes banal and quiet in the 11 to 15 day. Most areas are fairly dry especially the Plains states but there is some light to moderate rains over portions of the Midwest and the Delta. Temperatures will run a few degrees above normal mainly because normal daytime Max temperatures falling in mid October



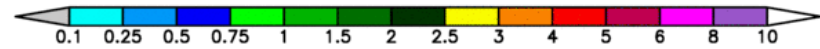
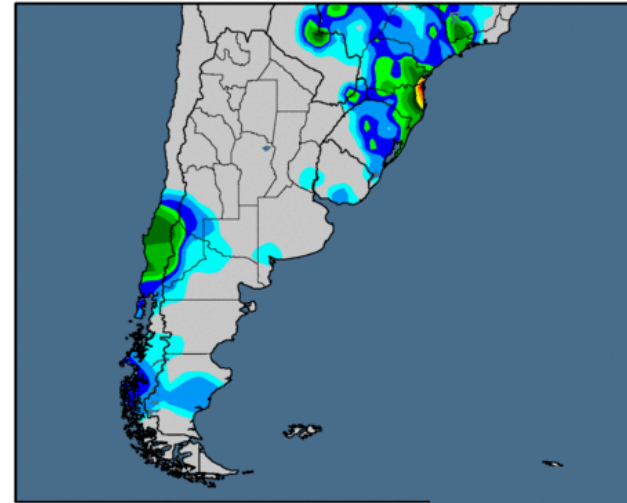
# SOUTH AMERICA

0.50-1.5" / 12-38mm with 60% coverage Parana 40% Sao Paulo 50% southern Minas Gerais southern Goias and 50% MGDS ... while it was 100% dry over all of northern central and eastern Argentina

24-hour Precipitation Analysis  
Observed precipitation (inches) through 12 UTC 30 Sep 2017



24-hour Precipitation Analysis  
Observed precipitation (inches) through 12 UTC 30 Sep 2017

