

CLIMA: PROJEÇÕES PARA A TEMPORADA 2020/2021

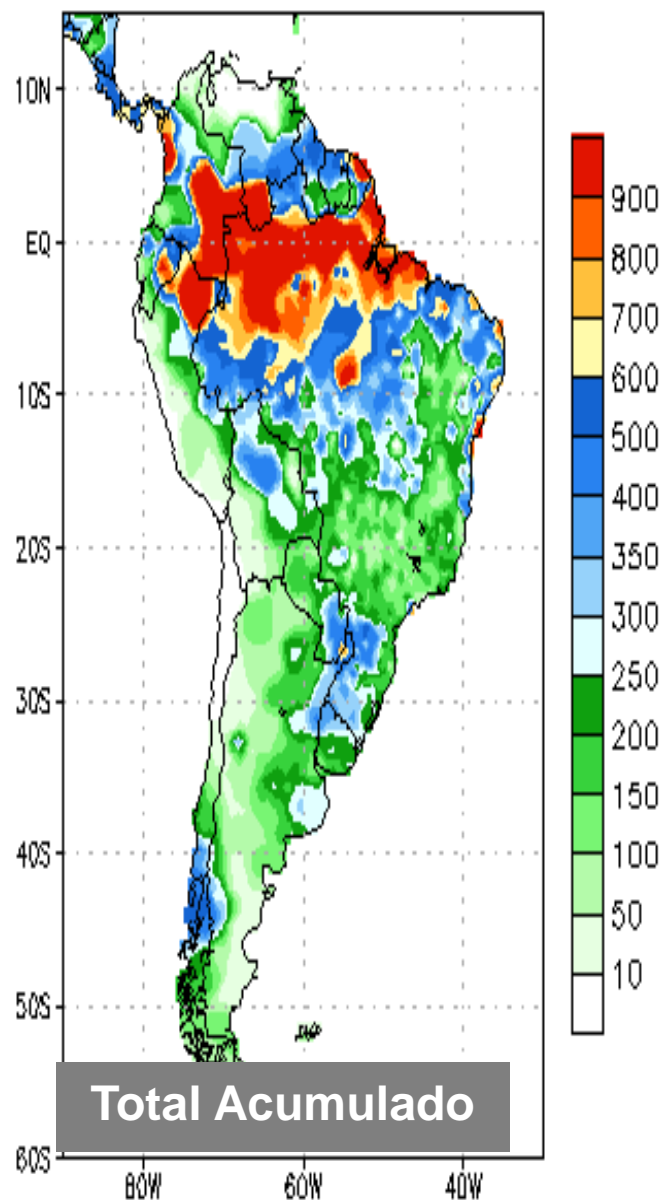
Junho/2020

- ✓ **Confirmado o início da fase fria no Pacífico equatorial, que deve se prolongar por todo o segundo semestre;**
- ✓ **Fase fria não deve continuar em 2021. Não está, portanto, consistente se vai ter intensidade e duração suficiente para caracterizar um LA NIÑA;**
- ✓ **Inverno no sul do Brasil com chuvas ligeiramente abaixo da média e temperaturas amenas. Reduz risco de frio extremo e duradouro;**
- ✓ **Clima nos próximos meses, em geral, favorece as lavouras de Inverno;**
- ✓ **Reduz risco de tempestades severas sobre o Sul do Brasil durante a Primavera;**

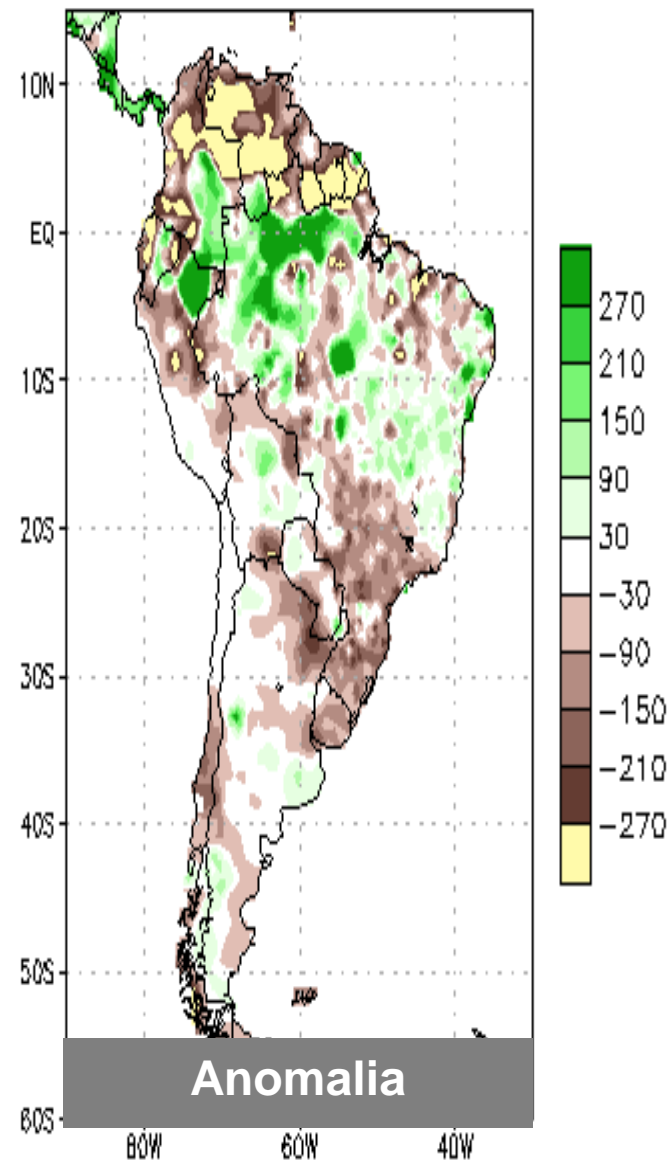
- ✓ **Cenário climático favorável para a Safra de Verão 2020/2021 nas regiões Sudeste, Centro-Oeste e Nordeste (MATOPIBA);**
- ✓ **Plantio não deve atrasar. Chuvas retornam gradualmente entre outubro e novembro;**
- ✓ **Porém, para o Verão de 2021 mantém condições de chuvas abaixo da média e risco de ocorrerem estiagens regionalizadas no Sul do Brasil;**
- ✓ **Dificuldade para recuperação plena dos reservatórios (açudes e barragens) para as lavouras de arroz do Rio Grande do Sul;**
- ✓ **Clima segue favorável para a evolução da lavoura dos Estados Unidos em 2020.**

CHUVA ÚLTIMOS 90 DIAS

Accumulated Prcp (mm) 18MAR2020–15JUN2020



Prcp Anomalies (mm) 18MAR2020–15JUN2020



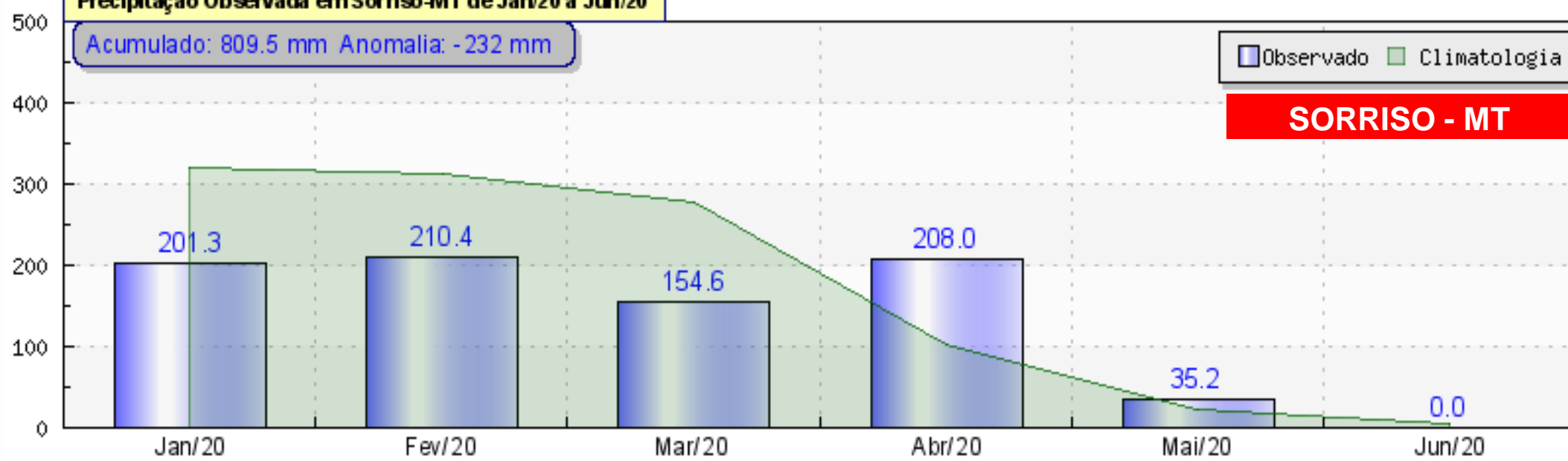
Clima Milho 2ª Safra de 2020

Precipitação Observada em Sorriso-MT de Jan/20 à Jun/20

Acumulado: 809.5 mm Anomalia: -232 mm

Observado Climatologia

SORRISO - MT

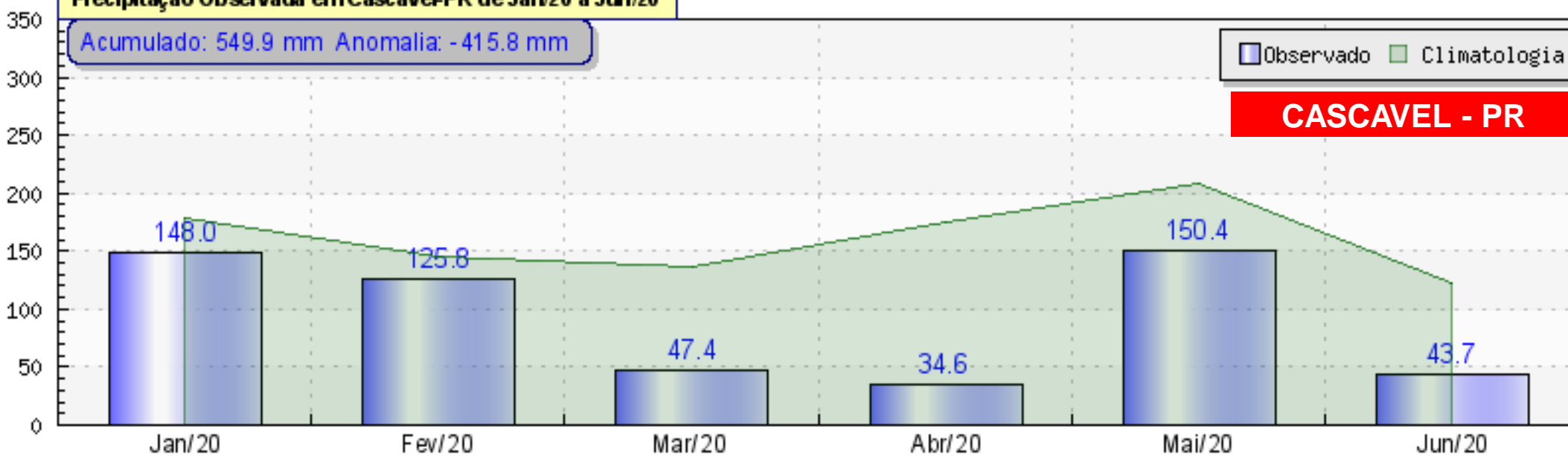


Precipitação Observada em Cascavel-PR de Jan/20 à Jun/20

Acumulado: 549.9 mm Anomalia: -415.8 mm

Observado Climatologia

CASCAVEL - PR





Simple

Comparativo

Temporal

Selecione

- EAR (MWmês)
- EAR (GWh)
- EAR (%)
- EAR Máximo (MWmês)

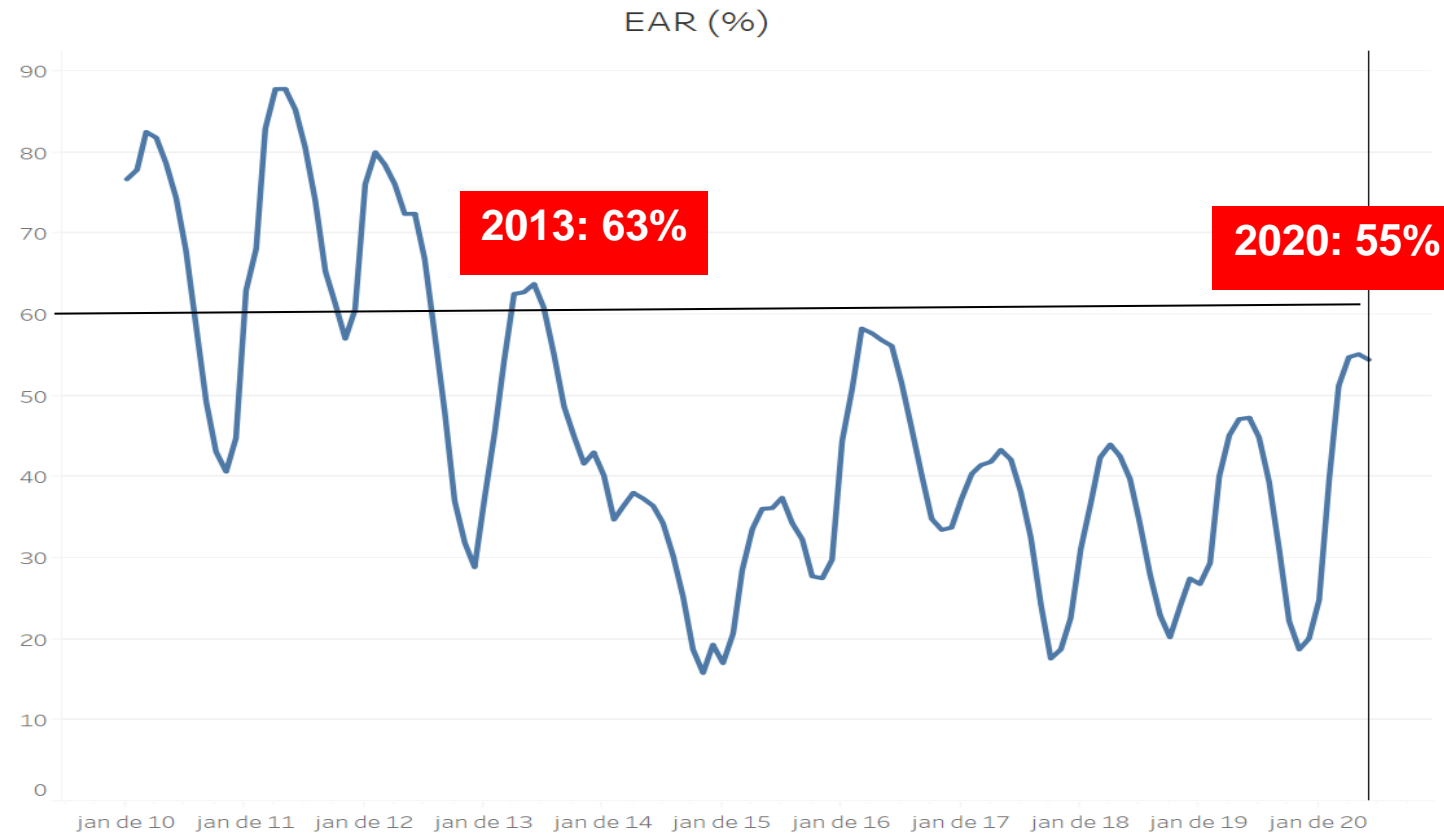
Escala de Tempo
Mês

Subsistema
Sudeste/Centro-Oeste

Período

Início: 01/01/2010 Fim: 16/06/2020

3820 dia(s) selecionado(s)

