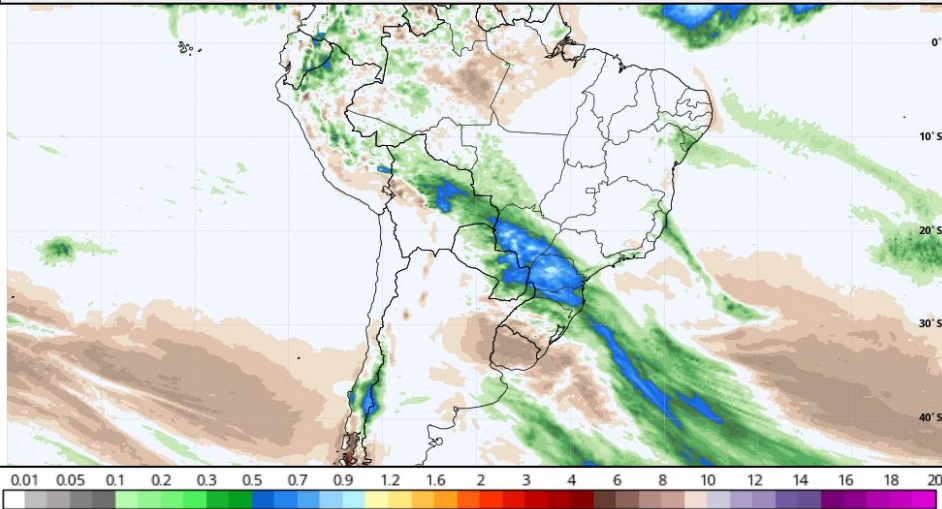


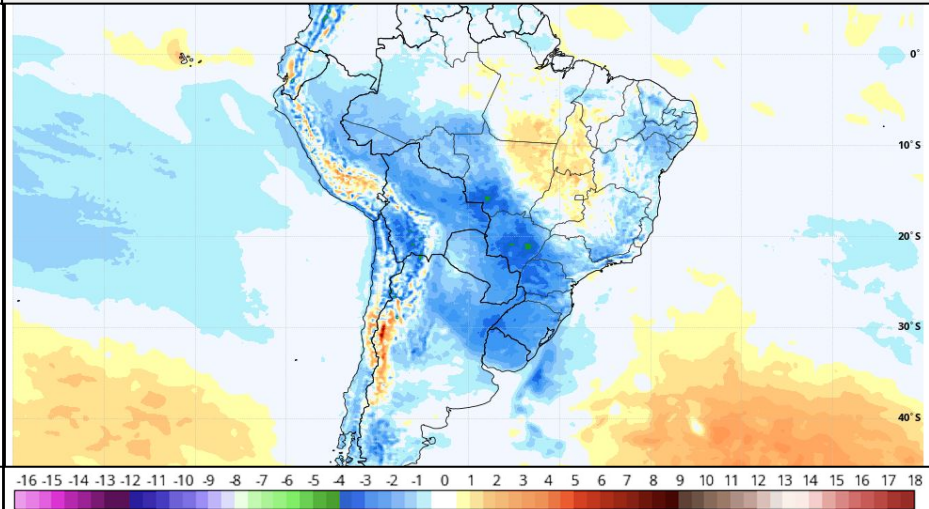
**Active pattern next several days, drier and warmer trends from late August into September...**

1. Rainfall was observed across parts of S Brazil over the past 24-48 hours with showers and thunderstorms leading to light/moderate precipitation totals (15 to 25 mm with scattered coverage). Meanwhile, warmer and drier conditions persisted across Central Brazil regions and dryness also persisted in parts of Argentina.
2. A wetter forecast takes hold over the next week with precipitation forecast to average above normal in much of Southern Brazil and even parts of Northeastern Argentina. Temperatures will trend cooler as well with models in good agreement on the pattern evolution.
3. As we move into the extended range (Days 10-20), most guidance agrees that ridging will return. This will lead to a drier and warmer weather pattern by the last 5 days of August and continuing into the early part of September. Drier risks may persist into September, although the details and longevity remain uncertain at this range.