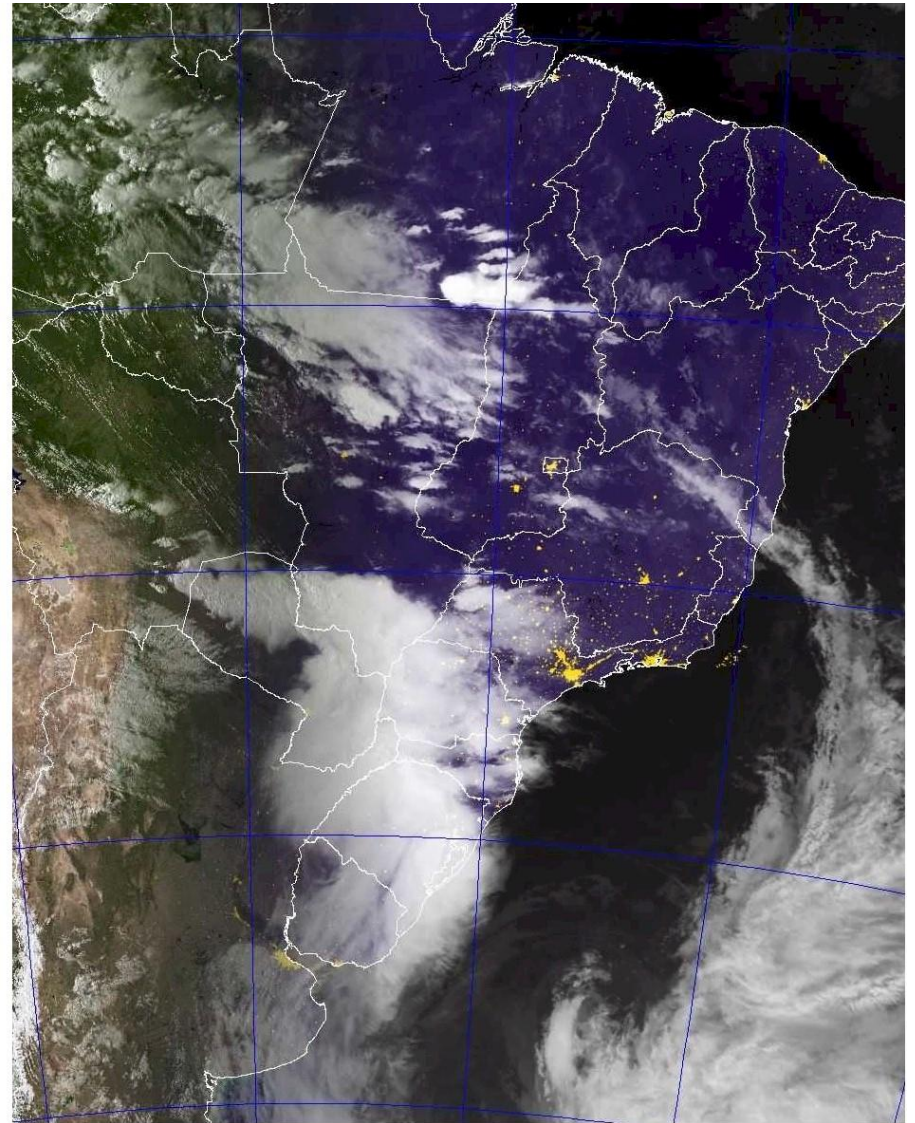
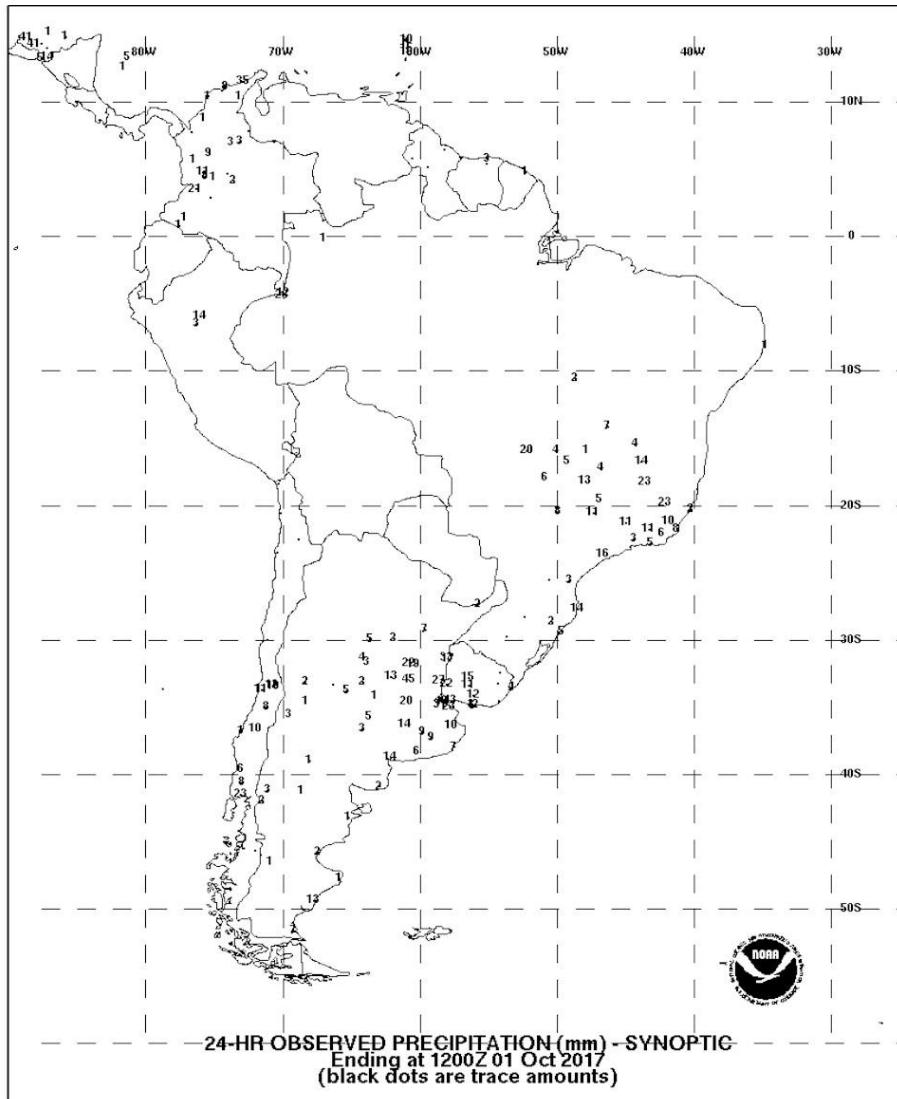


