

SOUTH AMERICA / AUSTRALIAN GRAIN WEATHER

11/6/17 OVERVIEW

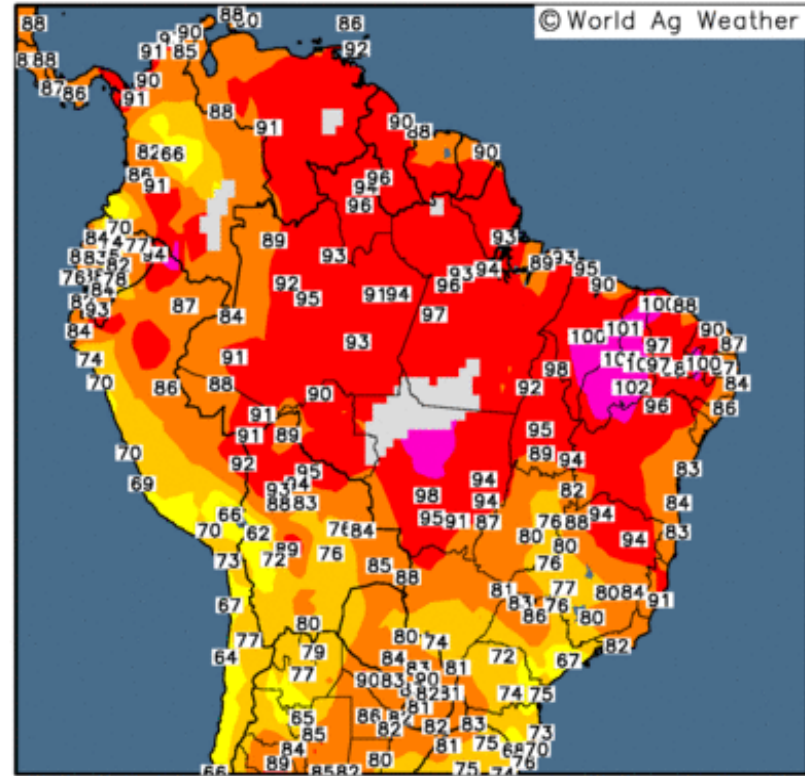
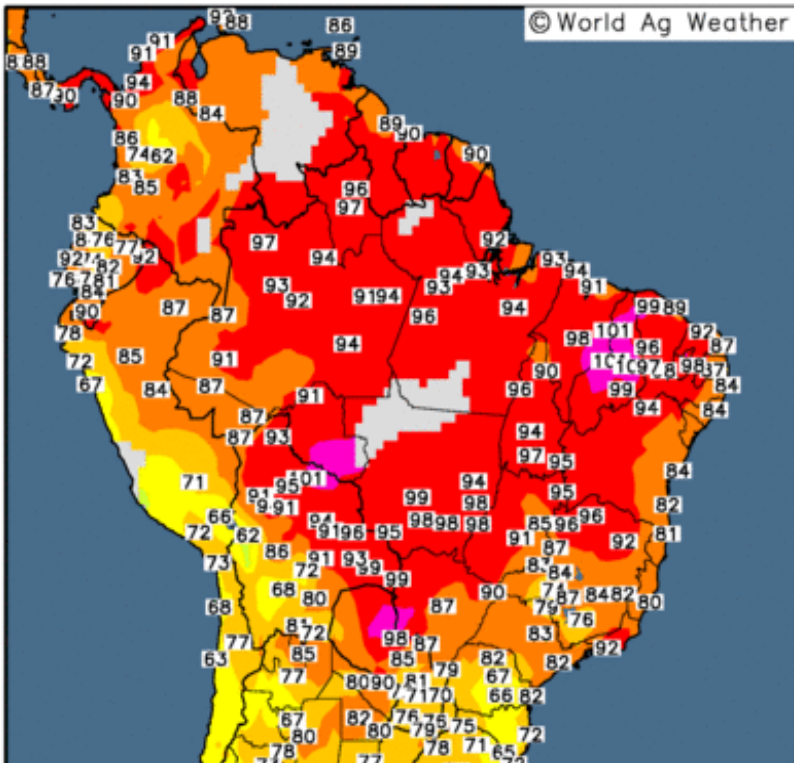
SUMMARY

As we talked about in the FRIDAY presentation and summary ...the collapse of the MJO into the Neutral circle means that the rainy window was going to end. In addition the rainfall amounts have generally been viewed as being under performing -- especially if your reference point has been the GFS Model which unfortunately is the case for many private forecasters for South America. Even though the European models been significantly drier but even there the European model sometimes runs too too wet. Notice in the 6-10 day the main band of rain is running in a west to east direction moving across central Brazil into the northern areas. Once this band pushes northward into Colombia and Venezuela the pattern will reload and new rains will develop over southeastern Brazil and Mato Grosso and Western Brazil. There is significant concern that if the Nco stays neutral for the rest a month the second half of November 1 that being much drier than what the data look like earlier last week.

TEMPS NOV 4 NOV 5

As you can see the heat returned to much of the interior portions of Brazil on November 4 and November 5. Most the readings however were not as extreme as what we saw only 10 days ago. That being said all of eastern and southeastern Brazil as well as Paraguay and most of Argentina had seasonal temperatures.