**7 Day Moisture Forecast (ECMWF Model)**

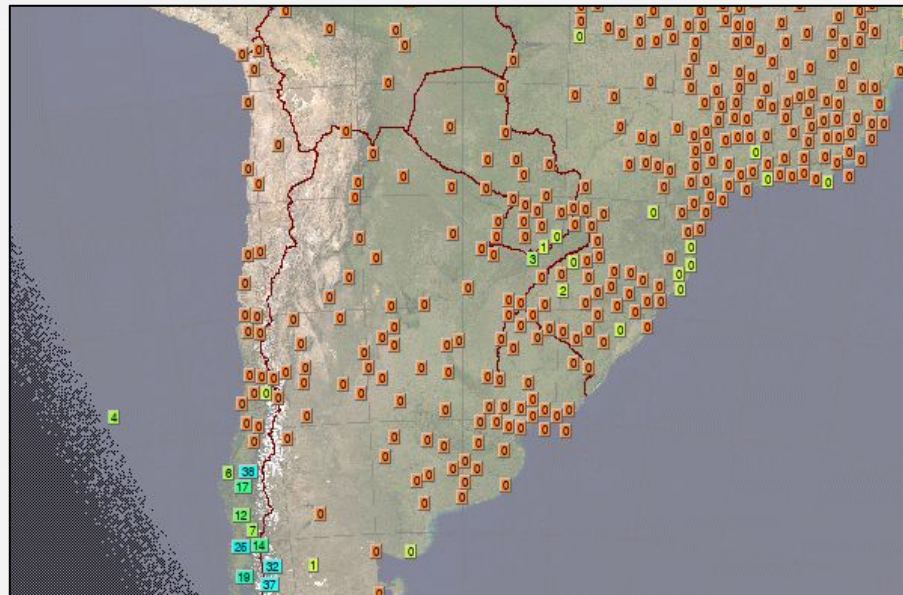
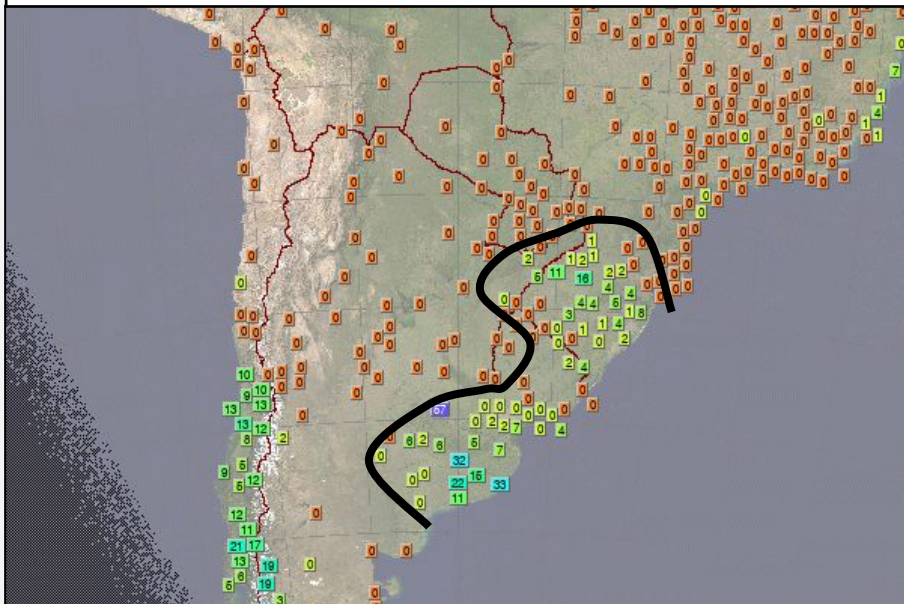


**7 Day Temperature Anomaly Forecast (ECMWF)**



### Last 24 Hour Rainfall Totals

Rainfall totals were generally light (5-15mm) across parts of far Southern Brazil over the last 24 hours with additional light to moderate rainfall totals observed across parts of Eastern Argentina. Much of Central Brazil remained dry during this time frame.



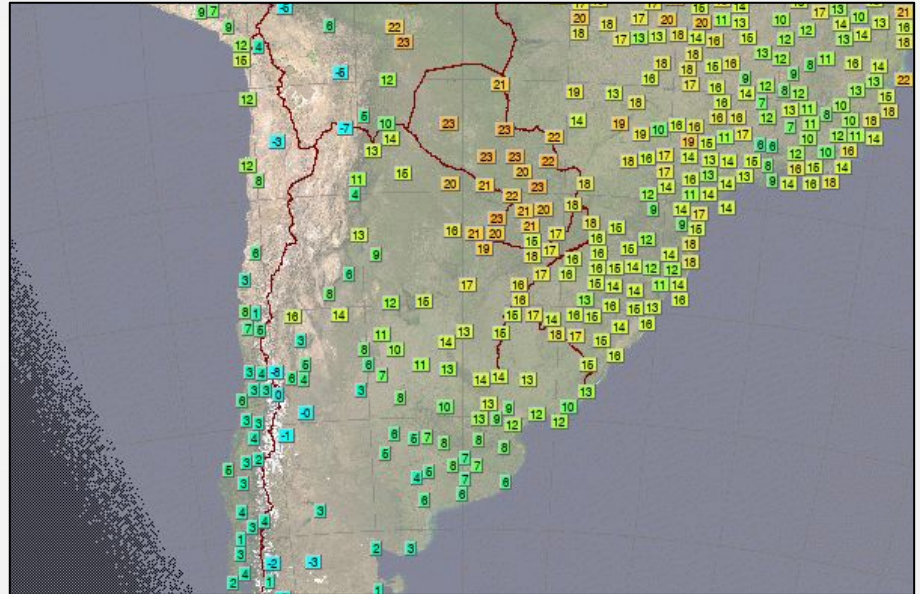
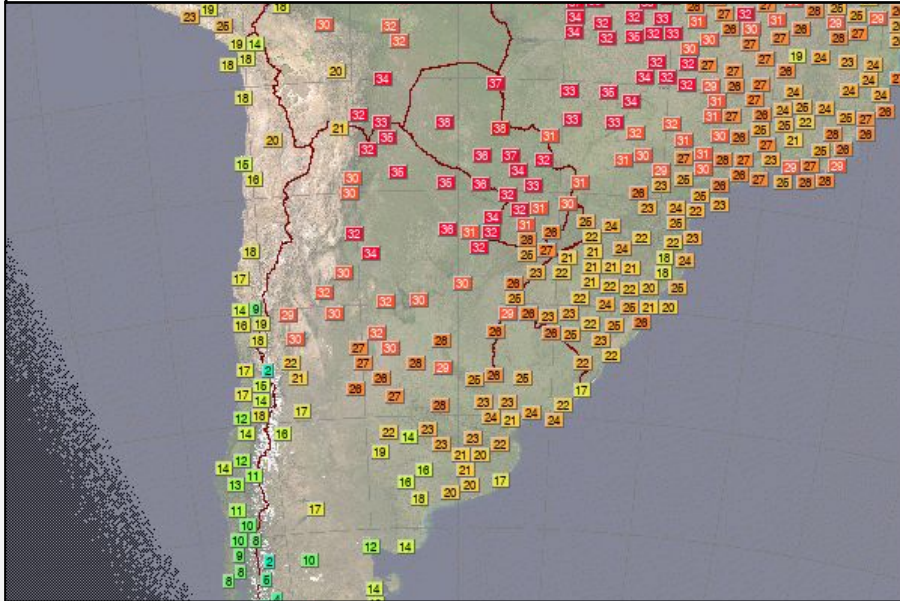
### 24-48 Hours Ago Rainfall Totals

