

Rural Clima

Previsões Climáticas Safra 2024/25

Desvendando o clima
com a chegada da La Niña

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 @ruralclima

 @marco_ruralclima



Pontos a serem discutidos



1

O QUE ESPERAR PARA OS PROXIMOS DIAS

2

LA NIÑA – VEM E EM QUAL INTENSIDADE?

3

SAFRA 2024/25 – NOVOS DESAFIOS,
ESTRATEGIAS E MANEJOS

4

O QUE ESPERAR PARA A SAFRA 2024/25
NOS EUA E ÁSIA

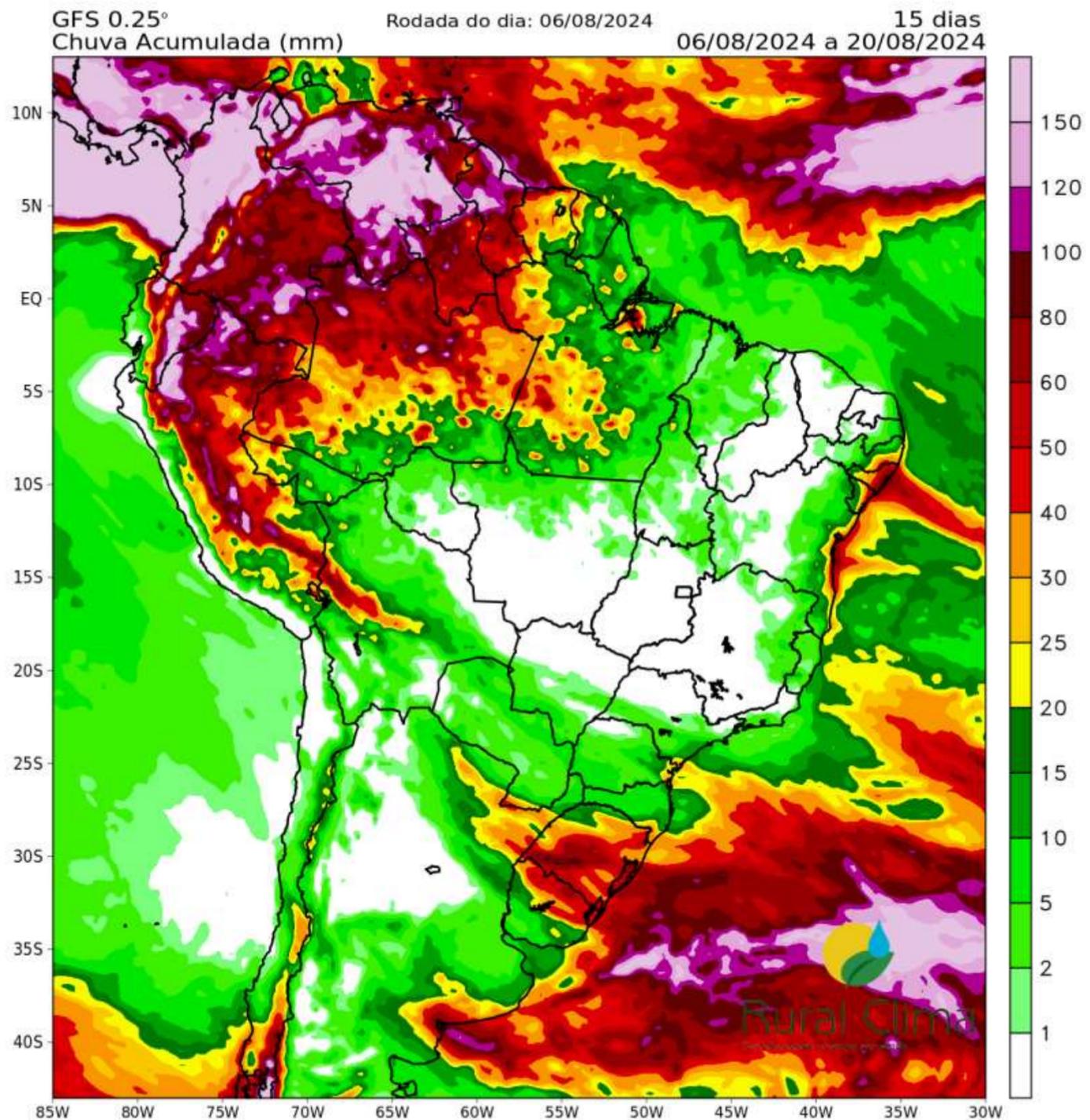
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Previsões meteorológicas

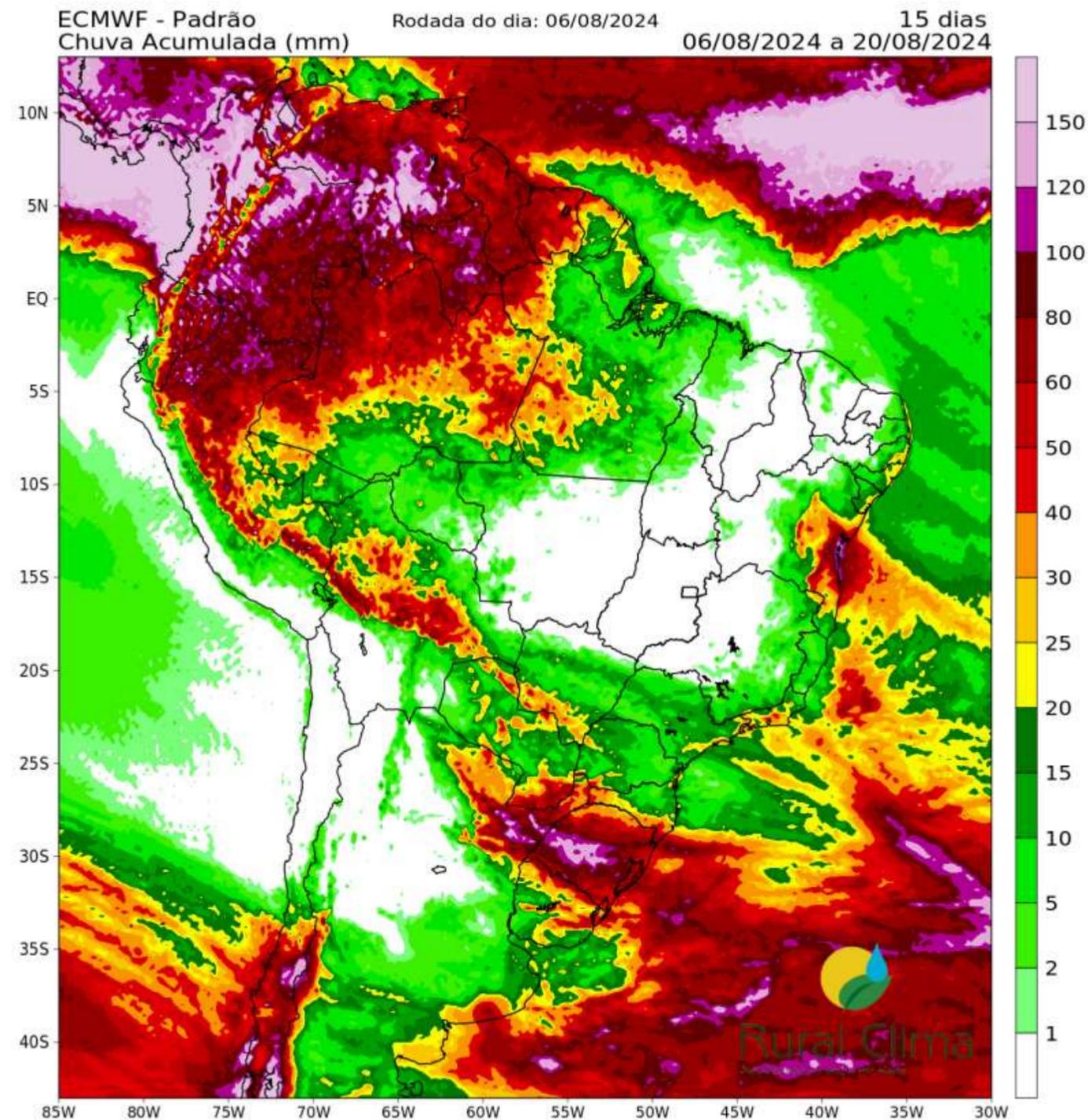
Próximos 15 dias

Rural Clima 

Previsão de chuvas - próximos 15 dias



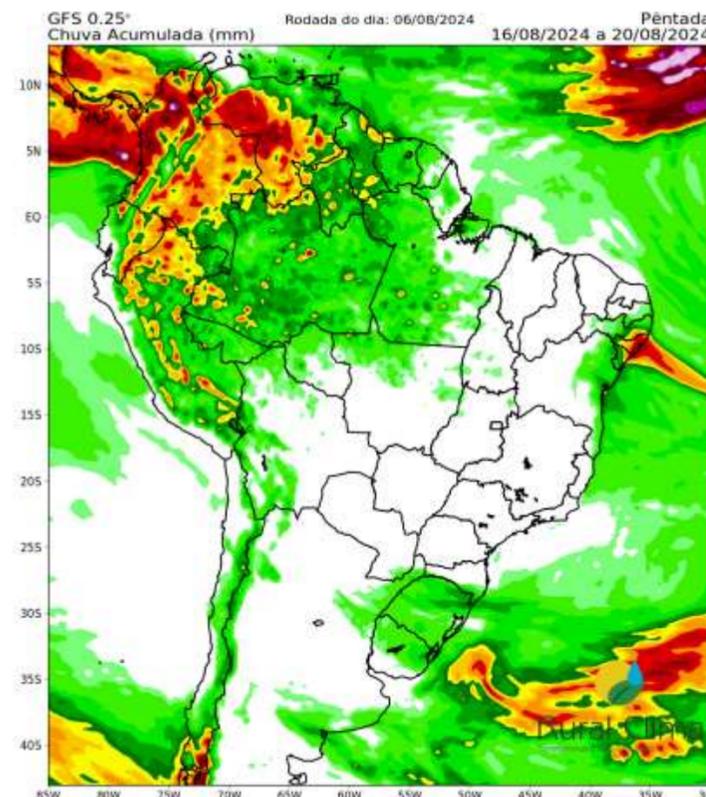
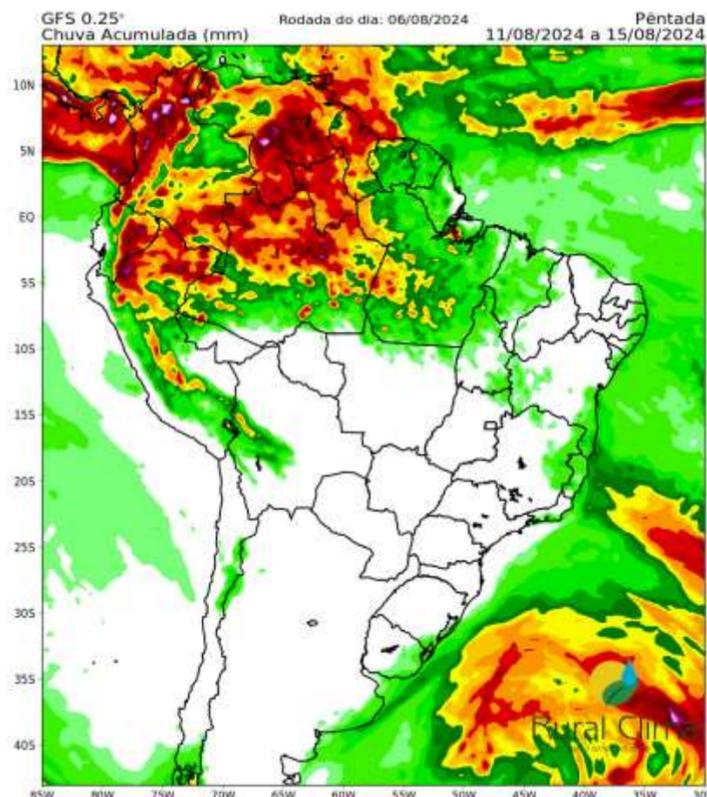
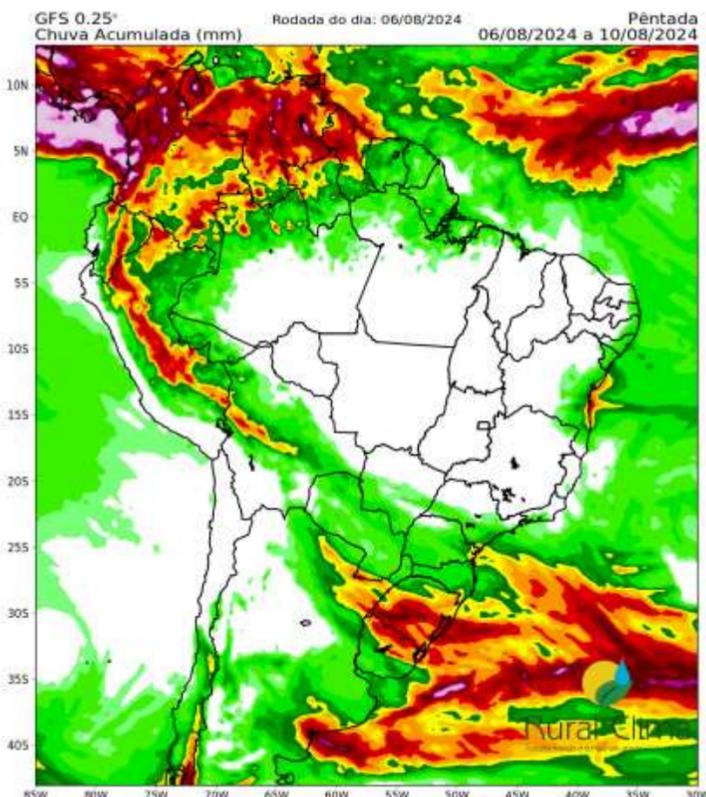
GFS



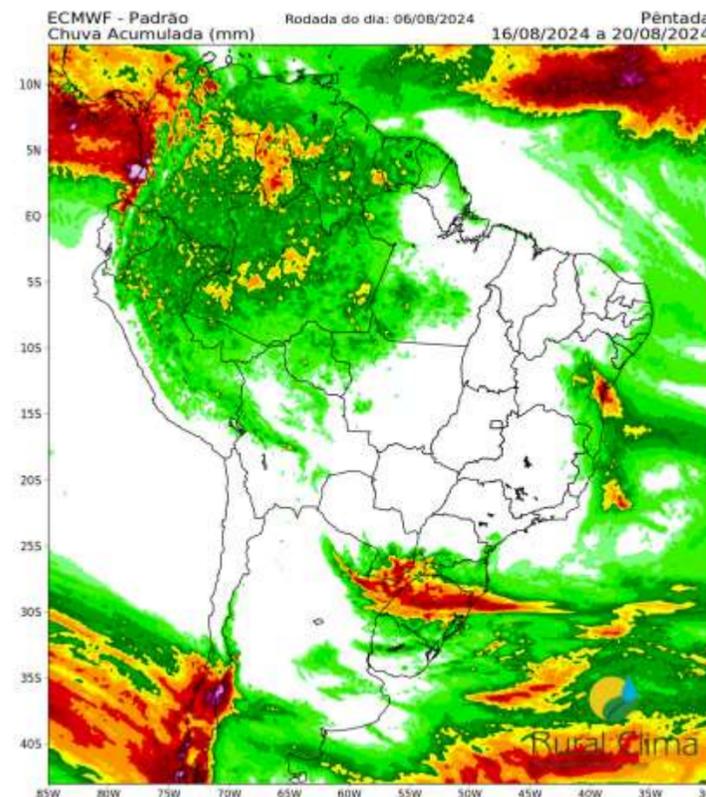
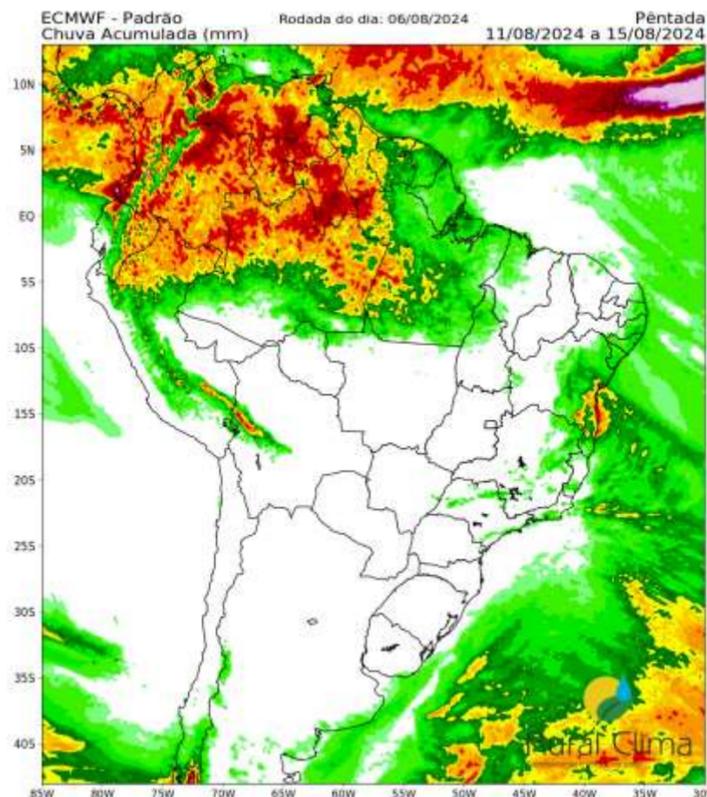
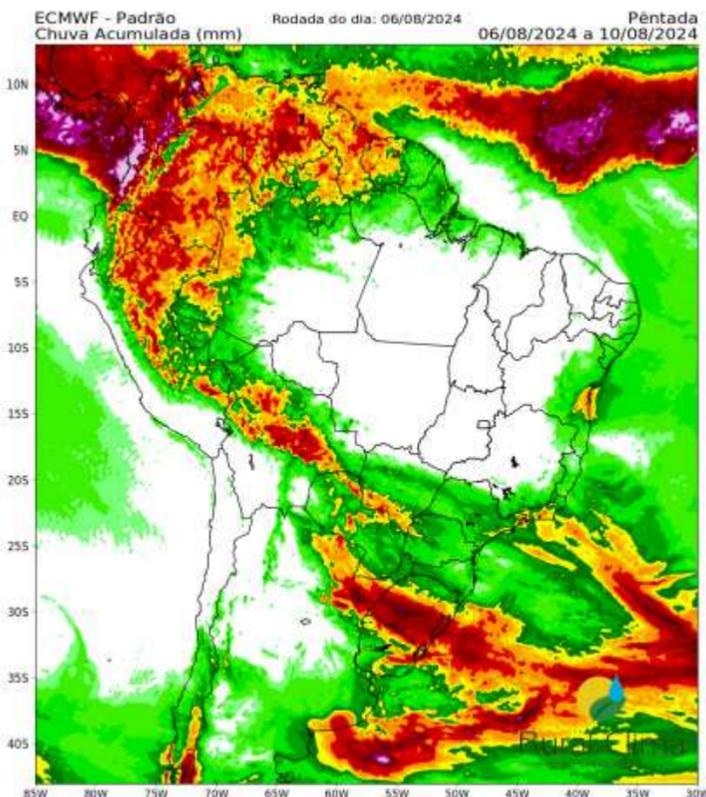
ECMWF