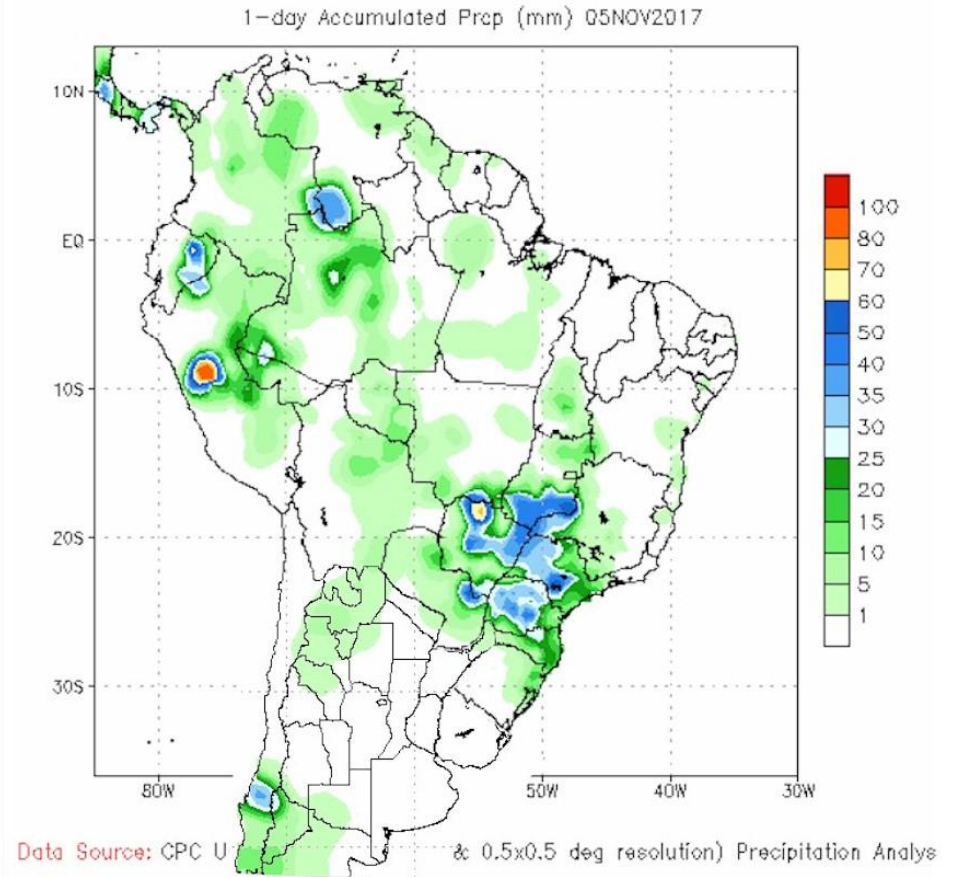
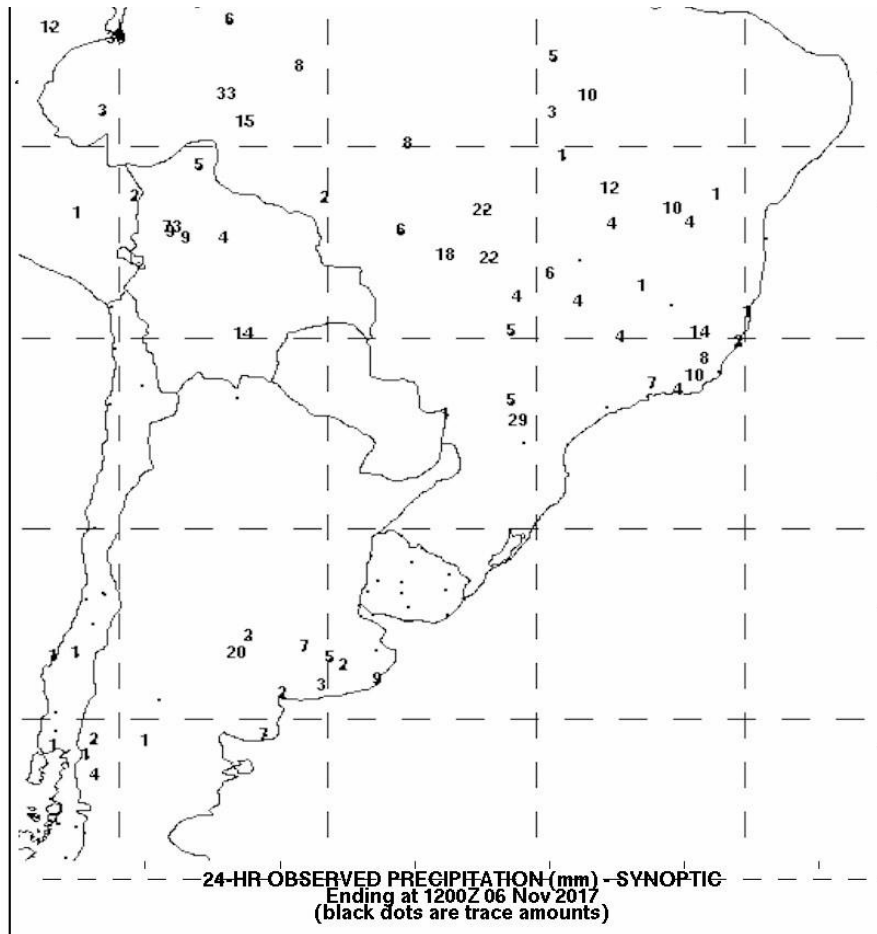
Observed Maximum Temperature (°F) 4 Nov 2017 Observed Maximum Temperature (°F) 5 Nov 2017

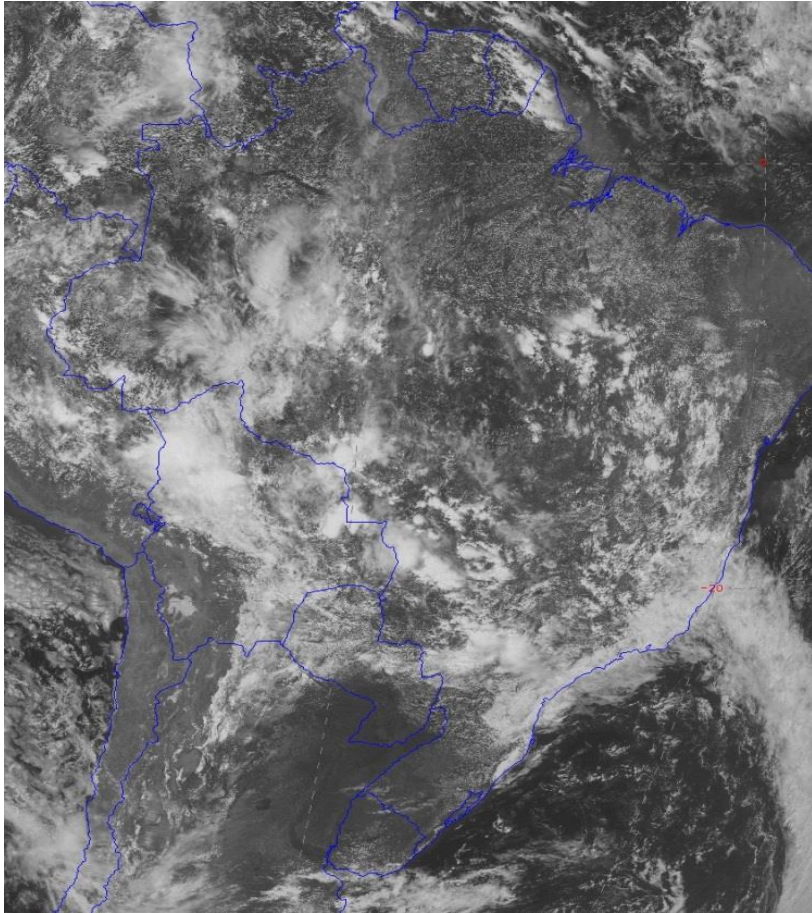


**RAINFALL last 2 days - NOV 4-5 and NOV 5-6
ending 0700 EST**

These two images show rainfall over the past two days. The image on the LEFT refers to November 5-6. The Rains have generally been under performing given how wet some other models have been - especially GFS model. In south central Argentina Buenos Aires into eastern La Pampa saw 2-20mm/ 0.4-0.75" with 50% coverage. In central Brazil rainfall amounts ranged from 4- 25mm/ 0.20-1.0" with 50-60% coverage over central and eastern Mato Grosso...GoiasTocantins into southern Minas Gerais.

