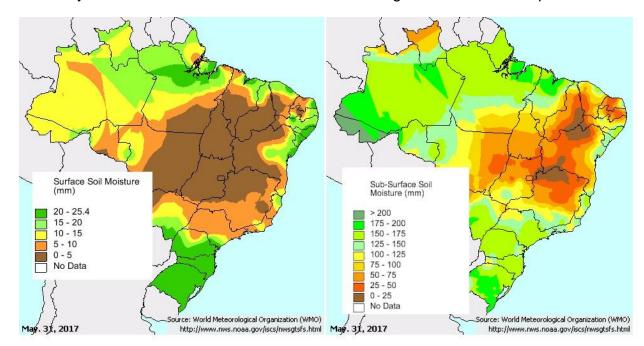
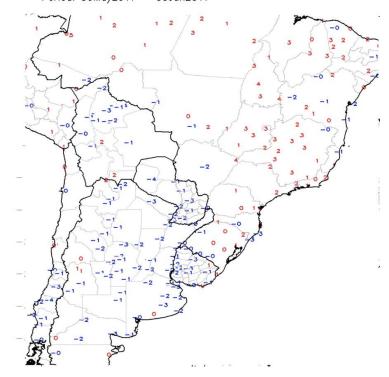
OVERSEAS FOCUS -- S.AMERICA 6 JUNE 2017 - NEXT 3 WEEKS

The long-term drought conditions over central and east central Brazil continue and the lack of significant rains over much of these areas during their Spring and Summer seasons have allowed the long-term drought conditions to remain in place. As you can see the surface moisture and sub service moisture.... they remain rather weak with significant deficits over most of Brazil except for the southeast areas. While there are some dry areas over central northern and Eastern Argentina for the most part these are normal variants with the seasonal conditions.

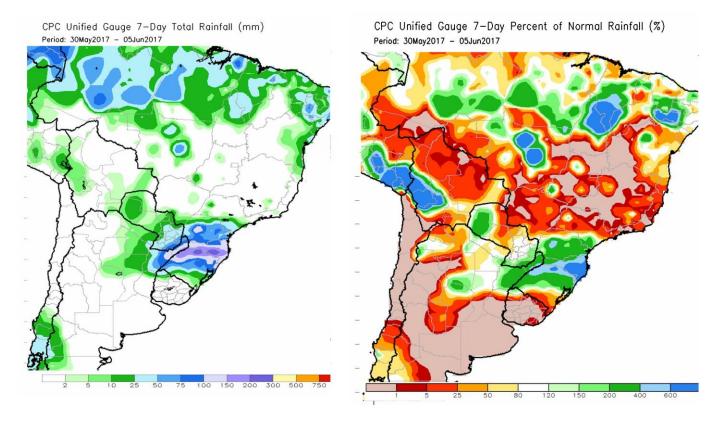


Running 7—Day Average Temperature Anomaly (C) Feriod: 30May2017 — 05Jun2017



Over the past seven days temperatures that continue to run below normal over southeastern Brazil and all of Central Eastern Northern Argentina as well as Paraguay. This is mainly due to the excessive clout cover and prolonged wet pattern in these areas. To the north with below normal rainfall and a distinct lack of clout cover temperatures have continue to run above normal over much of Sao Paulo Goias Tocantins and eastern Mato Grosso.

Over the last seven days the rainfall maps clearly show which areas have received the significant rain and which areas have not. Because is stable nature of the overall jet stream pattern in South America for the past 30 days the rainfall pattern has either been feast or fat and depending on your location. The map on the left represents actual rainfall over the past 7 days and as you see only far northeastern Argentina as well as RGDS Santa Catarina and Parana. Notice that the rainfall amounts in these areas range anywhere from 50-250mm / 2-9" ... The th which is anywhere from 200 to 500% above normal depending again on location. Notice that South Central Argentina has been bone dry and again most of east central central and southwestern Brazil has seen only 1 to 25% of normal rainfall over the past seven days.