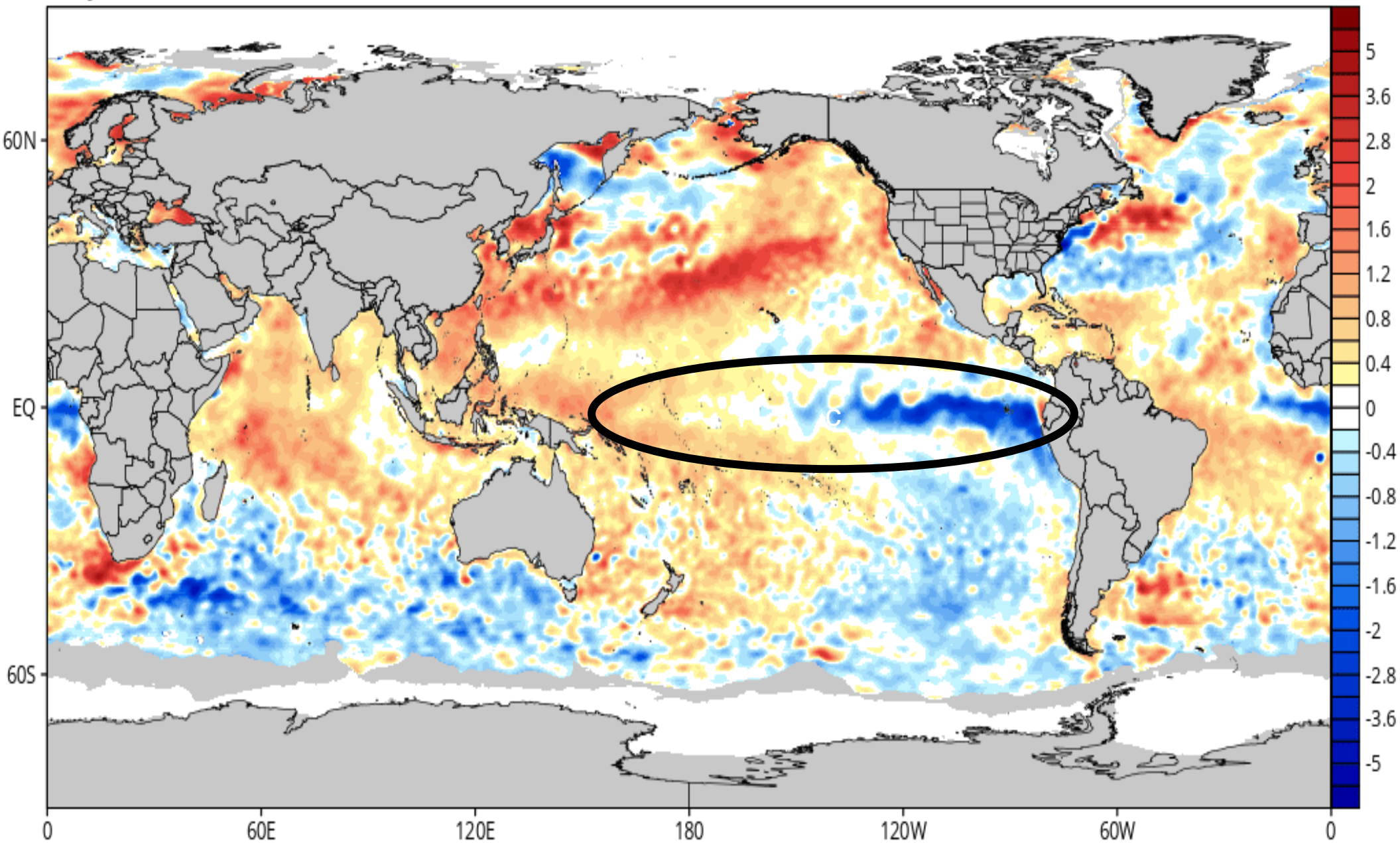


Pacífico equatorial indica início da fase fria

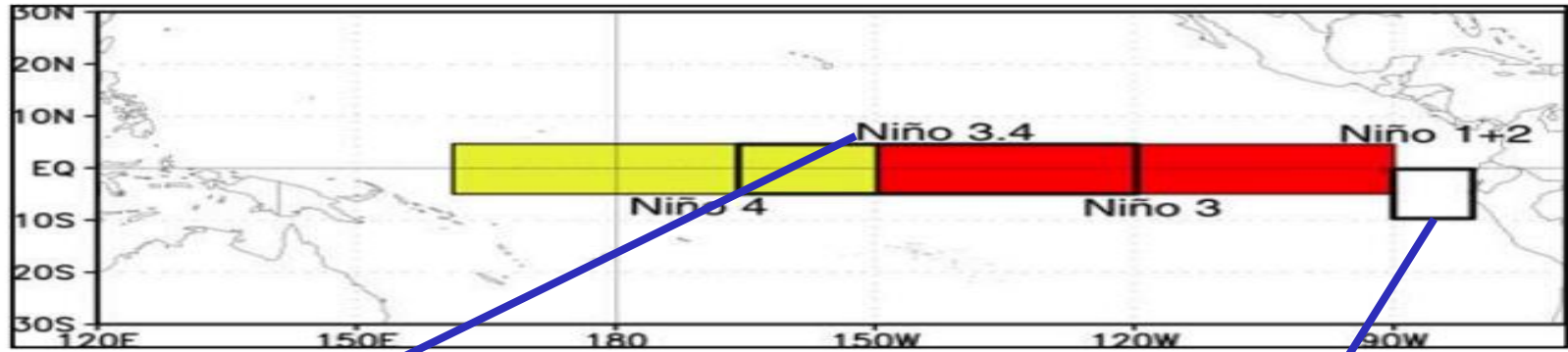
CDAS Sea Surface Temperature Anomaly (°C) (based on CFSR 1981-2010 Climatology)

Analysis Time: 00z Jun 18 2020

TROPICALTIDBITS.COM



Fase Fria se mantém no segundo semestre



NWS/NCEP/CPC

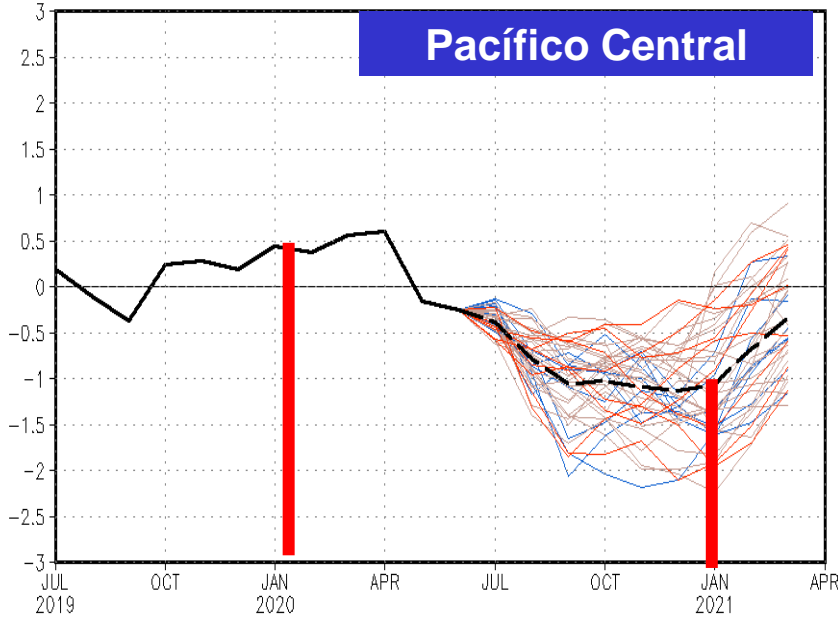
Last update: Thu Jun 18 2020
Initial conditions: 7Jun2020-16Jun2020



NWS/NCEP/CPC

Last update: Thu Jun 18 2020
Initial conditions: 7Jun2020-16Jun2020

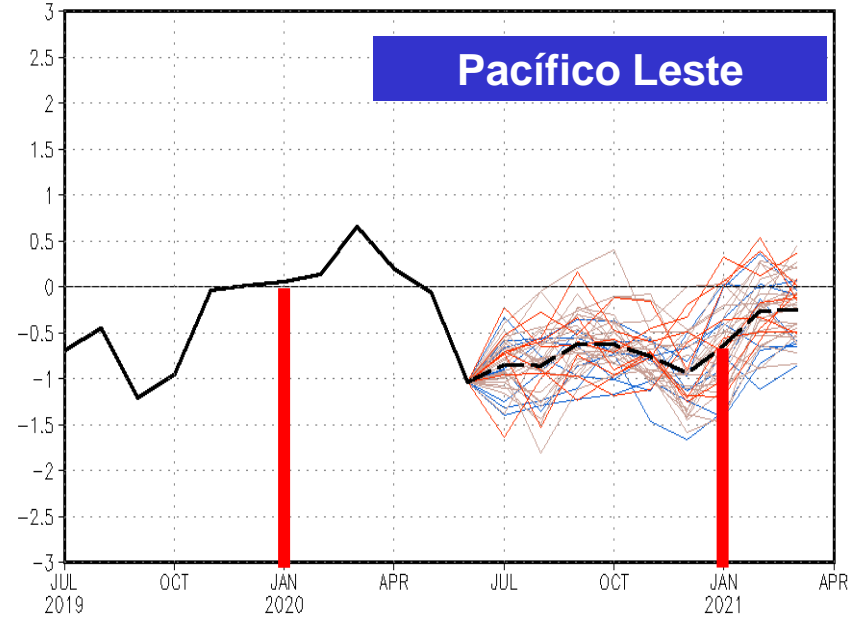
CFSv2 forecast Niño3.4 SST anomalies (K)



— Latest 8 forecast members
— Earliest 8 forecast members
— Other forecast members
— Forecast ensemble mean
— NCEP NSST daily analysis

(Model bias correct base period: 1999–2010; Climatology base period: 1982–2010)

CFSv2 forecast Niño1+2 SST anomalies (K)



— Latest 8 forecast members
— Earliest 8 forecast members
— Other forecast members
— Forecast ensemble mean
— NCEP NSST daily analysis

(Model bias correct base period: 1999–2010; Climatology base period: 1982–2010)



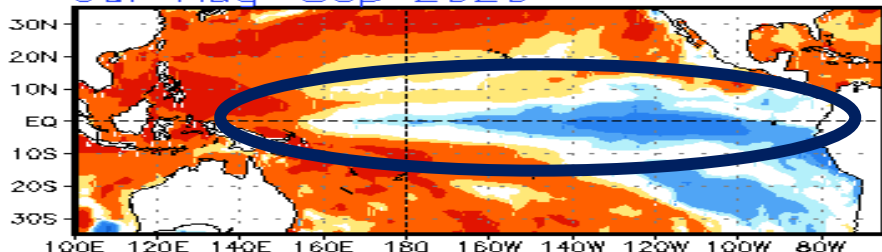
NWS/NCEP/CPC

Initial conditions: 7Jun2020–16Jun2020

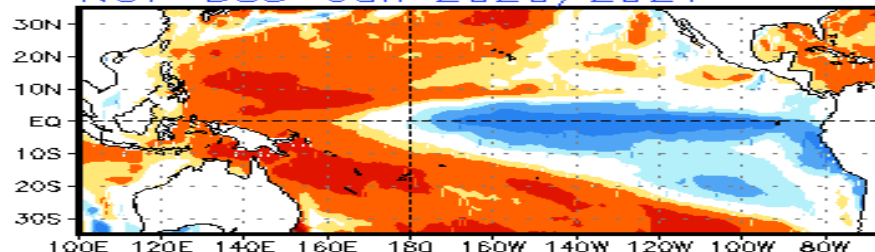
Last update: Thu Jun 18 2020

CFSv2 seasonal SST (K)

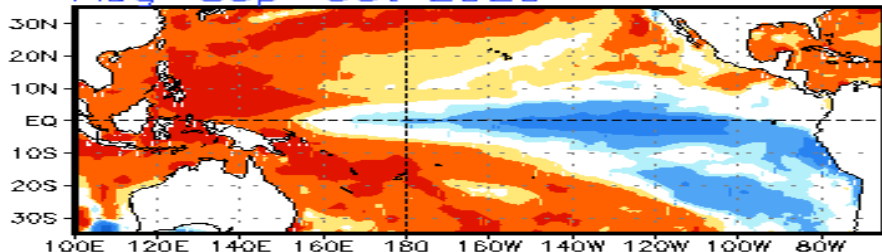
Jul–Aug–Sep 2020



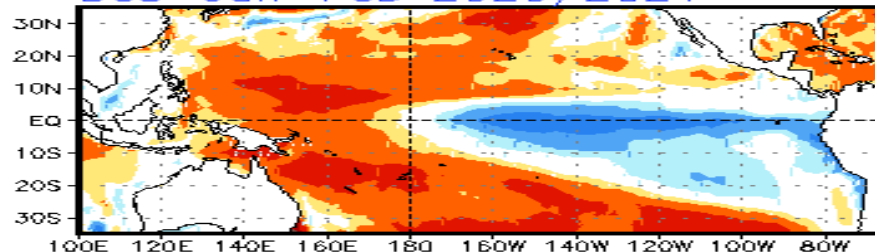
Nov–Dec–Jan 2020/2021



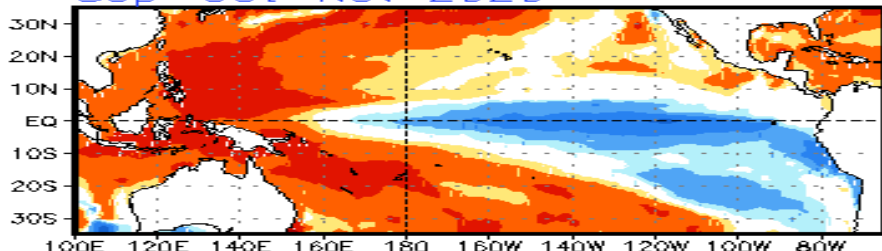
Aug–Sep–Oct 2020



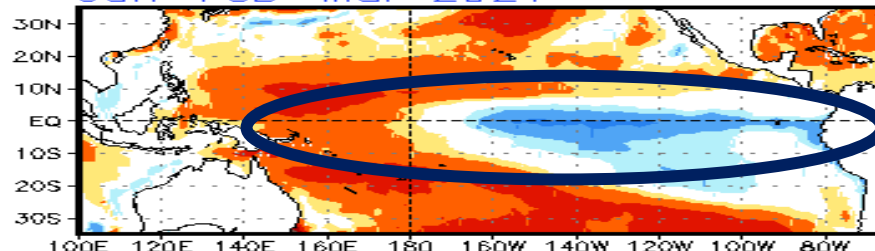
Dec–Jan–Feb 2020/2021



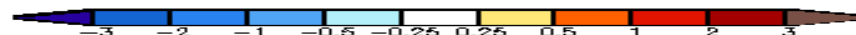
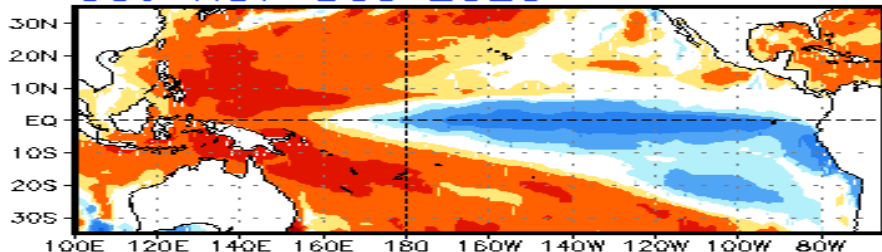
Sep–Oct–Nov 2020