Rainfall in NOV 4-5 was a bit more concentrated and significant with amounts ranging from 20-75mm/ 0.75 -3.0" with 70% coverage over MGDS Parana Sao Paulo and southern Goias. These rains however did NOT reach into southern Minas Gerais as forecasted.





The late morning satellite picture shows clear skies across all of central ...northern ...and eastern Argentina and southeast Brazil. There are some thunderstorm clusters which can be detected on a satellite picture over Parana into MGDS and southern Mato Grosso. Most of central and east central Brazil however is seeing generally partly to mostly sunny skies.

1-5 DAY

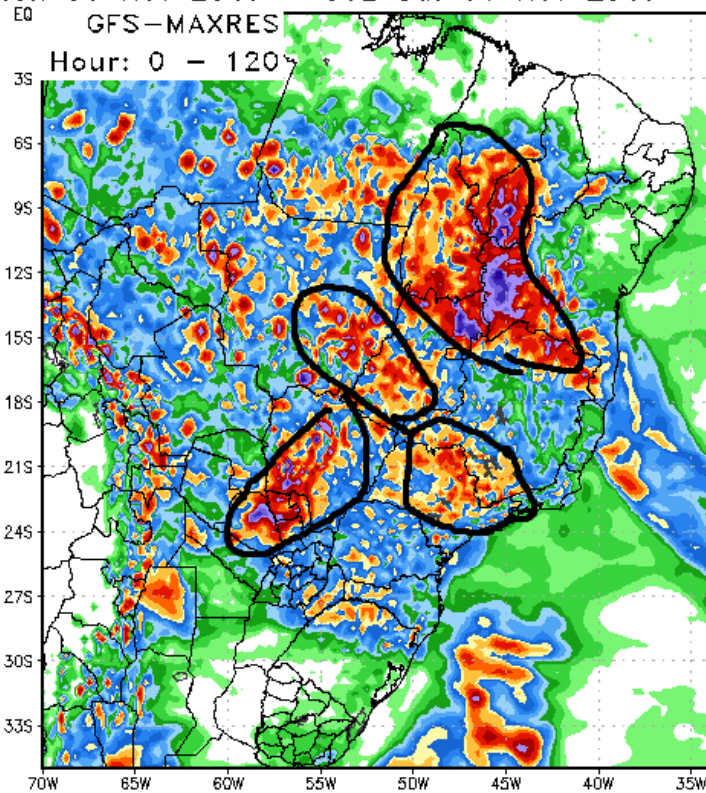
over the next 5 days the weather models continue show significant rains over much of Brazil but there are some differences. This image compares the GFS model (LEFT) vs. the European (RIGHT) and I have highlighted some key differences. Notice that the European generally has two significant clusters of rainfall amounts between 2-4"/ 50-100mm- mainly over Goias Tocantins eastern Mato Grosso and over central Paraguay.

The GFS actually has 4 significant clusters of rain and storms and all the rainfall amounts are significantly heavier. The model shows two clusters of 1-4" / 25-100mm rains over eastern Mato Grosso and over Sao Paulo.... which does not exist on the European model. Both

models to agree that most of Argentina will be generally dry all the next five days.

120 Hour Total Precipitation (in)

Valid: 06z Mon 06 Nov 2017 – 06z Sat 11 Nov 2017

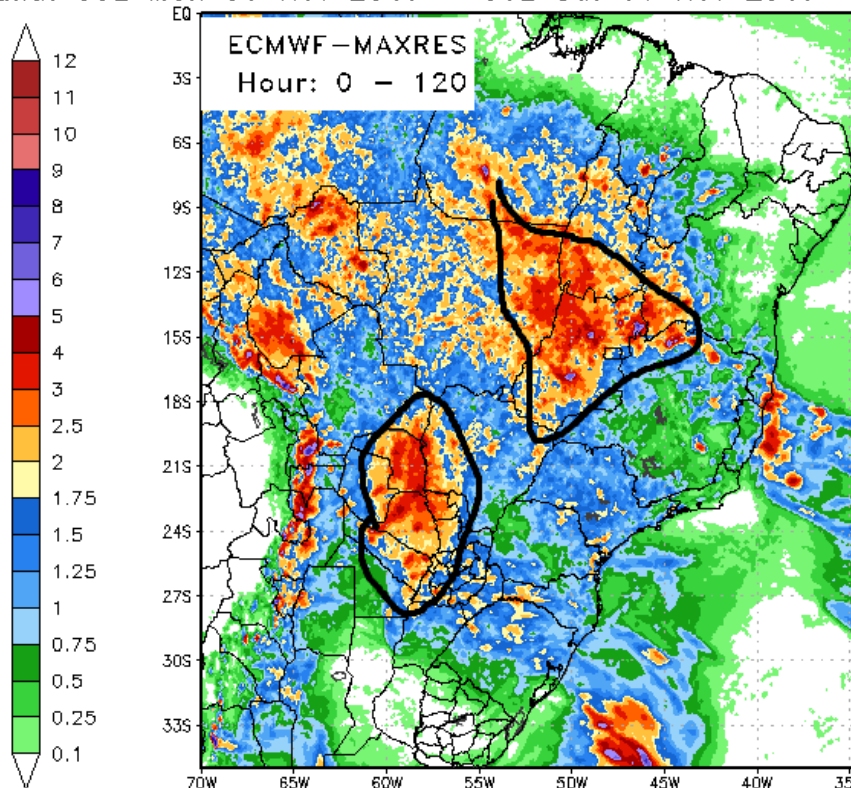


Max: 10.1 in
Min: 0.0 in

StormVistaWxModels.com

120 Hour Total Precipitation (in)

Valid: 00z Mon 06 Nov 2017 – 00z Sat 11 Nov 2017



Max: 9.0 in
Min: 0.0 in

StormVistaWxModels.com

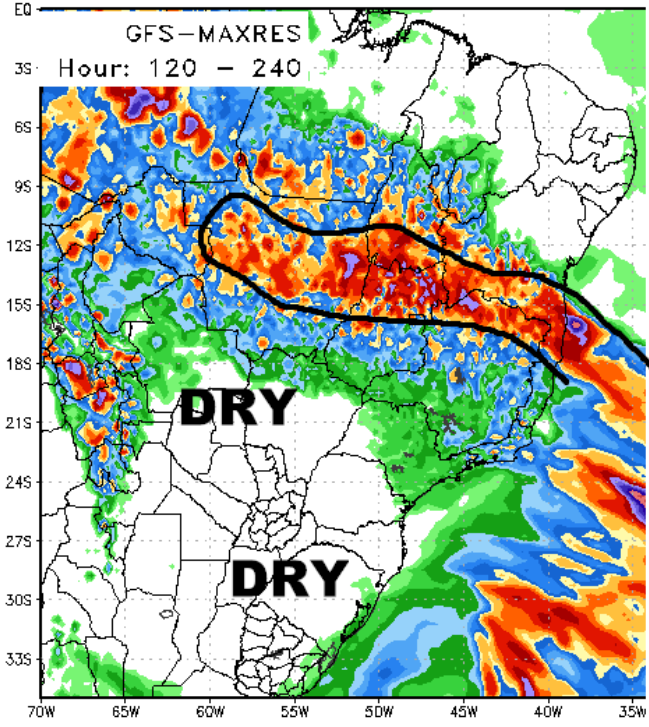
6-10 DAY.