The weekend was quite dry across a large majority of Central and Southern Brazil (until Sunday) with very little rainfall observed in the 24-48 hours prior to this morning. Only very isolated light showery activity was observed during this time frame across the region.



#### Last 24 Hour Maximum Temperatures

Warmth has returned over the last 24 hours with temperatures of 20-30 C observed across a fairly large majority of the area. Major warmth (30 + C high temperatures) was focused inland and away from the coast, but these temperatures are still warmer than last week.

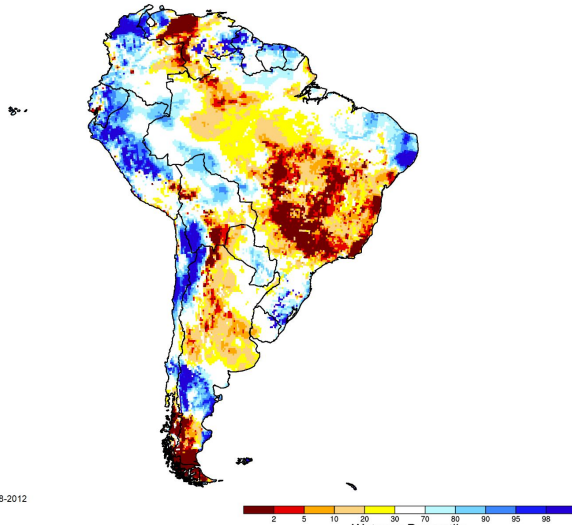


#### Last 24 Hour Minimum Temperatures

Overnight low temperatures were also warmer than the week prior but remained only slightly warmer than normal with lows of 14-18 C in key regions near the coast. Anomalous warmth in parts of NE Argentina and S Brazil saw overnight lows of 20-25 C but this was over a relatively small coverage region.

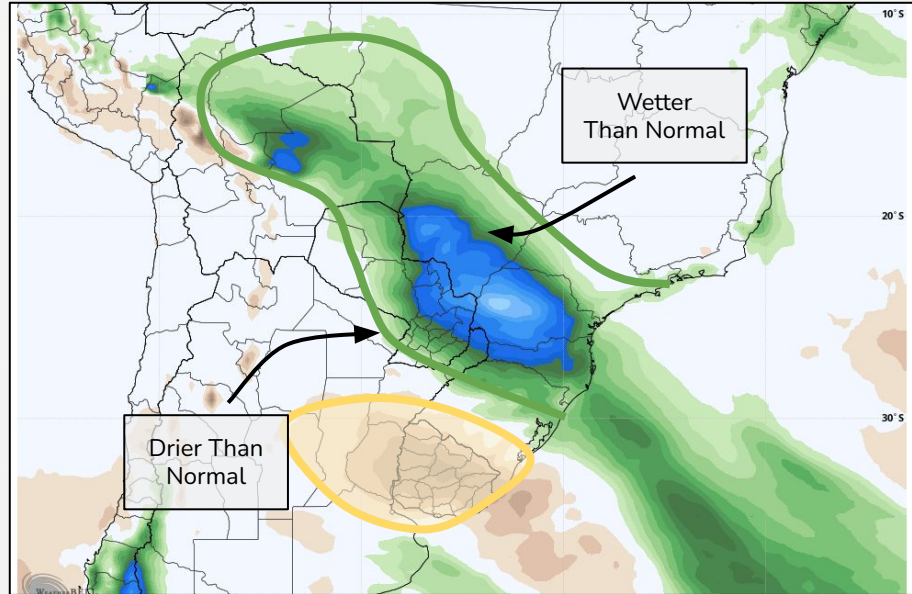
### NASA Grace Root Zone Soil Moisture Overview