Jan–Feb–Mar 2021

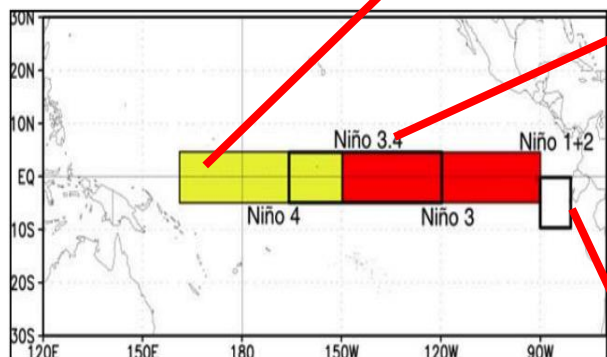
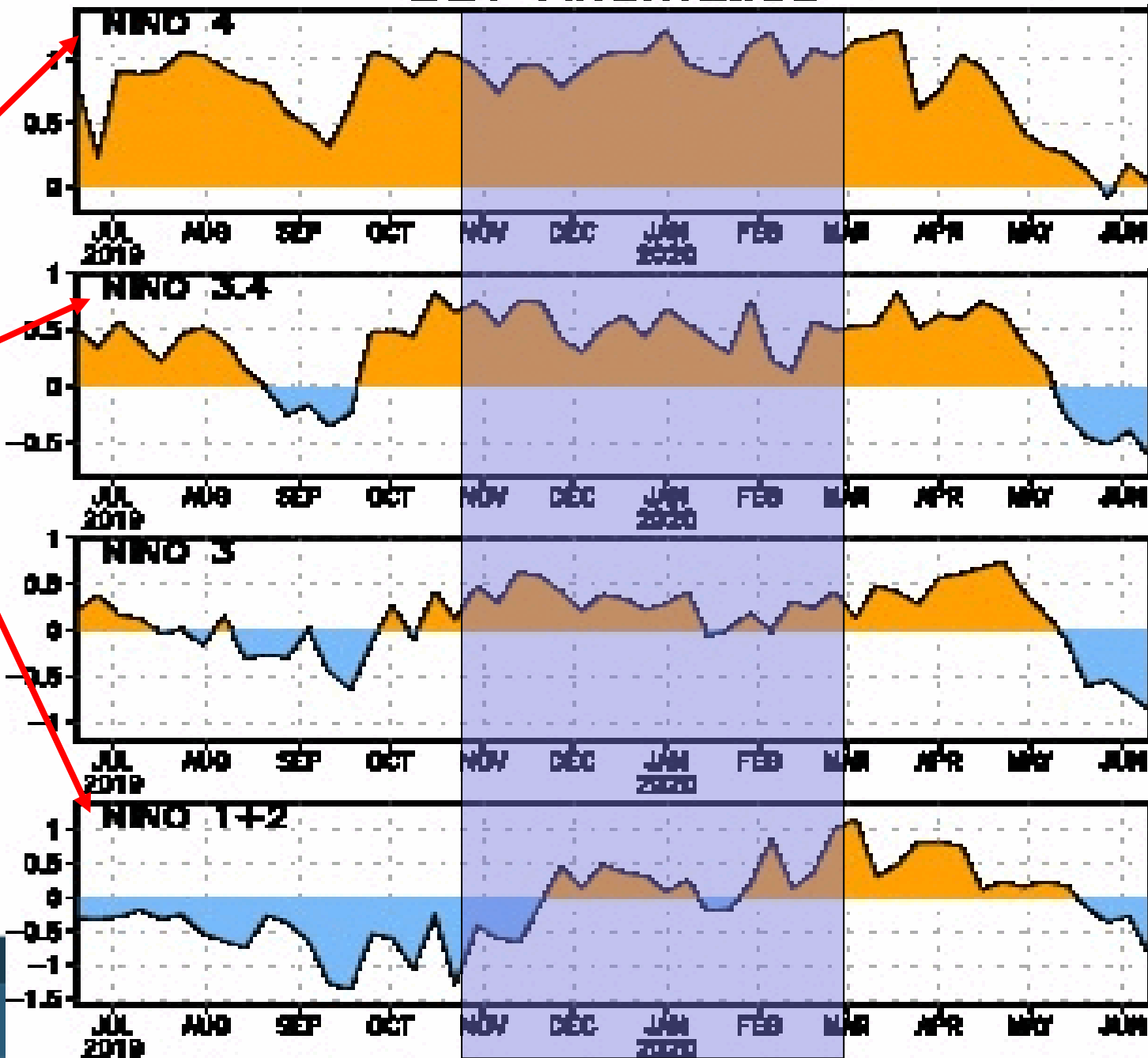


Oct–Nov–Dec 2020



(Model bias correction base period: 1999–2010; Climatology base period: 1982–2010)

SST Anomalias

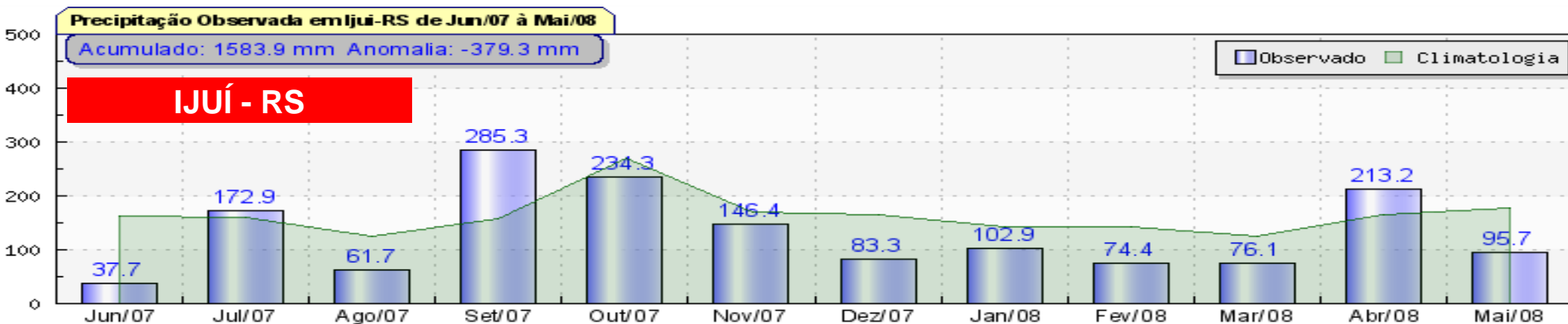
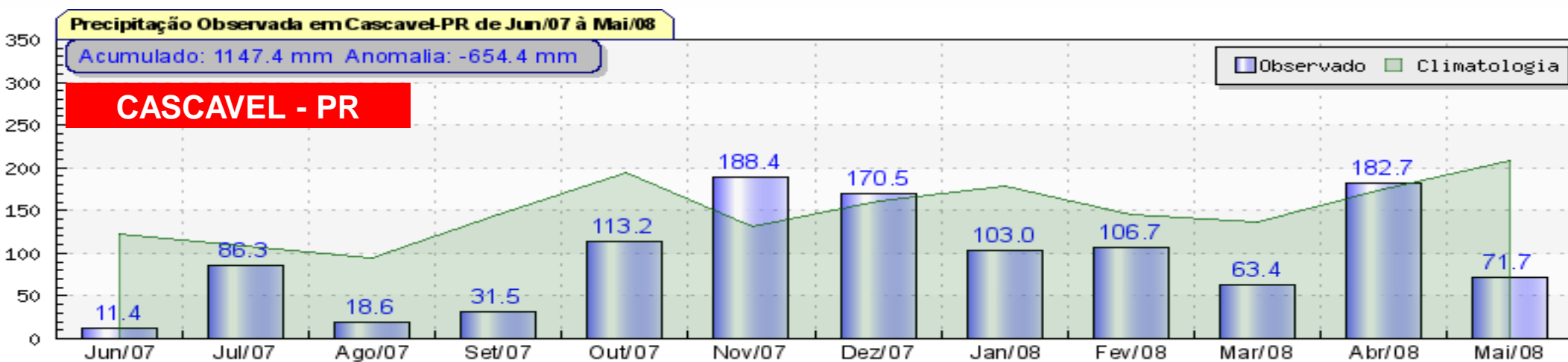
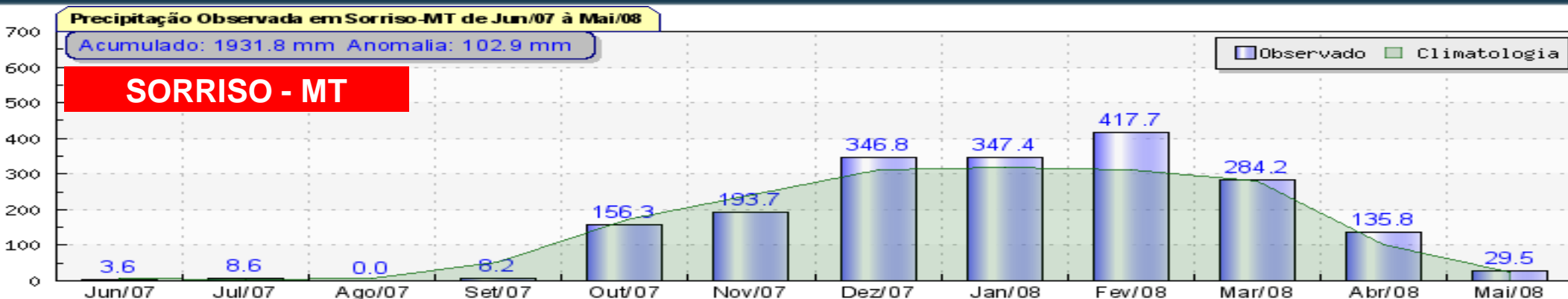


Padrão Climático de 2020 análogo a 2007!

Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2000	-1.7	-1.4	-1.1	-0.8	-0.7	-0.6	-0.6	-0.5	-0.5	-0.6	-0.7	-0.7
2001	-0.7	-0.5	-0.4	-0.3	-0.3	-0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3
2002	-0.1	0.0	0.1	0.2	0.4	0.7	0.8	0.9	1.0	1.2	1.3	1.1
2003	0.9	0.6	0.4	0.0	-0.3	-0.2	0.1	0.2	0.3	0.3	0.4	0.4
2004	0.4	0.3	0.2	0.2	0.2	0.3	0.5	0.6	0.7	0.7	0.7	0.7
2005	0.6	0.6	0.4	0.4	0.3	0.1	-0.1	-0.1	-0.1	-0.3	-0.6	-0.8
2006	-0.8	-0.7	-0.5	-0.3	0.0	0.0	0.1	0.3	0.5	0.7	0.9	0.9
2007	0.7	0.3	0.0	-0.2	-0.3	-0.4	-0.5	-0.8	-1.1	-1.4	-1.5	-1.6
2008	-1.6	-1.4	-1.2	-0.9	-0.8	-0.5	-0.4	-0.3	-0.3	-0.4	-0.6	-0.7
2009	-0.8	-0.7	-0.5	-0.2	0.1	0.4	0.5	0.5	0.7	1.0	1.3	1.6
Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2010	1.5	1.3	0.9	0.4	-0.1	-0.6	-1.0	-1.4	-1.6	-1.7	-1.7	-1.6
2011	-1.4	-1.1	-0.8	-0.6	-0.5	-0.4	-0.5	-0.7	-0.9	-1.1	-1.1	-1.0
2012	-0.8	-0.6	-0.5	-0.4	-0.2	0.1	0.3	0.3	0.3	0.2	0.0	-0.2
2013	-0.4	-0.3	-0.2	-0.2	-0.3	-0.3	-0.4	-0.4	-0.3	-0.2	-0.2	-0.3
2014	-0.4	-0.4	-0.2	0.1	0.3	0.2	0.1	0.0	0.2	0.4	0.6	0.7
2015	0.6	0.6	0.6	0.8	1.0	1.2	1.5	1.8	2.1	2.4	2.5	2.6
2016	2.5	2.2	1.7	1.0	0.5	0.0	-0.3	-0.6	-0.7	-0.7	-0.7	-0.6
2017	-0.3	-0.1	0.1	0.3	0.4	0.4	0.2	-0.1	-0.4	-0.7	-0.9	-1.0
2018	-0.9	-0.8	-0.6	-0.4	-0.1	0.1	0.1	0.2	0.4	0.7	0.9	0.8
2019	0.8	0.8	0.8	0.7	0.6	0.5	0.3	0.1	0.1	0.3	0.5	0.5
Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2020	0.5	0.6	0.5	0.3								

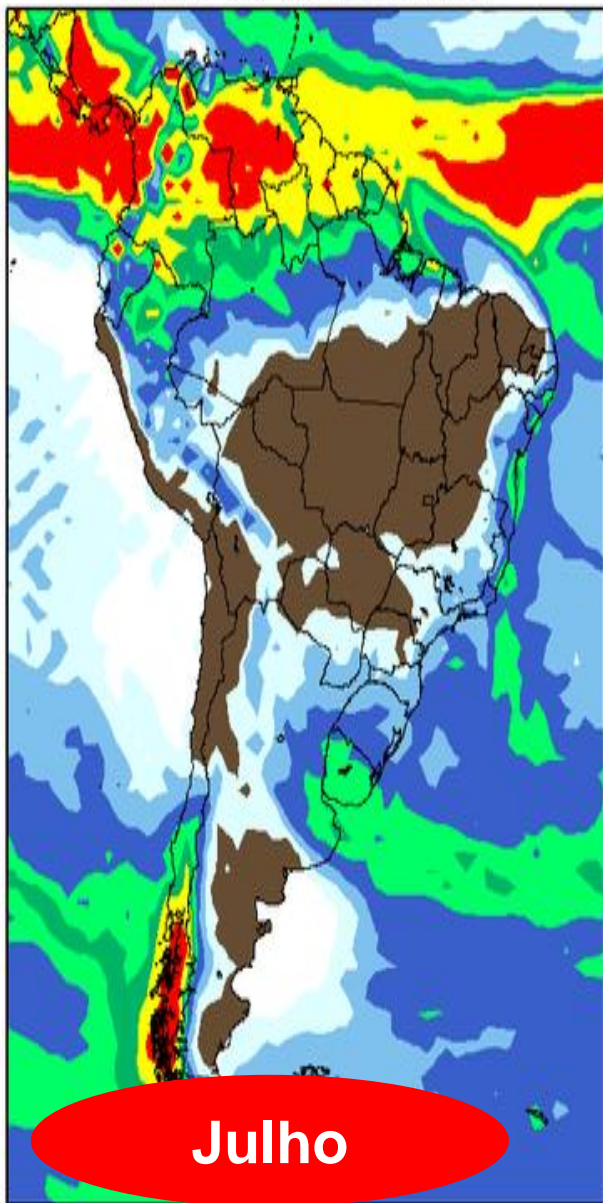


Padrão Climático de 2020 análogo a 2007!