Previsões de chuvas - próximos 15 dias

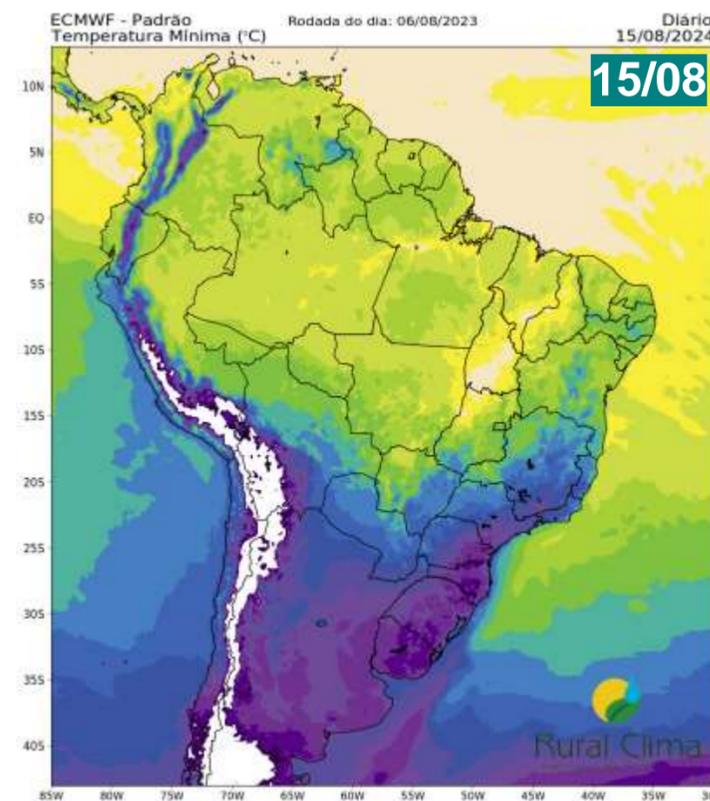
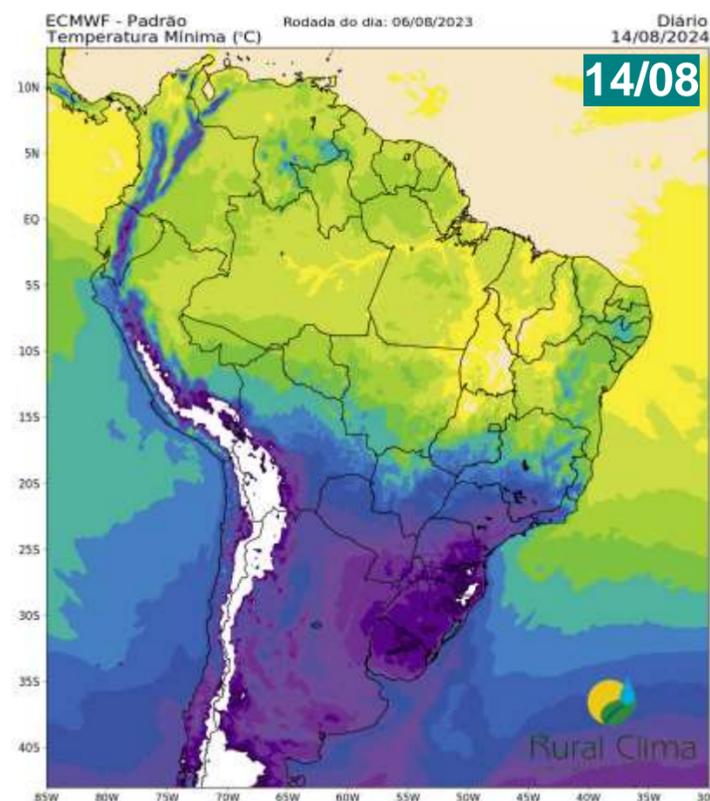
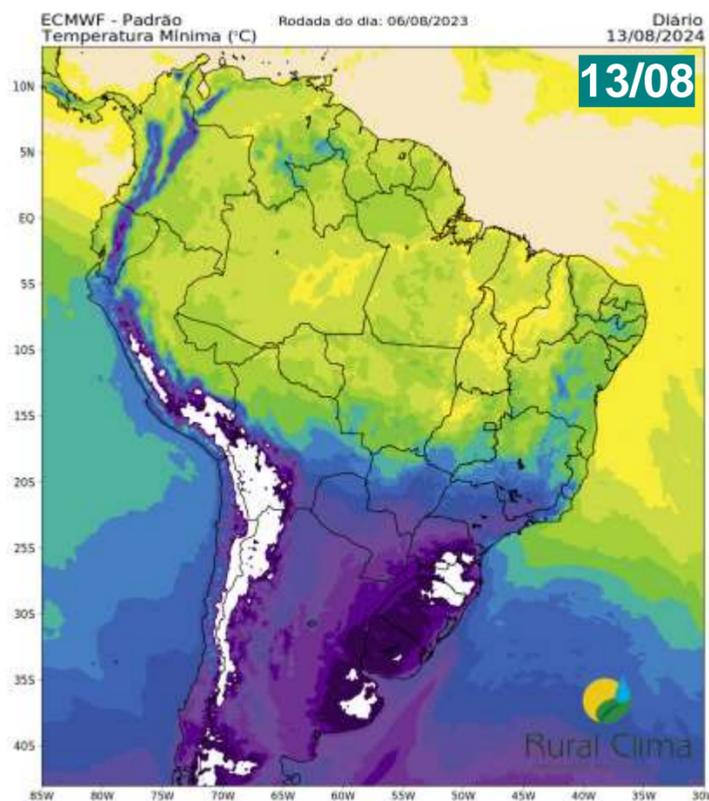
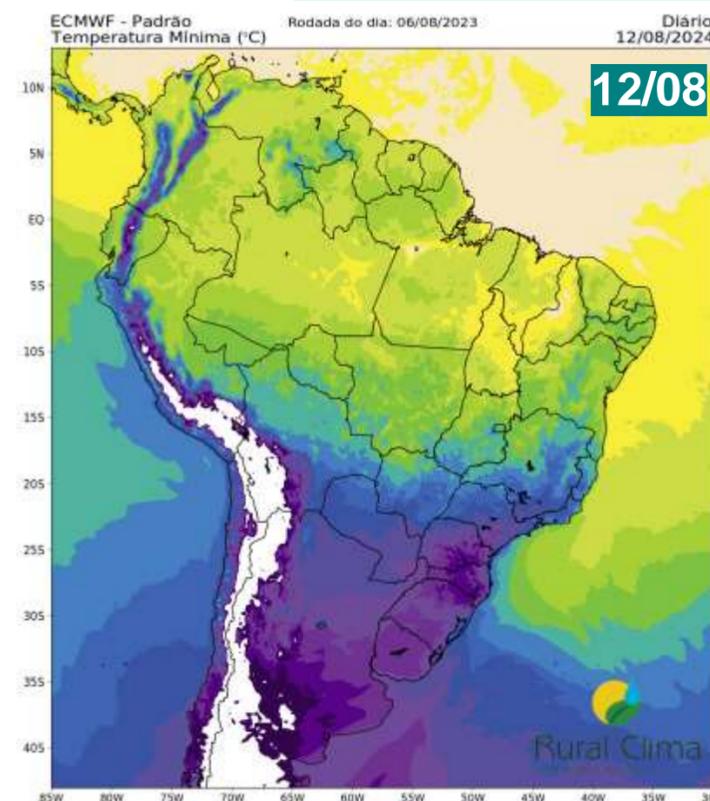
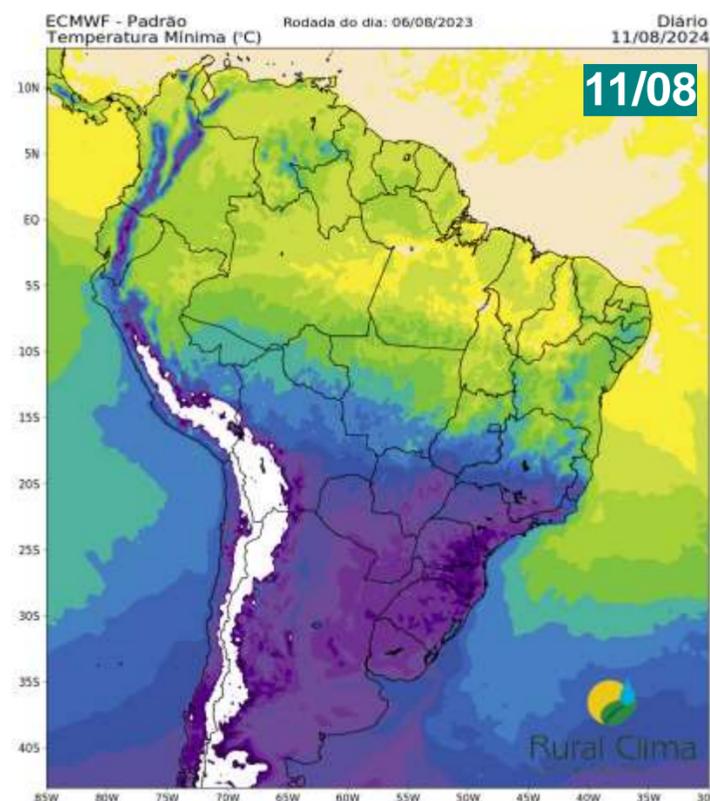
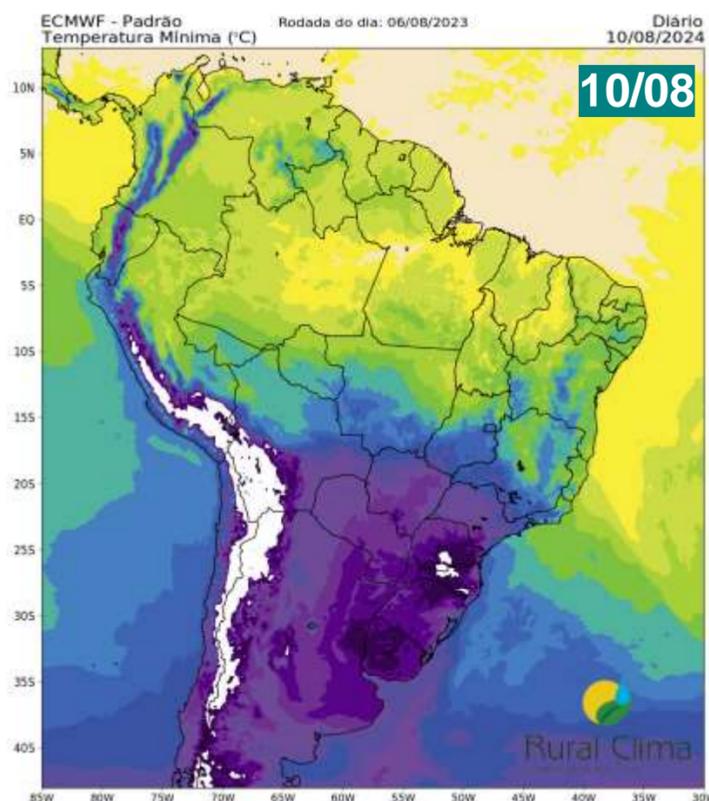
GFS



ECMWF



Previsões de geadas – próximos 15 dias



p

LA NIÑA

Vem e qual intensidade ??

1. Já estamos sob influência da La Niña?



Update prepared by:
Climate Prediction Center / NCEP
5 August 2024

ENSO Alert System Status: **La Niña Watch**

ENSO-neutral conditions are present.*

Equatorial sea surface temperatures (SSTs) are above average in the western Pacific, near average in the east-central Pacific, and below average in the eastern Pacific Ocean.

ENSO-neutral is expected to continue for the next several months, with La Niña favored to develop during August-October (70% chance) and persist into the Northern Hemisphere winter 2024-25 (79% chance during November-January).*

* Note: These statements are updated once a month (2nd Thursday of each month) in association with the ENSO Diagnostics Discussion, which can be found by clicking [here](#).

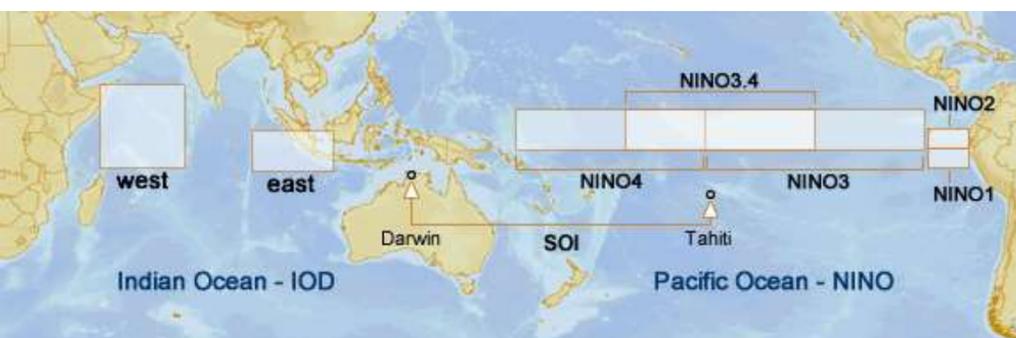
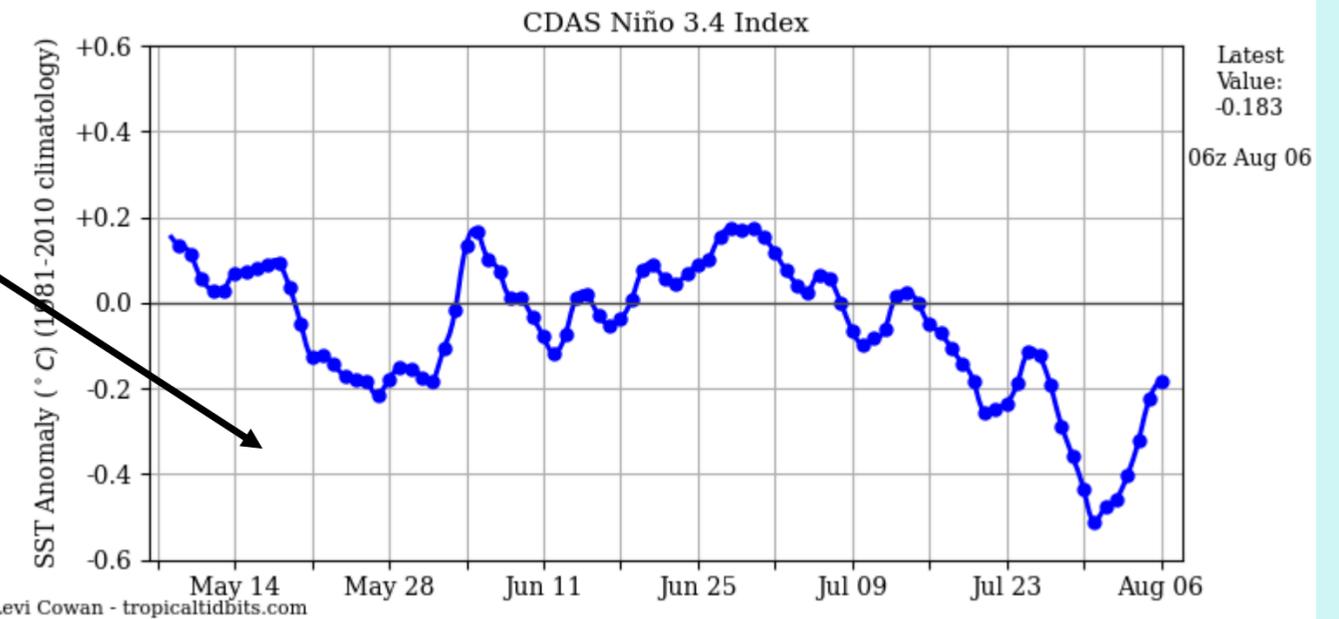
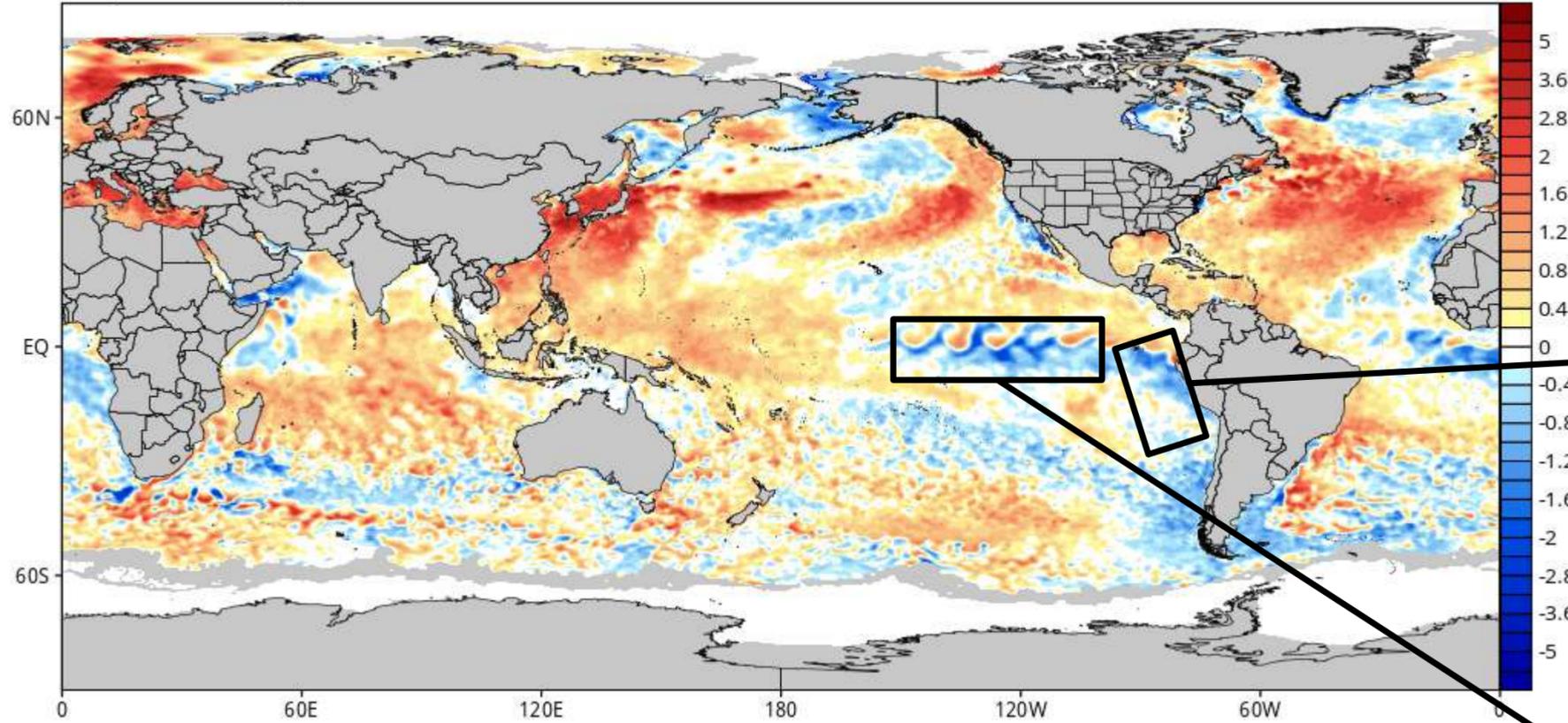
I. La Niña

2. Temperaturas das águas dos Oceanos

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

Analysis Time: 06z Aug 06 2024

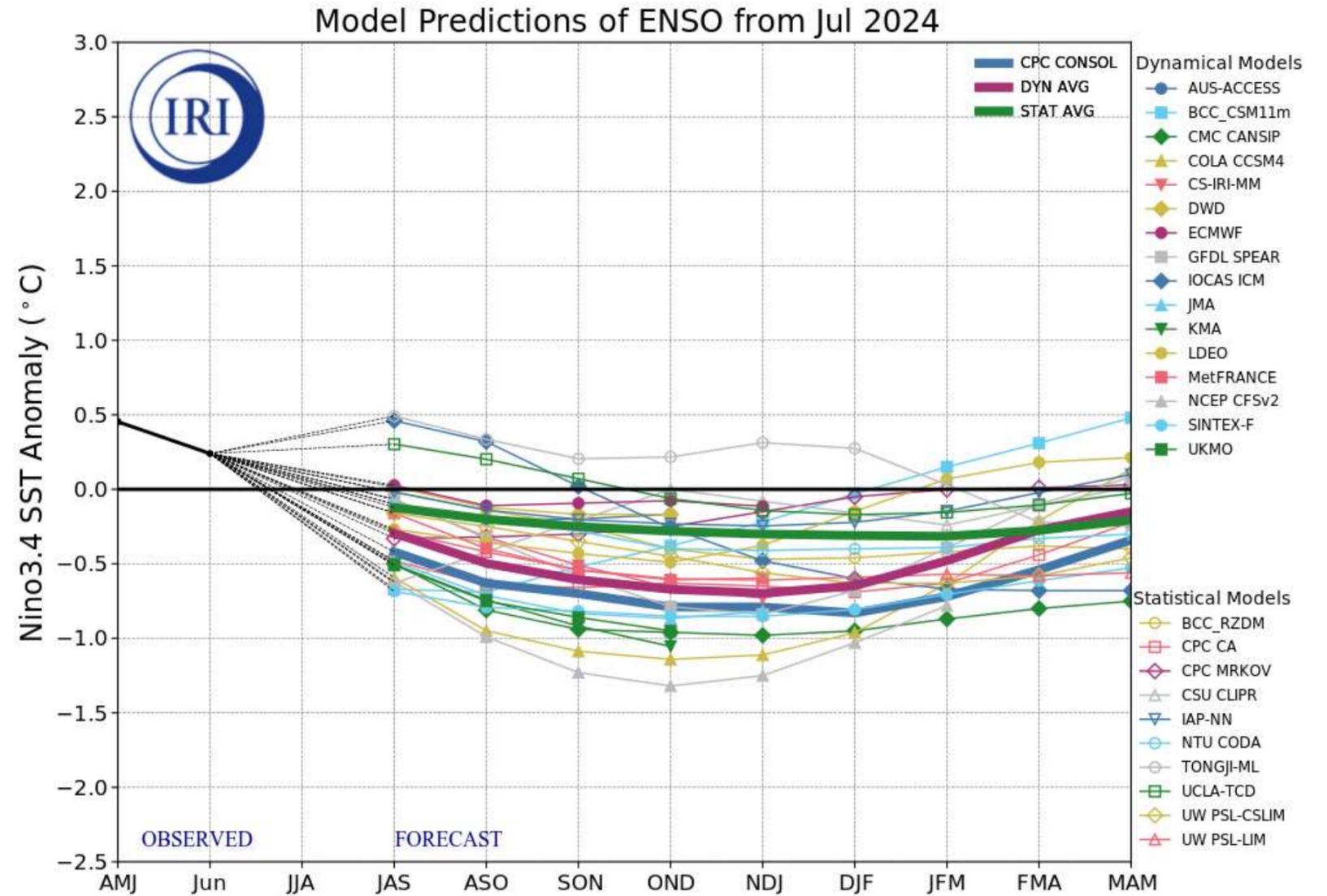
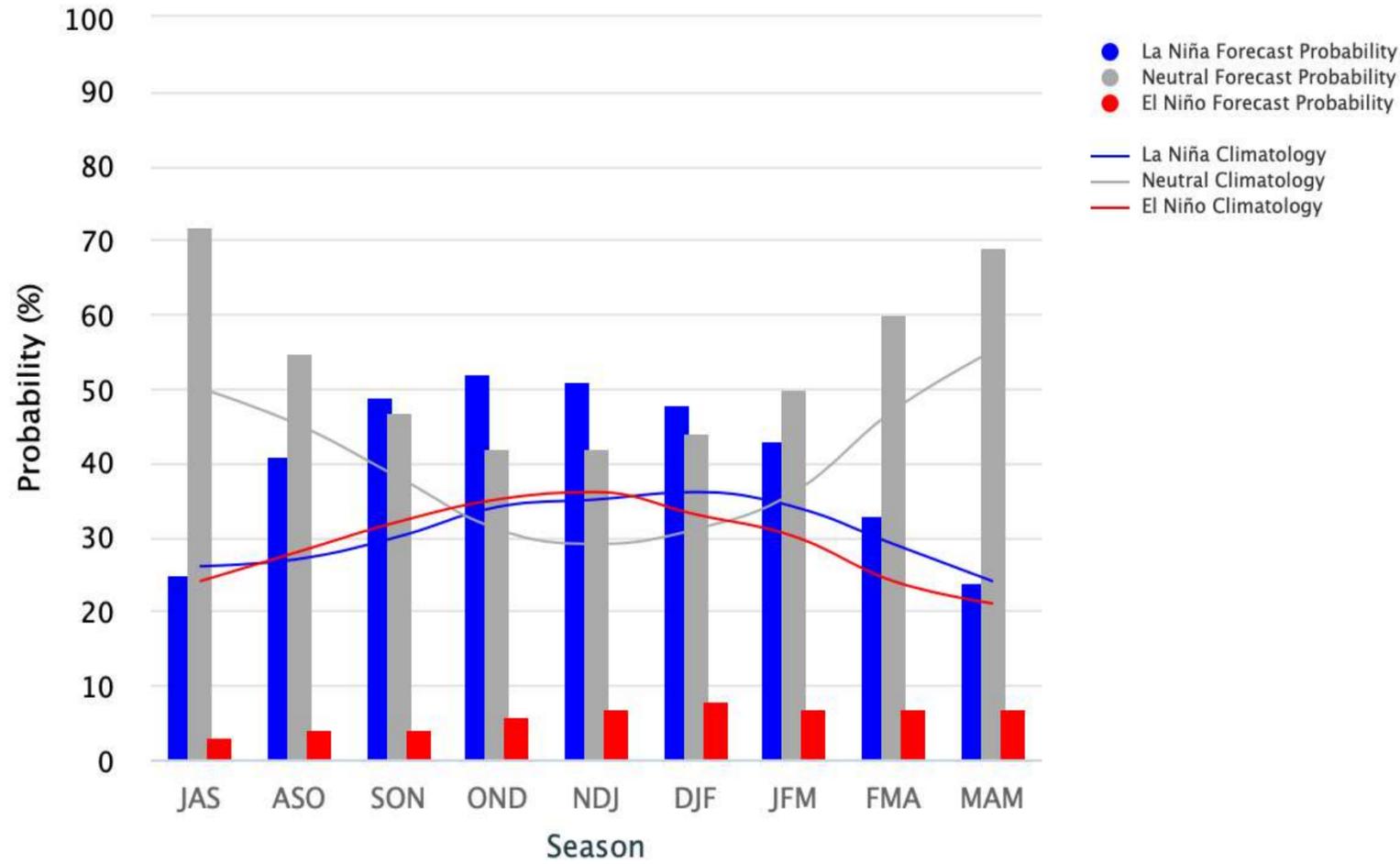
TROPICALTIDBITS.COM