Widespread drier than normal soil moisture and dryness has persisted across Central Brazil as well as in parts of Southern Brazil. Slightly wetter than normal soil moisture continues across the far Southeast BZ coastal regions. Otherwise, drier than normal soil moisture conditions persist across vast parts of the crop regions as we head through August.



Wetness percentiles are relative to the period 1948-2012  
The root zone is defined as the top 1 meter of soil  
Cell Resolution 0.25 degrees  
Projection of this document is Albers Equal Area (South America)

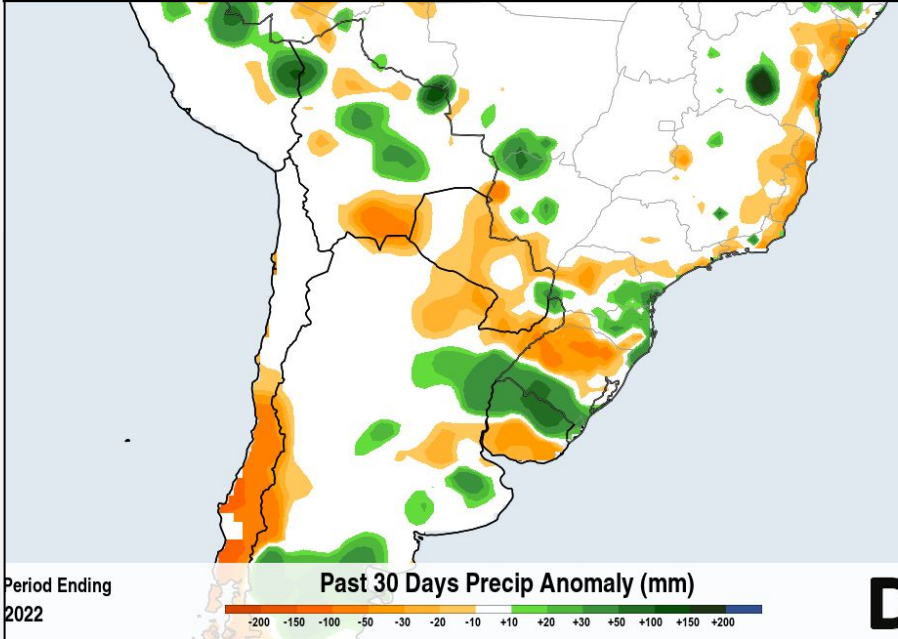
<https://nasagrace.unl.edu>



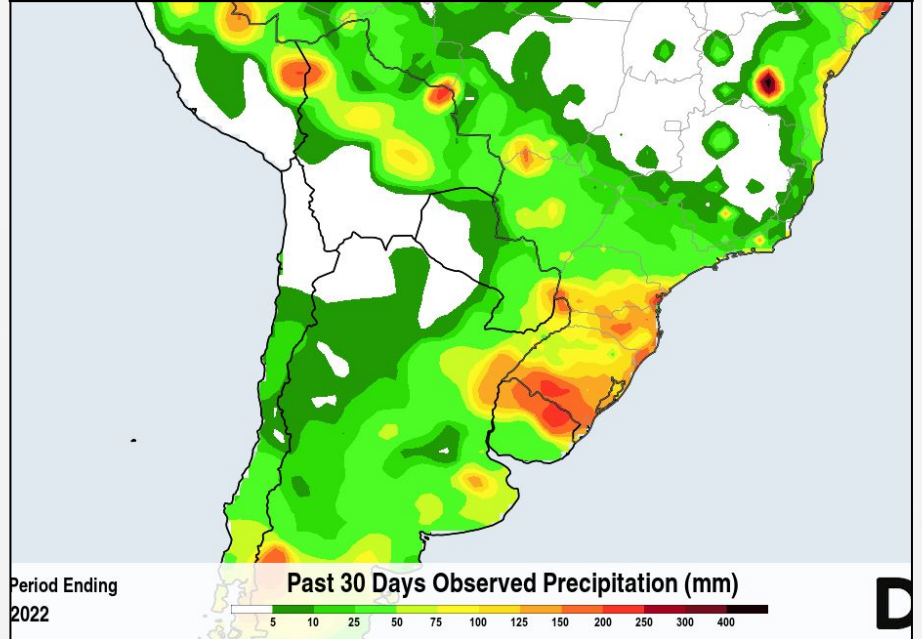
### 7 Day Precipitation Anomaly Forecast

Above normal precipitation is expected to continue across parts of South-Central Brazil through the next 7 days. The one exception will be across parts of Argentina as well as parts of Mato Grosso Du Sol where models suggest dryness could persist into the end of August.

