

Monitoramento da situação da seca na bacia do rio Paranapanema

DEZEMBRO/2023

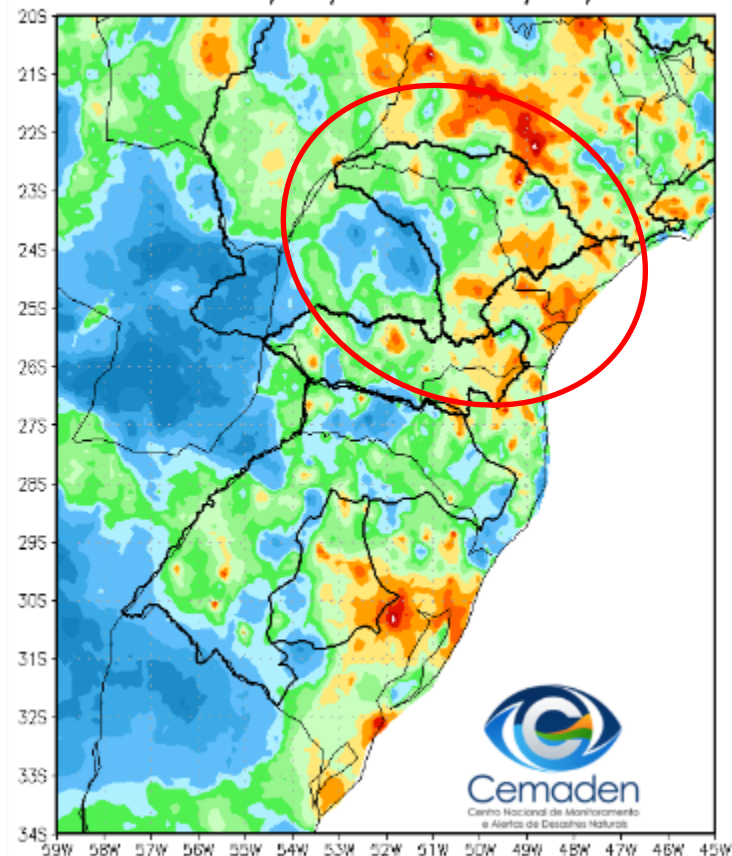


MINISTÉRIO DA
CIÊNCIA, TECNOLOGIA
E INOVAÇÕES

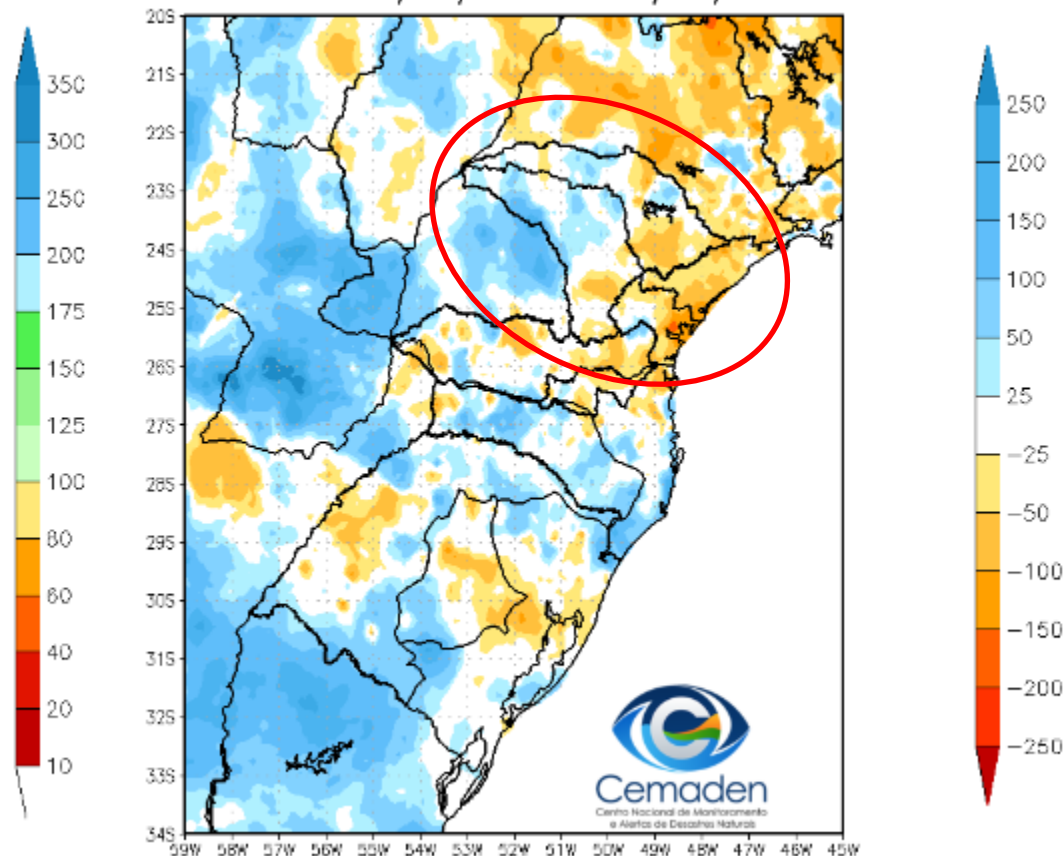


Precipitação acumulada nos últimos 30 dias

Precipitação Acumulada (mm) A.S.
Período: 20/11/2023 a 20/12/2023