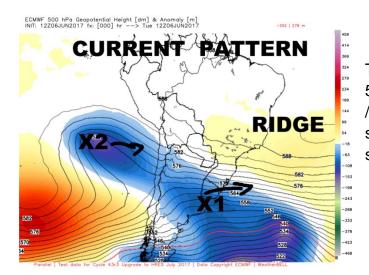


This trend has intensified over last 14 days with large areas of central and Southern France and far Eastern Germany Western Poland saying only 20% of normal rainfall. On the other hand the rather wet areas across the Balkans into Austria Hungary and southeastern Poland have increased their positive rainfall anomalies running anywhere from 150 to 300% normal rainfall.

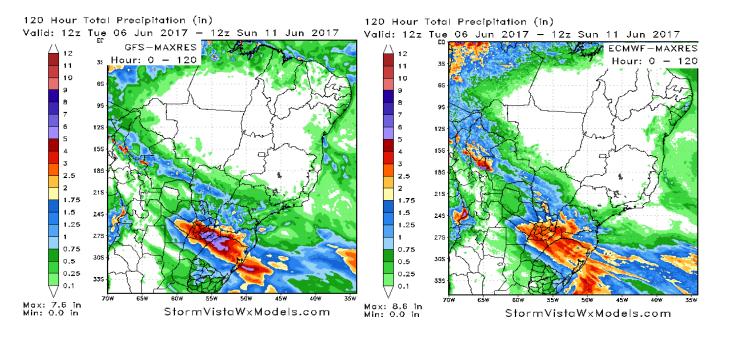
DAY 1-6 / JUNE 7-11

These two images show the overall current jet stream map and why the pattern is locked in in this particular mode which forces the significant rains to fall over relatively narrow restricted area or far northeastern Argentina and Southeast Brazil. The map on the LEFT represents the actual jet stream map as of June 6. There are two powerful pieces of energy which we have labeled X1 and X2. The feature X1 is a piece of energy that is currently located over Eastern Argentina and Uruguay -- and it is has been producing a significant rains over the past few days in southeastern Brazil. However this feature is moving to the east. There is another strong upper air disturbance coming in behind

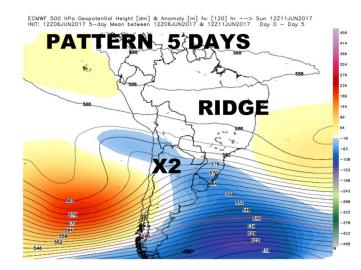
which we label X2 and that feature will arrive by day 5 / Day 6 over Northern Argentina and begin to bring in significant rain to that area as well as southeastern Brazil and Paraguay.



These rainfall maps represent the GFS and the European model rainfall forecast for the next 5 days. The GFS is little heavier than the European as it has a fairly large area of 5-7" /125-175mm rains over the western portions of RGDS and into the northeastern Argentina state of Corrientes. The European model rainfall amounts are not nearly quite as heavy but still show a significant area of 1-4"/ 25-100mm

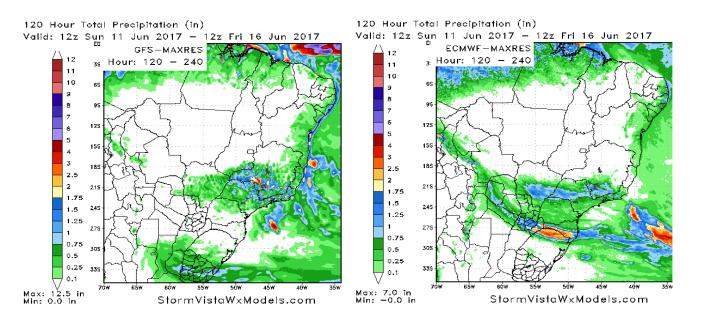


DAY 6-10 JUNE 7-11

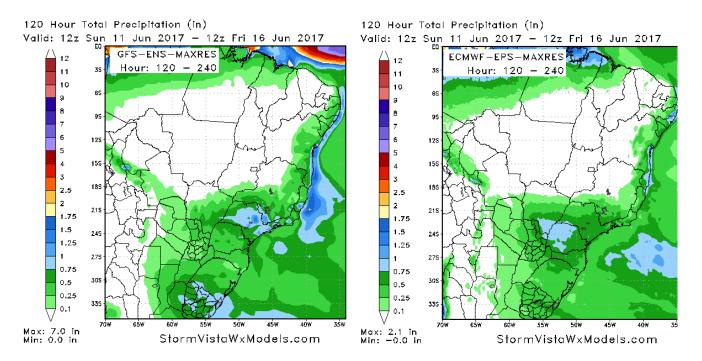


In the 6-10day we present the upper air map which shows a powerful upper disturbance well off the west central coast of Chile -- which we have labeled X3. As powerful as this feature is it is still well to the west of the Chile Coast so it will be some time before it can impact eastern and Northern Argentina as well as southern Brazil This is why the 6-10 day looks so dry.