## **RAINFALL SATURDAY INTO SUNDAY ending 0700 1 OCTOBER 0700 cdt**

0.20-0.75"/4 -20mm with over 60% coverage over southern Minas Gerais .. northern Sao Paulo and southern Goias. There was a second area of rain with amounts of 3-50mm/0.15-2.0" and 60-70% coverage over Cordoba... Santa Fe ... Buenos Aires ..and Entre Rios.



**CONDITIONS SUNDAY NIGHT** The Sunday early evening satellite picture from South America shows heavy low clouds covering all of southeastern Brazil from Uruguay into much of Sao Paulo and into southern MGDS and eastern Parguay . Rest of Brazil is clear EXCEPT for storms over northern Mato Grosso

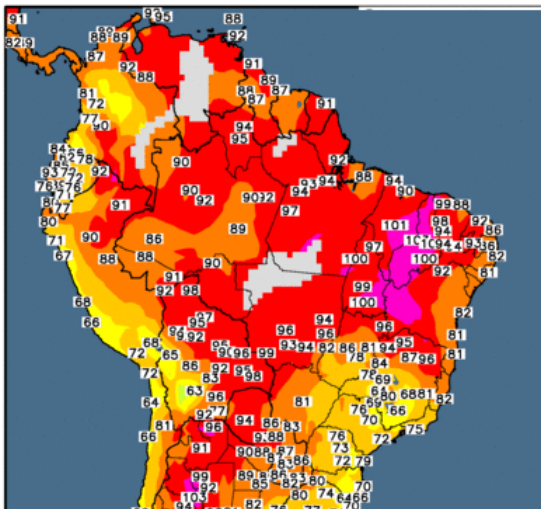


# SOUTH AMERICA SUMMARY

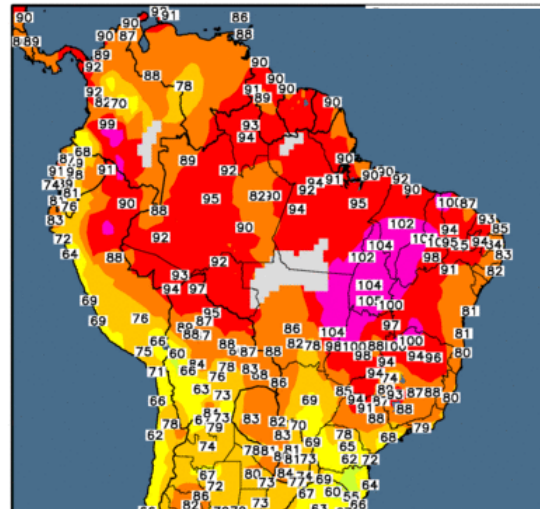
This week will feature the first significant rains into much of southwestern and southeast Brazil. Some of this rain will get into Central Brazil for the first time this season. The rains and increased cloud cover will probably provide for several cooler days over the interior portions of Brazil which has been caught up in the drought and extreme heat over the last several weeks. In addition the models do not agree about Mato Grosso over next two weeks with the Euro much wetter and the GFS bone dry. In the 6-10D there will be a concentration of heavy rain over northeast Argentina southeast Brazil and eastern Paraguay.