Rainfall Anomaly Last 30 Days

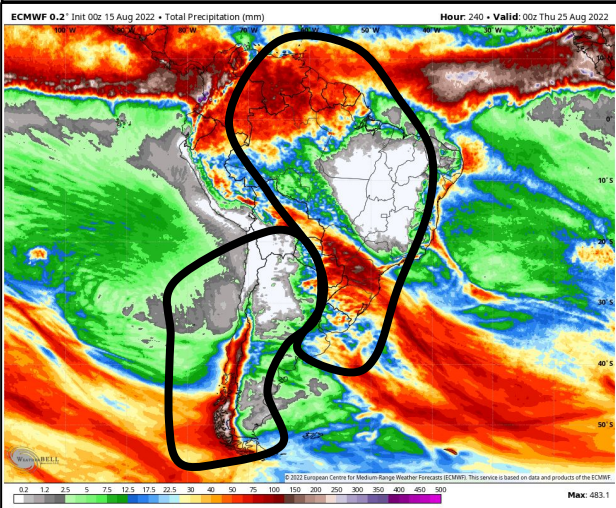


Rainfall Total Last 30 Days

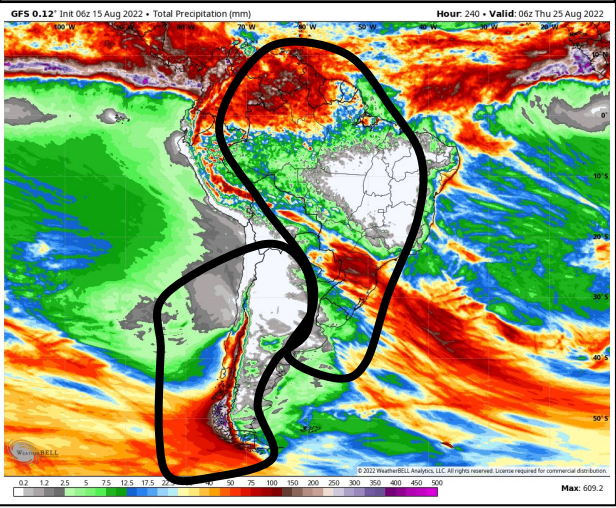




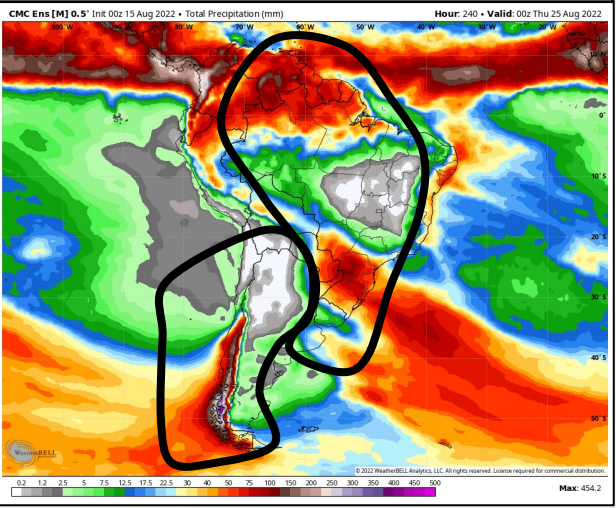
### 10 Day ECMWF Precip



### 10 Day GEFS Precip



### 10 Day Canadian Precip

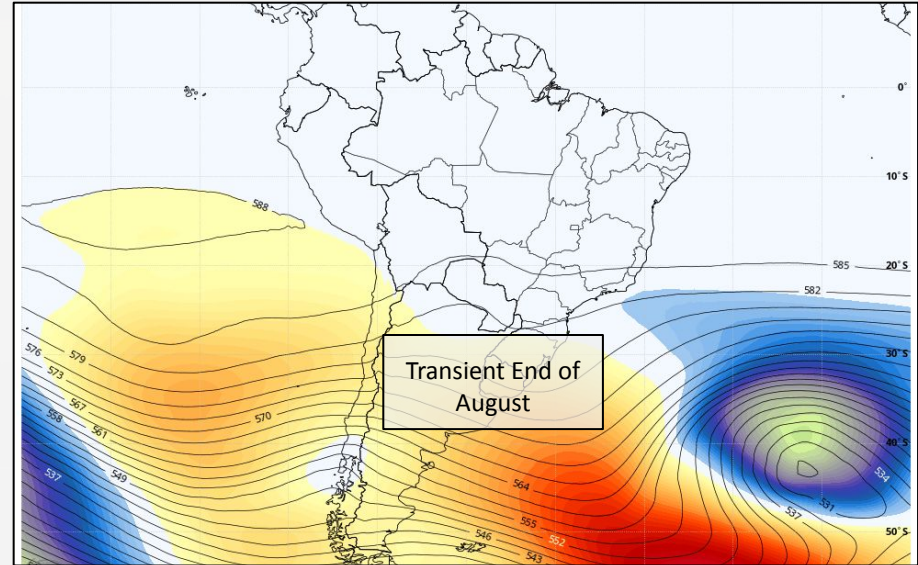
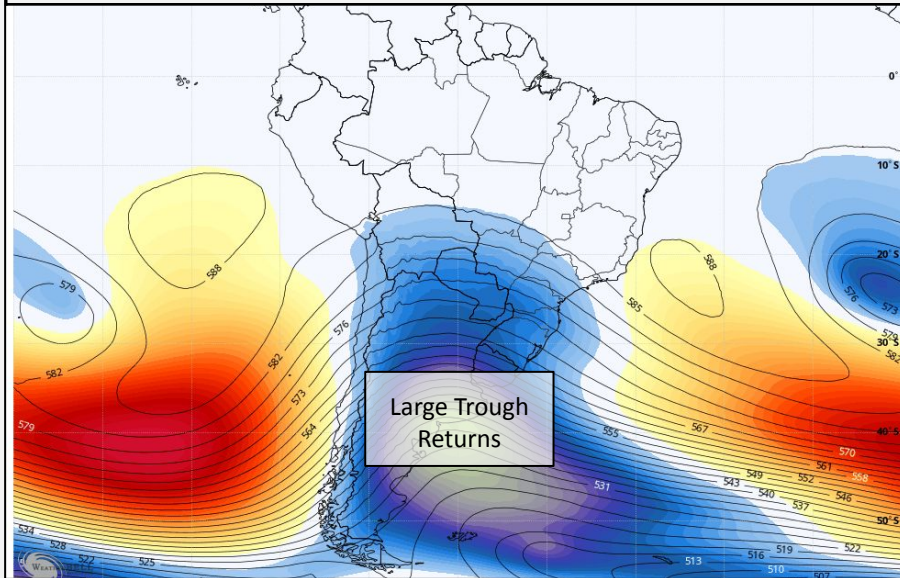


### Rainfall Highlights:

This slide is meant to be a tool to cut through the week to week volatility and show the next 10 days of rainfall verbatim. Black lines indicate approximate ag production in Brazil and Argentina. The majority of widespread precipitation over the next 10 days is forecast to be focused in S Brazil and parts of far Northeast Argentina.

**Trouging Return Next 7 Days**

A large area of troughing is forecast to return to Southern Brazil as we move past mid-Month, over the next week, with all models suggesting that slightly cooler than normal and wetter than normal conditions will return. Opportunities for precipitation should persist across Southern Brazil during this time.