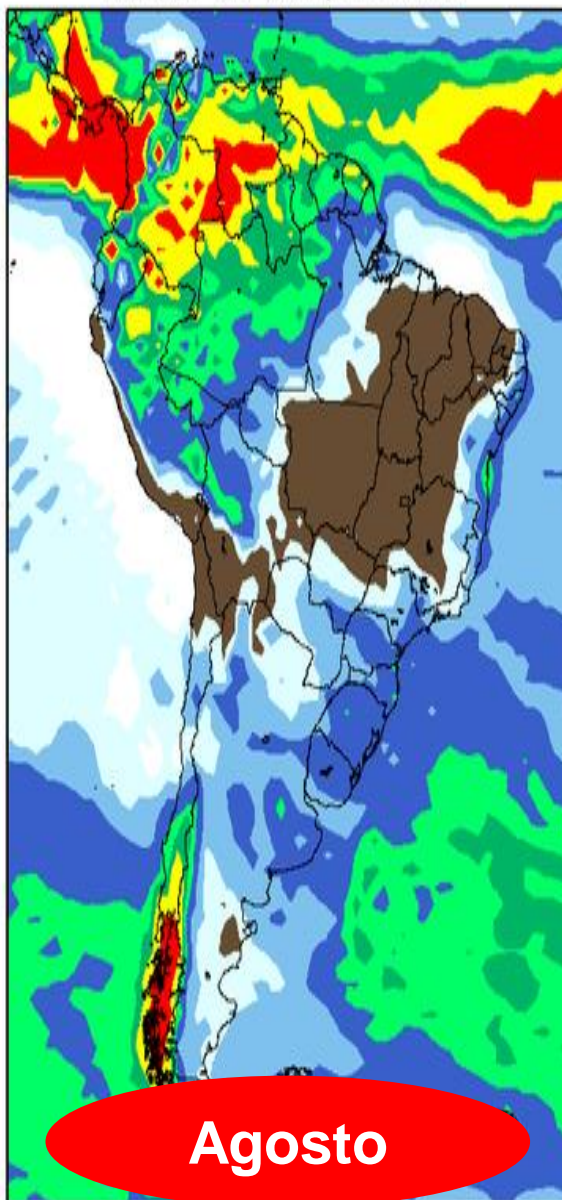
Previsão de Chuvas Mensais do Centro Europeu

Precipitação Mensal 07/2020 (C)
Rodada de: 2020/06 ECMWF



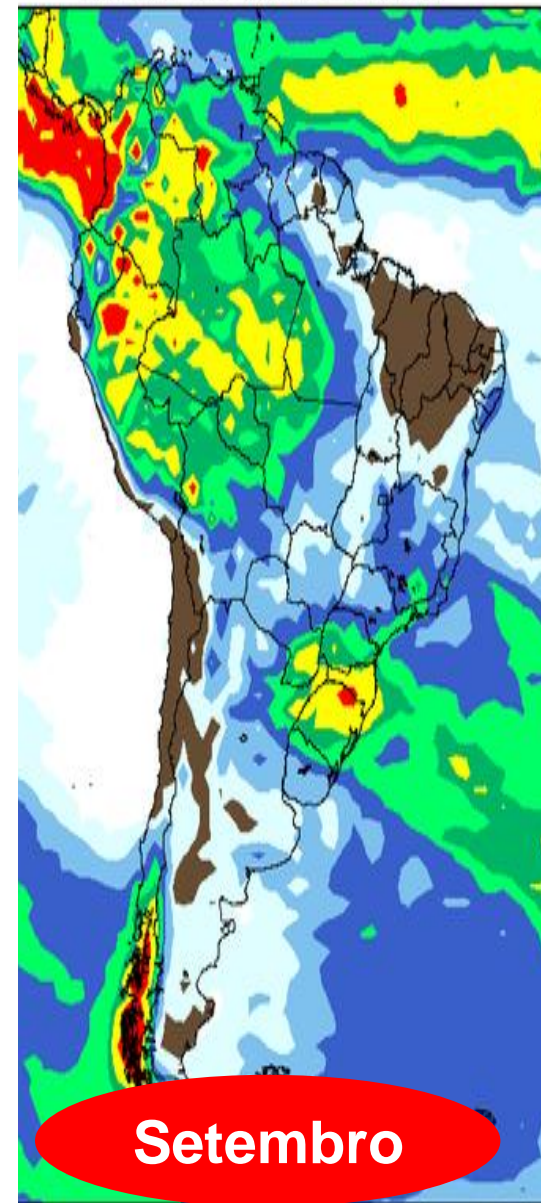
10 25 50 100 150 200 300

Precipitação Mensal 08/2020 (C)
Rodada de: 2020/06 ECMWF



10 25 50 100 150 200 300

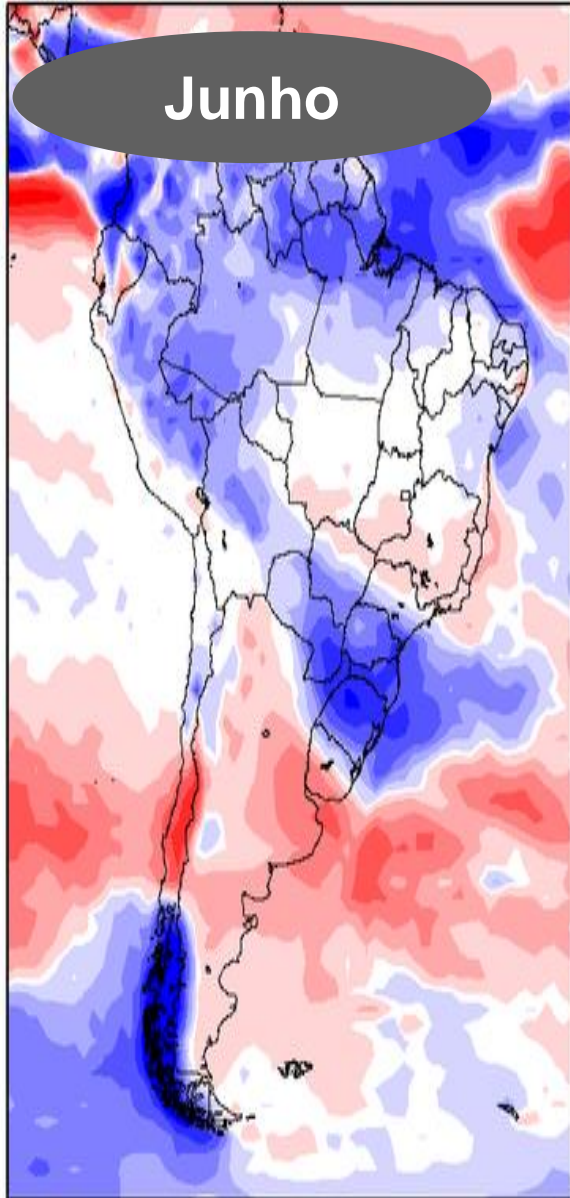
Precipitação Mensal 09/2020 (C)
Rodada de: 2020/06 ECMWF



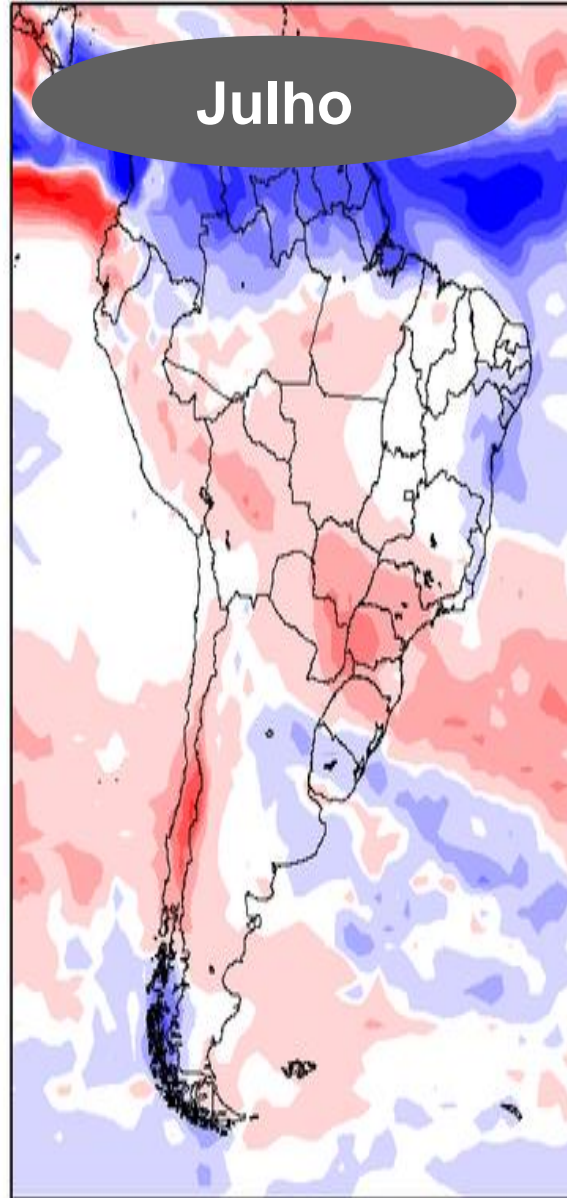
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Previsão de Anomalia de Chuvas Mensais do Centro Europeu

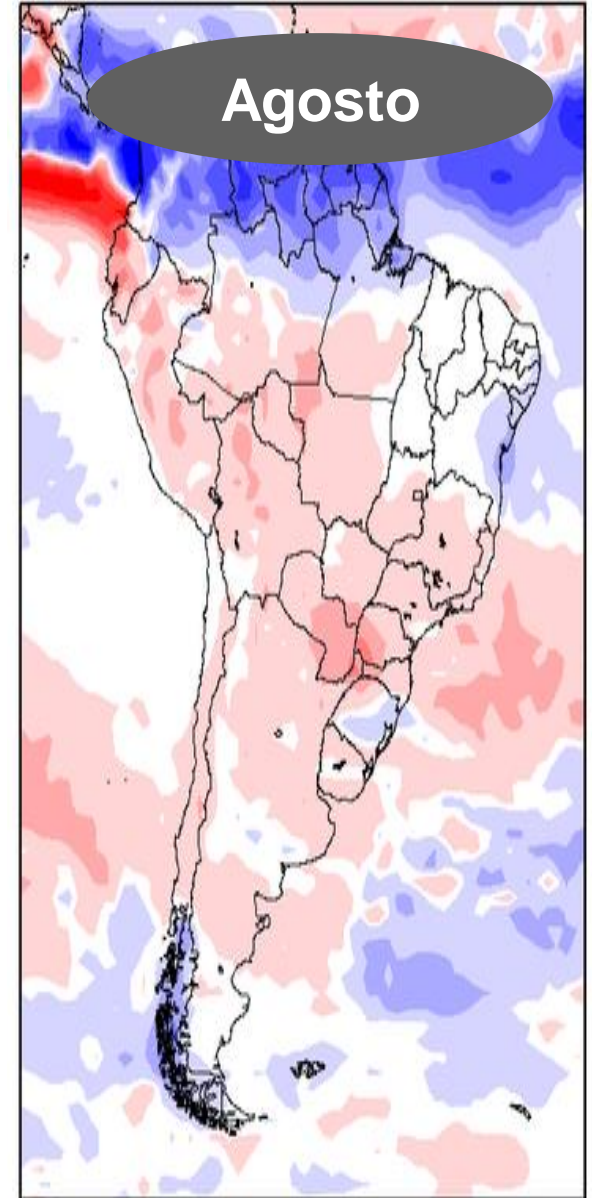
Anomalia Precipitação Mensal 06/2020 (mm)
Rodada de: 2020/06 ECMWF



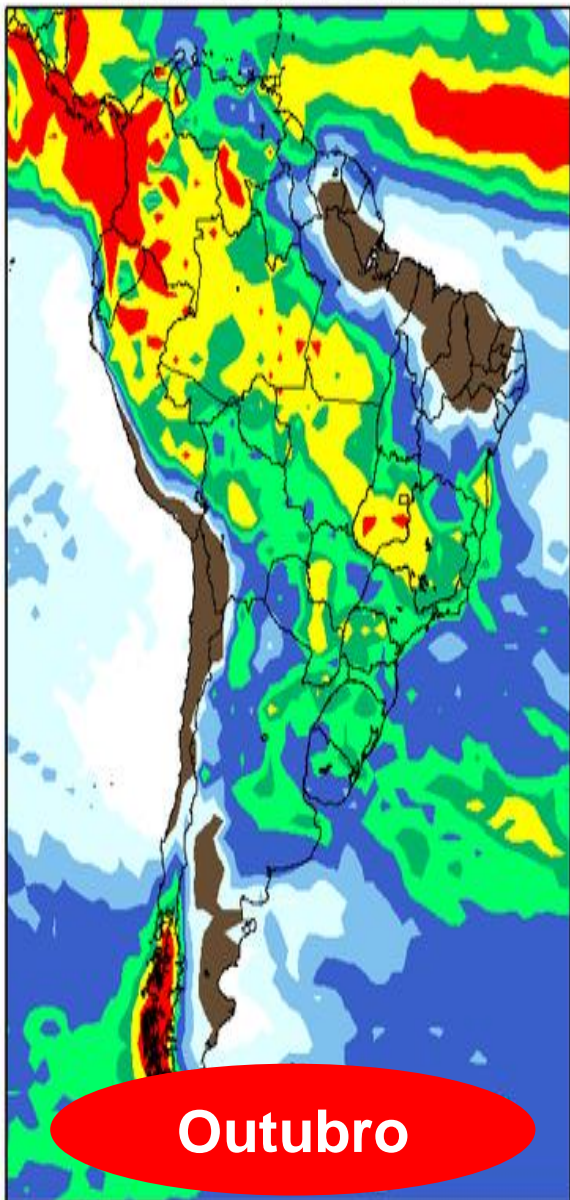
Anomalia Precipitação Mensal 07/2020 (mm)
Rodada de: 2020/06 ECMWF



Anomalia Precipitação Mensal 08/2020 (mm)
Rodada de: 2020/06 ECMWF

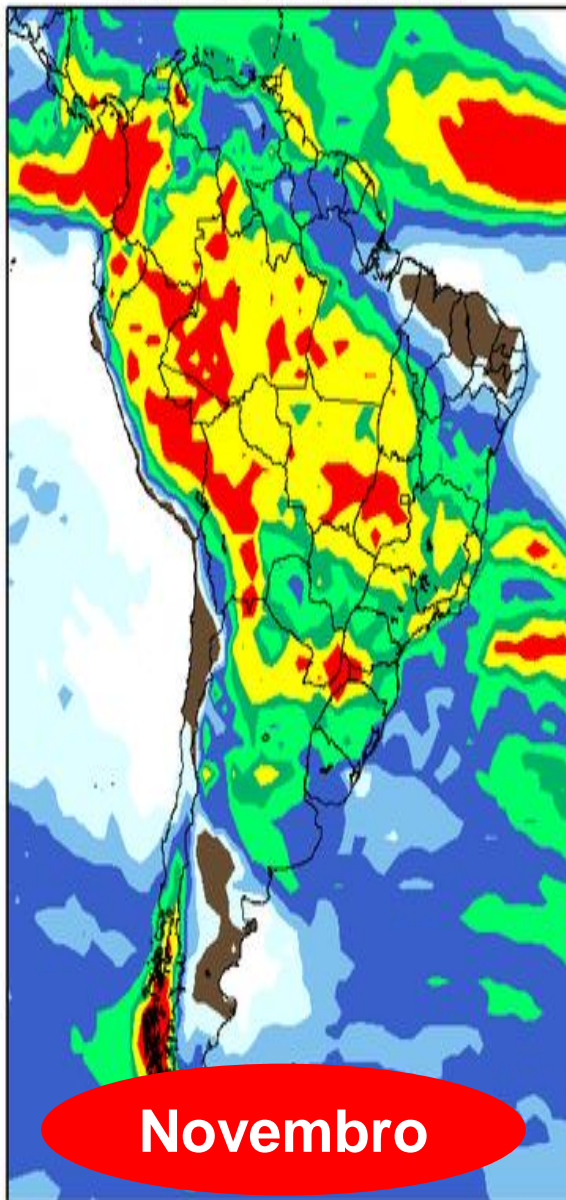


Precipitação Mensal 10/2020 (C)
Rodada de: 2020/06 ECMWF



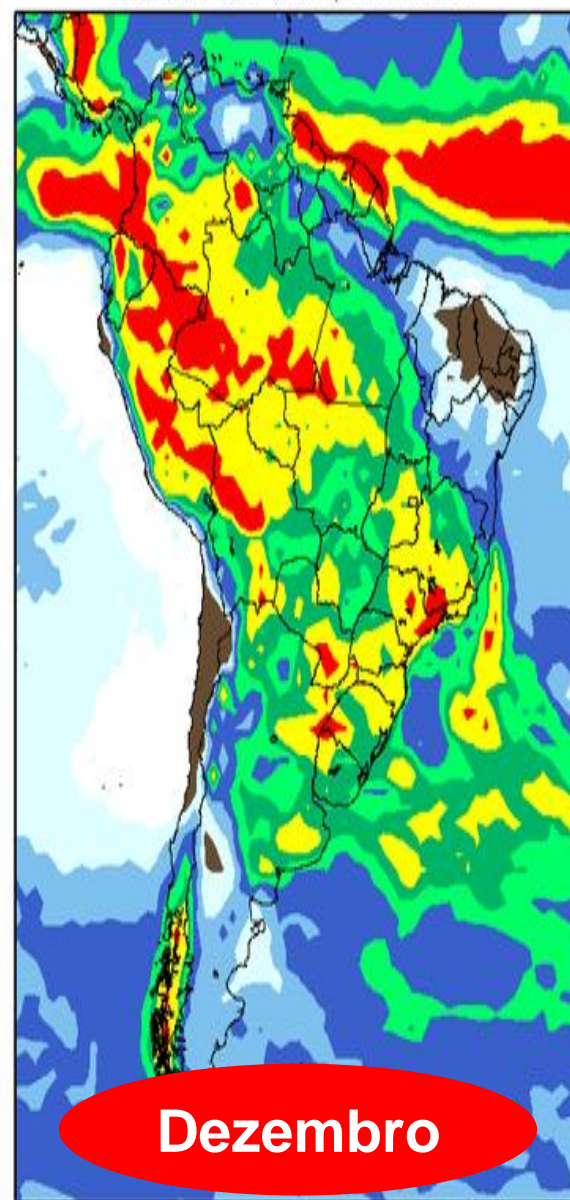
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Precipitação Mensal 11/2020 (C)
Rodada de: 2020/06 ECMWF