3. Projeções para os próximos meses

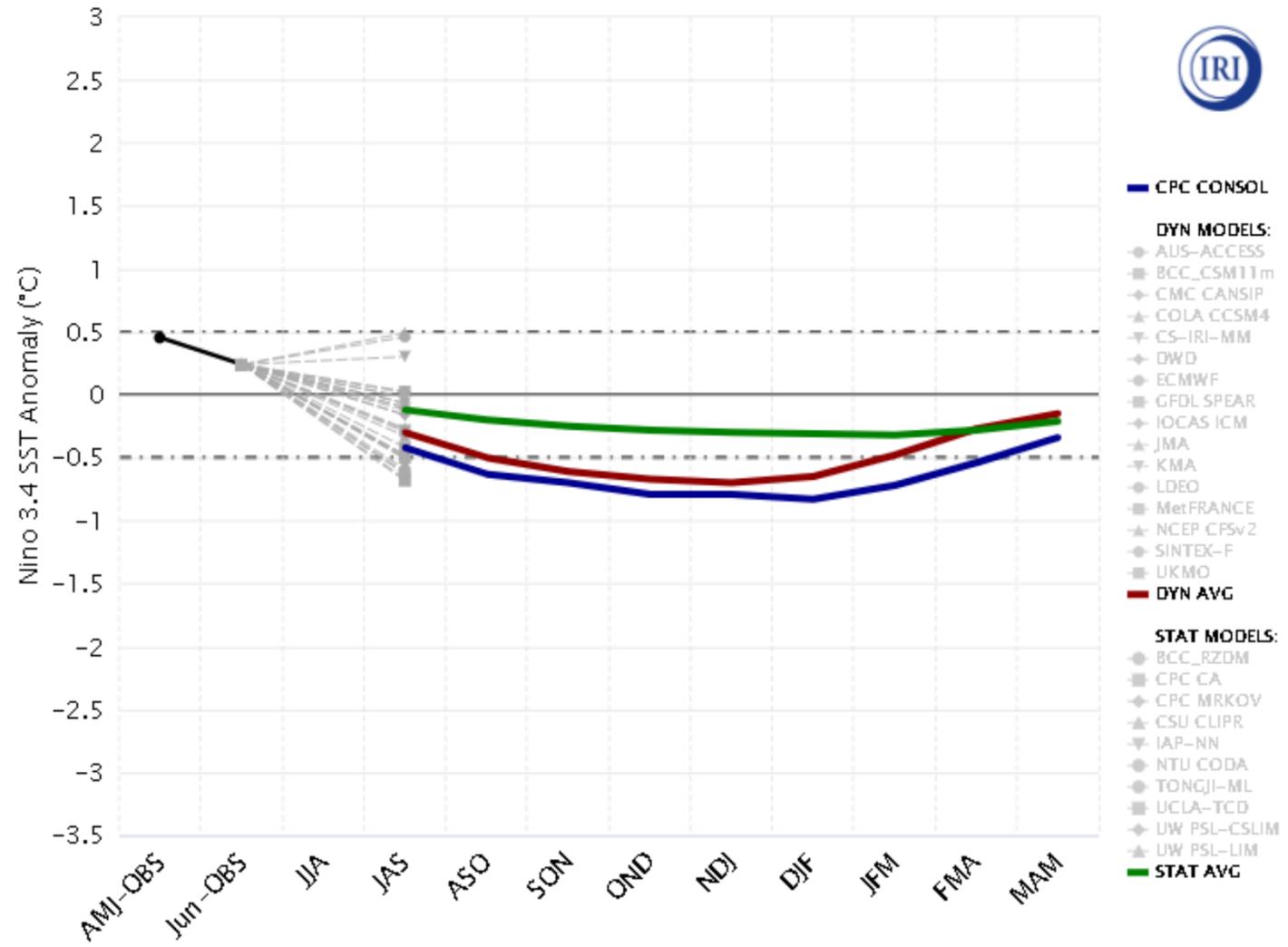
Mid-July 2024 IRI Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly Neutral ENSO: -0.5 °C to 0.5 °C

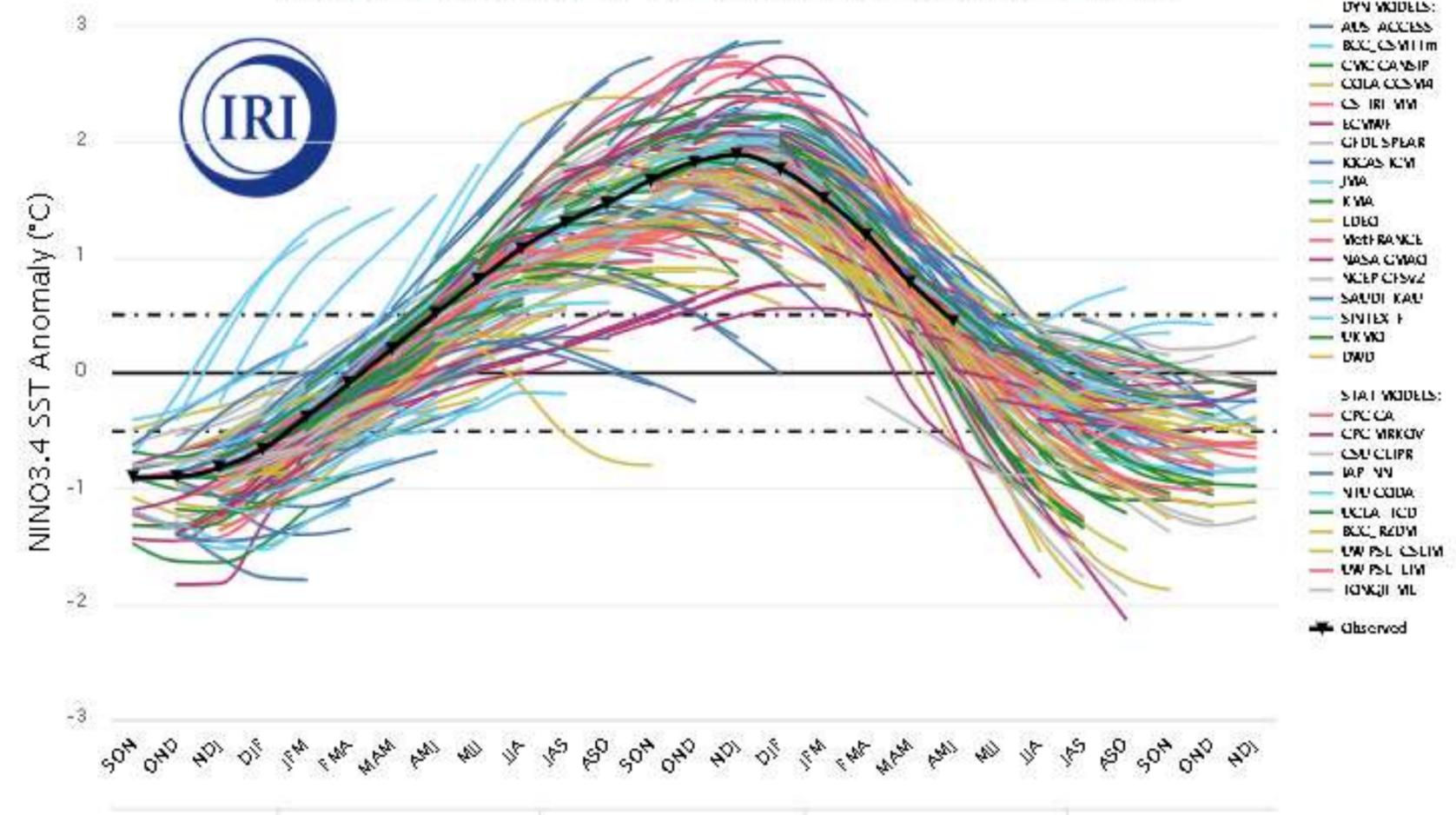


3. Projeções para os próximos meses

Model Predictions of ENSO from Jul 2024



Last 22 seasons of All models ending July 2024



4. Conclusão

- a. Safra 2024/25 será sim influenciada pela La Niña;**
- b. Será uma La Niña de fraca a moderada intensidade;**
- c. Sendo que só começará a ganhar forças na primavera;**
- d. Até lá, o clima seguirá dentro da neutralidade – sem nenhum fenômeno climático**
- e. Deverá ser um fenômeno de curta duração, perdendo forças já no verão/2025.**
- f. Similaridade: 2016/2017**

SAFRA 2024/25

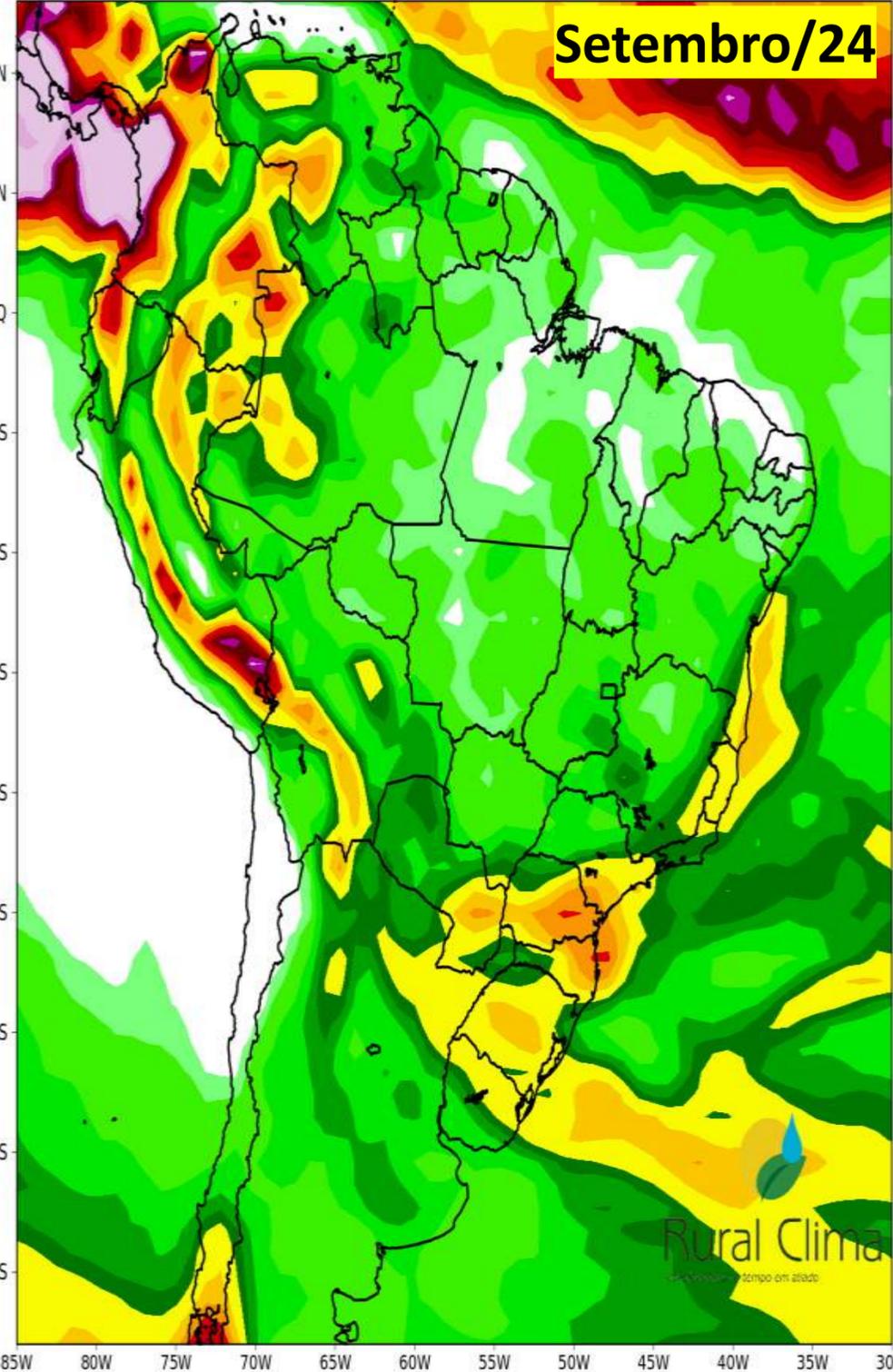
Previsões climáticas

Rural Clima 

3. Previsões climáticas – Acumulado de chuvas mensais

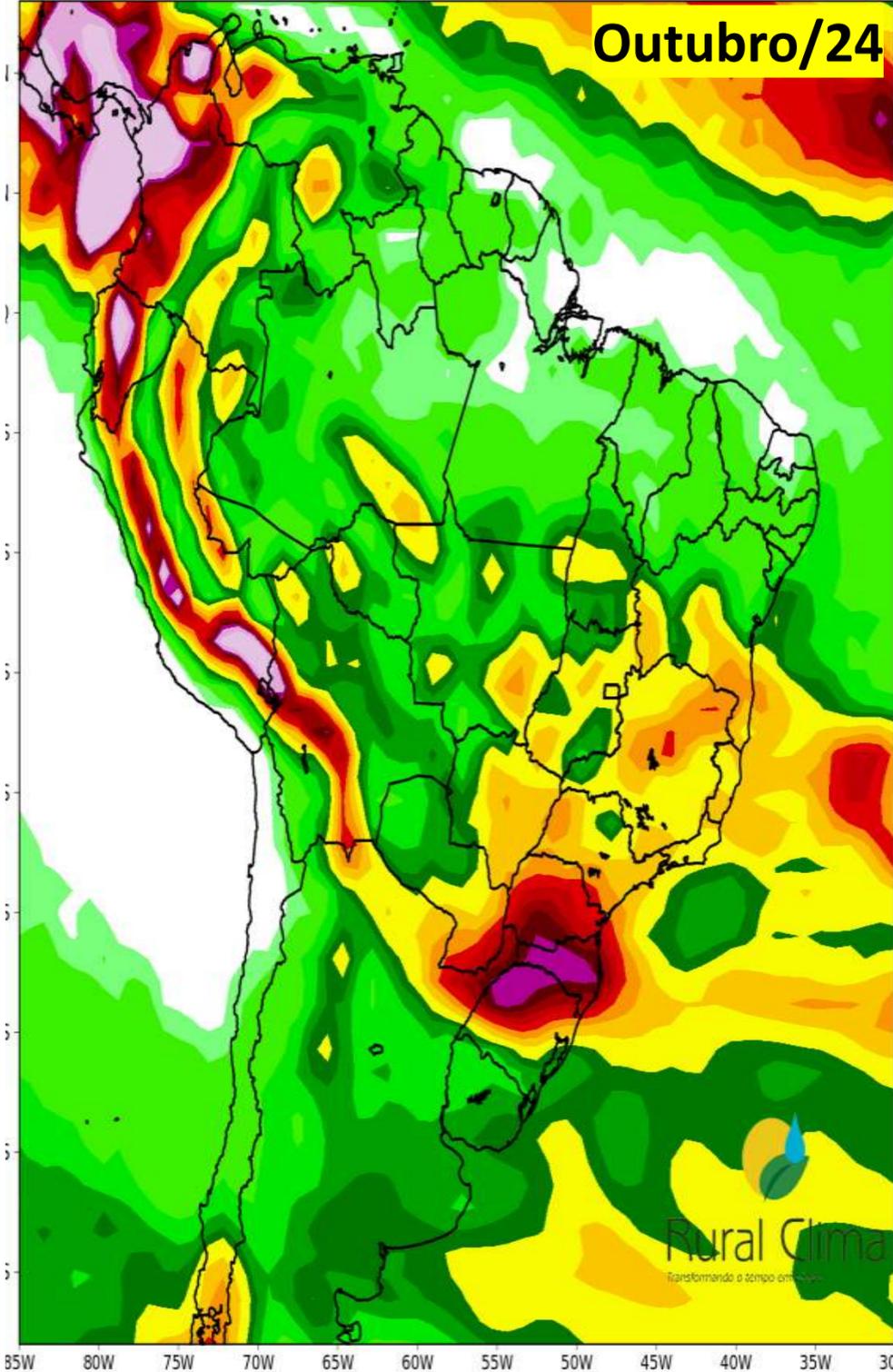
CFSv2 Rodada do dia: 05/08/2024 Mensal
Chuva Acumulada (mm) 09/2024