in 6-10D again we see very similar rainfall patterns between the models but the amounts are significantly different. To begin with both models agree that all of southwestern Brazil as well as Southeast and areas Paraguay and all of central ...eastern ... and northern Argentina will be completely dry in this timeframe. The main difference is the intensity band running in a room at more less west ro east alingment

across the southern portions of Bahia ,,into Goias Tocantins ...and most of Mato Grosso. The rainfall amounts and the GFS band range from 2-6 while the European rain amounts area much more reasonable 1-3" / 25-75mm

120 Hour Total Precipitation (in)

Valid: 06z Sat 11 Nov 2017 - 06z Thu 16 Nov 2017

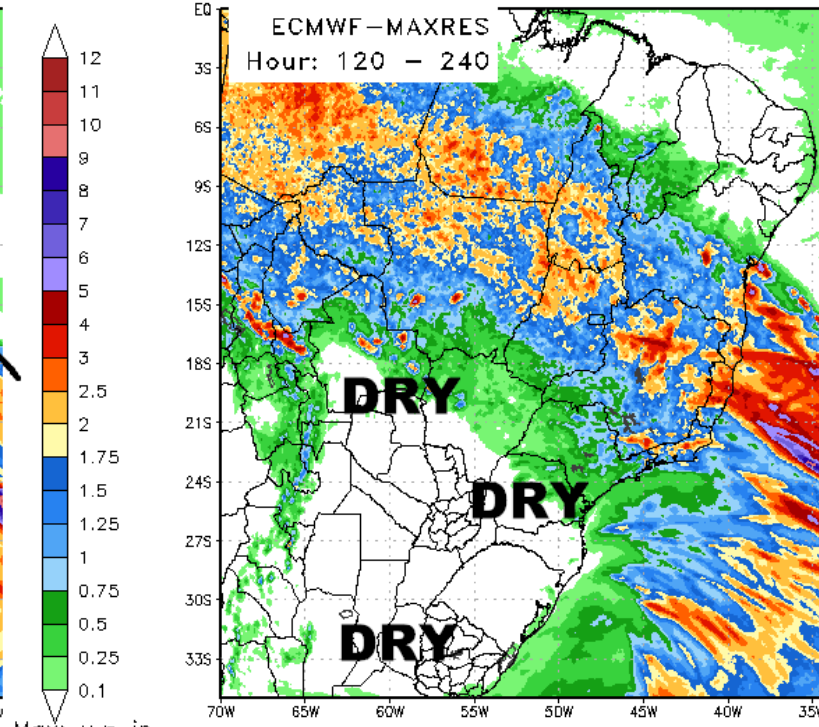


Max: 10.4 in
Min: 0.0 in

StormVistaWxModels.com

120 Hour Total Precipitation (in)

Valid: 00z Sat 11 Nov 2017 - 00z Thu 16 Nov 2017



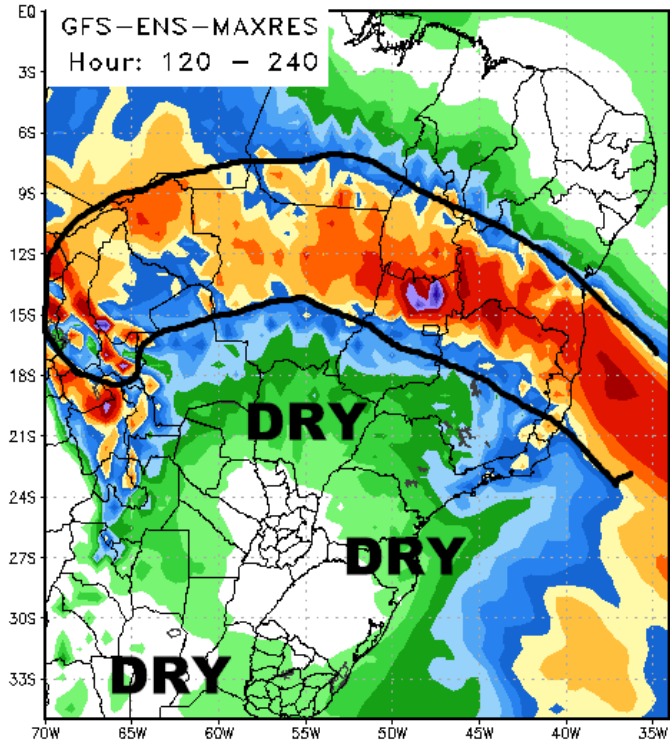
Max: 9.6 in
Min: -0.0 in

StormVistaWxModels.com

6-10 DAY ENSEMBLE

In this case looking at the GFS and European ensembles we don't see much difference. The GFS just simply is a weather model and it has large areas of 4-5" / 100-125mm rains over much of this portion of Brazil where the European has a much more reasonable 1 to 2.5" / 25-60mm

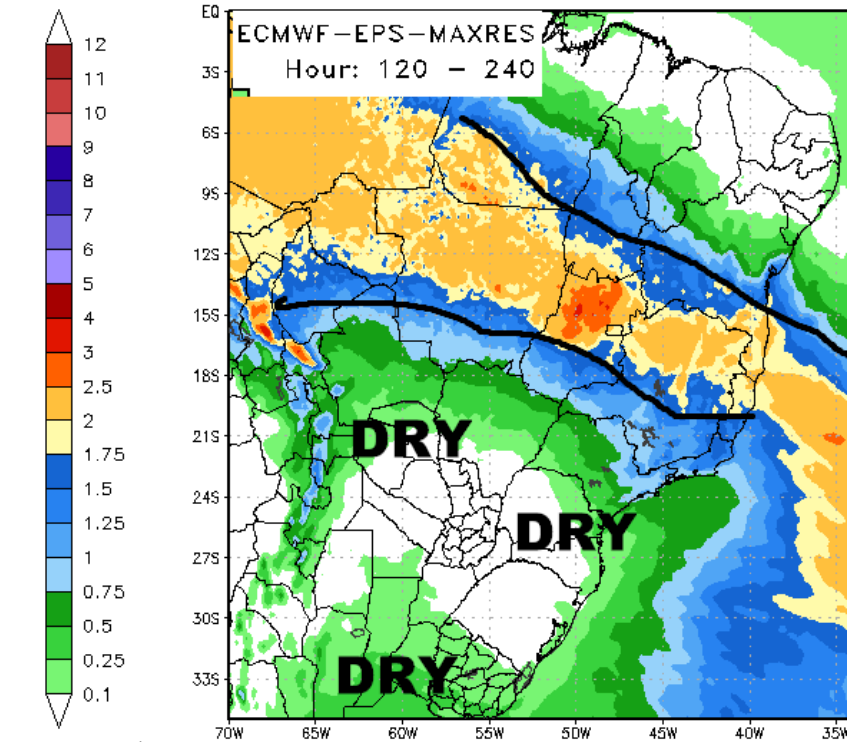
120 Hour Total Precipitation (in)
Valid: 06z Sat 11 Nov 2017 - 06z Thu 16 Nov 2017