10 25 50 100 150 200 300

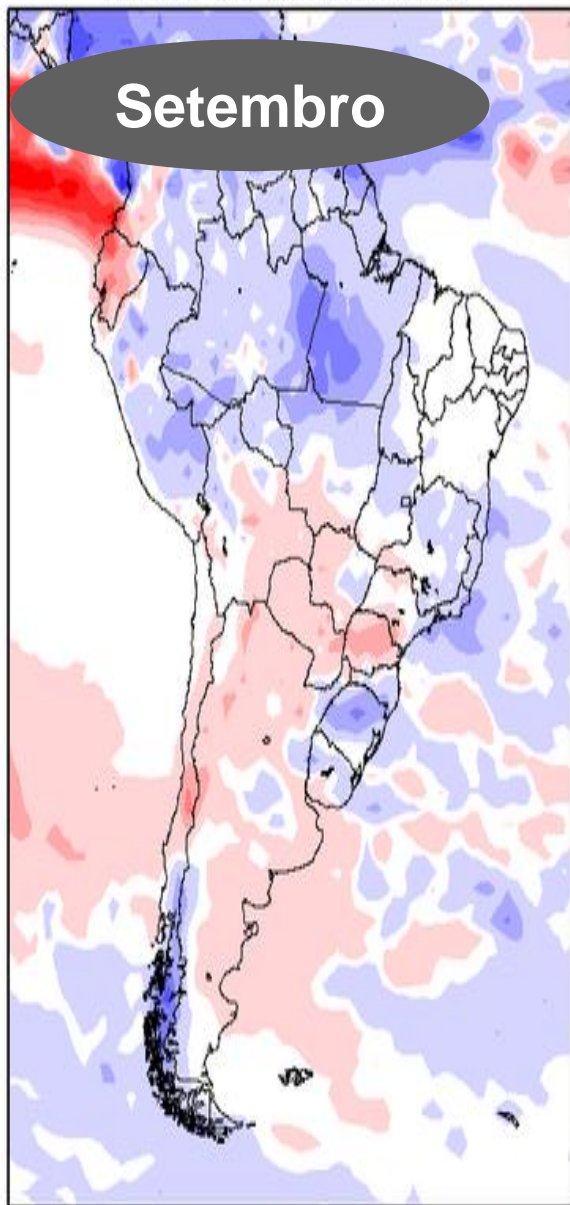
Precipitação Mensal 12/2020 (C)
Rodada de: 2020/06 ECMWF



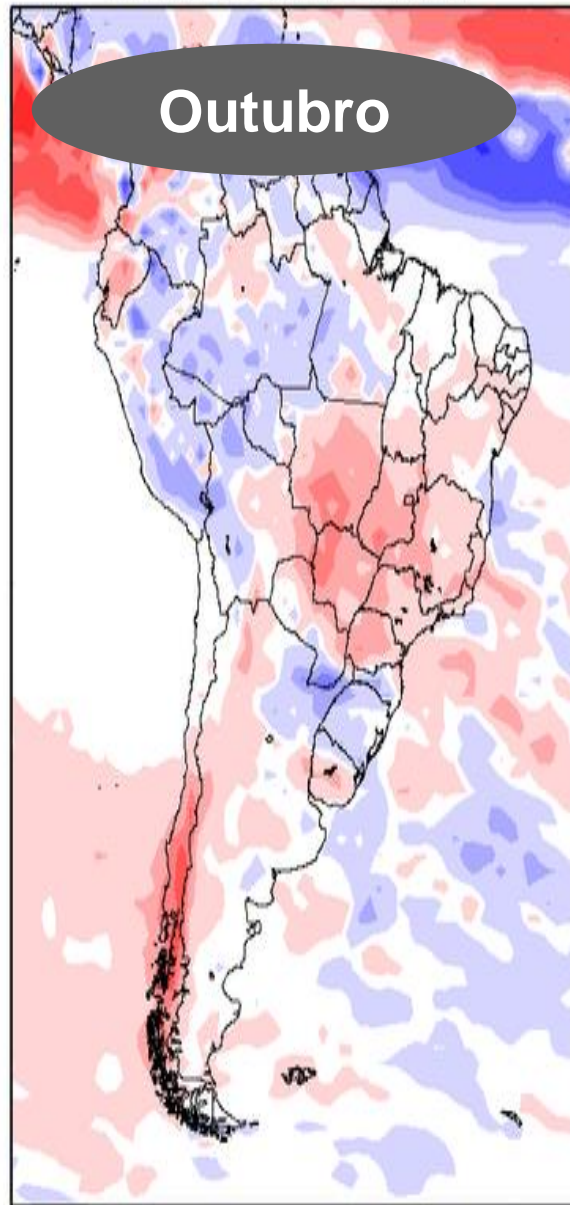
10 25 50 100 150 200 300

Previsão de Anomalia de Chuvas Mensais do Centro Europeu

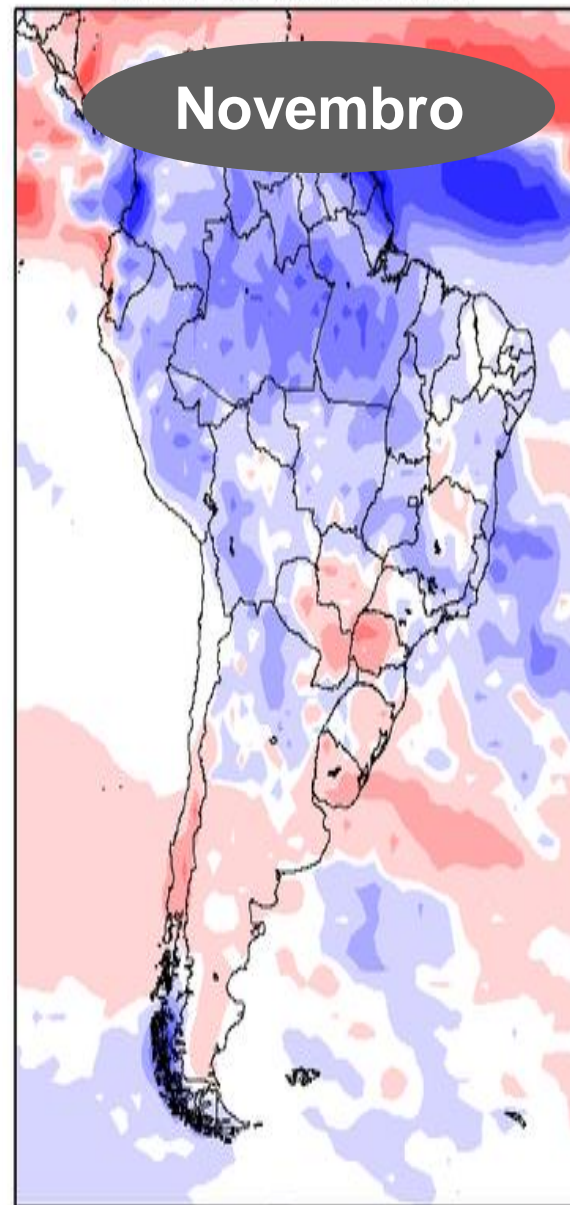
Anomalia Precipitacao Mensal 09/2020 (mm)
Rodada de: 2020/06 ECMWF



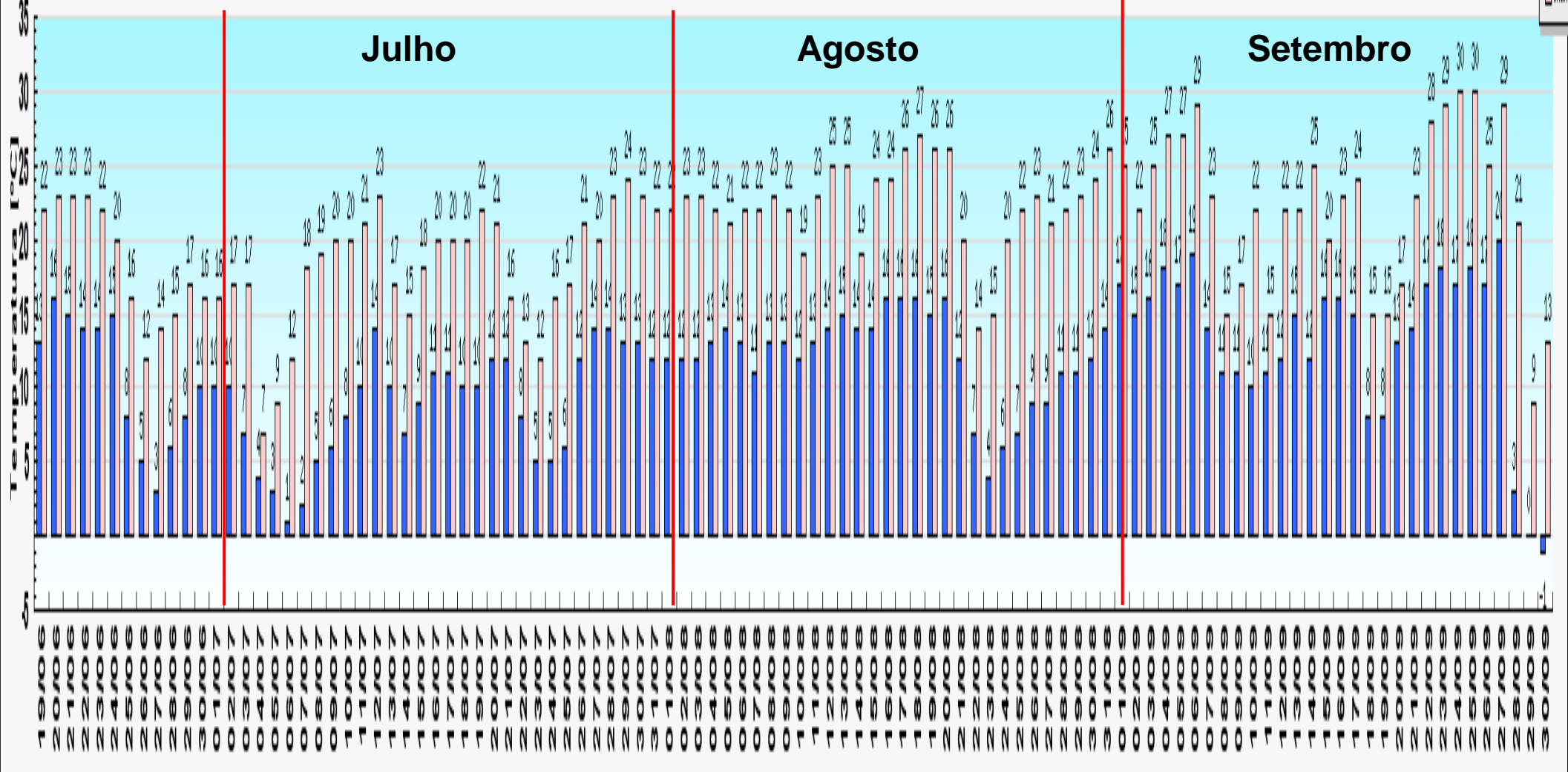
Anomalia Precipitacao Mensal 10/2020 (mm)
Rodada de: 2020/06 ECMWF



Anomalia Precipitacao Mensal 11/2020 (mm)
Rodada de: 2020/06 ECMWF

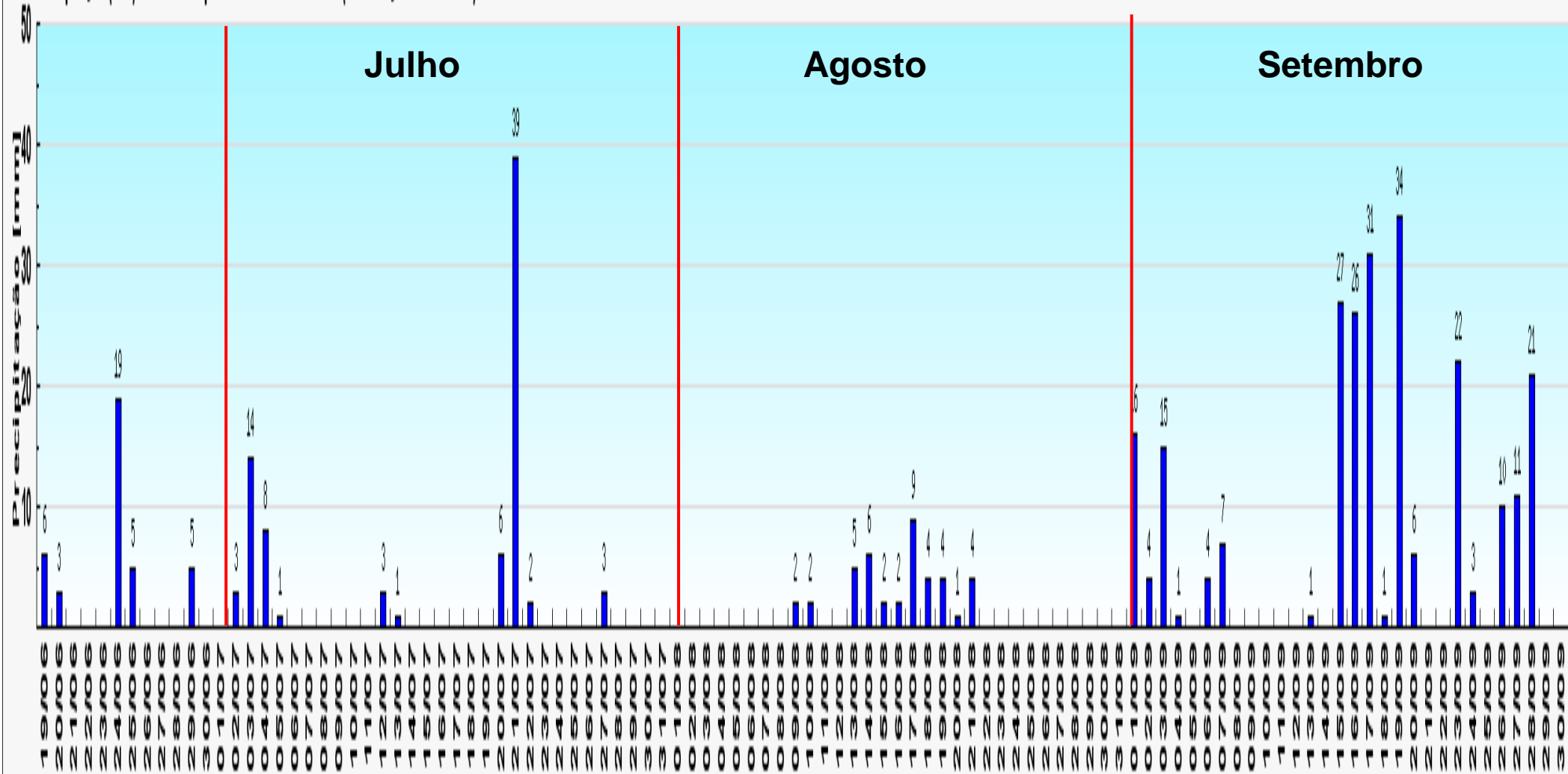


Temperaturas (°C) Máximas e Mínimas para PassoFundo-RS (Atualização: 17/06/2020)