Setembro/24



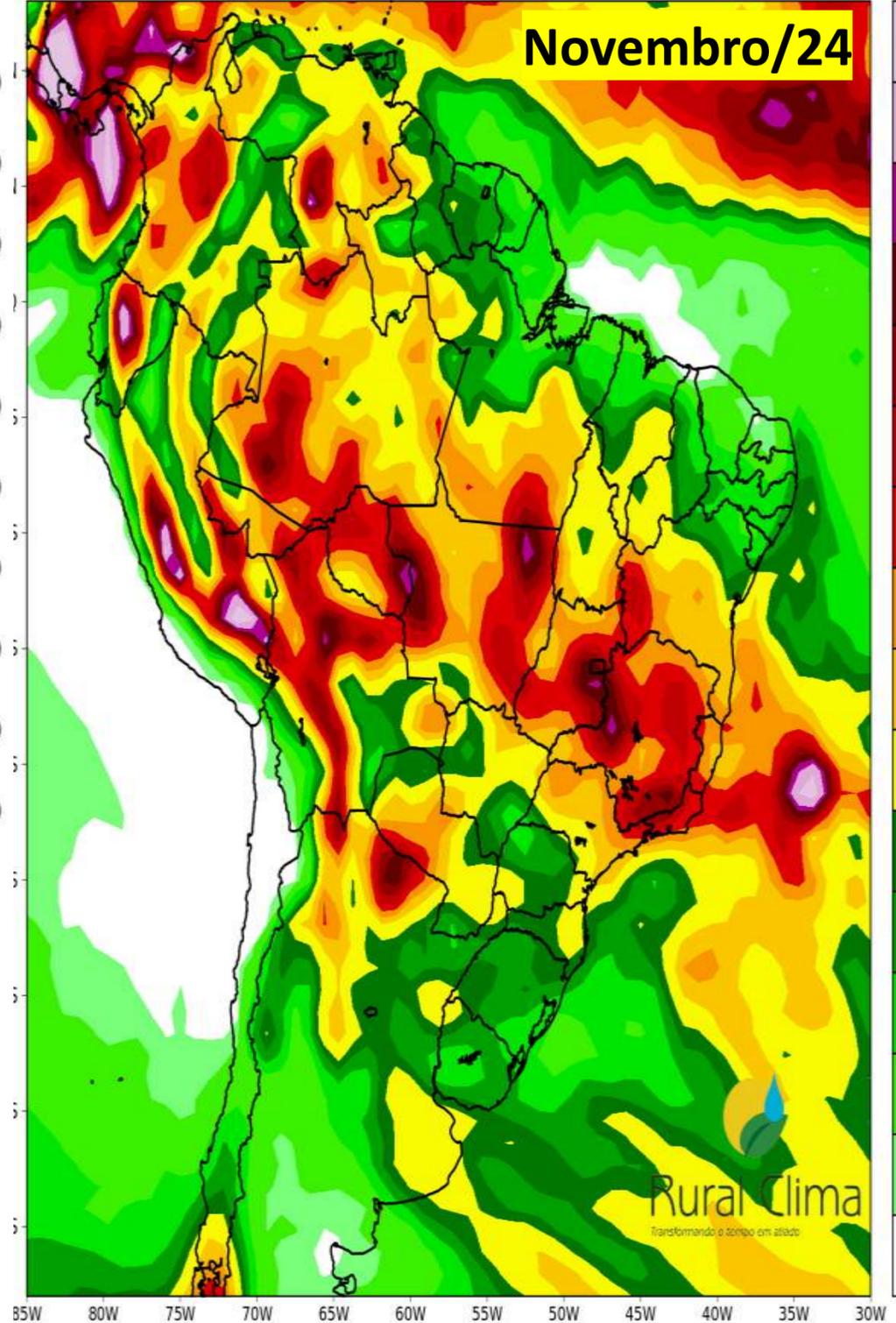
CFSv2 Rodada do dia: 05/08/2024 Mensal
Chuva Acumulada (mm) 10/2024

Outubro/24



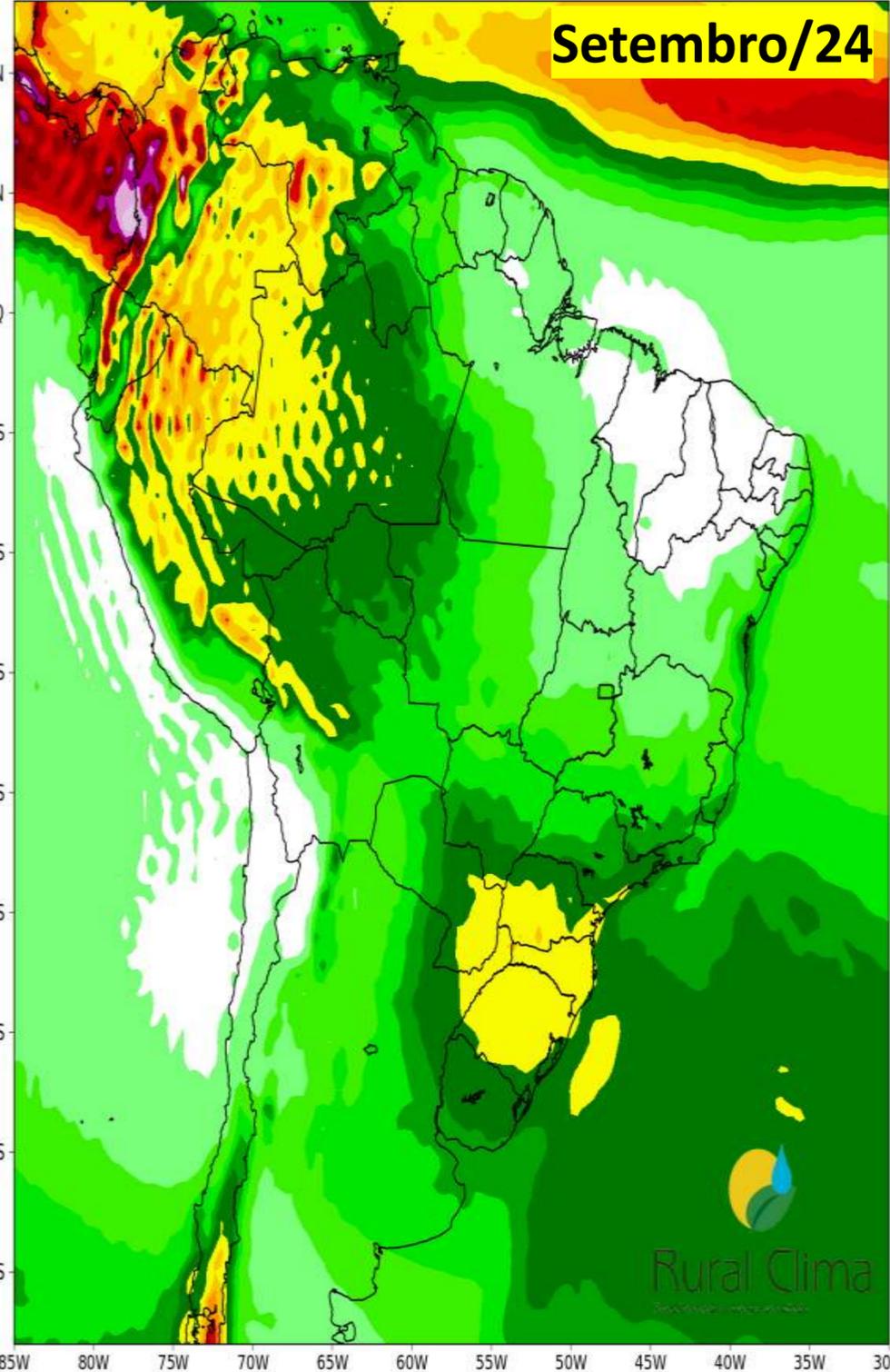
CFSv2 Rodada do dia: 05/08/2024 Mensal
Chuva Acumulada (mm) 11/2024

Novembro/24

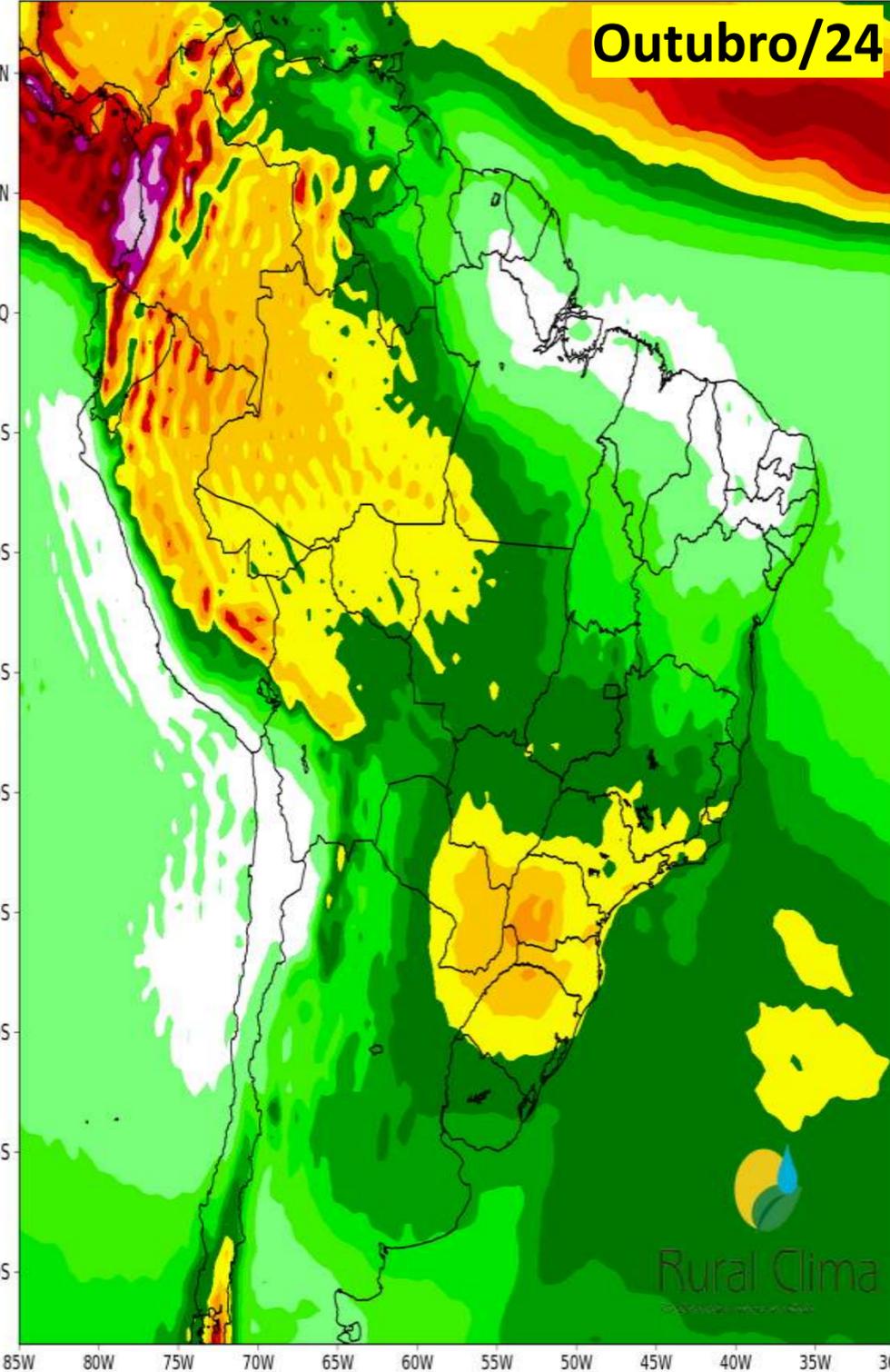


3. Previsões climáticas – Acumulado de chuvas mensais

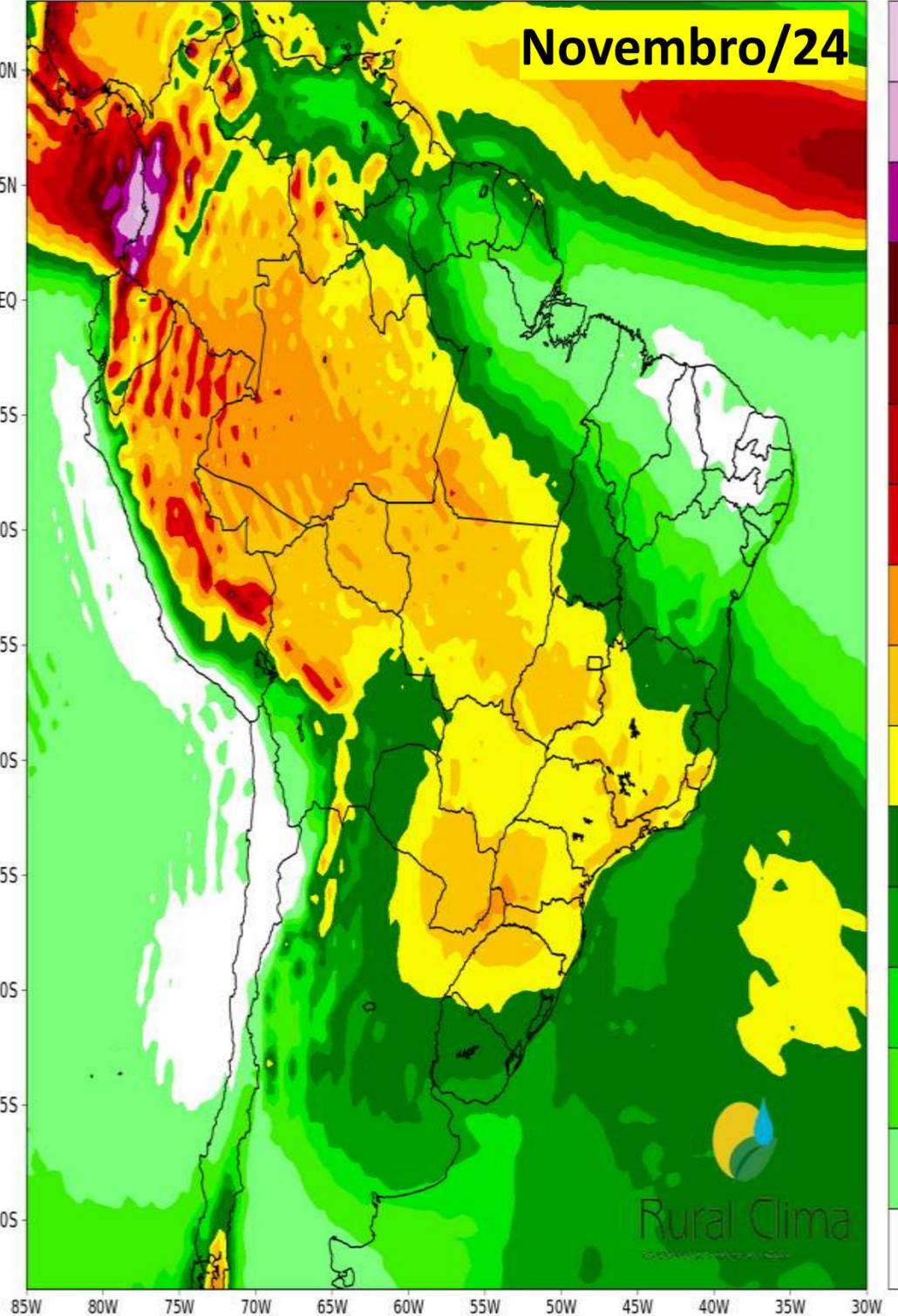
ECMWF - Mensal
Chuva Acumulada (mm) Rodada do dia: 01/08/2024 09/2024



ECMWF - Mensal
Chuva Acumulada (mm) Rodada do dia: 01/08/2024 10/2024



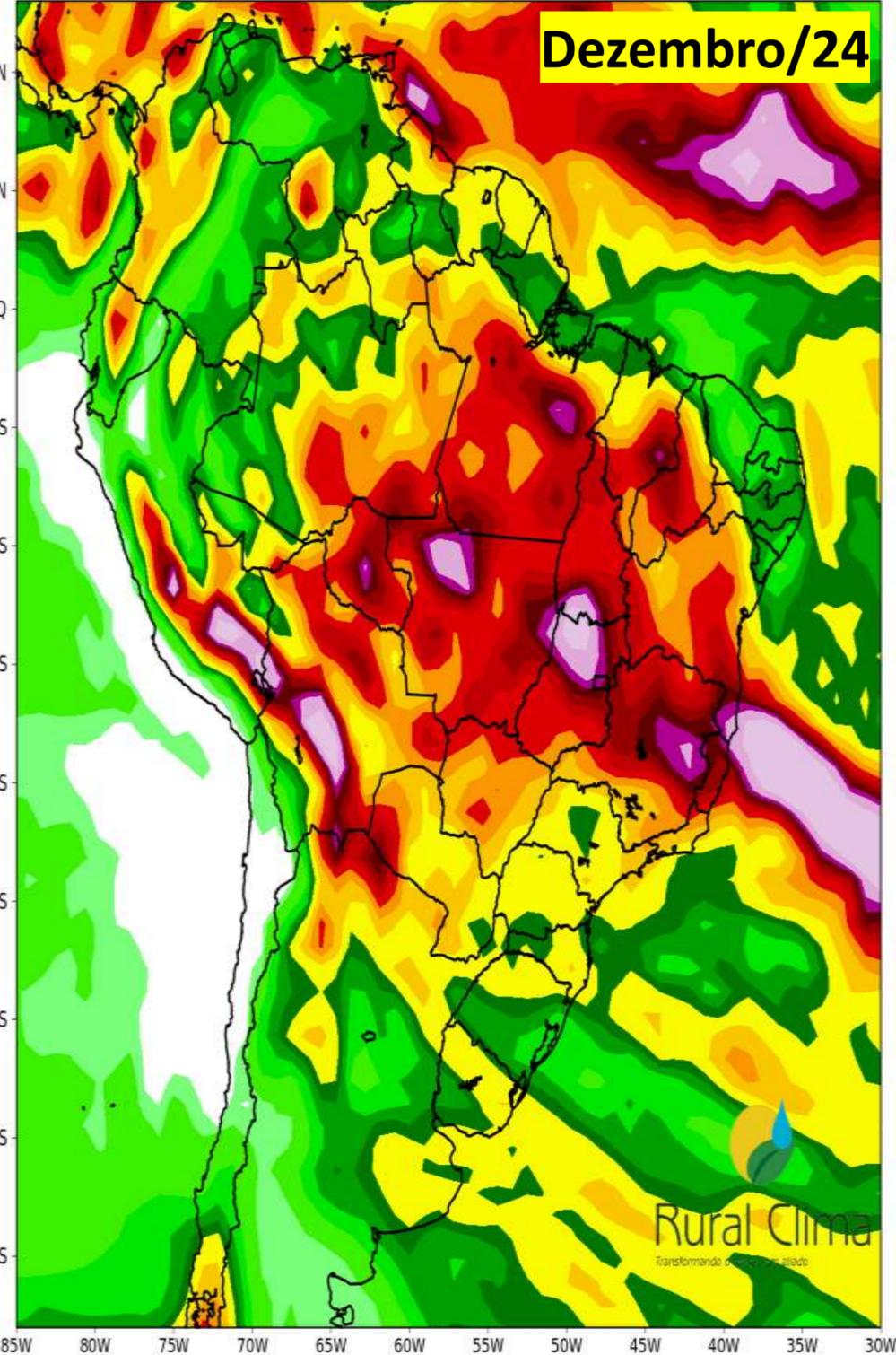
ECMWF - Mensal
Chuva Acumulada (mm) Rodada do dia: 01/08/2024 11/2024



3. Previsões climáticas – Acumulado de chuvas mensais

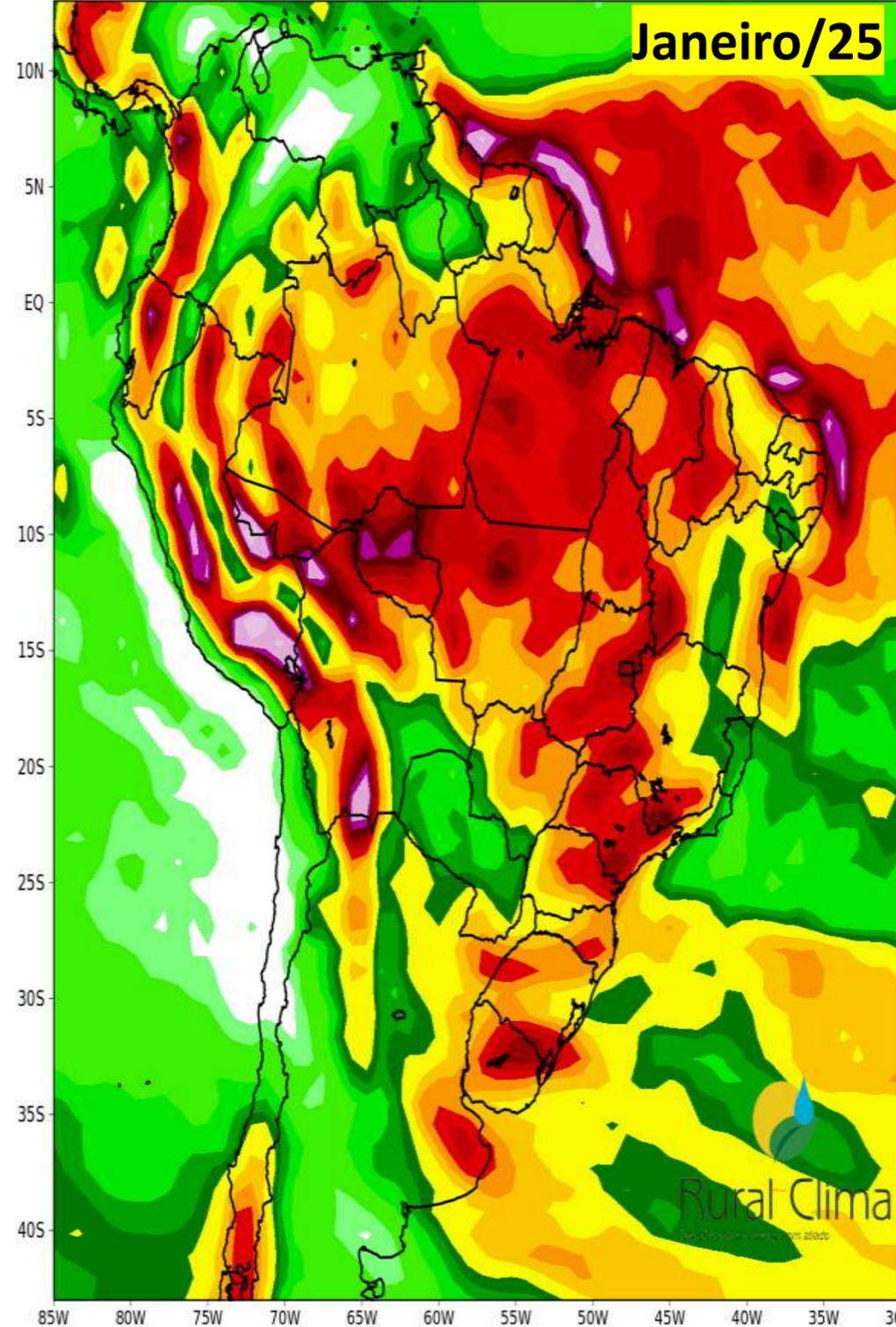
CFSv2 Rodada do dia: 05/08/2024 Mensal
Chuva Acumulada (mm) 12/2024