Max: 8.5 in
Min: 0.0 in

StormVistaWxModels.com

120 Hour Total Precipitation (in)
Valid: 00z Sat 11 Nov 2017 - 00z Thu 16 Nov 2017



Max: 3.8 in
Min: -0.0 in

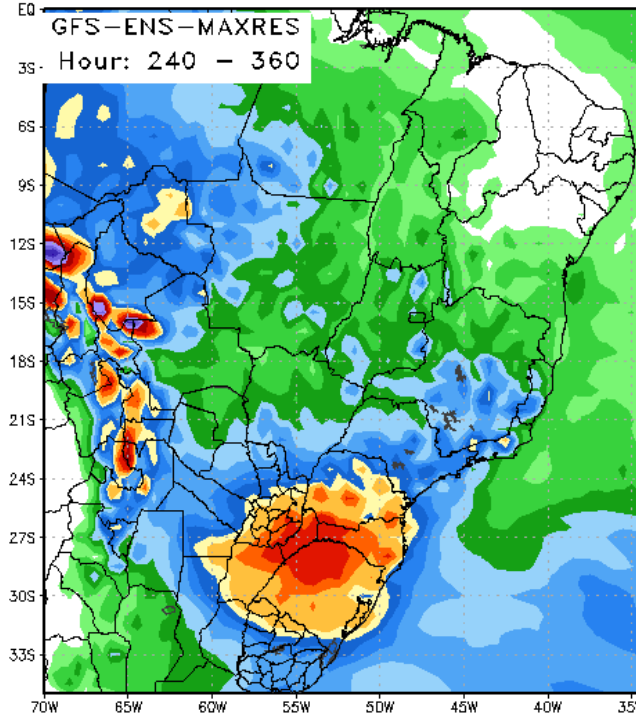
StormVistaWxModels.com

11-15 DAY ENSEMBLE

In the 11 to 15 day there is not good model agreement. The European is much wetter over the entire western half of Brazil showing significant rains of 1-2" /25-40mm over most of Mato Grosso Goias and MGDS . The GFS ensemble has a little the rain those areas but it is much more concentrated over southeastern Brazil and northeastern Argentina as Wells far southeastern Paraguay. The European like society as well but as I said the European simply has more rain over Western Central Brazil than the GFS does.

VERY DIFIFERENT

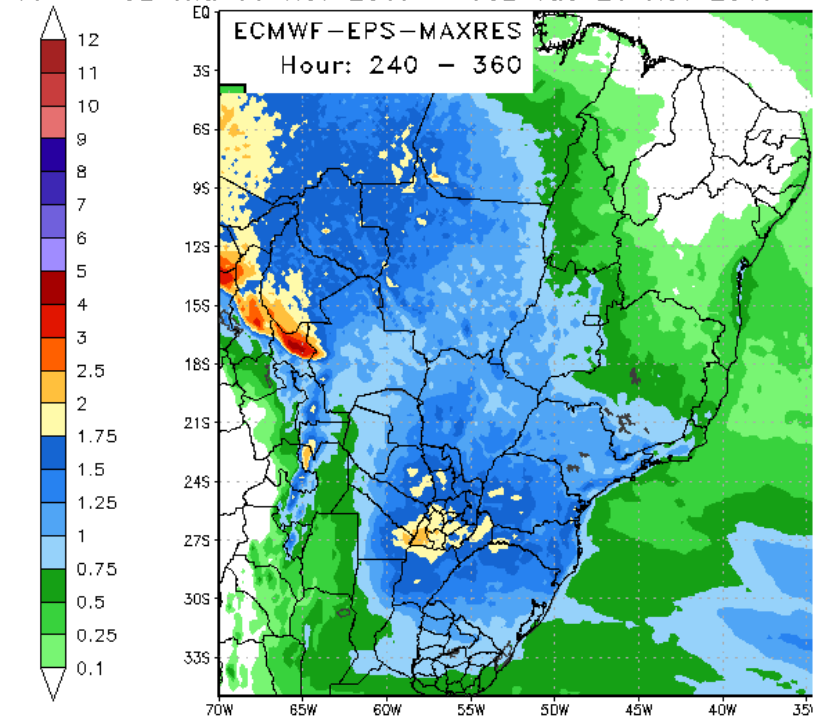
120 Hour Total Precipitation (in)
Valid: 06z Thu 16 Nov 2017 - 06z Tue 21 Nov 2017



Max: 8.3 in
Min: 0.0 in

StormVistaWxModels.com

120 Hour Total Precipitation (in)
Valid: 00z Thu 16 Nov 2017 - 00z Tue 21 Nov 2017



Max: 4.6 in
Min: -0.0 in

StormVistaWxModels.com

AUSTRALIAN GRAIN WX

There is not a lot of rain to talk about in Australia of the next 10 days. It certainly looks pretty dry out there but will be some scattered activity over the interior portions of southwest Australia which might be moderately beneficial. One thing that is significant is that the models are showing increasing amounts of heat over Southern Australia. So far this season has been pretty