There are some indications that the dry pattern over central and northern Brazil will come to an end after the 15-20 October with rains over Southeastern Brazil finally coming northward. But this is rather tentative at this time and not a certainty or even a probability

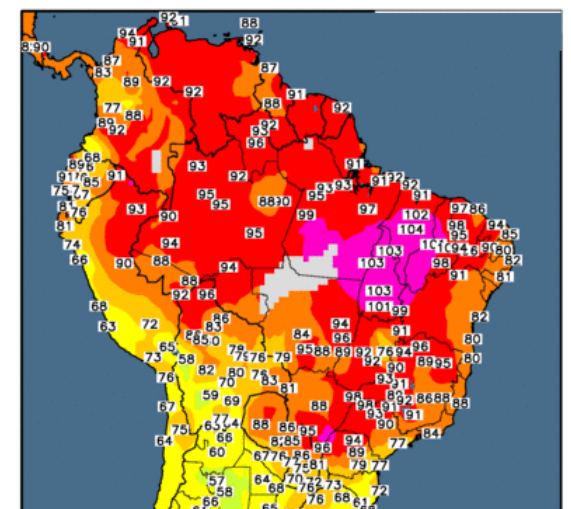
Observed Maximum Temperature (°F)  
30 Sep 2017



Observed Maximum Temperature (°F) Observed Maximum Temperature (°F)  
29 Sep 2017



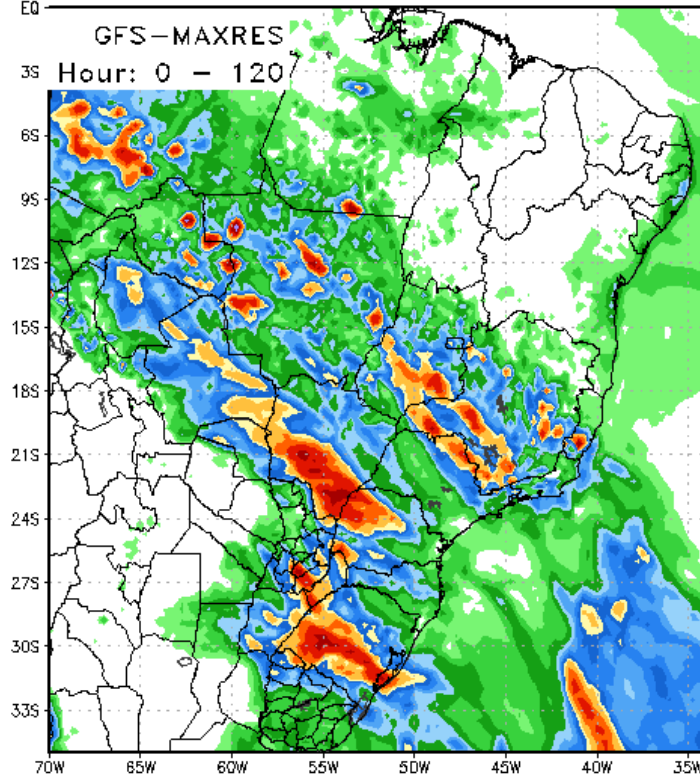
Observed Maximum Temperature (°F)  
28 Sep 2017



# 1-5 DAY

We have excellent model agreement. Most of Argentina is dry. All the models show same sort of rain amounts.. coverage ...and the rain shield on the GFS ...Canadian ...and the European over next 5 days. The rains over southeastern ...southwestern ...and central Brazil looks pretty good . There will be widespread 1-3"/ 25-75mm rains covering all of southeastern Brazil into SP and the southern half of Minas Gerais... much of Goias.. Mato Grosso and MGDS. The best rains appear to be concentrated over southern MGDS and Parana . In some areas of coverage is 50% while other areas the coverage is between 60 and 70%.