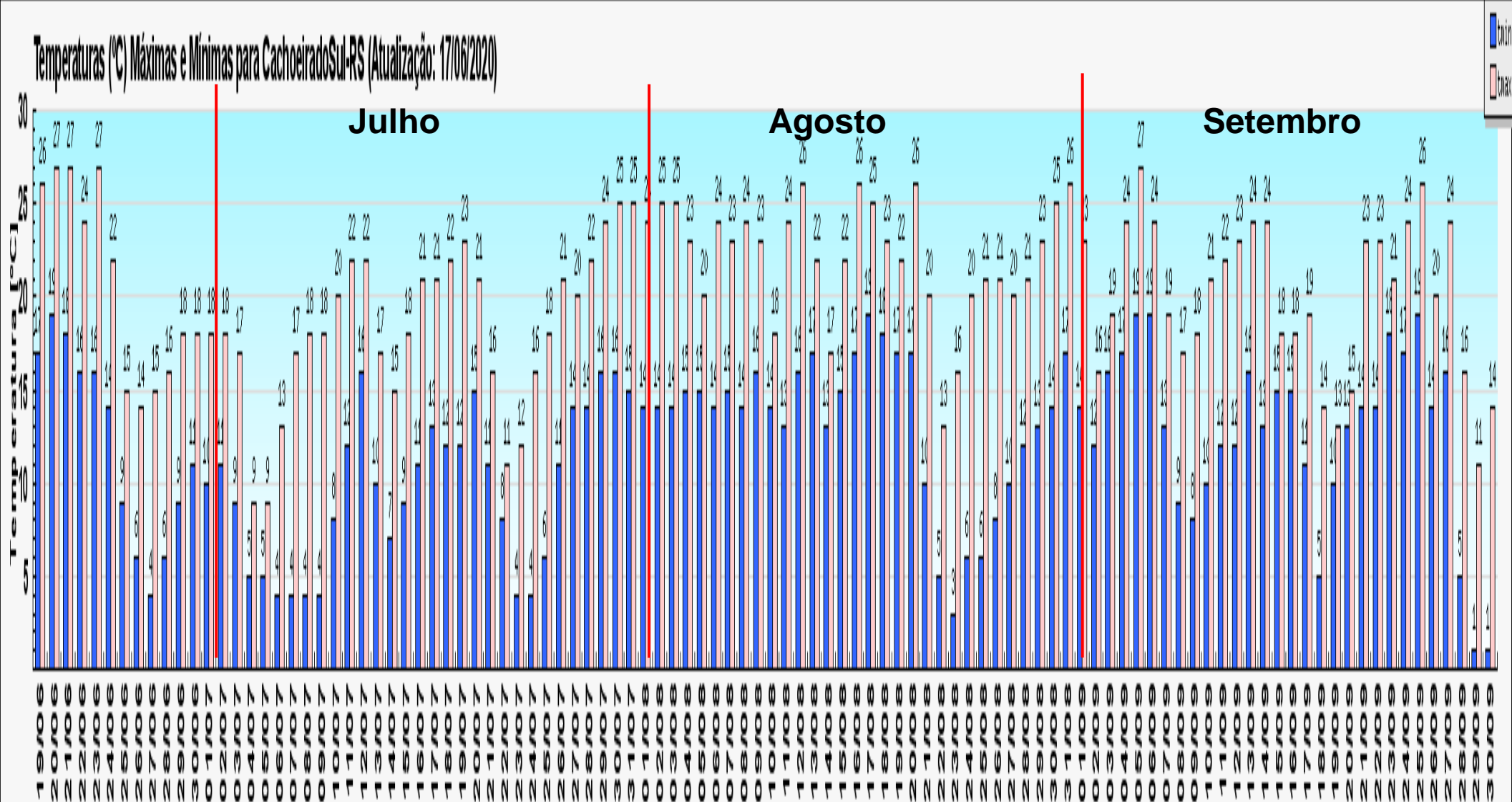
Fonte: CFS/2/NOA (Últimas 15 simulações) - Análise: Somar Meteorologia

Precipitação (mm) Acumulada para Cachoeira do Sul-RS (Atualização: 17/06/2020)



Fonte: CFSv2/NOAH (Últimas 15 simulações) - Análise: Somar Meteorologia

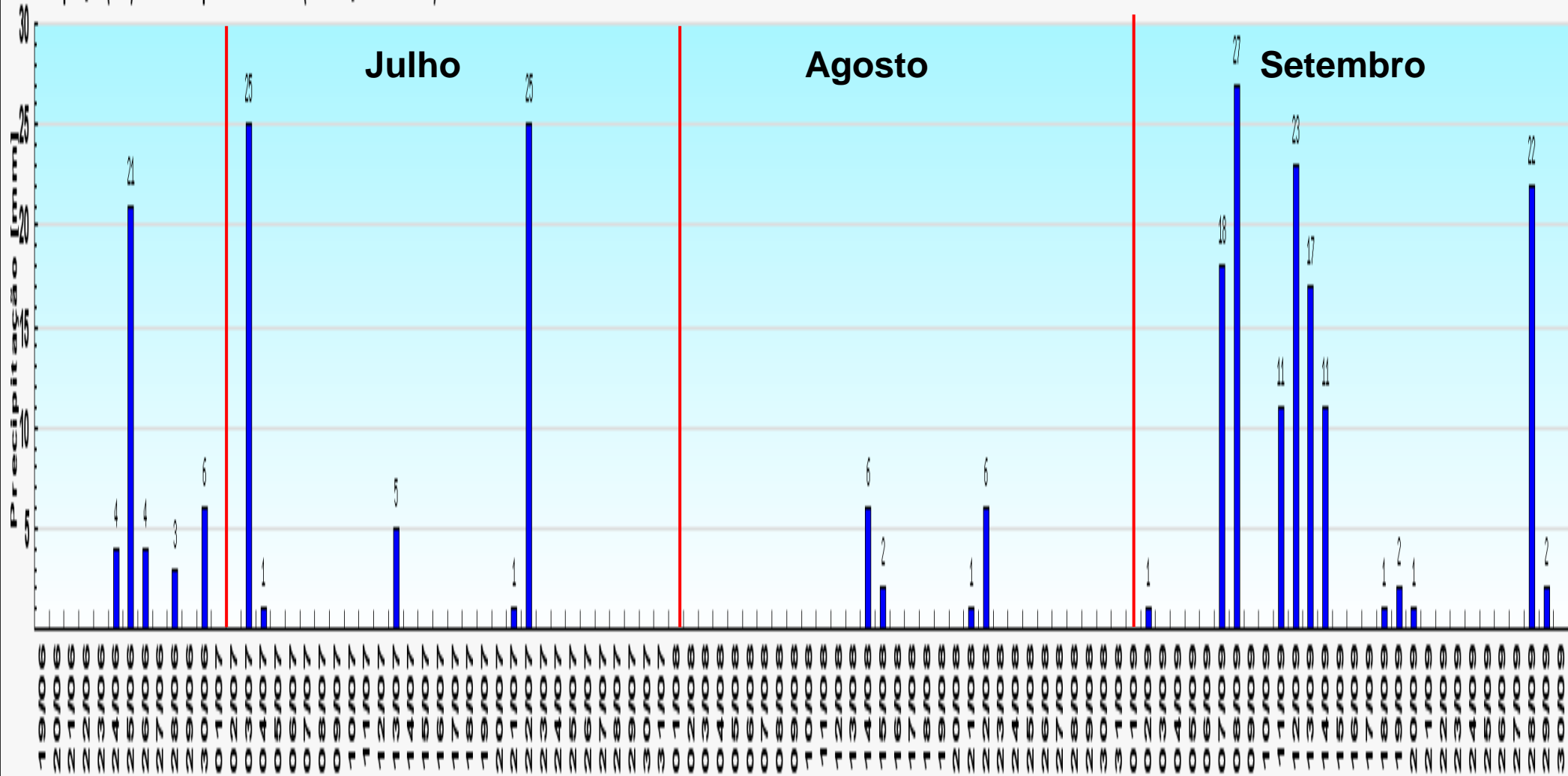
Temperaturas (°C) Máximas e Mínimas para Cachoeira do Sul-RS (Atualização: 17/06/2020)



Fonte: DFS/2/NOAA (Últimas 15 simulações) - Análise: Somar Meteorologia

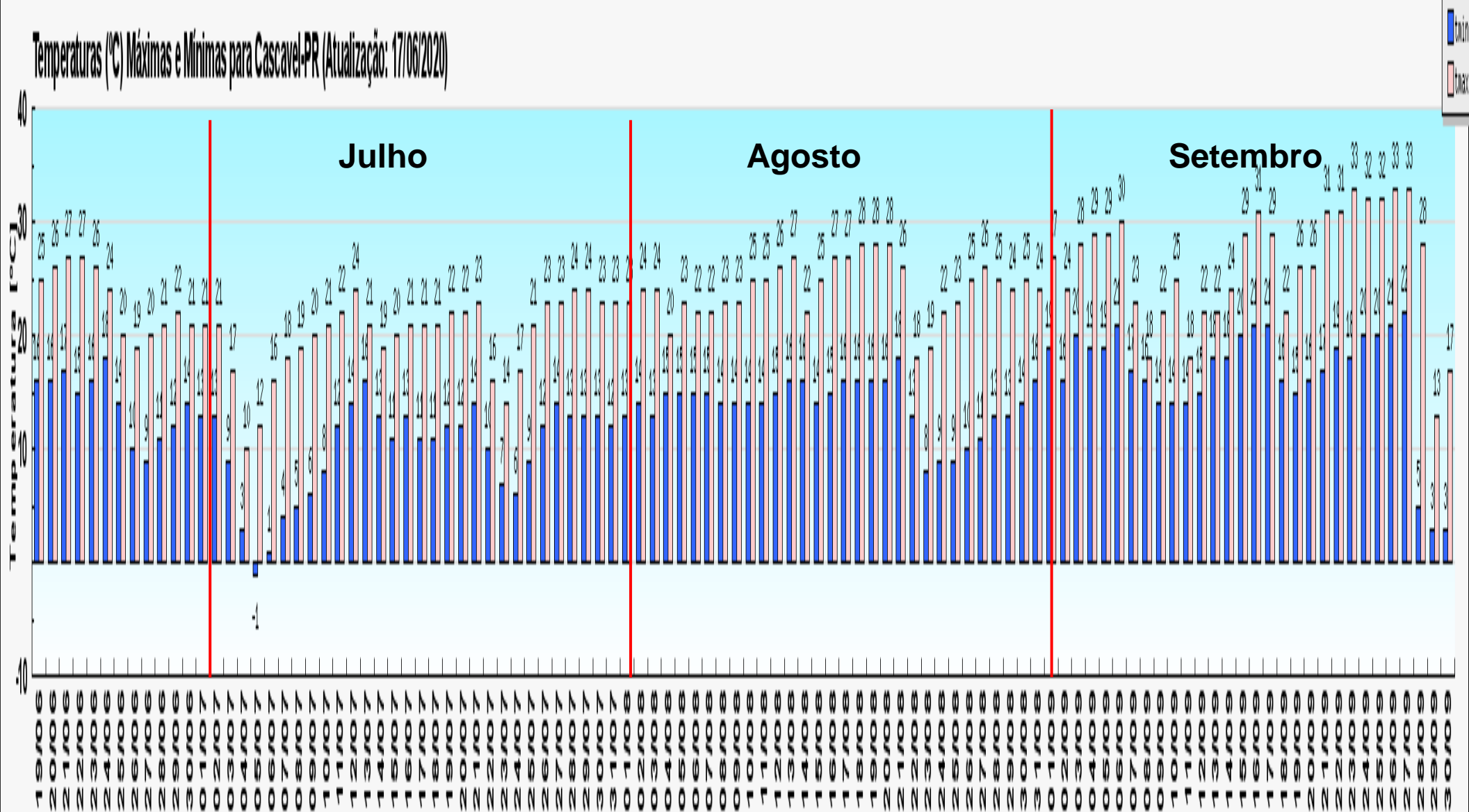
CASCAVEL – PR: Chuva (Junho a Setembro/2020)

Precipitação (mm) Acumulada para Cascavel-PR (Atualização: 17/06/2020)



Fonte: CFSv2/MOHA (Últimas 15 simulações) - Análise: Somar Meteorologia

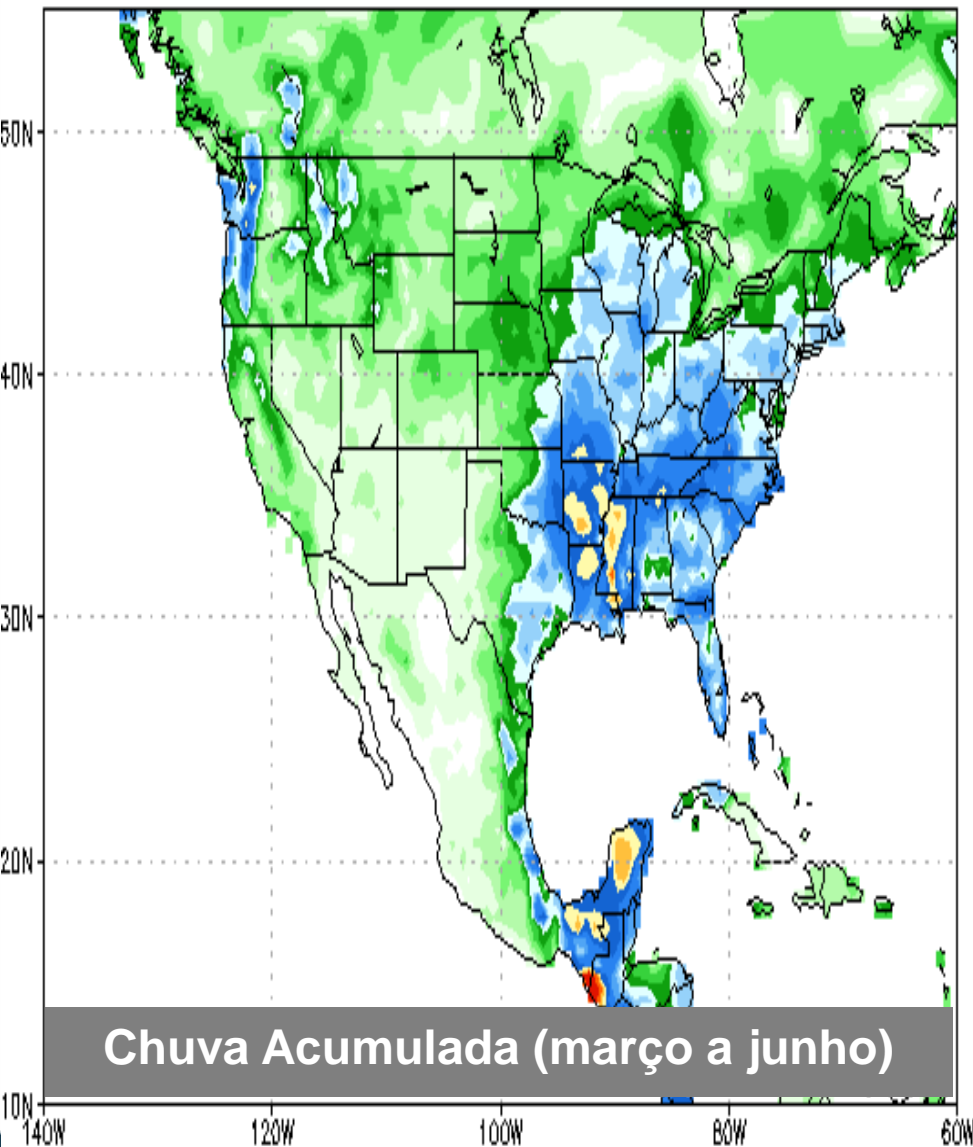
Temperaturas (°C) Máximas e Mínimas para Cascavel-PR (Atualização: 17/06/2020)