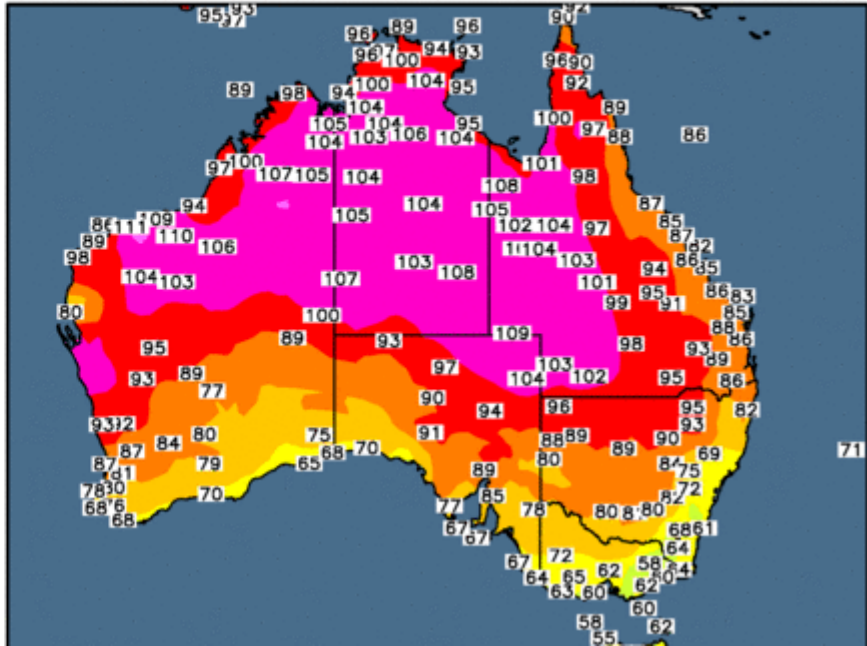
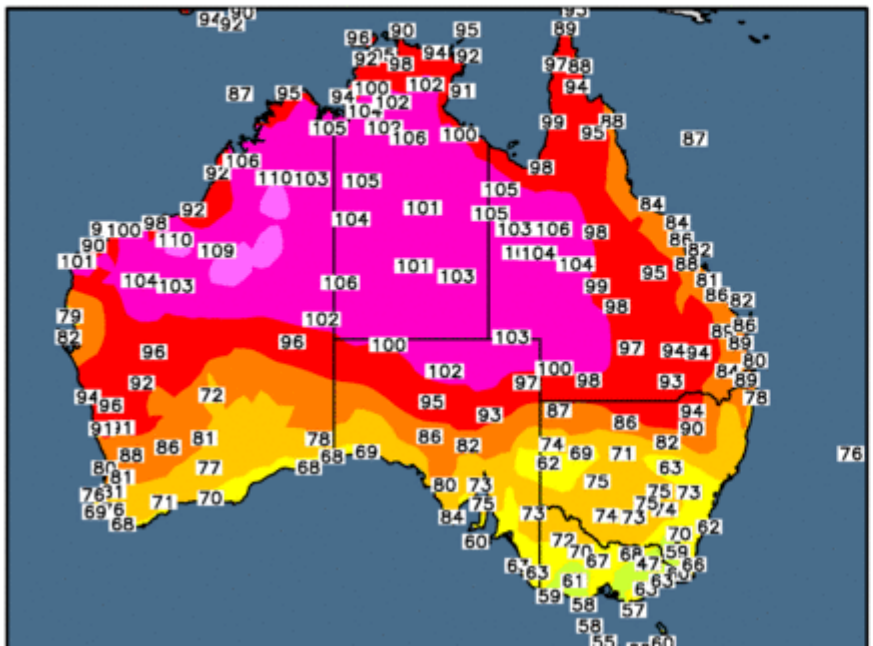
cool their of all the heat over the northern half of the continent but the data clearly shows that's going to change here over the next two weeks.

Temperatures remained quite favorable and nonthreatening again over the weekend in southern half of Australia. There was significant heat but it was over central and northern Australia leaving most of the grain areas in seasonal temperatures.

Observed Maximum Temperature (°F) Observed Maximum Temperature (°F)

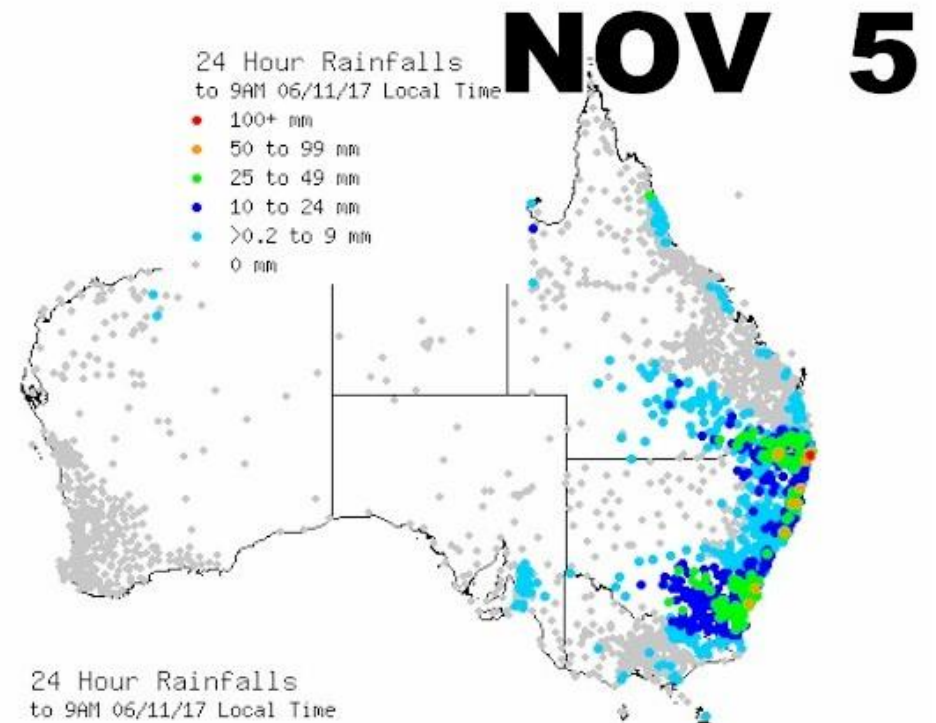
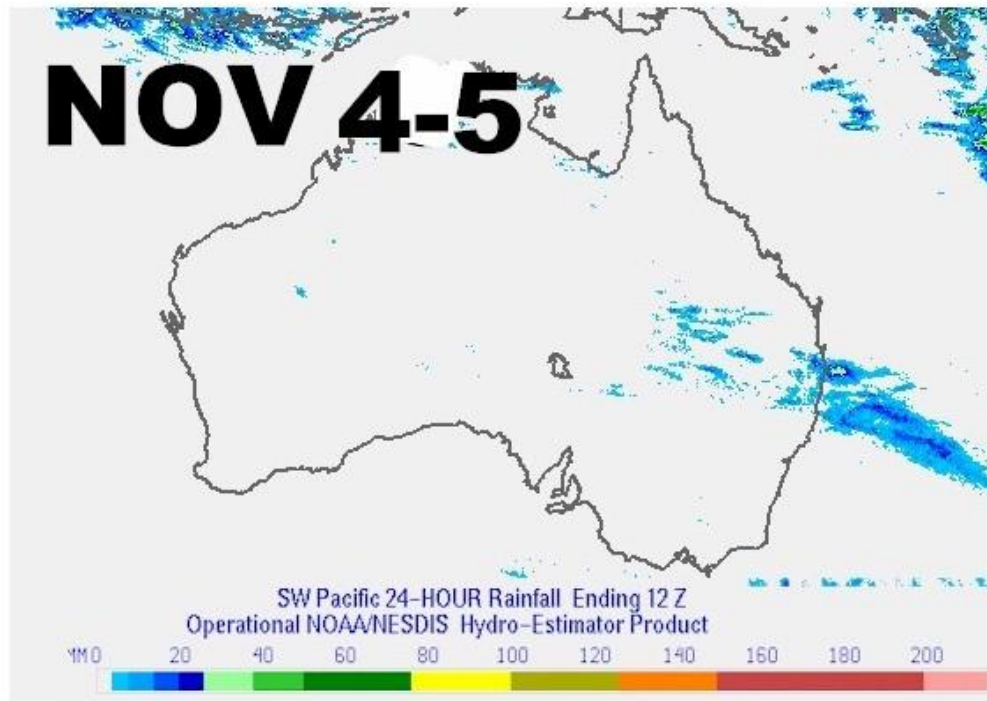
4 Nov 2017