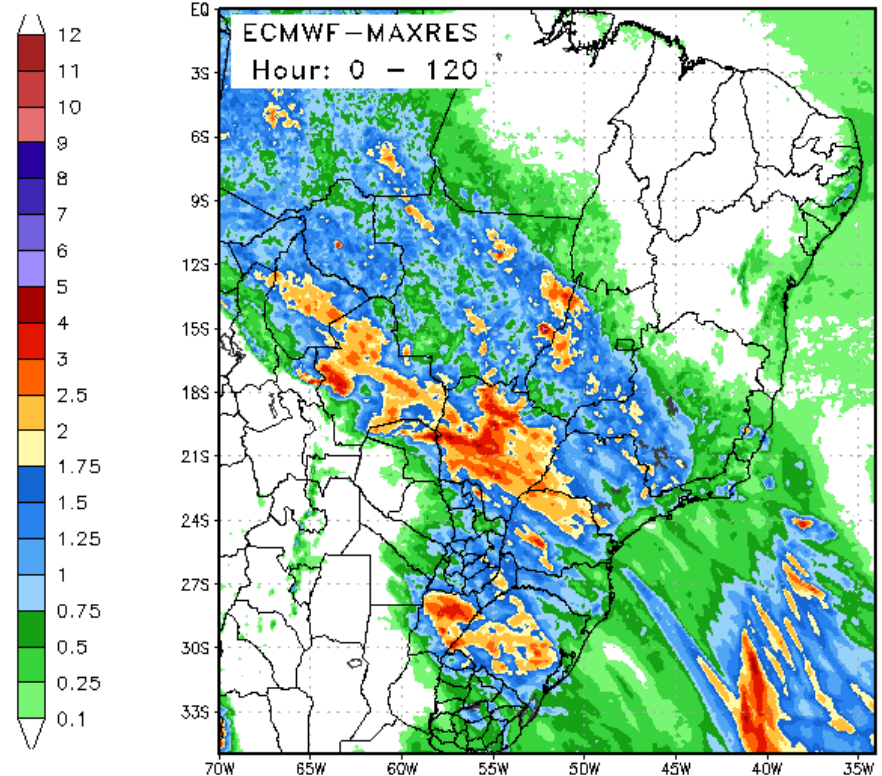
120 Hour Total Precipitation (in)  
Valid: 12z Sun 01 Oct 2017 - 12z Fri 06 Oct 2017



Max: 6.2 in  
Min: 0.0 in

StormVistaWxModels.com

120 Hour Total Precipitation (in)  
Valid: 12z Sun 01 Oct 2017 - 12z Fri 06 Oct 2017



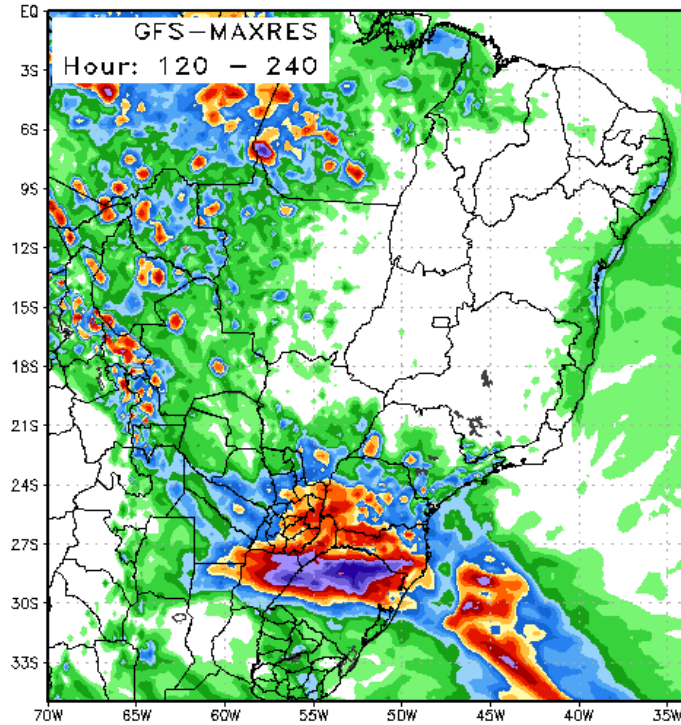
Max: 5.4 in  
Min: 0.0 in

StormVistaWxModels.com

# 6 - 10 DAY

Both models agree that rainfall coverage shrinks and is concentrated mostly over Parana... Santa Catarina ... RGDS ...eastern Paraguay into Corrientes 1-4"/ 60-70% coverage. The operational GFS has 4-8"/ 100-200mm rains concentrated over northern portion of RGDS into eastern Corrientes and 1-2" rains of 50-60% coverage over Chaco Santa Fe ... Buenos Aires and Entre Rios. The GFS model is much drier over western Mato Grosso where the European model has 1-2"/ 25-50mm rains and 50 to 60% in western half of Mato Grosso.