Dezembro/24



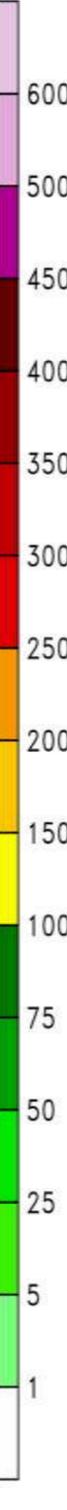
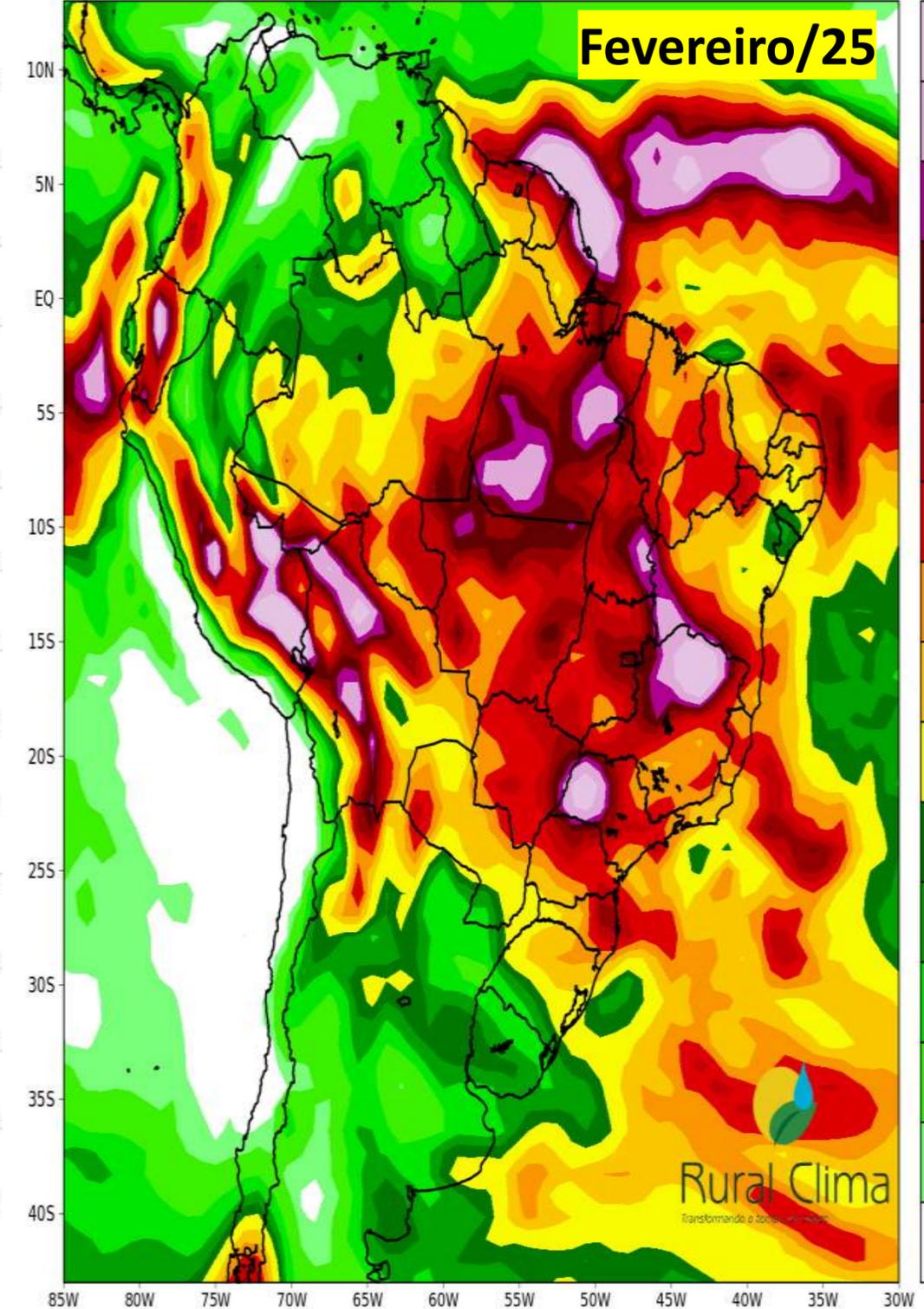
CFSv2 Rodada do dia: 05/08/2024 Mensal
Chuva Acumulada (mm) 01/2025

Janeiro/25



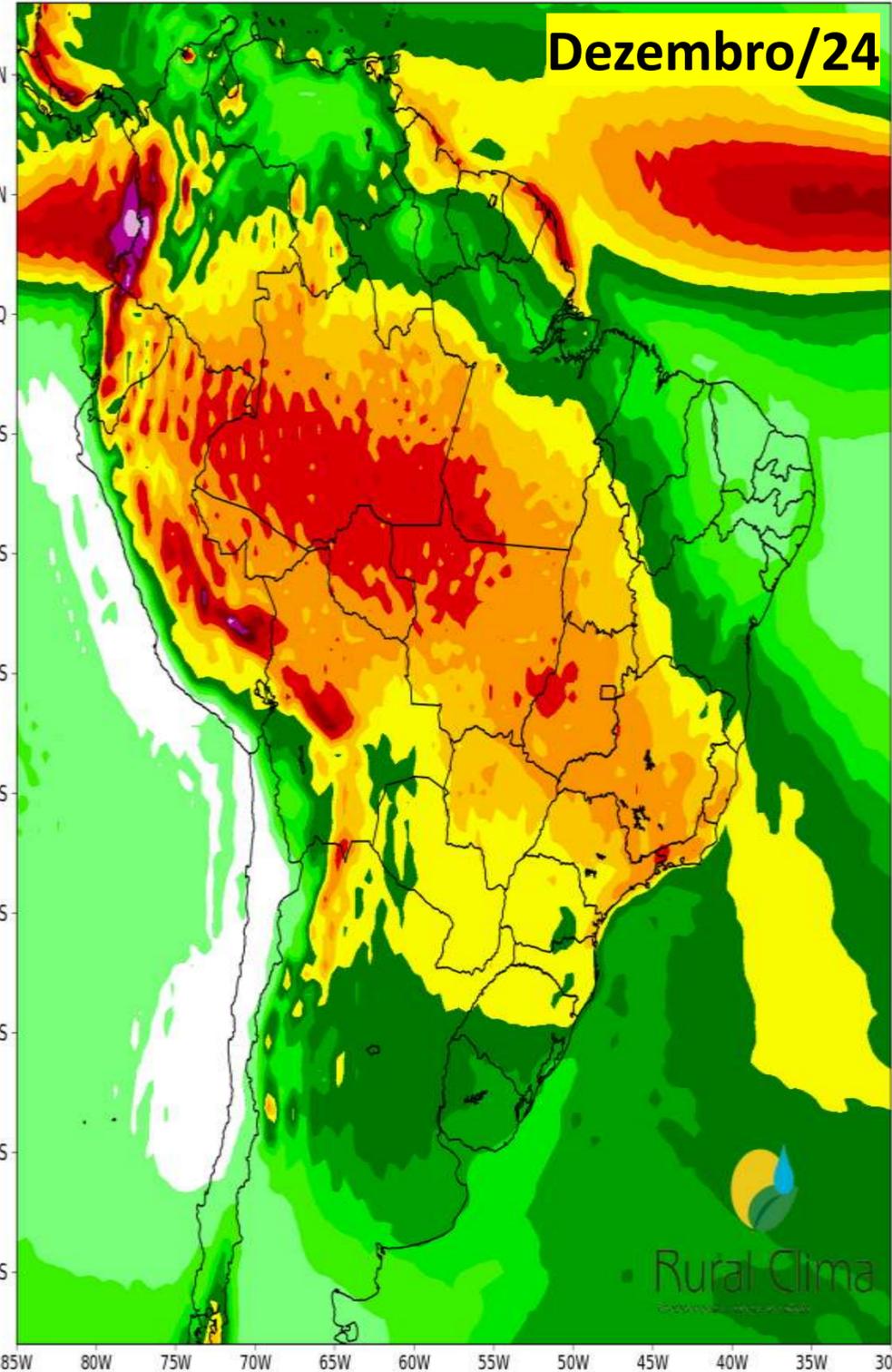
CFSv2 Rodada do dia: 05/08/2024 Mensal
Chuva Acumulada (mm) 02/2025

Fevereiro/25

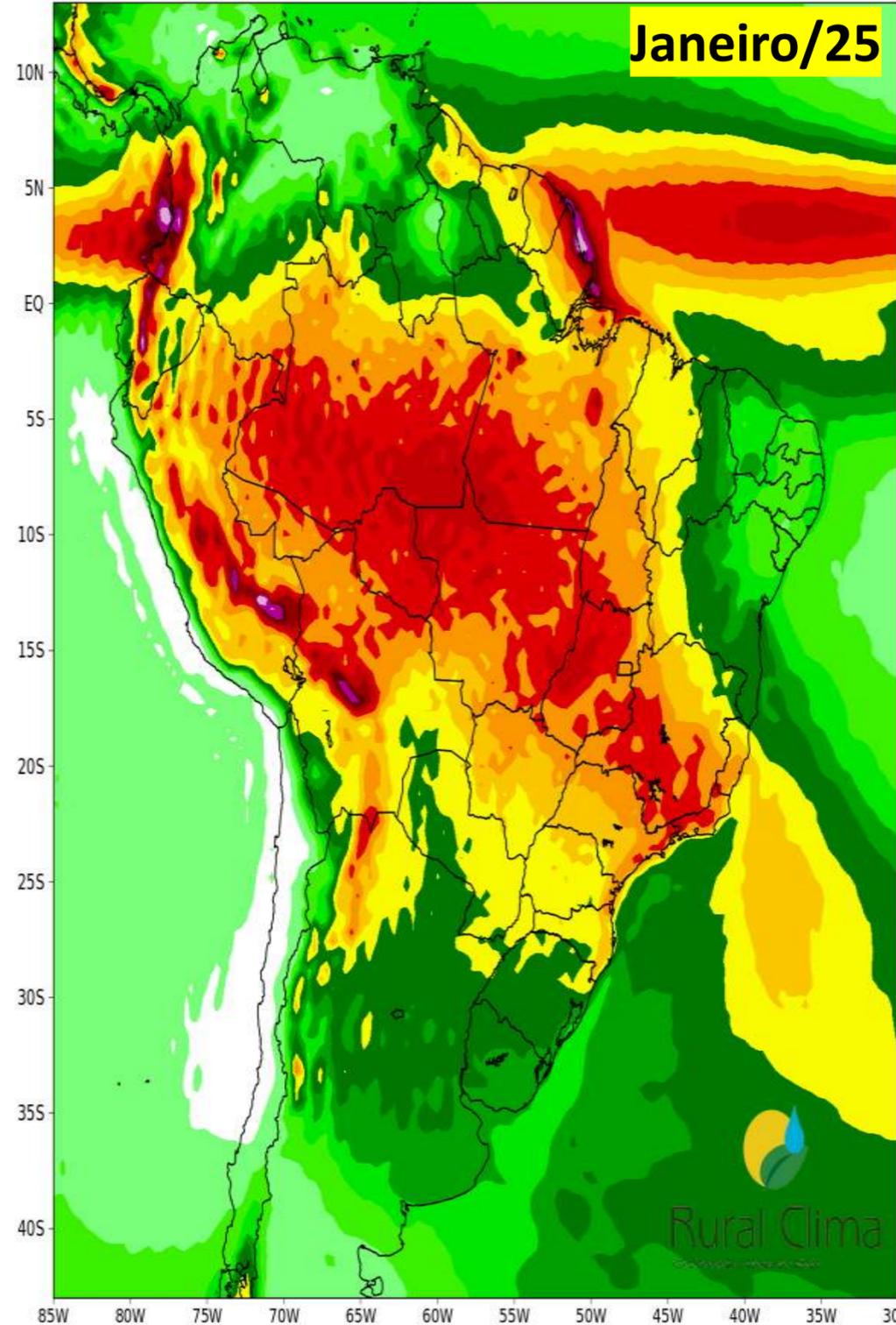


3. Previsões climáticas – Acumulado de chuvas mensais

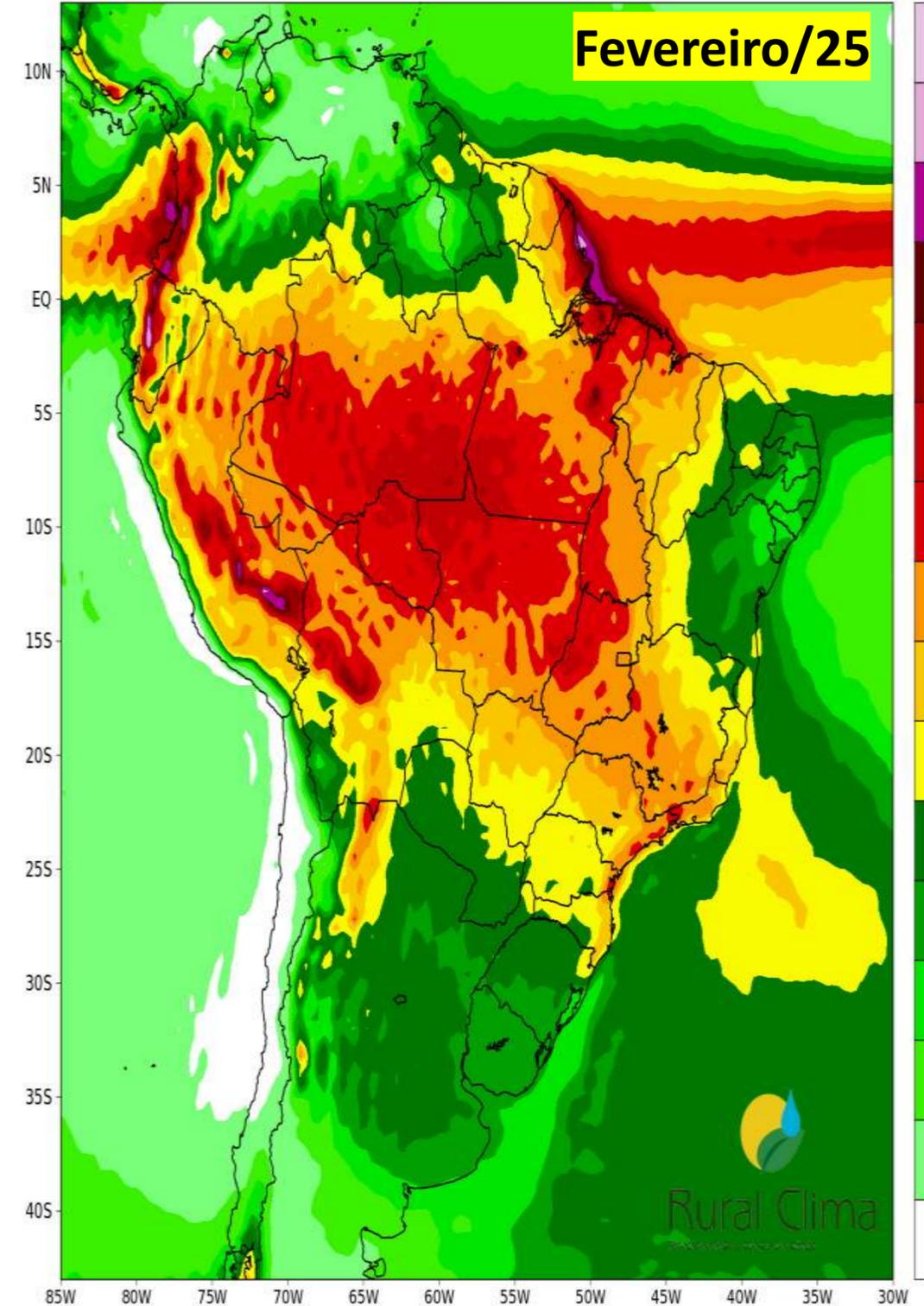
ECMWF - Mensal
Chuva Acumulada (mm) Rodada do dia: 01/08/2024 12/2024



ECMWF - Mensal
Chuva Acumulada (mm) Rodada do dia: 01/08/2024 01/2025



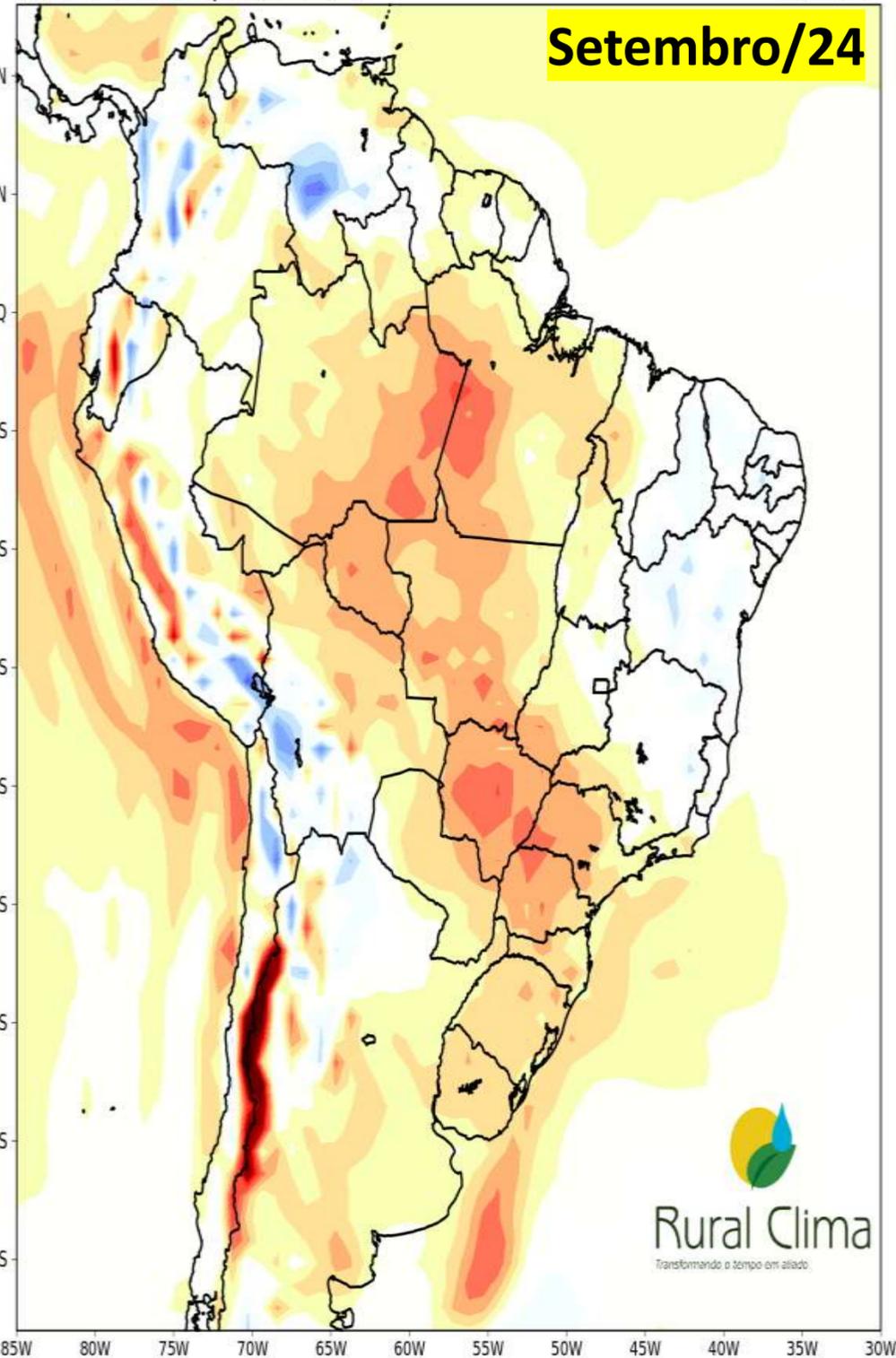
ECMWF - Mensal
Chuva Acumulada (mm) Rodada do dia: 01/08/2024 02/2025