5 Nov 2017

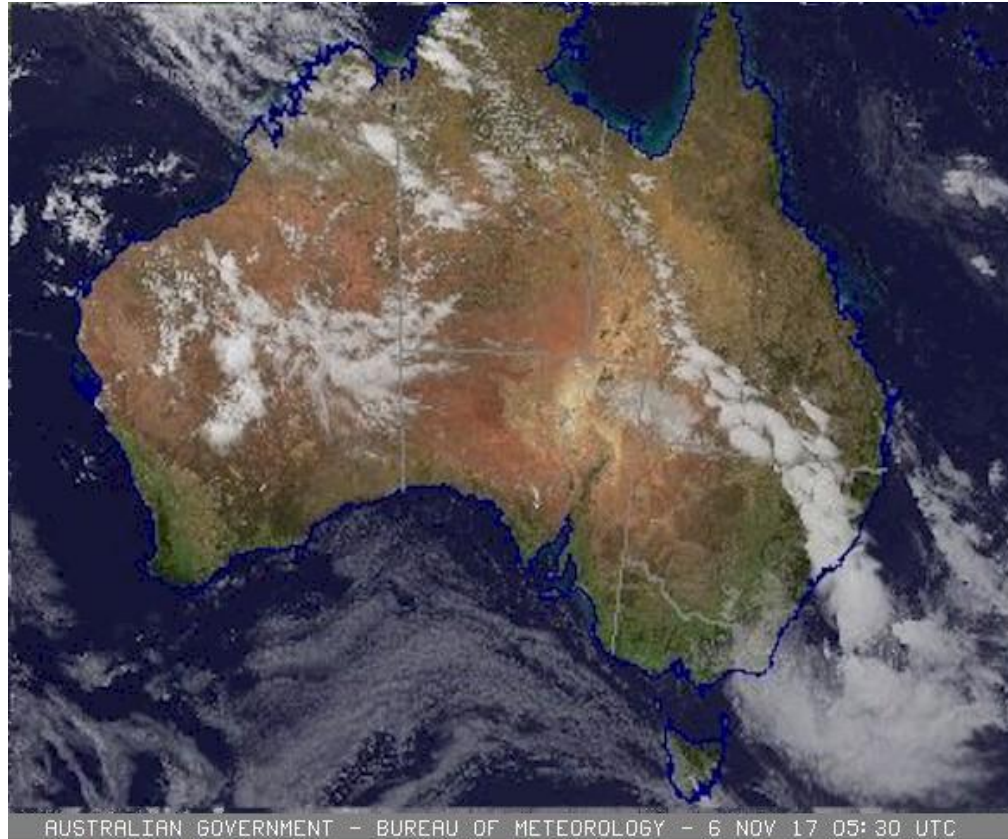


**RAINFALL last 2 days - NOV 4-5 and NOV 5-6
ending 0700 EST**

The rainfall November 4-5 was nonexistent over all areas. Rainfall NOV 5-6 shows the impact of the current system leaving East Australia. Notice that there were some decent rains into portions of southeastern Queensland with amounts between 2-25mm/ 0.15-1.0" with locally amounts on the coast.

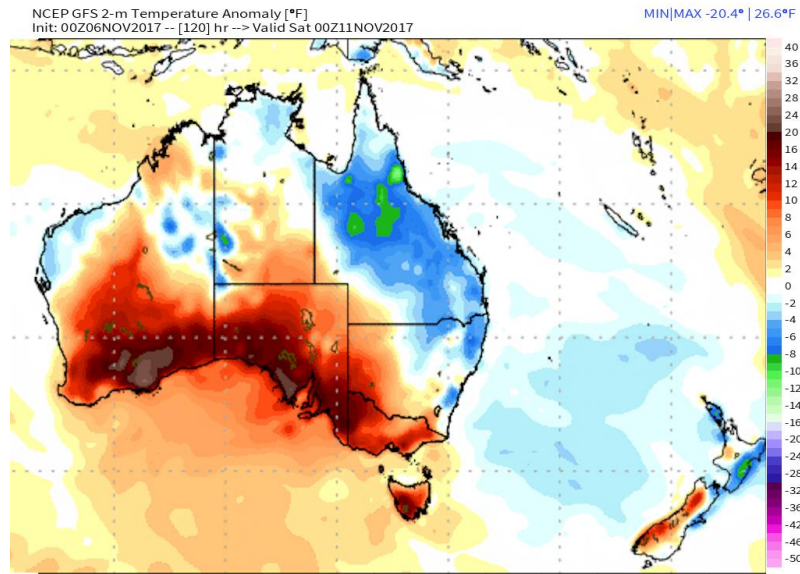
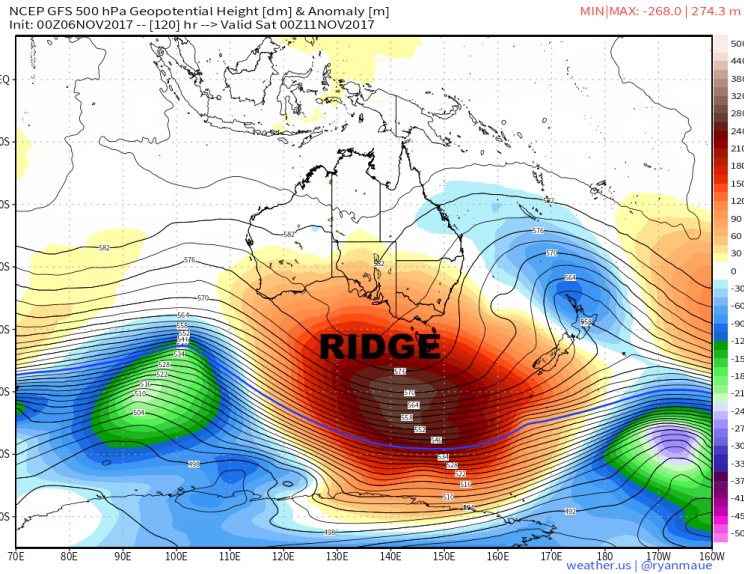


The Monday afternoon satellite picture shows heavy clouds and rain leaving Eastern Australia and moving into southeastern portions of Queensland. This system brought moderate rains in the last 24 hours to portions of Queensland.