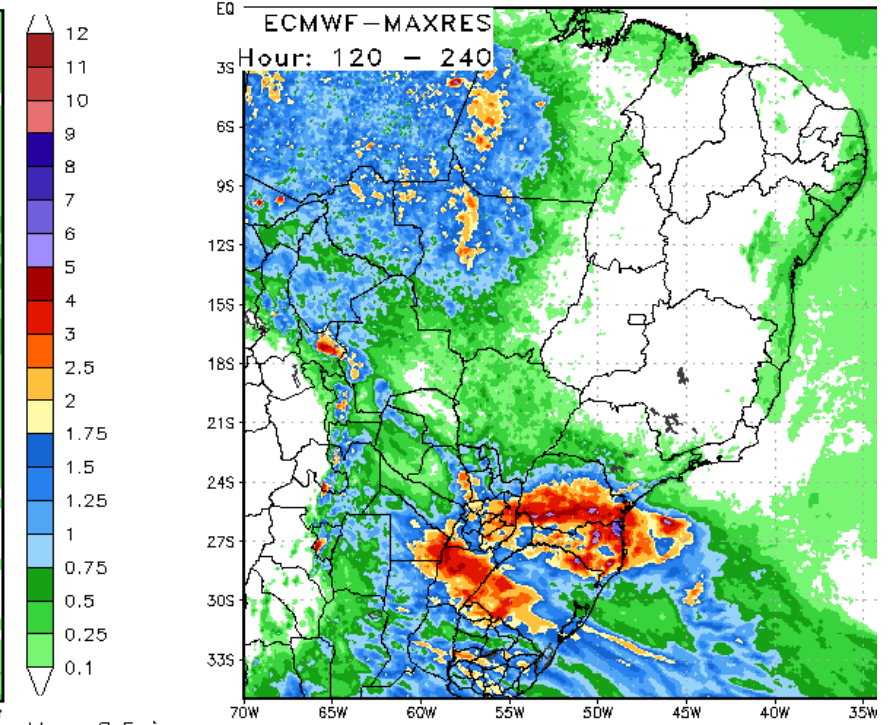
120 Hour Total Precipitation (in)  
Valid: 12z Fri 06 Oct 2017 - 12z Wed 11 Oct 2017



Max: 9.2 in  
Min: 0.0 in

StormVistaWxModels.com

120 Hour Total Precipitation (in)  
Valid: 12z Fri 06 Oct 2017 - 12z Wed 11 Oct 2017

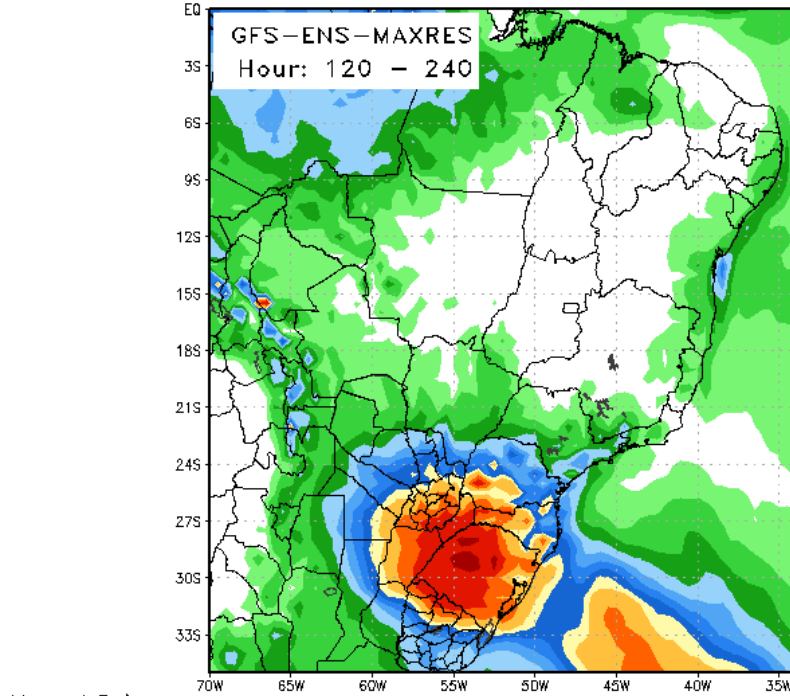


Max: 8.5 in  
Min: 0.0 in

StormVistaWxModels.com

The GFS and European ensembles are in strong agreement that there will be a major concentration of 1-4"/ 25-100mm rains over all of eastern Paraguay ... Parana... Santa Catarina.. RGDS ..Corrientes and 1-2" / 25-50mm in eastern Formosa Chaco northern Santa Fe.