3. Previsões climáticas – Anomalia de Temperatura

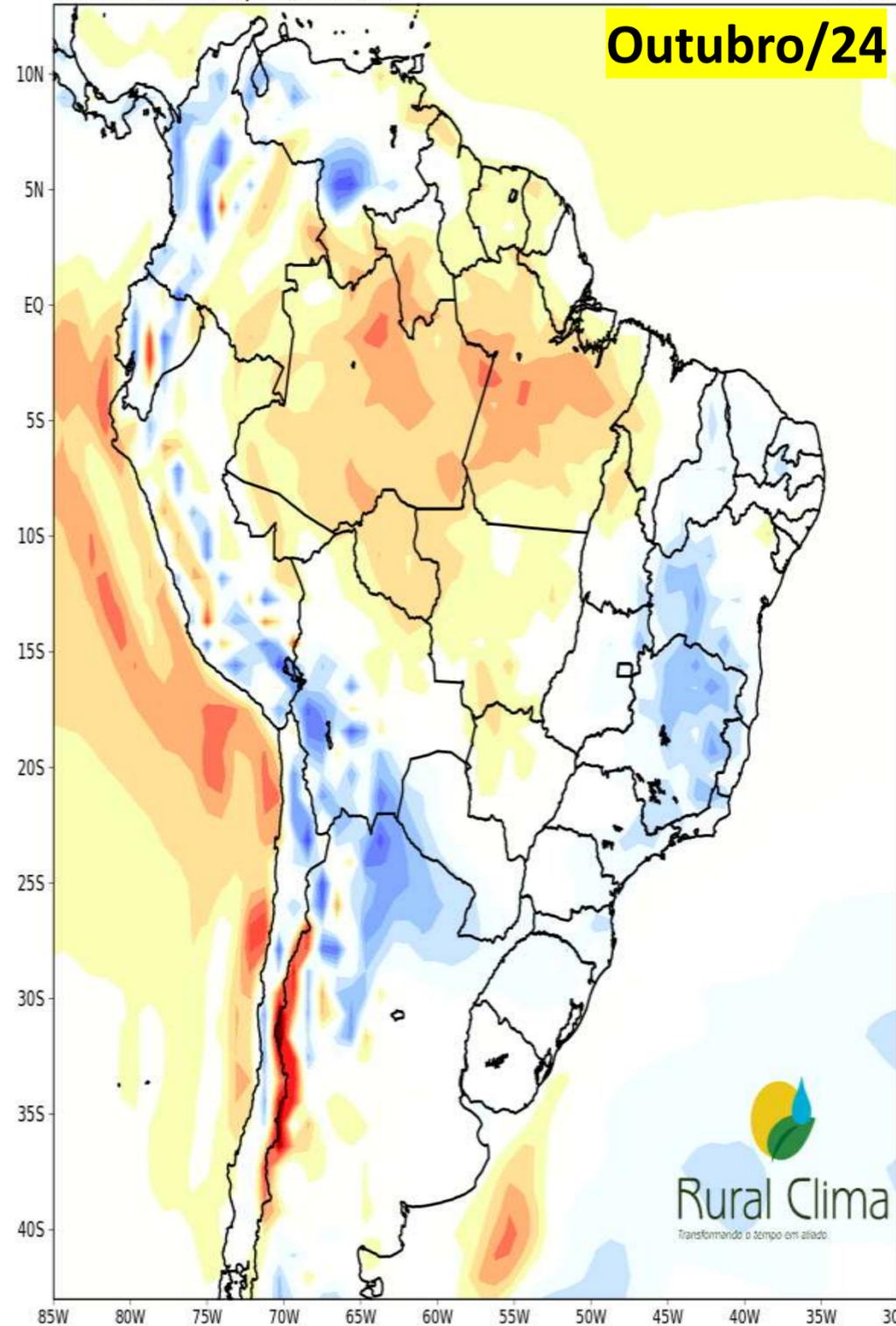
CFSv2 Rodada do dia: 05/08/2024 Mensal
Anomalia de Temperatura (°C) 09/2024

Setembro/24



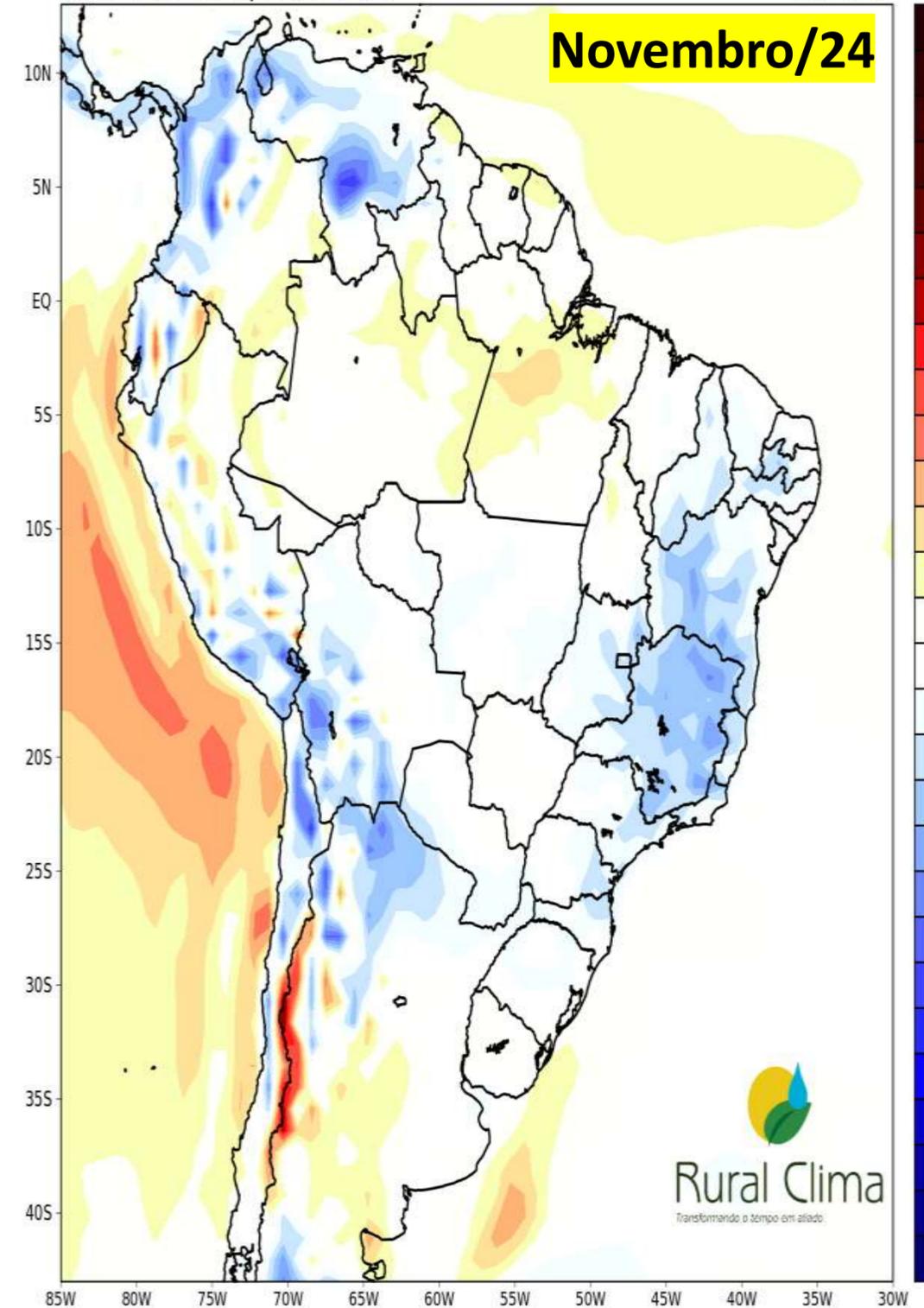
CFSv2 Rodada do dia: 05/08/2024 Mensal
Anomalia de Temperatura (°C) 10/2024

Outubro/24



CFSv2 Rodada do dia: 05/08/2024 Mensal
Anomalia de Temperatura (°C) 11/2024

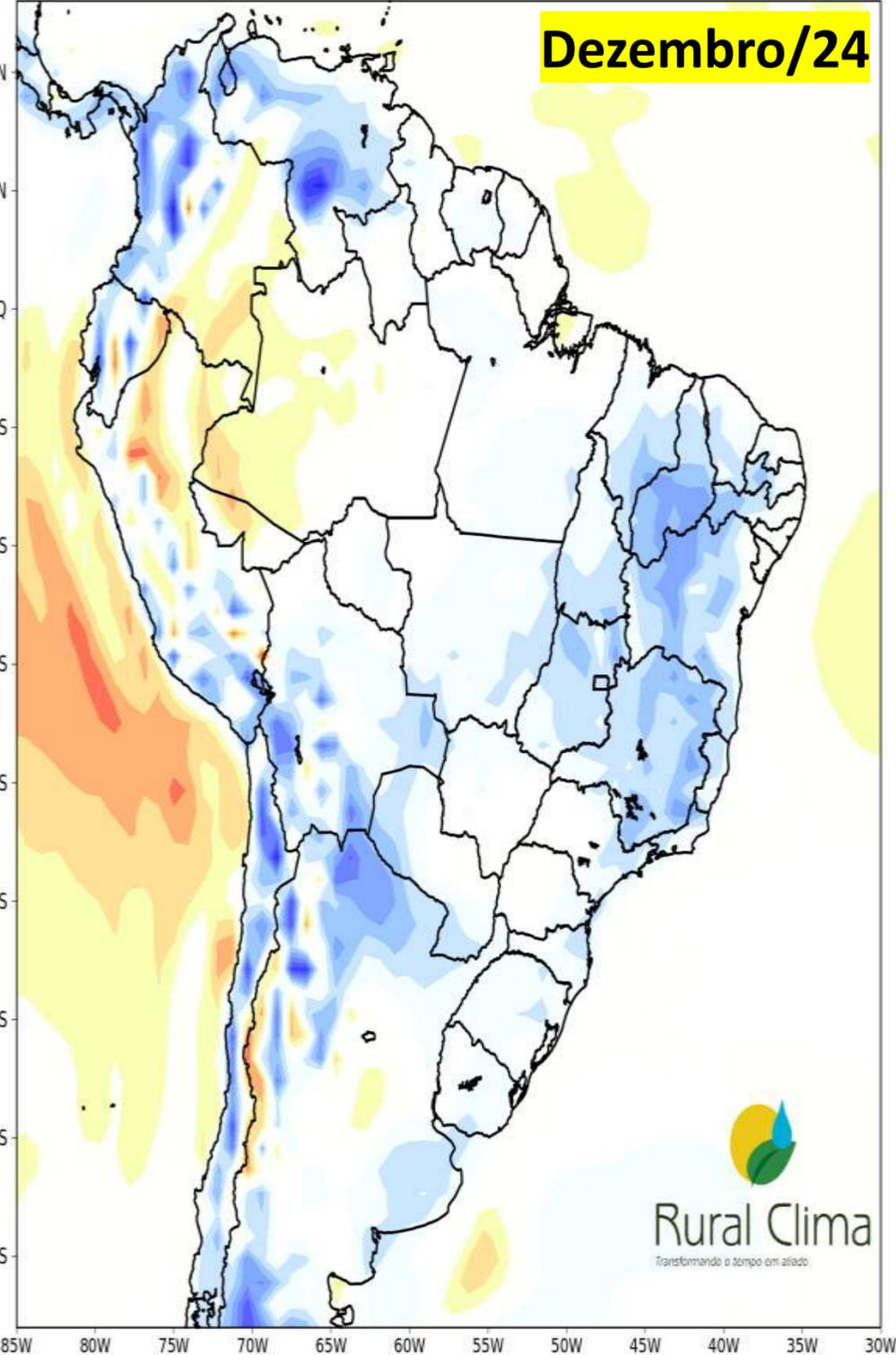
Novembro/24



3. Previsões climáticas – Anomalia de temperatura

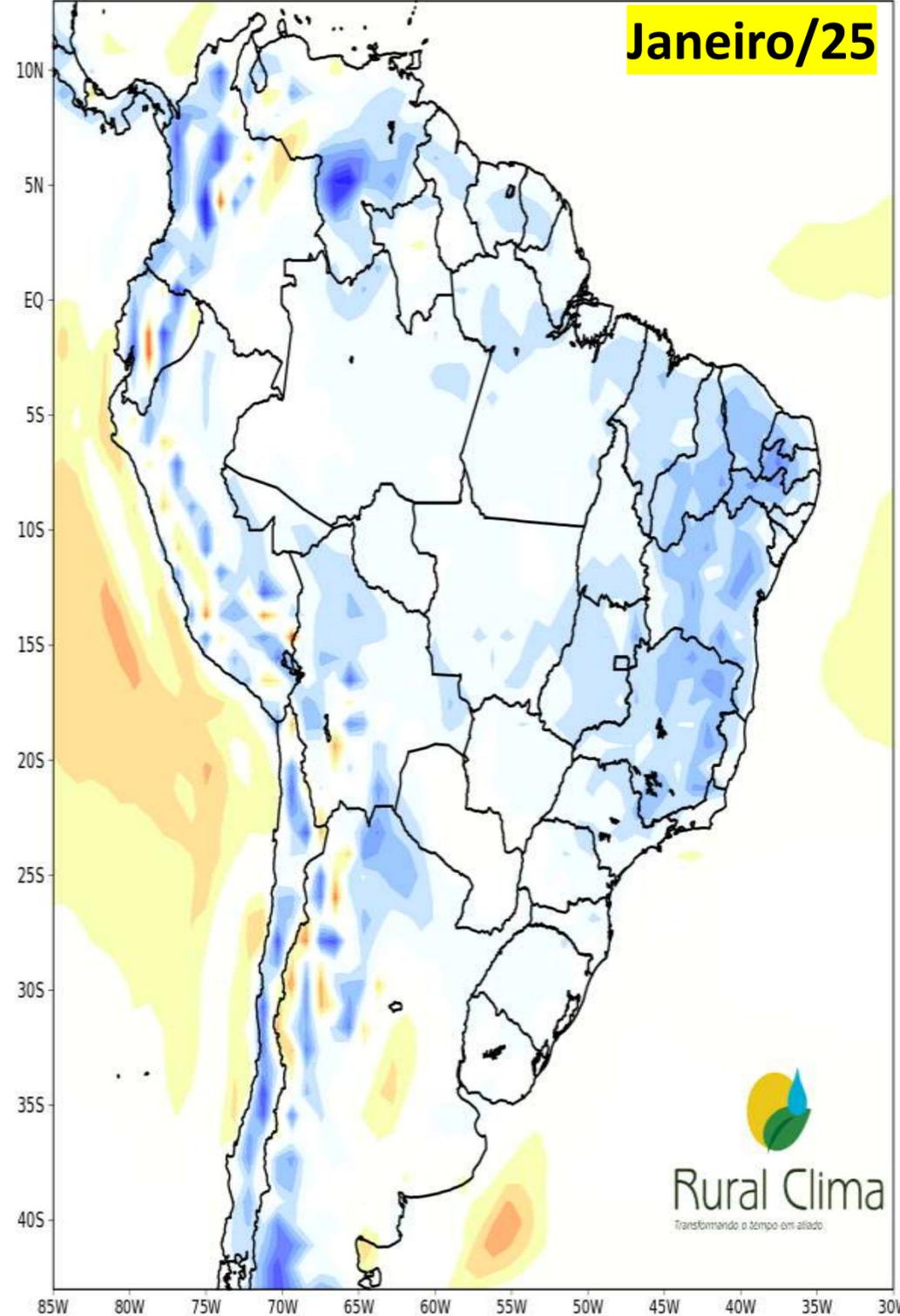
CFSv2 Rodada do dia: 05/08/2024 Mensal
Anomalia de Temperatura (°C) 12/2024

Dezembro/24



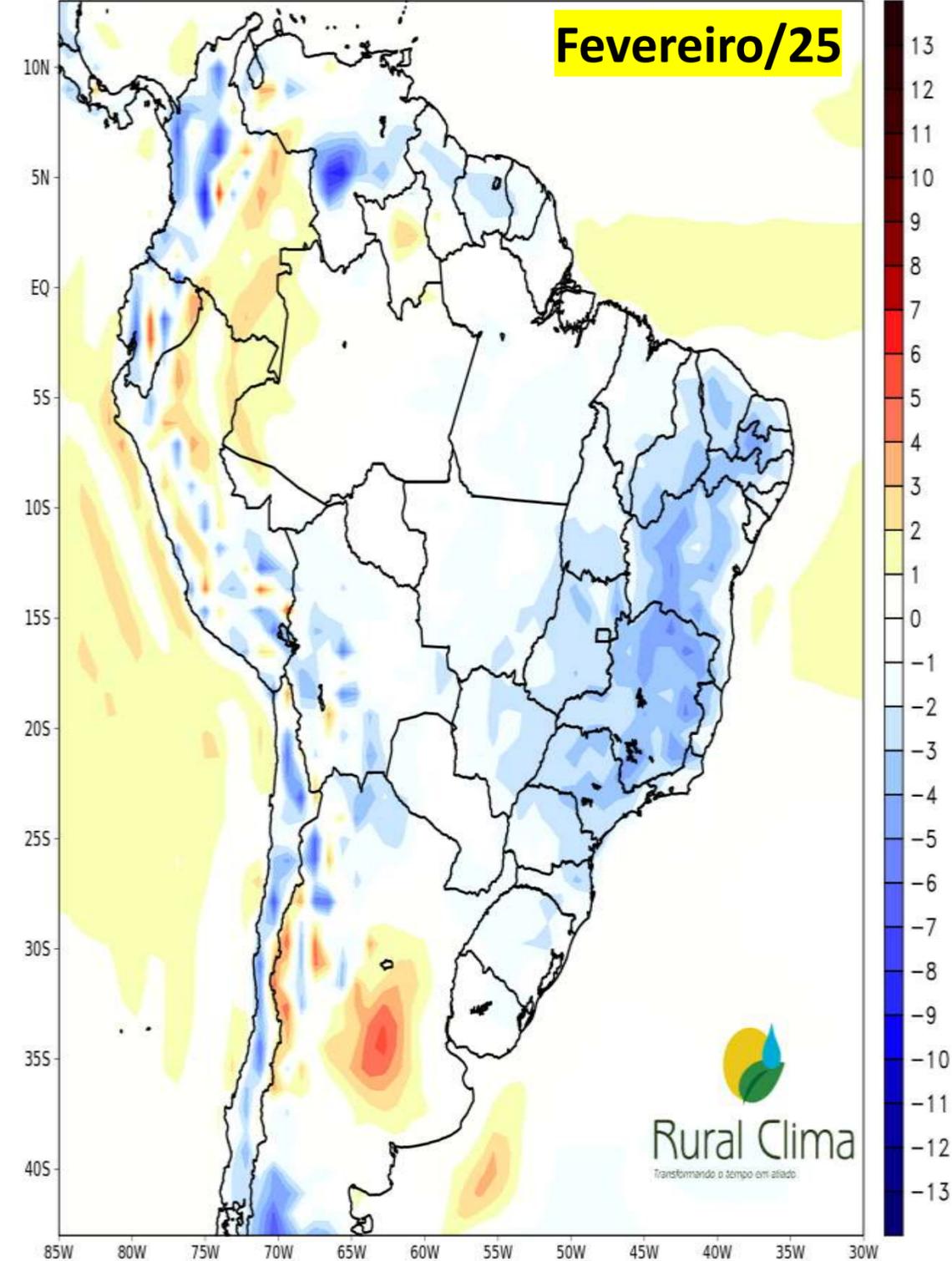
CFSv2 Rodada do dia: 05/08/2024 Mensal
Anomalia de Temperatura (°C) 01/2025