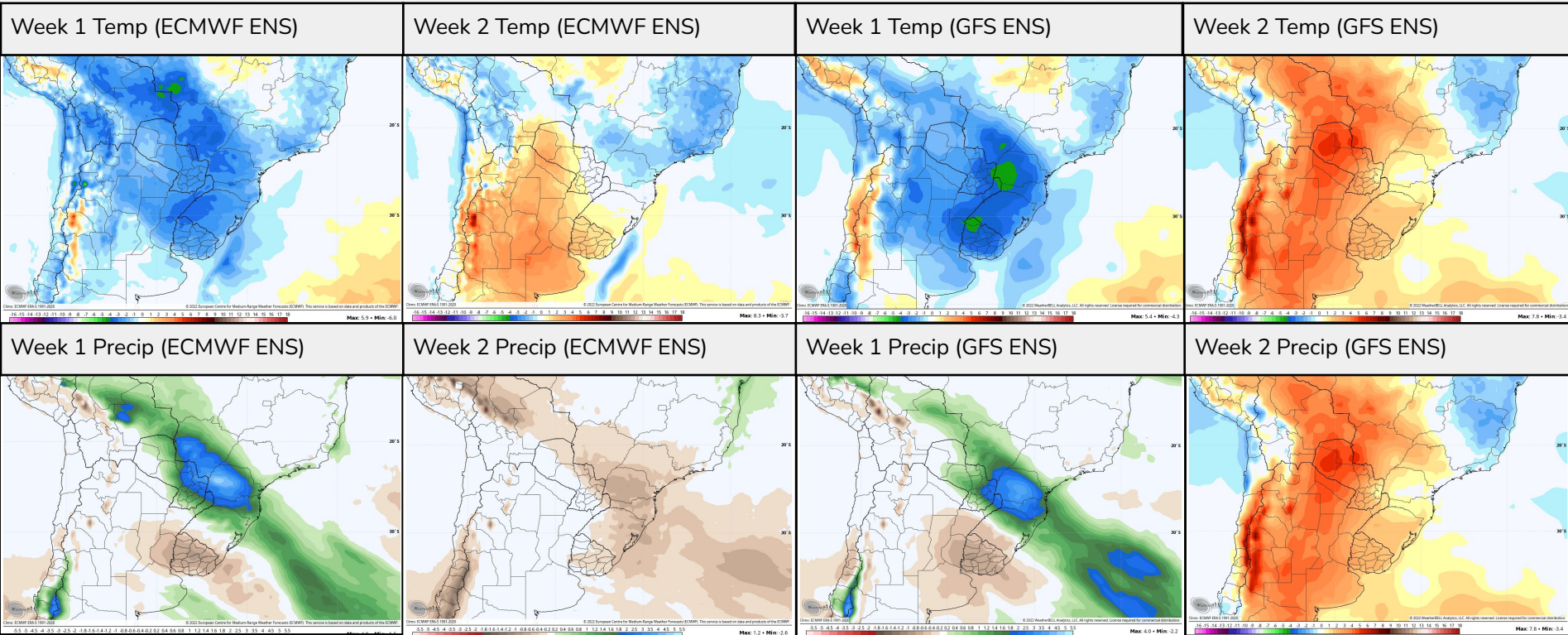


**Ridging May Return Late August**

Model guidance then suggests that ridging could return to the forecast during late August and the early part of September. This signals the possibility that dryness could expand once again as troughing moves away from the area and lift for precipitation becomes more sparse. Some hints of drier risks begin to emerge during this time frame as a result.