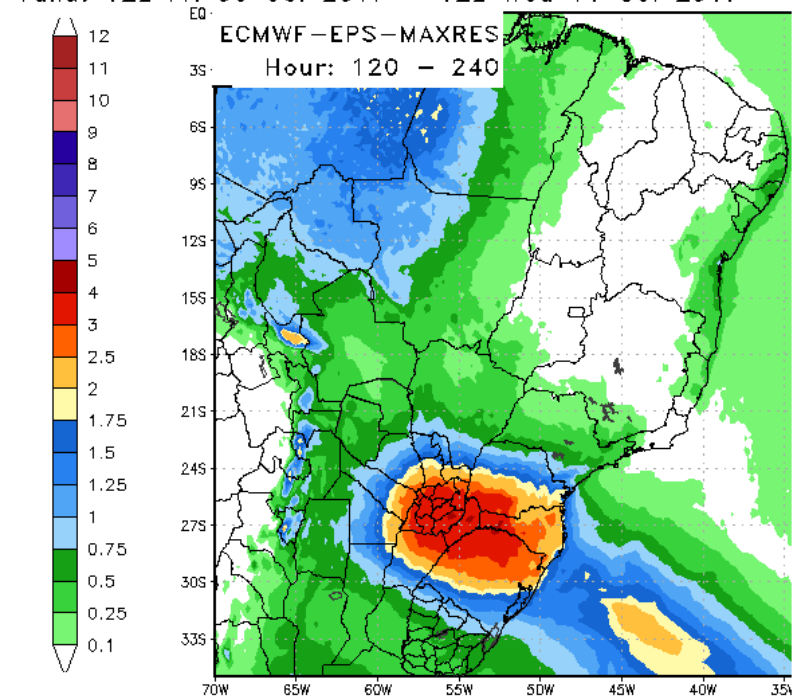
120 Hour Total Precipitation (in)  
Valid: 12z Fri 06 Oct 2017 – 12z Wed 11 Oct 2017