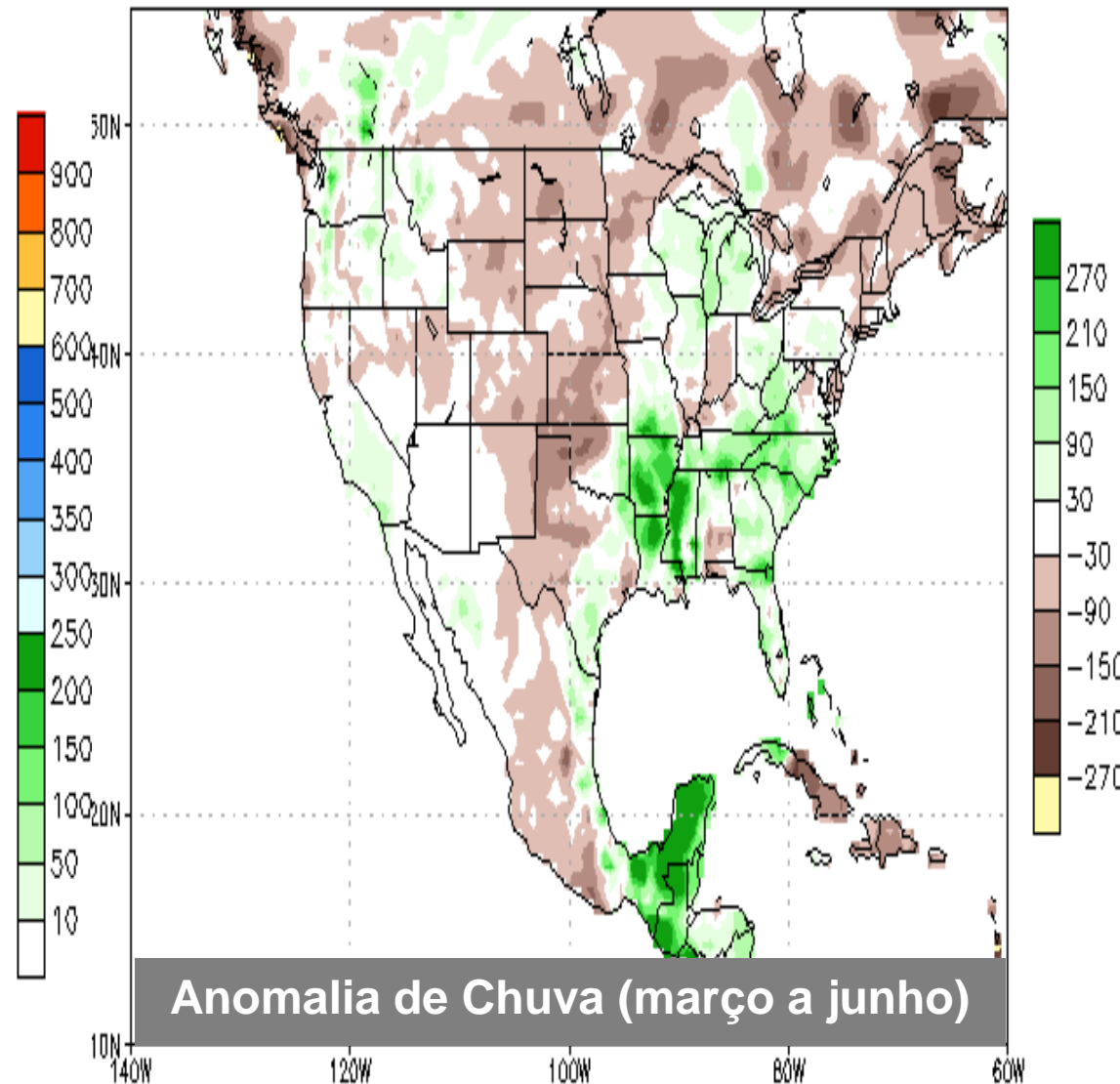
Fonte: CFS/2/NOVA (Últimas 15 simulações) - Análise: Somar Meteorologia

Clima favorece Safra 2020/2021 dos EUA

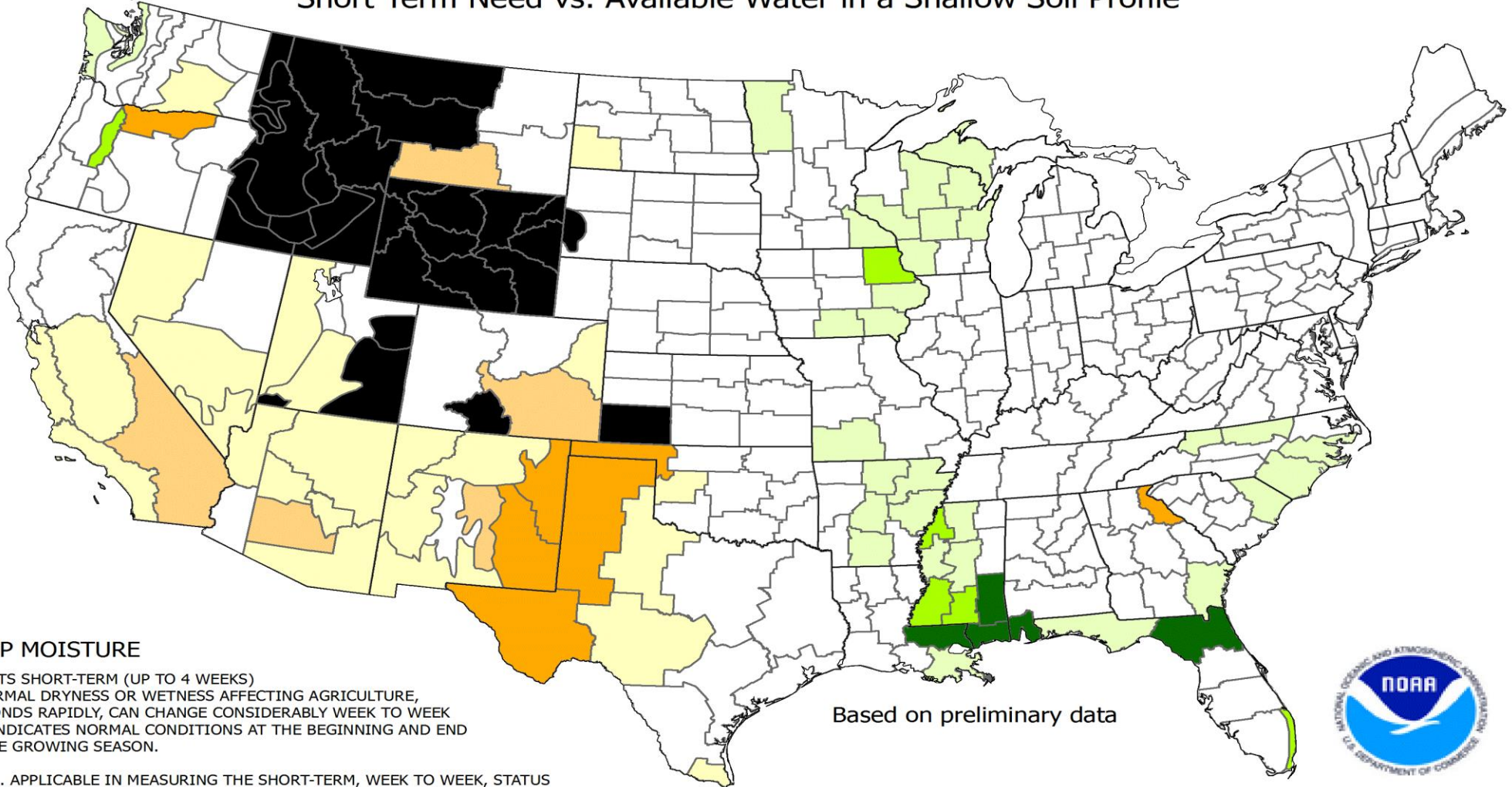
Accumulated Prop (mm) 18MAR2020–15JUN2020



Prop Anomalies (mm) 18MAR2020–15JUN2020



Crop Moisture Index by Division
Weekly Value for Period Ending Jun 13, 2020
Short Term Need vs. Available Water in a Shallow Soil Profile



Based on preliminary data



CROP MOISTURE

DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.

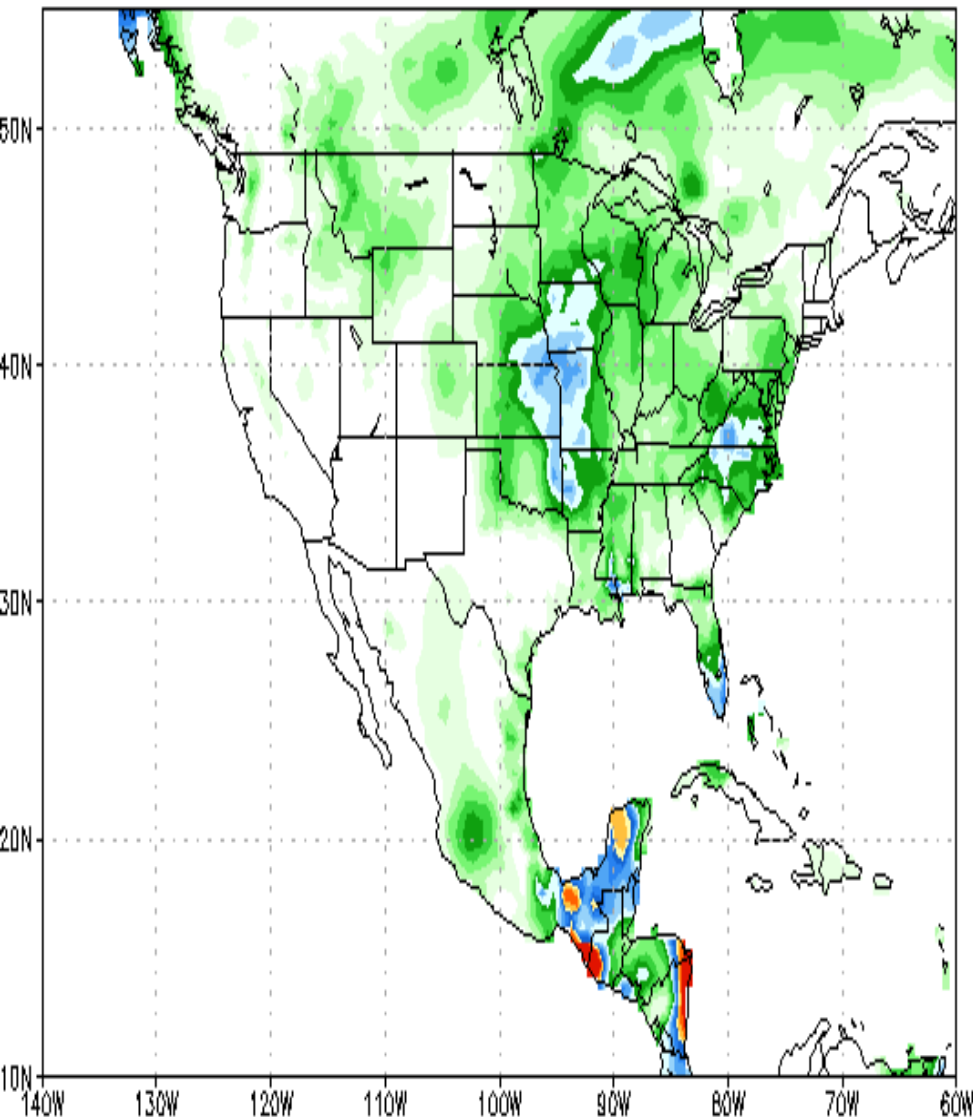
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F. IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

- | | |
|---|---------------------------------|
| -3.0 or less (Severely Dry) | +1.0 to +1.9 (Abnormally Moist) |
| -2.0 to -2.9 (Excessively Dry) | +2.0 to +3.0 (Wet) |
| -1.0 to -1.9 (Abnormally Dry) | 3.0 and above (Excessively Wet) |
| -0.9 to +0.9 (Slightly Dry/Favorably Moist) | Missing/Incomplete |

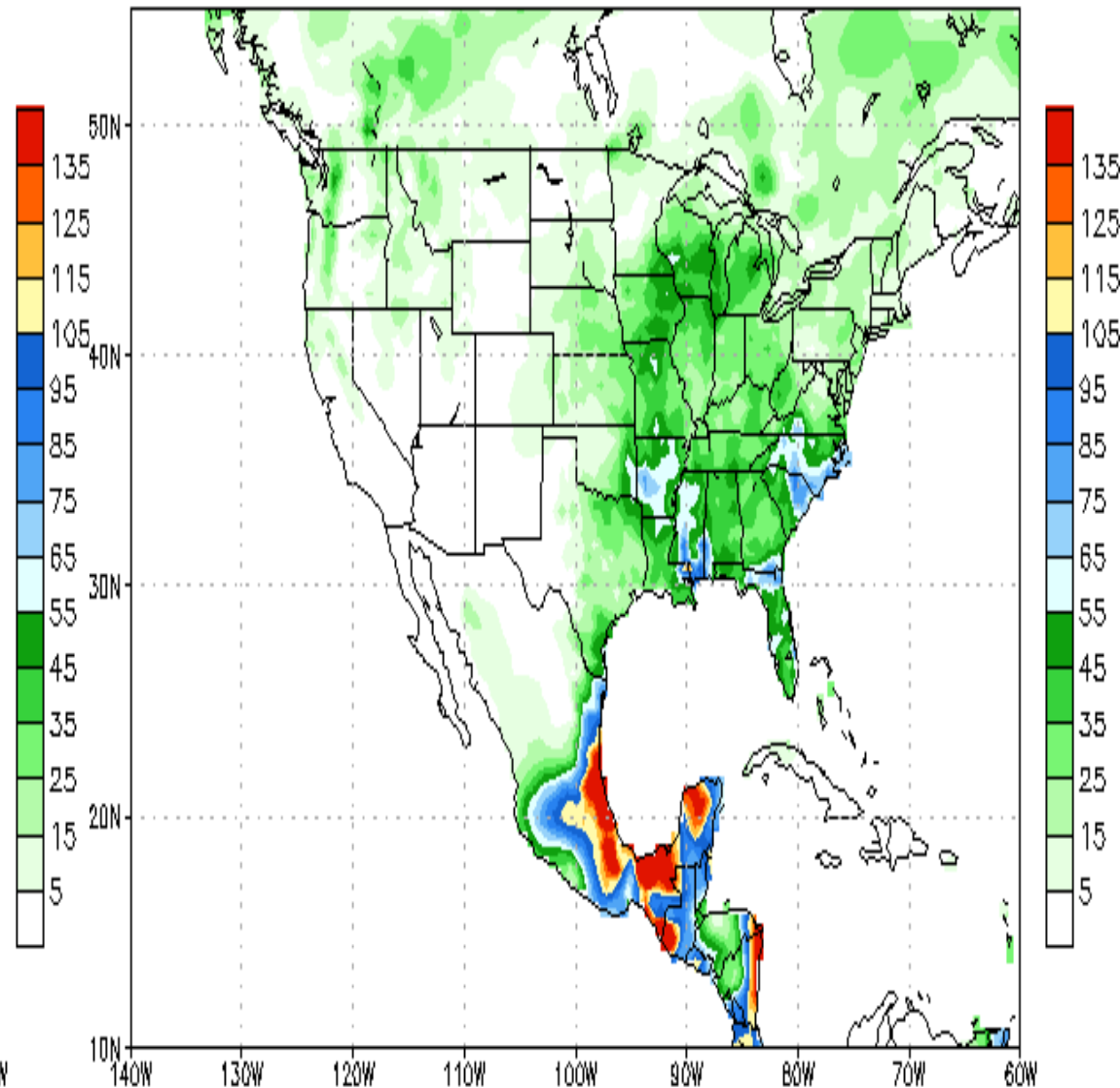
EUA: deve chover nas próximas duas semanas

NCEP GFS Ensemble Forecast 1–7 Day Precipitation (mm)
from: 17Jun2020
17Jun2020–23Jun2020 Accumulation