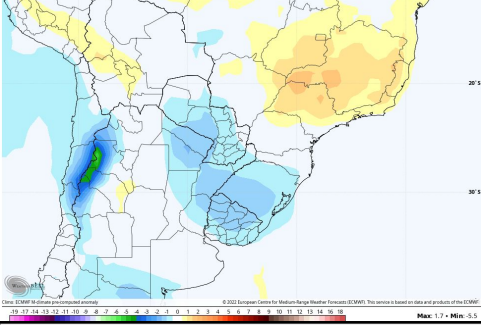
### Model Data



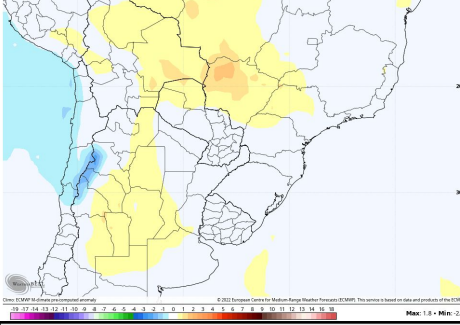


### Extended Forecast Model Data (ECMWF Seasonal Data)

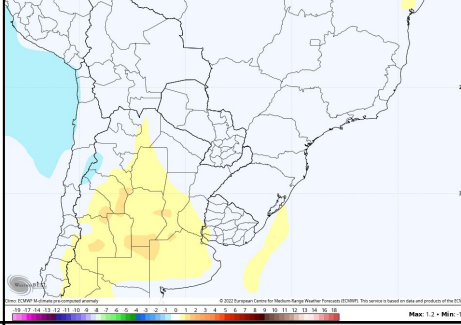
#### August 2022 Temperature



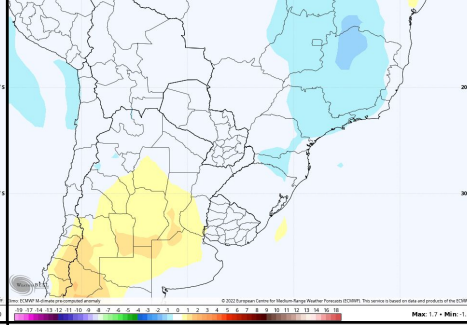
#### September 2022 Temperature



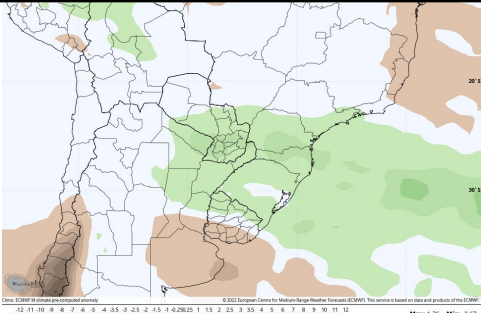
#### October 2022 Temperature



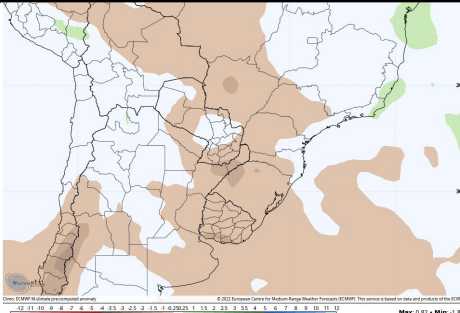
#### November 2022 Temperature



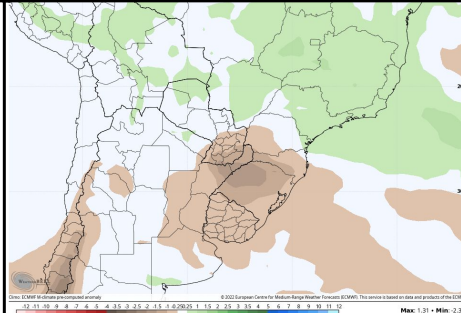
#### August 2022 Precipitation



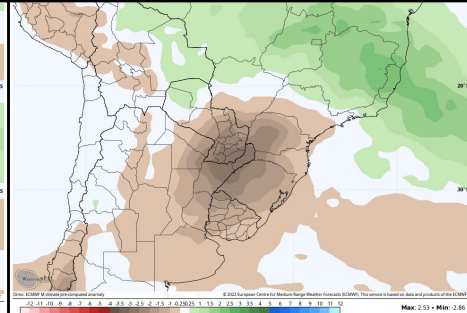
#### September 2022 Precipitation



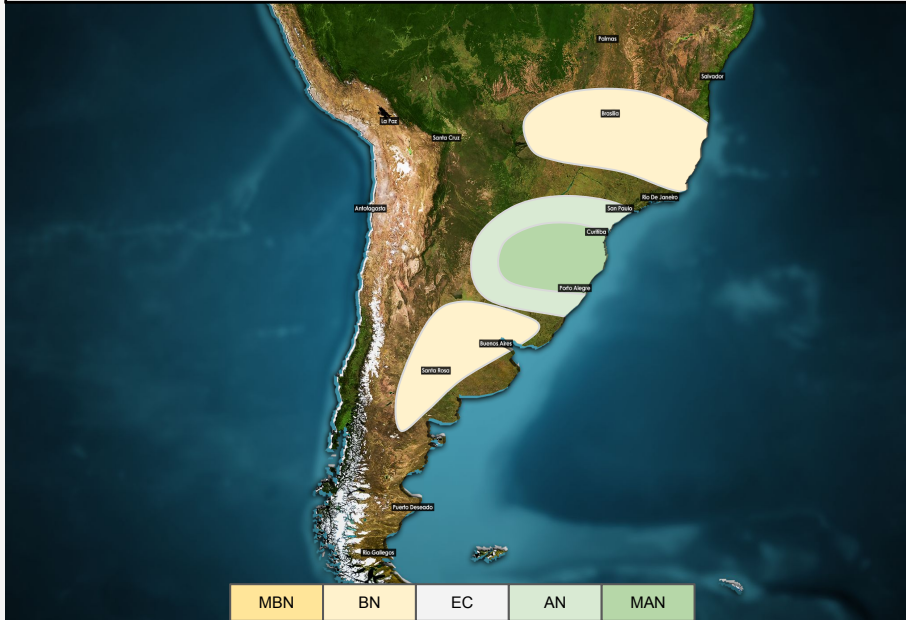