Janeiro/25



CFSv2 Rodada do dia: 05/08/2024 Mensal
Anomalia de Temperatura (°C) 02/2025

Fevereiro/25

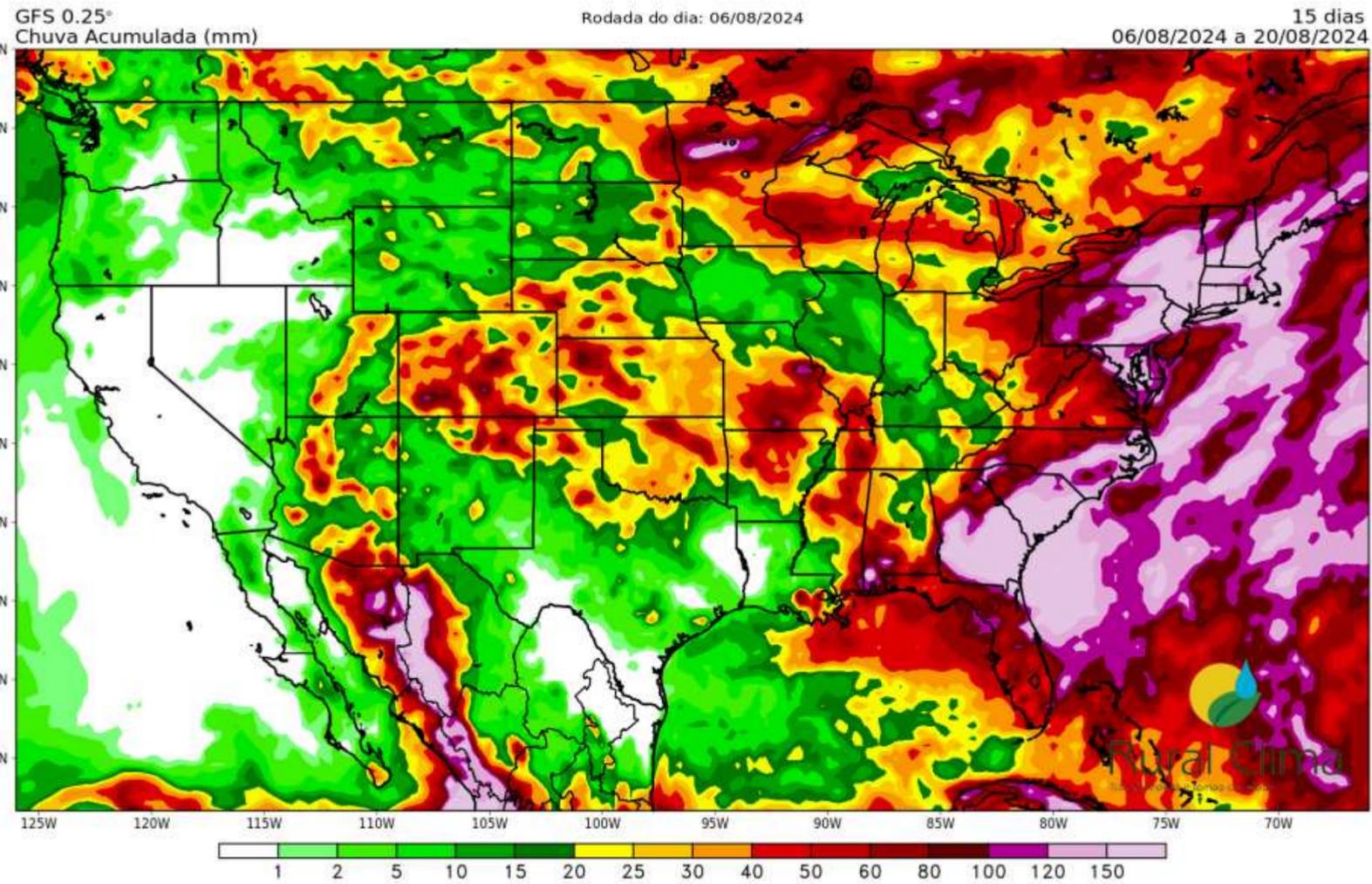


Estados Unidos

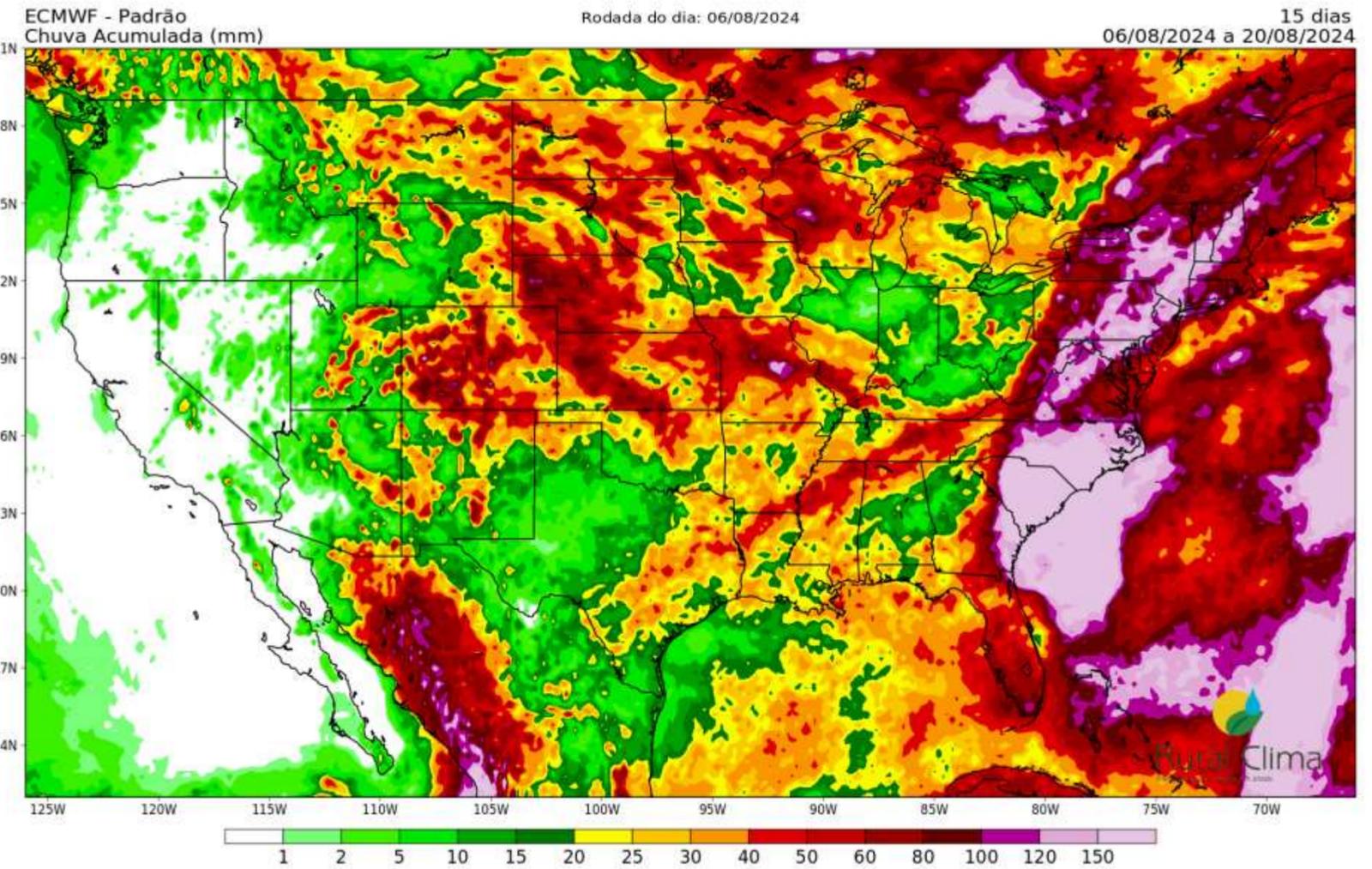
Safra 2024/25

Rural Clima 

1. Previsões meteorológicas – Acumulado de chuvas

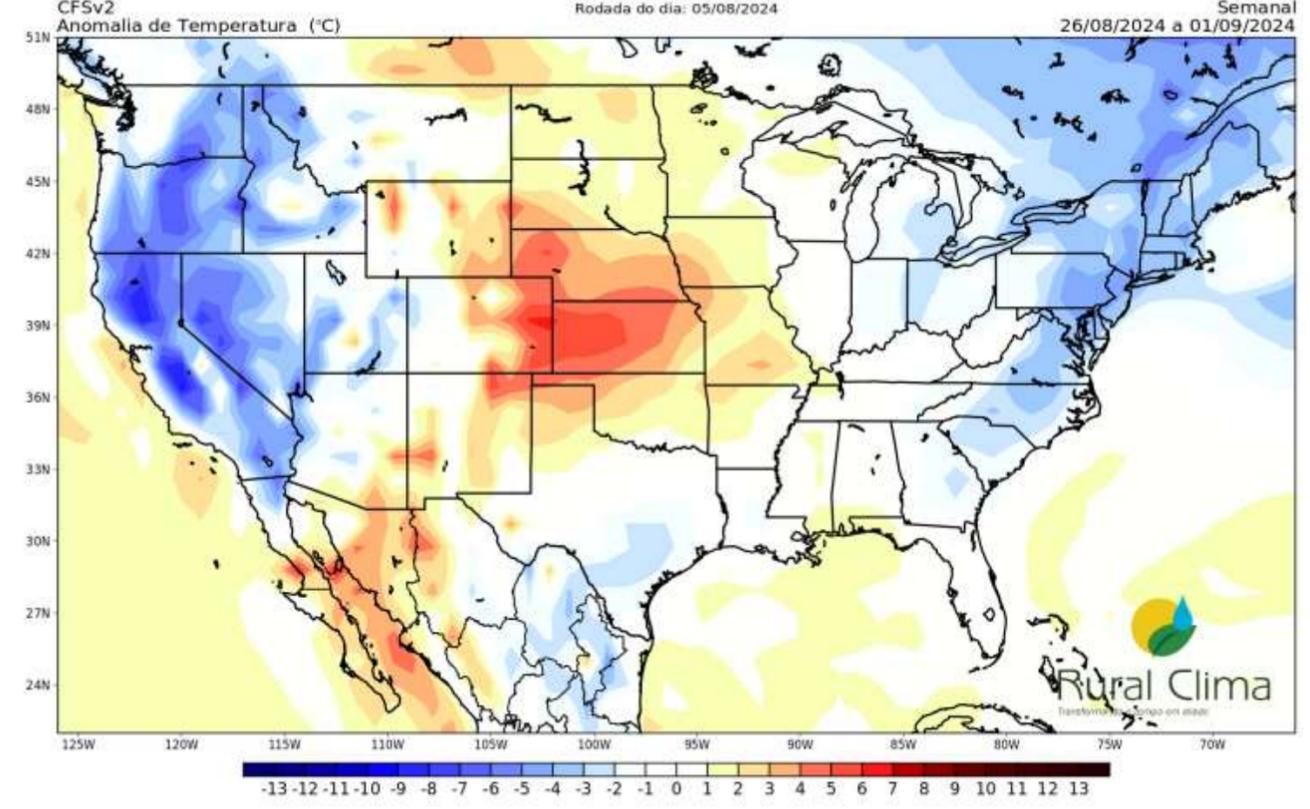
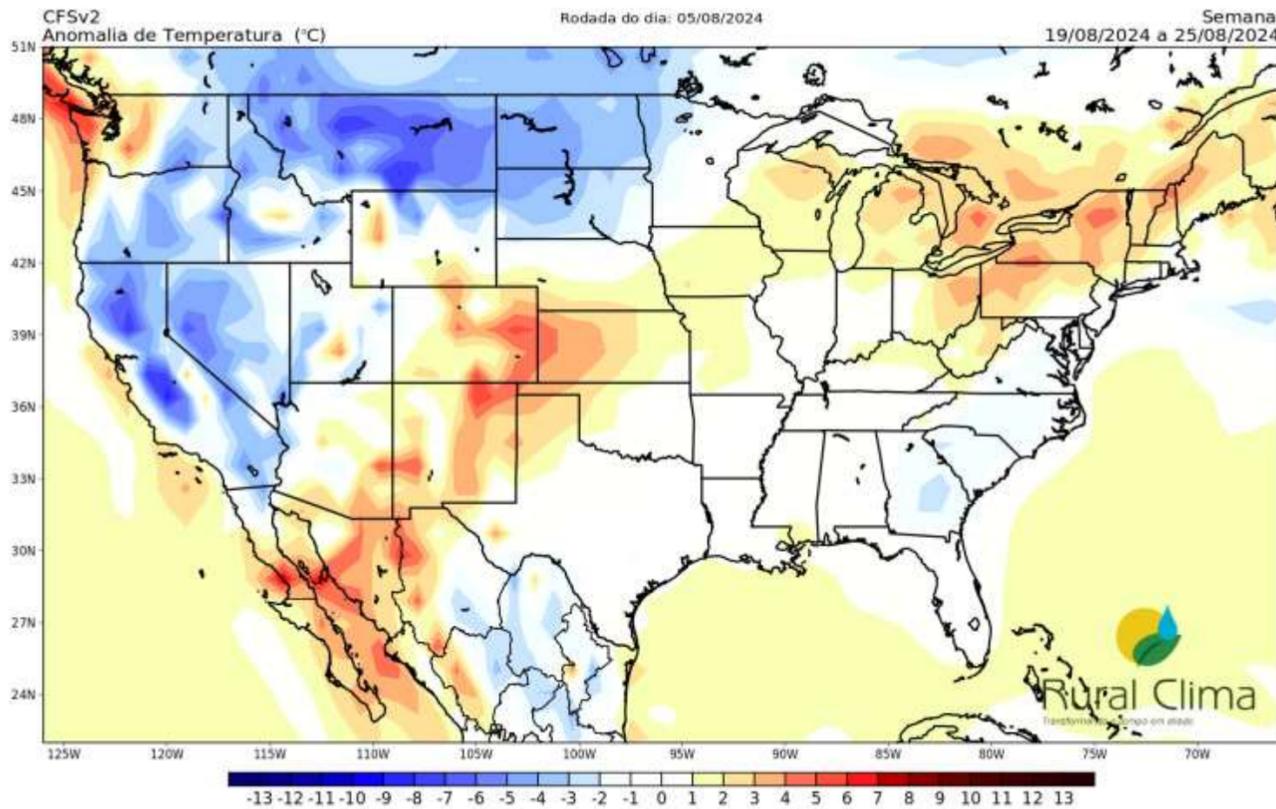
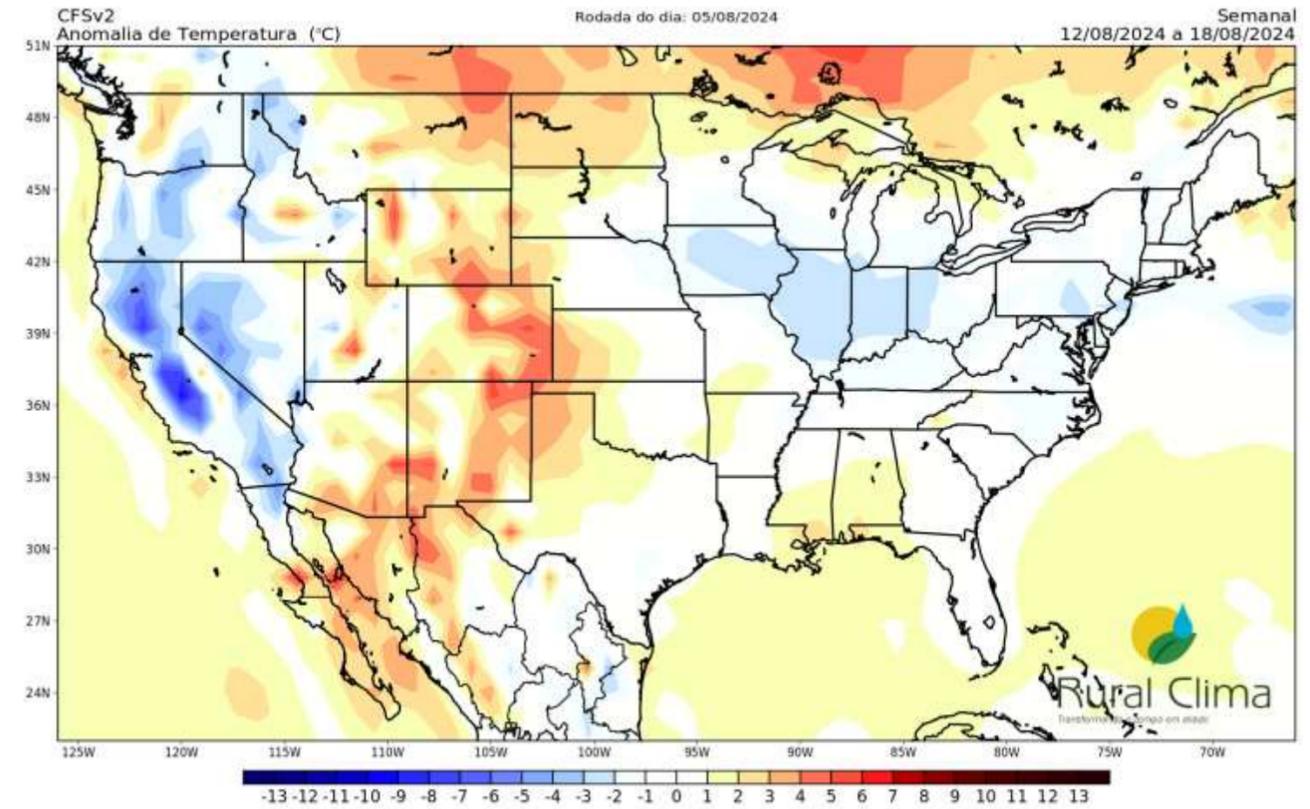
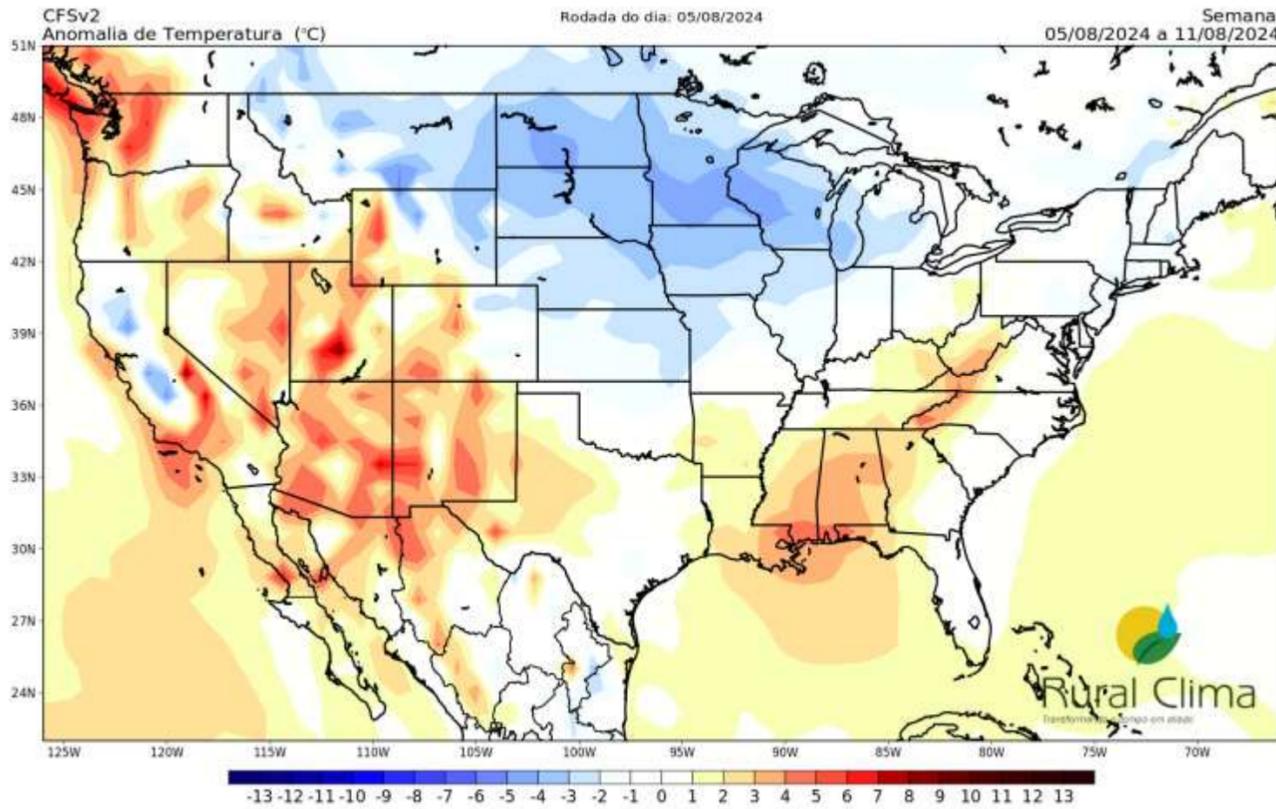


GFS



ECMWF

2. Previsões meteorológicas - Anomalia de temperatura



Mudanças Climáticas

Rural Clima 

1. Mudanças Climáticas



Rural Clima 

OBRIGADO!