There is still some moderate rain over portions of MGDS Sao Paulo even into the southern portions of Minas Gerais-- but the rains on these models are not typically significant -- 30-40% coverage over Ssao Paulo eastern MGDS Parana



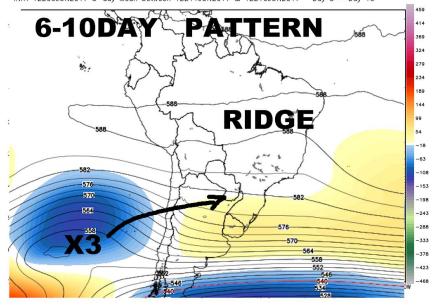
In the 6-10 day ensembles the models generally support this idea of moderate rains lingering over southeastern Brazil with some other rain getting into Sao Paulo.



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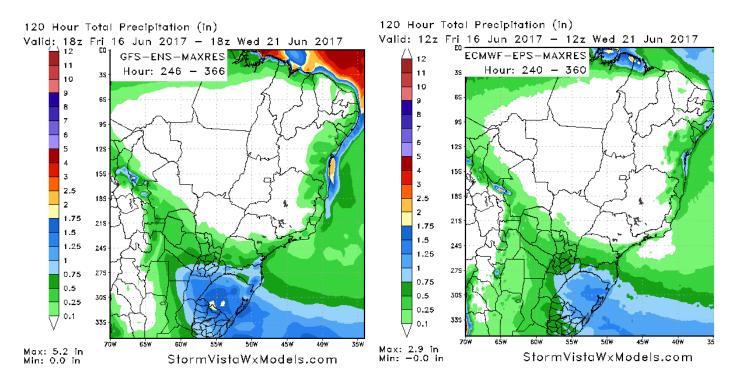
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ECMWF 500 hPa Geopotential Height [dm] & Anomaly [m] fx: [240] hr --> Fri 12Z16JUN2017 INIT: 12Z06JUN2017 5-day Mean between 12Z11JUN2017 & 12Z16JUN2017 Day 5 - Day 10



11 – 15 DAY JUNE 12-16

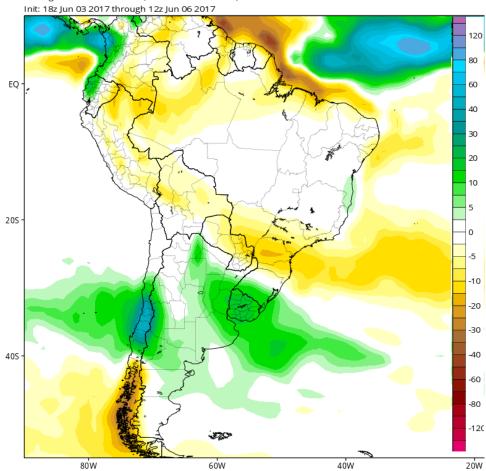
I Presumably this powerful disturbance off the coast of Chile in the southwest portions of the Southern Pacific Ocean ...will move into Northern Chile and across central and northern Argentina in the 11 to 15 day. The weather models reflect this with an increase of rain again over the far southeast areas of Brazil but in our opinion this may be underdonegiven the size and intensity of this potential next big system coming in from the Pacific Ocean. In other words we expect the rainfall amounts on the w eatr models to increase significantly over southeastern Brazil as well as far Northeast Argentina and Paraguay as we get closer to the event



Finally the week 3 models show that the persistent rain area over southeastern Brazil is going to shift the south and move into central and eastern Argentina as well as Uruguay in late June.

CFSv2 Accumulated Precip. Anomaly (mm) from 12z20Jun2017 to 12z27Jun2017 (Days 15-21)

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



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