#### October 2022 Precipitation



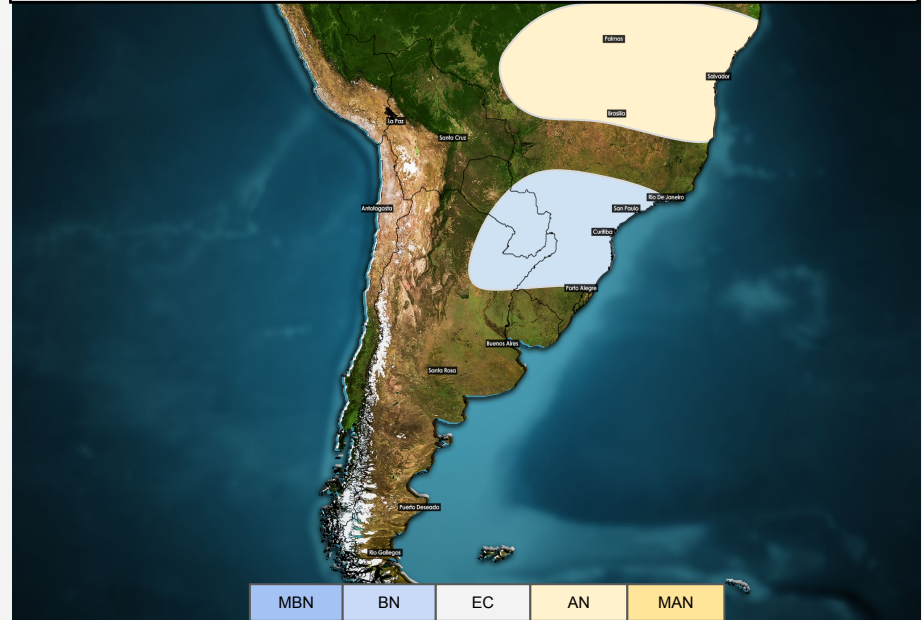
#### November 2022 Precipitation



## 16-30 Day Precipitation Departure Forecast



## 16-30 Day Temperature Departure Forecast



## Forecast Highlights:

Wetter than normal conditions are expected to continue across parts of S Brazil over the next 16-30 days, while two distinct areas of drier conditions persist across Argentina as well as in Central Brazil. Cooler than normal temperatures will accompany this wetter area with clouds & showers acting to mitigate temperatures overall. Meanwhile, warmth and dryness is forecast in Central Brazil through essentially the end of the month of August.