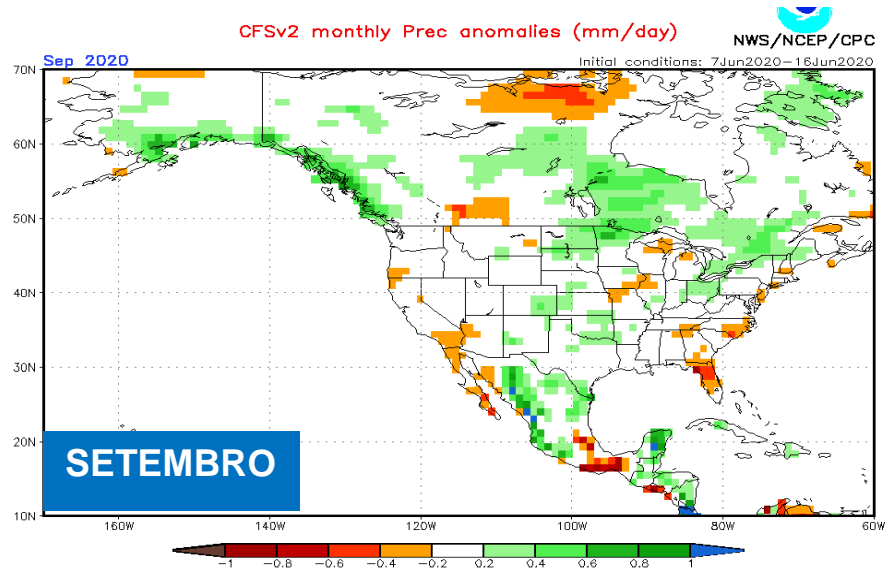
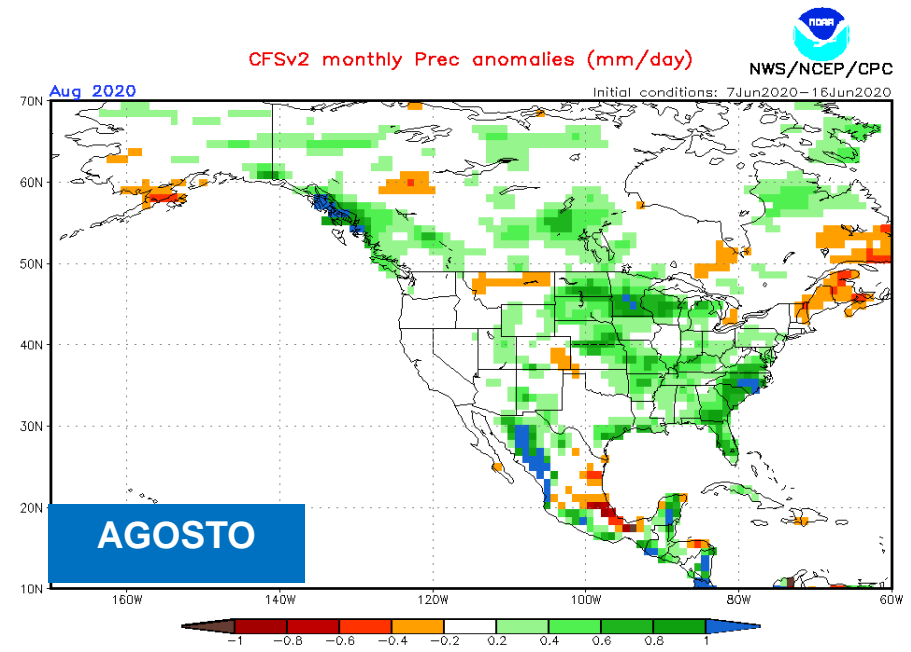
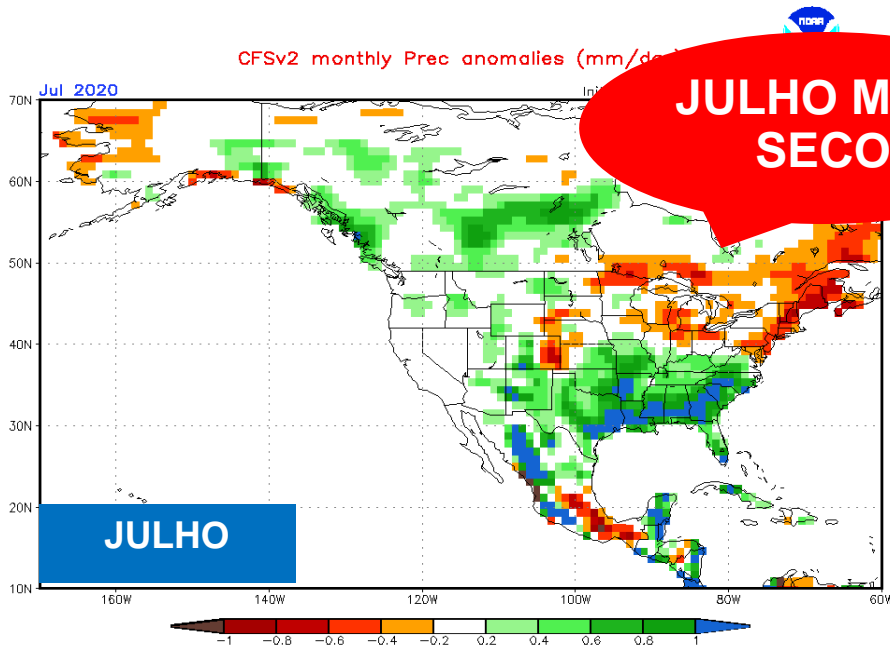
Bias correction based on last 30-day forecast error

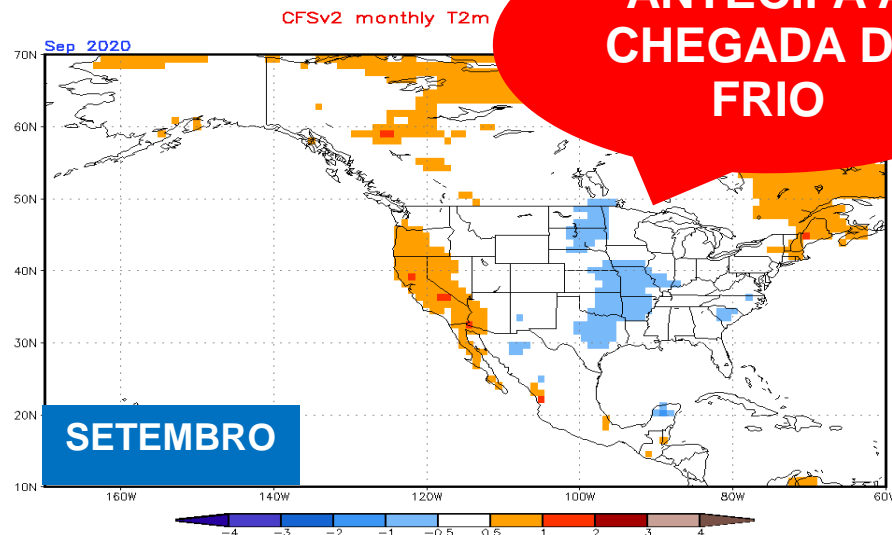
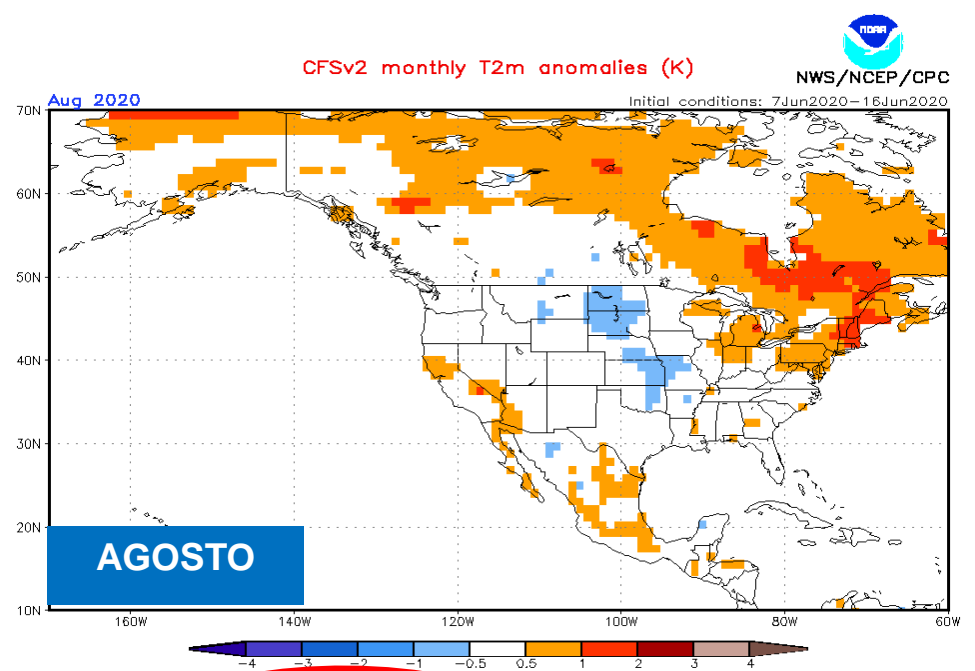
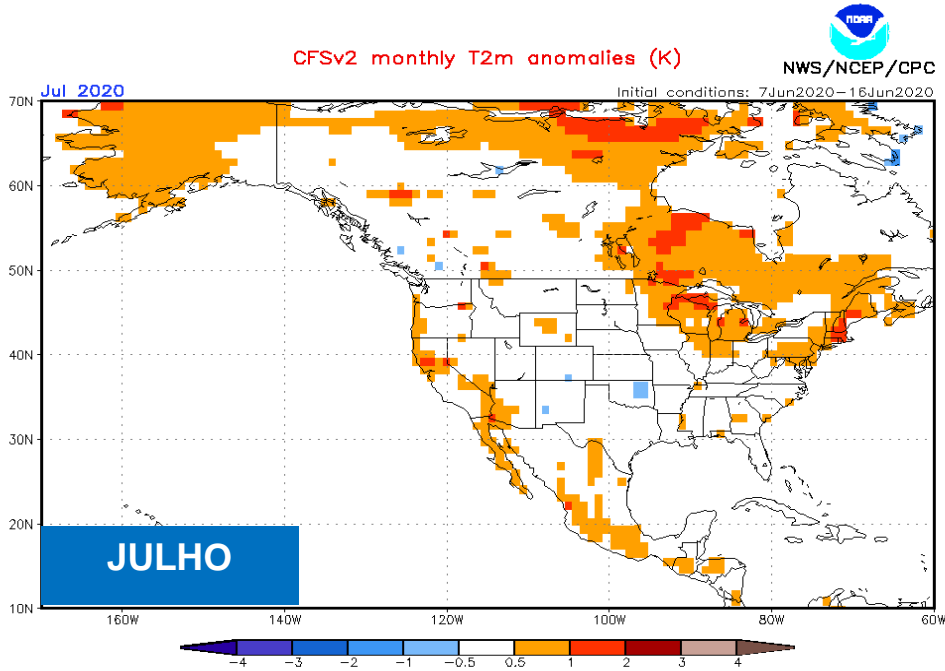
NCEP GFS Ensemble Forecast 8–14 Day Precipitation (mm)
from: 17Jun2020
24Jun2020–30Jun2020 Accumulation



Bias correction based on last 30-day forecast error

EUA: chuvas em Julho, Agosto e Setembro/2020



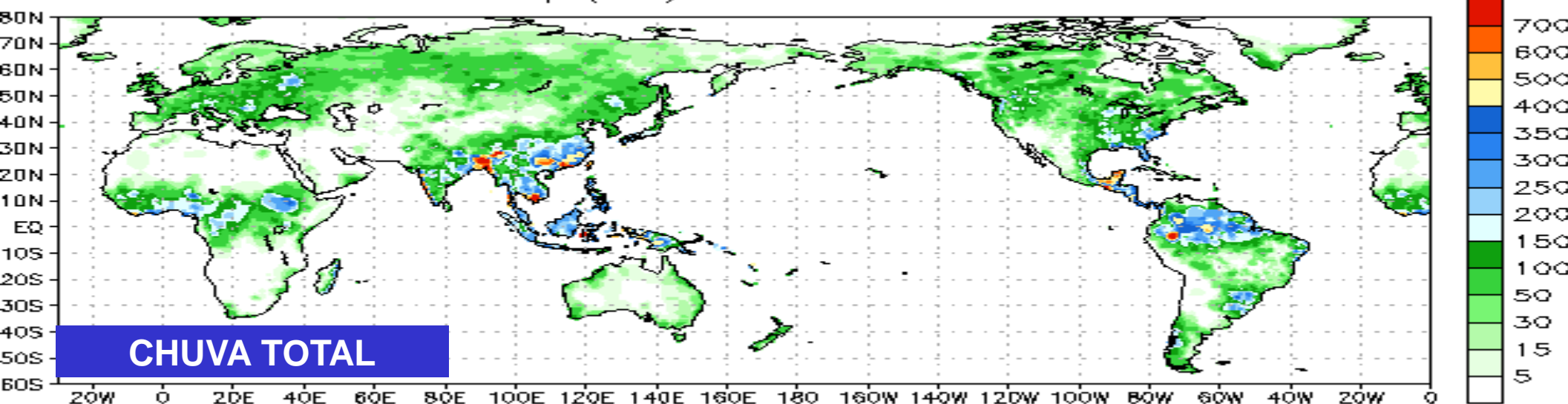


**ANTECIPA A
CHEGADA DO
FRIO**

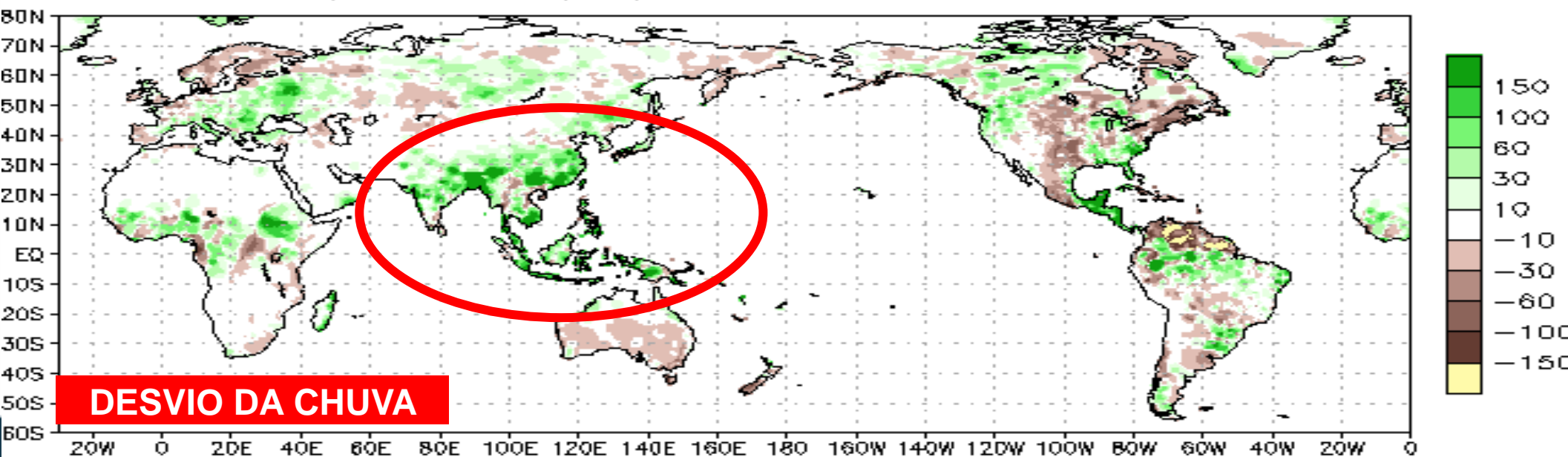


GLOBO – Chuva nos últimos 30 dias

Accumulated Prcp (mm) 18 MAY 2020 – 16 JUN 2020



Data Source: CPC Unified (gauge-based) Precipitation
Prcp Anomalies (mm) 18 MAY 2020 – 16 JUN 2020



Data Source: CPC Unified (gauge-based) Precipitation
Climatology (1981–2010)



High Resolution Images can be found at:

<http://www.cpc.ncep.noaa.gov/products/precip/CWlink/ENSO/ENSO-Global-Impacts/>

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É BEM MELHOR SABER!