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SAFRA 2023/24

Um ano para ficar para a história

Rural Clima 

SAFRA 2023/24 – UM ANO PARA FICAR NA HISTÓRIA

1. Previsão de um Super El Niño

Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2010	1.5	1.2	0.8	0.4	-0.2	-0.7	-1.0	-1.3	-1.6	-1.6	-1.6	-1.6
2011	-1.4	-1.2	-0.9	-0.7	-0.6	-0.4	-0.5	-0.6	-0.8	-1.0	-1.1	-1.0
2012	-0.9	-0.7	-0.6	-0.5	-0.3	0.0	0.2	0.4	0.4	0.3	0.1	-0.2
2013	-0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.3
2014	-0.4	-0.5	-0.3	0.0	0.2	0.2	0.0	0.1	0.2	0.5	0.6	0.7
2015	0.5	0.5	0.5	0.7	0.9	1.2	1.5	1.9	2.2	2.4	2.6	2.6
2016	2.5	2.1	1.6	0.9	0.4	-0.1	-0.4	-0.5	-0.6	-0.7	-0.7	-0.6
2017	-0.3	-0.2	0.1	0.2	0.3	0.3	0.1	-0.1	-0.4	-0.7	-0.8	-1.0
2018	-0.9	-0.9	-0.7	-0.5	-0.2	0.0	0.1	0.2	0.5	0.8	0.9	0.8
2019	0.7	0.7	0.7	0.7	0.5	0.5	0.3	0.1	0.2	0.3	0.5	0.5
Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2020	0.5	0.5	0.4	0.2	-0.1	-0.3	-0.4	-0.6	-0.9	-1.2	-1.3	-1.2
2021	-1.0	-0.9	-0.8	-0.7	-0.5	-0.4	-0.4	-0.5	-0.7	-0.8	-1.0	-1.0
2022	-1.0	-0.9	-1.0	-1.1	-1.0	-0.9	-0.8	-0.9	-1.0	-1.0	-0.9	-0.8
2023	-0.7	-0.4	-0.1	0.2	0.5	0.8	1.1	1.3	1.6	1.8	1.9	2.0
2024	1.8	1.5	1.1	0.7								



❖ Apesar dos danos terem sido maiores dos registrados em 2015/16, os valores de anomalia da temperatura das águas do Pacífico ficaram inferiores

❖ Portanto, o El Niño 2023/24 não pode ser considerado um Super El Niño

SAFRA 2023/24 - UM ANO PARA FICAR NA HISTÓRIA

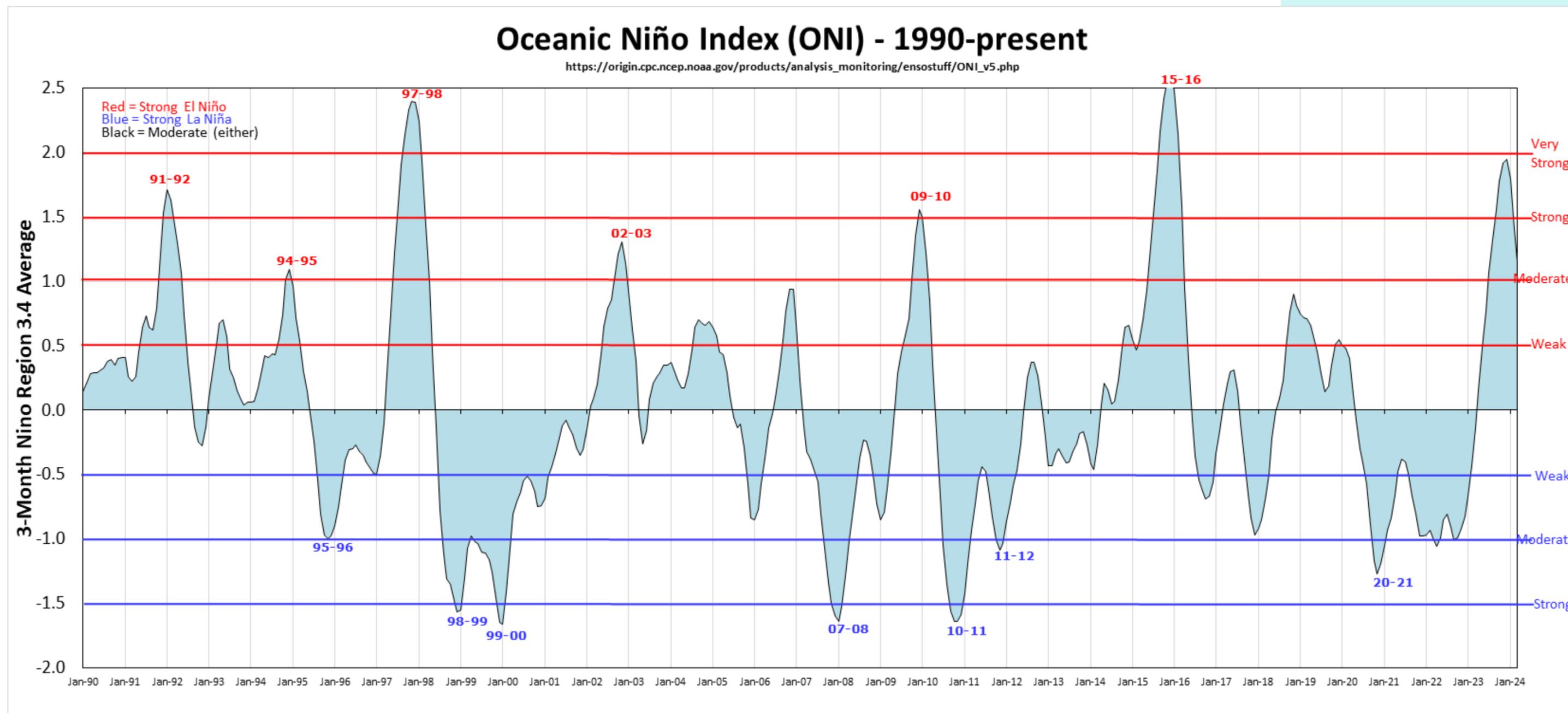
1. Previsão de um Super El Niño

El Niño - 27				La Niña - 25		
Weak - 11	Moderate - 7	Strong - 6	Very Strong - 3	Weak - 12	Moderate - 6	Strong - 7
1952-53	1951-52	1957-58	1982-83	1954-55	1955-56	1973-74
1953-54	1963-64	1965-66	1997-98	1964-65	1970-71	1975-76
1958-59	1968-69	1972-73	2015-16	1971-72	1995-96	1988-89
1969-70	1986-87	1987-88		1974-75	2011-12	1998-99
1976-77	1994-95	1991-92		1983-84	2020-21	1999-00
1977-78	2002-03	2023-24		1984-85	2021-22	2007-08
1979-80	2009-10			2000-01		2010-11
2004-05				2005-06		
2006-07				2008-09		
2014-15				2016-17		
2018-19				2017-18		
				2022-23		



[Click HERE for full-size image of this graph](#)

1. Previsão de um Super El Niño



2. Inverno/Primavera de 2023

Sul:

- ❖ Excesso de dias chuvosos / Enchentes
- ❖ Atrasos no plantio e prejuízos nas lavouras de inverno

Cerrado:

- ❖ Apesar das chuvas terem chegado “cedo”, ela só se consolidou, de fato, no final da primavera (Dezembro)
- ❖ Fortes ondas de calor e chuvas extremamente irregulares
- ❖ Prejuízos na soja - Perdas superiores a 20%



SAFRA 2023/24 - UM ANO PARA FICAR NA HISTÓRIA

2. Verão/Outono de 2024

Sul:

- ❖ Veranicos e altas temperaturas
- ❖ Enchentes

Cerrado:

- ❖ Chuvas frequentes e em bons volumes
- ❖ Ondas de calor
- ❖ Corte mais cedo das chuvas - prejuízos em lavouras de 2ª safra



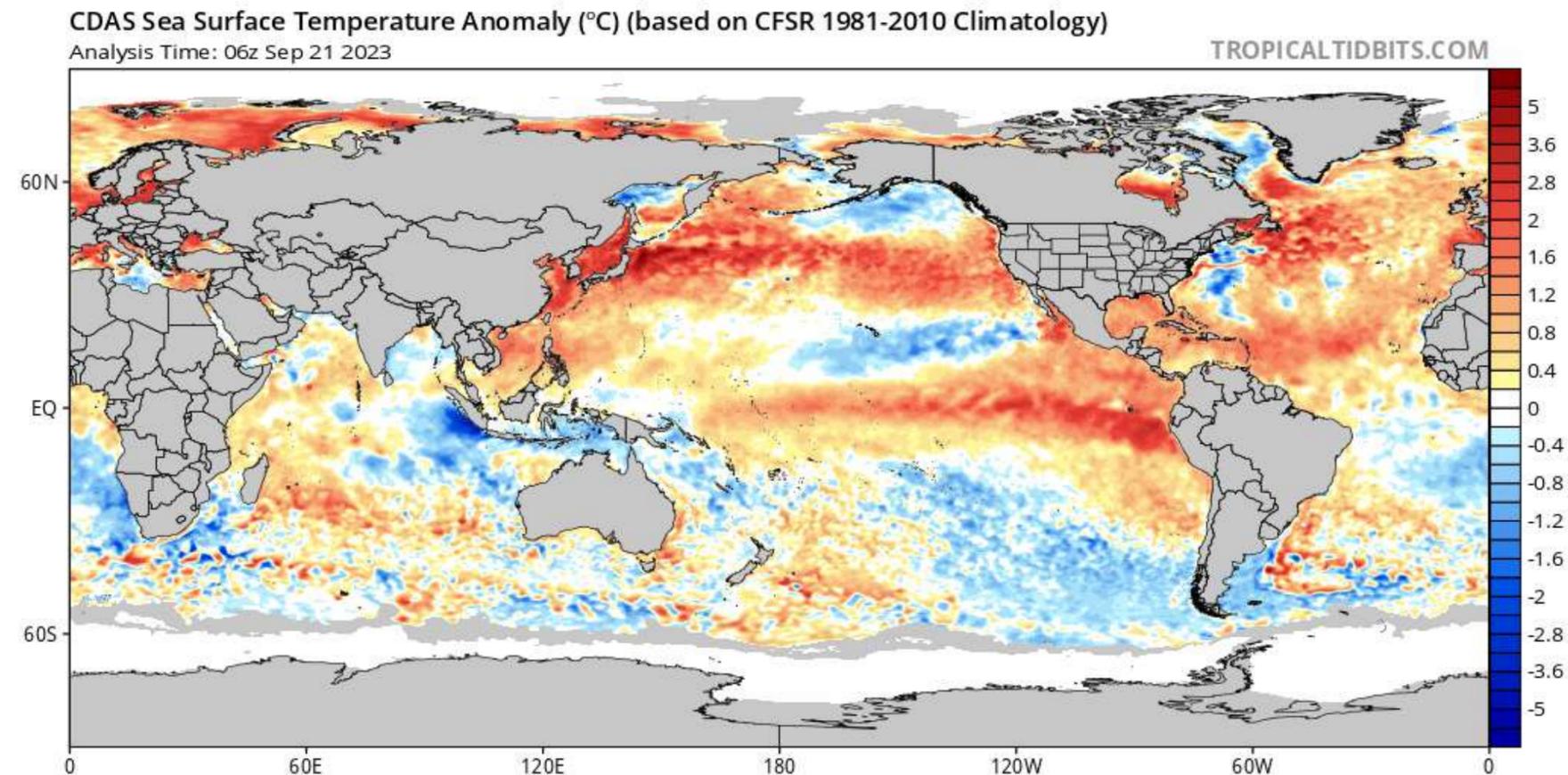
SAFRA 2023/24 – UM ANO PARA FICAR NA HISTÓRIA

3. Motivos / Causas

3.1 Aquecimento anormal das águas do Pacífico

3.2 Seca na Bacia Amazônica

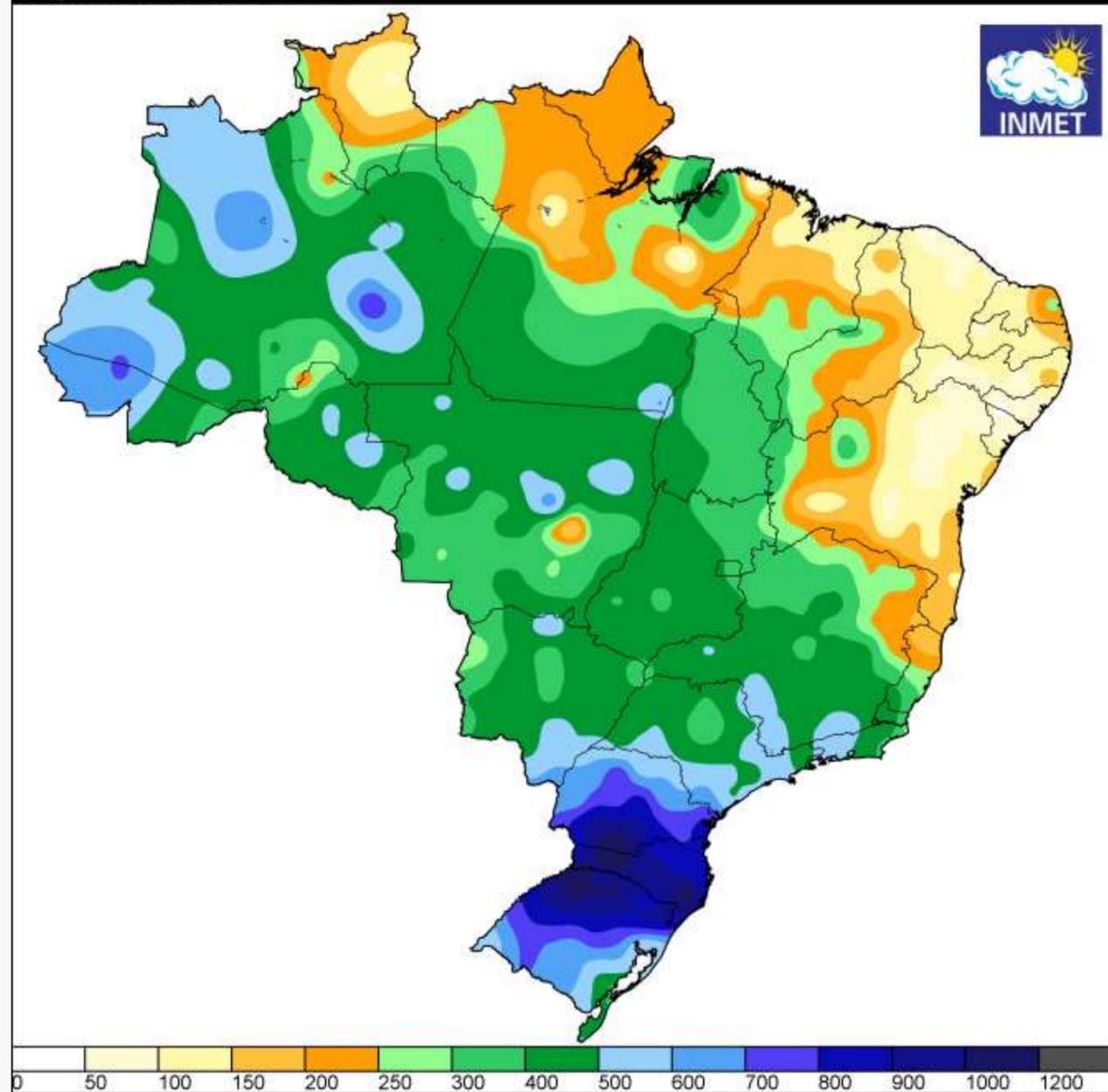
3.3 Atlântico sul mais frio





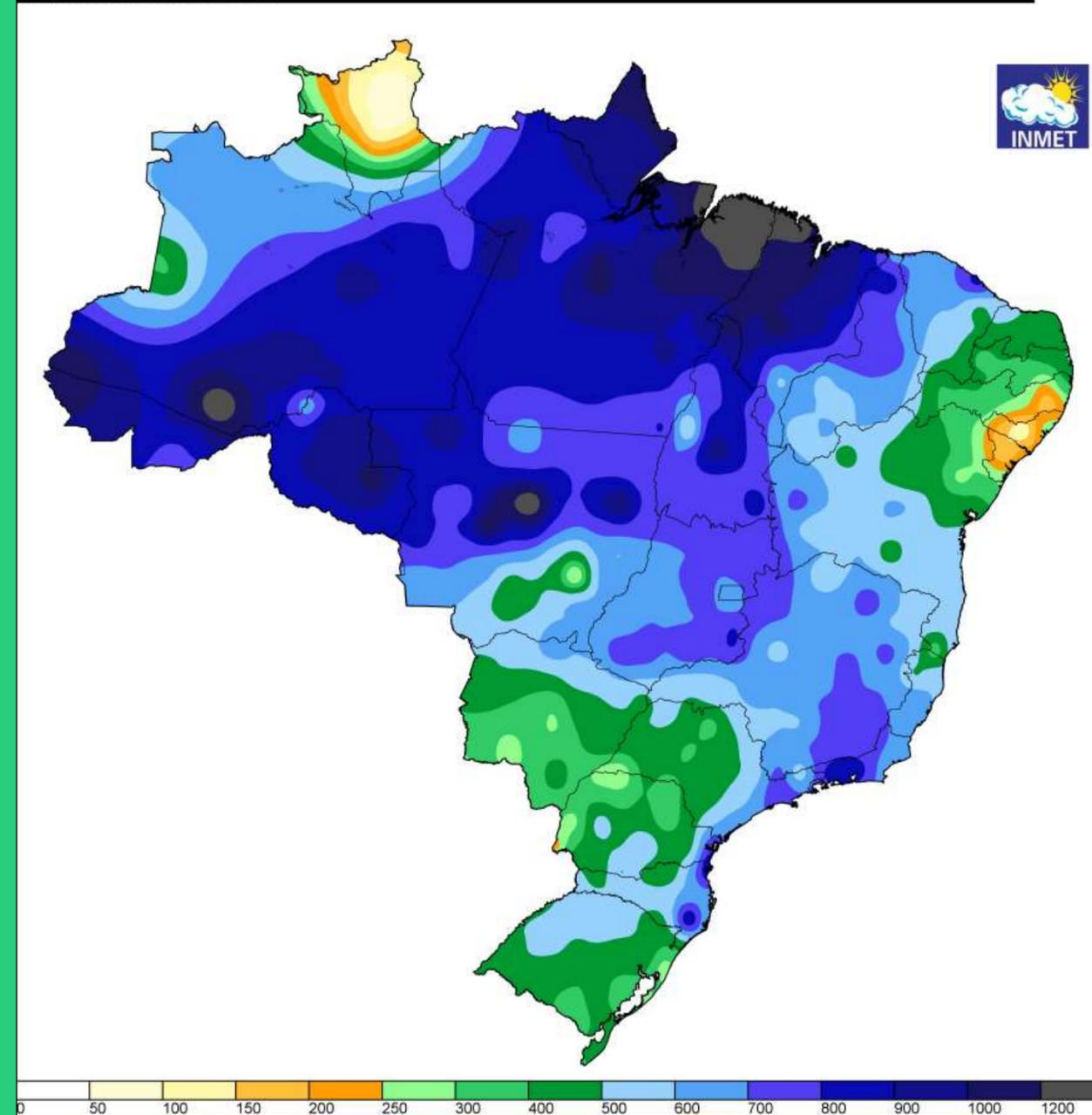
CHUVAS PRIMAVERA/23

Instituto Nacional de Meteorologia - INMET
Precipitação Acumulada nos últimos 90 dias
Mapa do dia 02/01/2024

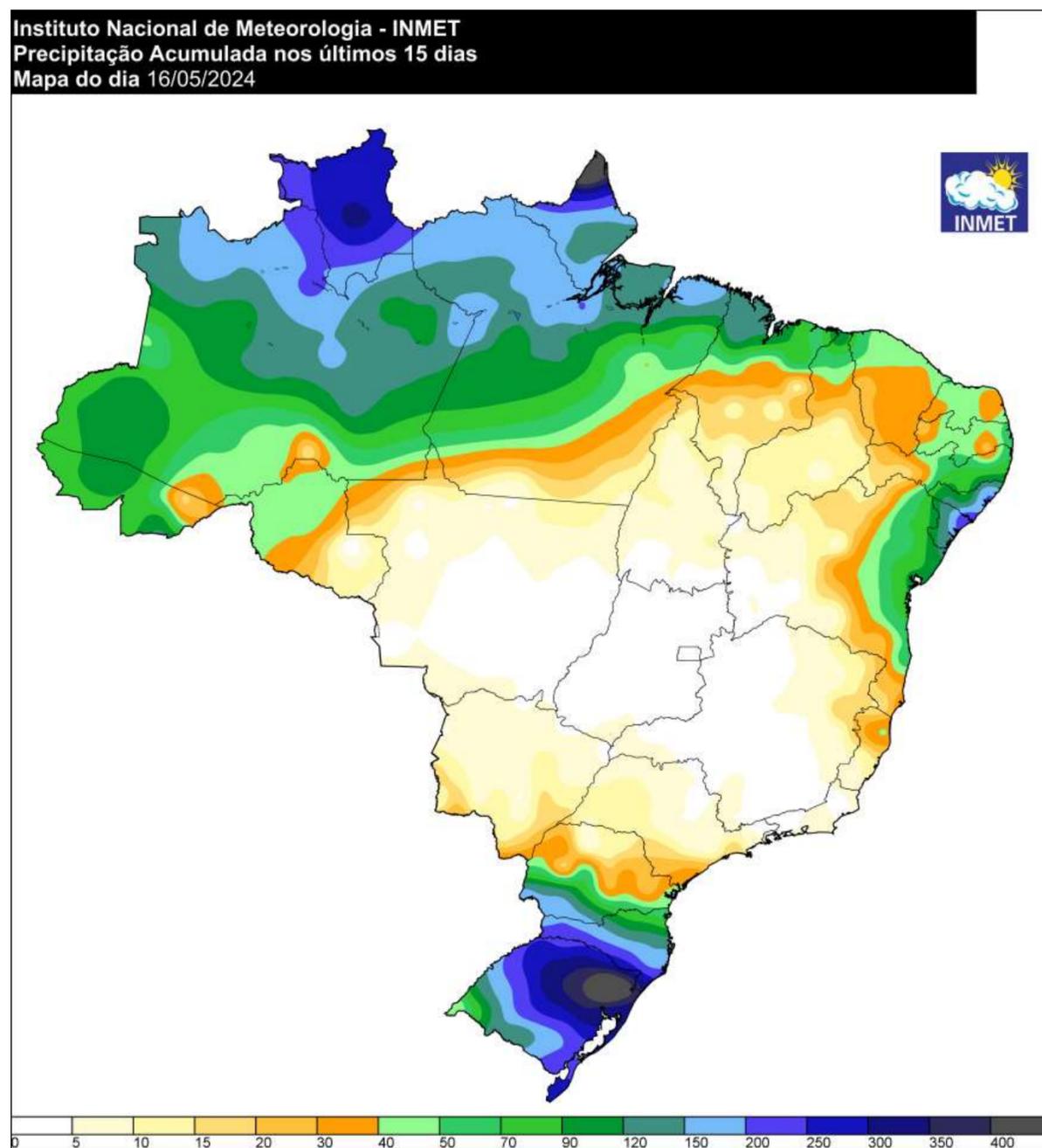


CHUVAS VERÃO/24

Instituto Nacional de Meteorologia - INMET
Precipitação Acumulada nos últimos 90 dias
Mapa do dia 01/04/2024



4. Chuvas dos últimos 15 dias



- ❖ El Niño
- ❖ Bloqueio Atmosférico - região central
- ❖ Massa de ar polar na Argentina e Uruguai
- ❖ Vento de Norte