Max: 4.5 in  
Min: 0.0 in

StormVistaWxModels.com

120 Hour Total Precipitation (in)  
Valid: 12z Fri 06 Oct 2017 – 12z Wed 11 Oct 2017



Max: 4.1 in  
Min: -0.0 in

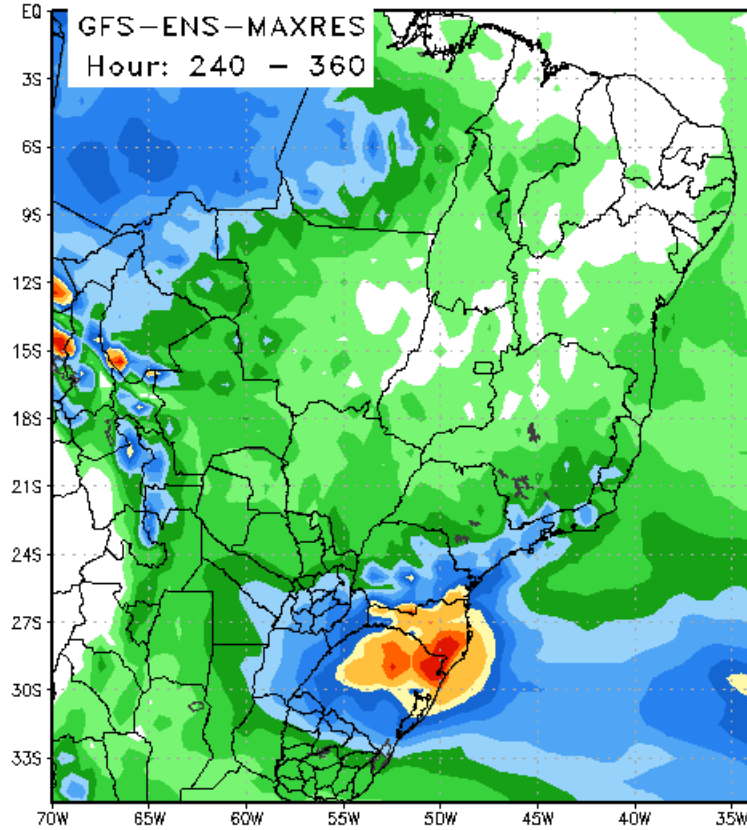
StormVistaWxModels.com

The rainfall amounts are again centered over all of southeastern Brazil.. far northeast Argentina into eastern Paraguay with generally 1-2"/ 25-50mm rainfall amounts. The European model still has decent rains over much of Mato Grosso 0.5- 1.5"/ 12-38mm while the GFS is completely dry over all of Mato Grosso

**11 - 15 DAY**

120 Hour Total Precipitation (in)

Valid: 12z Wed 11 Oct 2017 - 12z Mon 16 Oct 2017

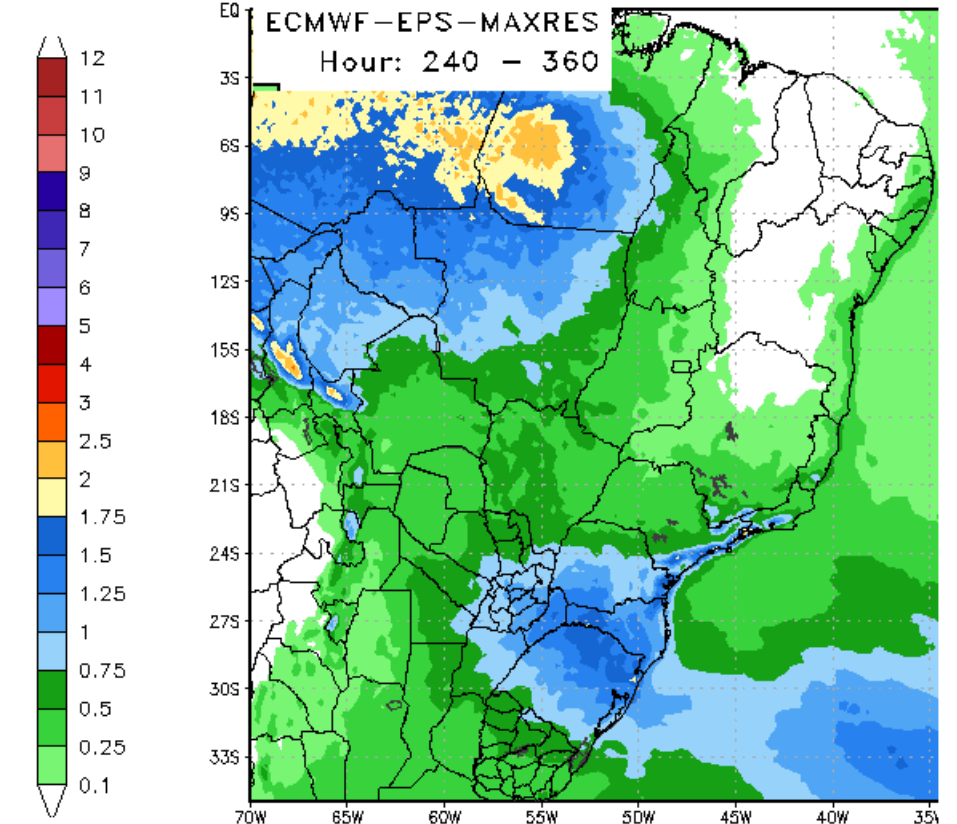


Max: 3.9 in  
Min: 0.0 in

StormVistaWxModels.com

120 Hour Total Precipitation (in)

Valid: 12z Wed 11 Oct 2017 - 12z Mon 16 Oct 2017



Max: 2.7 in  
Min: 0.0 in

StormVistaWxModels.com

\*\*\*\*\*

DT wxrisk.com OFFICE 804 715 8330 CELL 804 307 8070