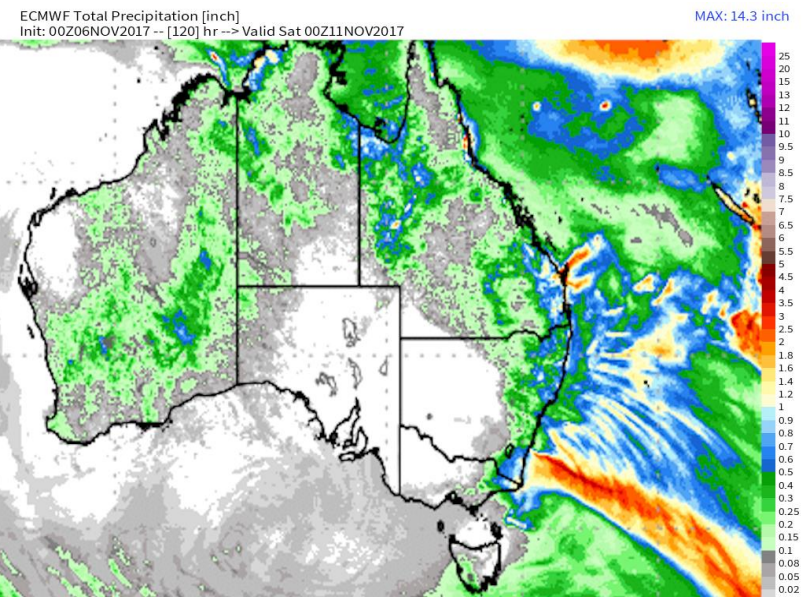
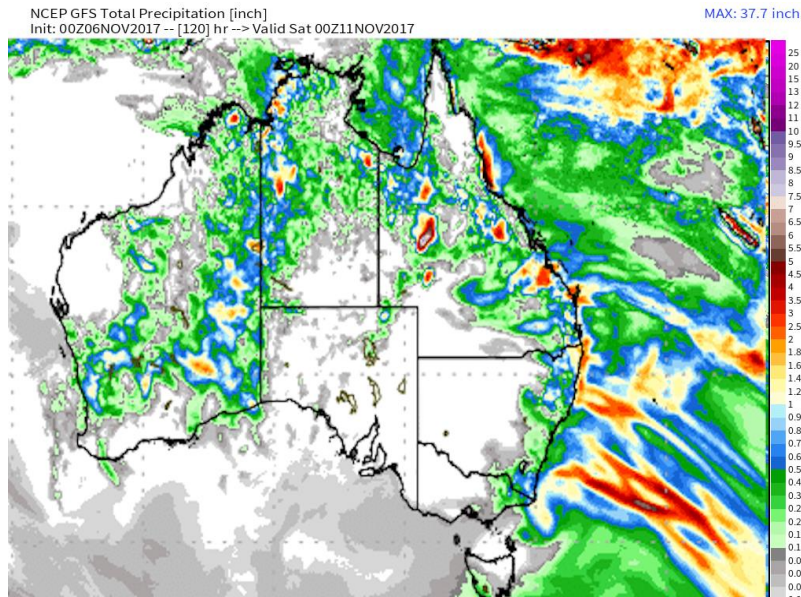


1-5 DAY

Over the next 5 days the heat will be increasing significantly across all of southern third of Australia. This is because of a significant ridge in the jet stream which will be forming over Southern Australia. We can see this on the image below. The map on the right hand side shows a surface temperature anomalies as you can see the turn quite warm for the first time this season over much of Southern Australia.



Rainfall the next 5 days does not look particular significant. Most activities along the coastal Range is of southeastern Queensland and New South Wales. There is some scattered activity of 6-25mm/ 0.25-1.0" over the interior portions of southwestern Australia with 40 to 50% coverage.



6 - 10 DAY

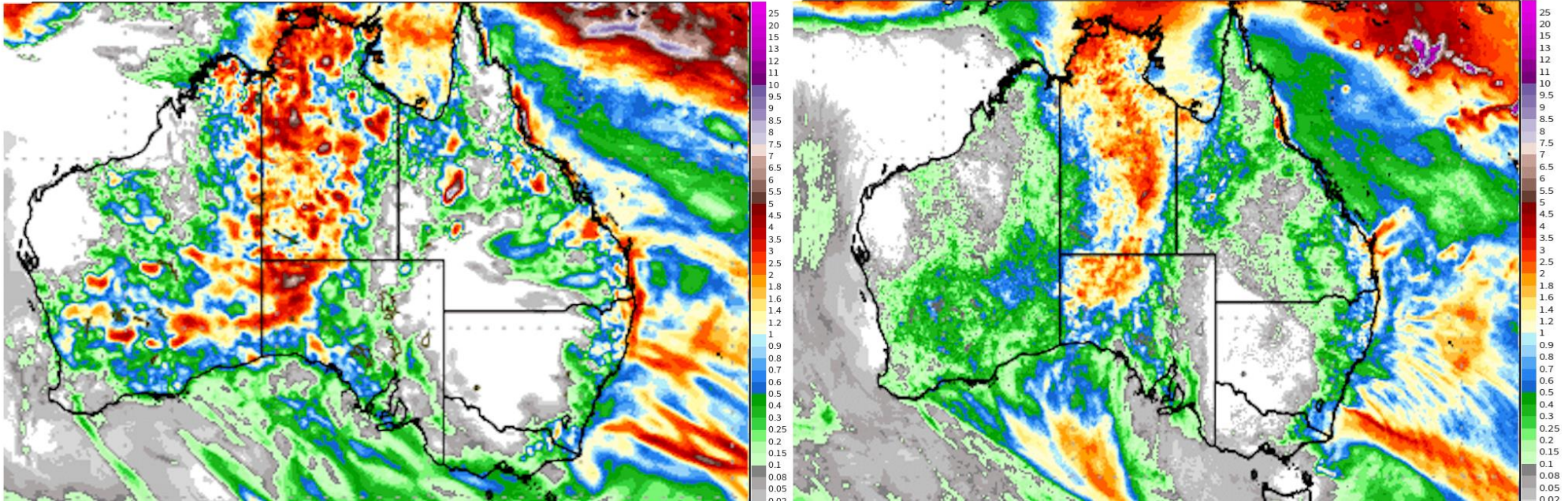
This activity increases significantly over much of the eastern portions of the Western Australia Territory and over central Australia from the north to south coasts. However most of New South Wales and southeastern Queensland remains dry in the 6-10DAY with the only significant rain occurring once again near the coast

NCEP GFS Total Precipitation [inch]
Init: 00Z06NOV2017 -- [240] hr --> Valid Thu 00Z16NOV2017

MAX: 50.7 inch

ECMWF Total Precipitation [inch]
Init: 00Z06NOV2017 -- [240] hr --> Valid Thu 00Z16NOV2017

MAX: 27.7 inch



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