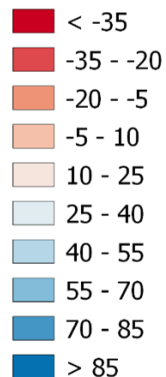
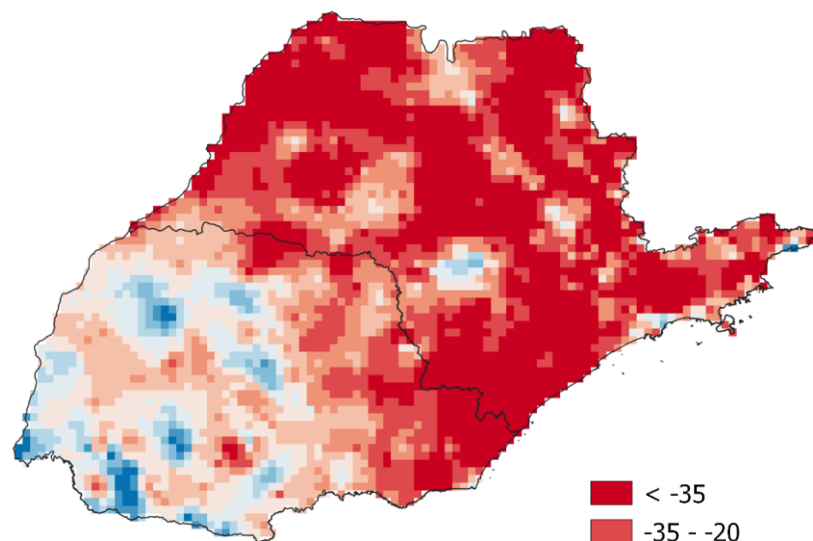


Anomalia de Precipitação (mm) A.S.
Período: 20/11/2023 a 20/12/2023

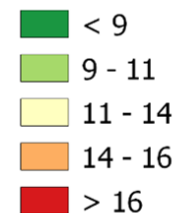
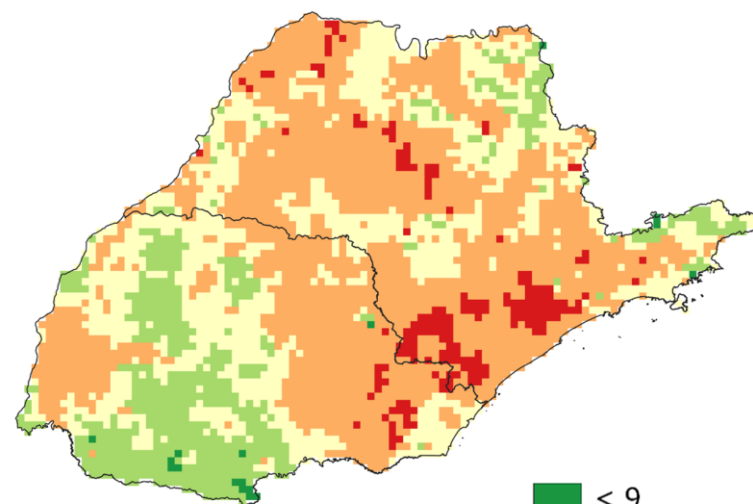


PRECIPITAÇÃO: DEZEMBRO (ATÉ 19) 2023

ANOMALIA (MM)

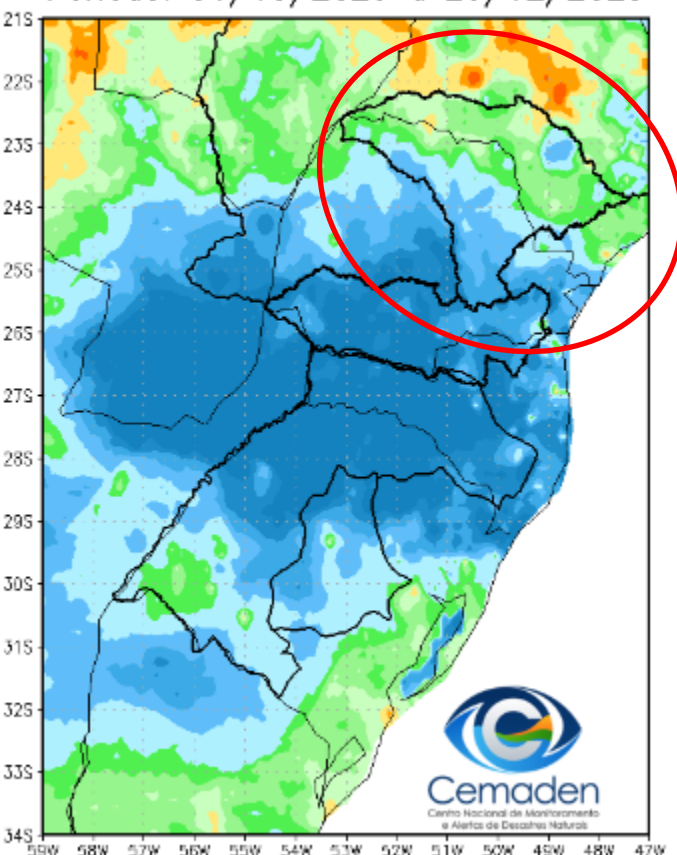


TOTAL DE DIAS SEM

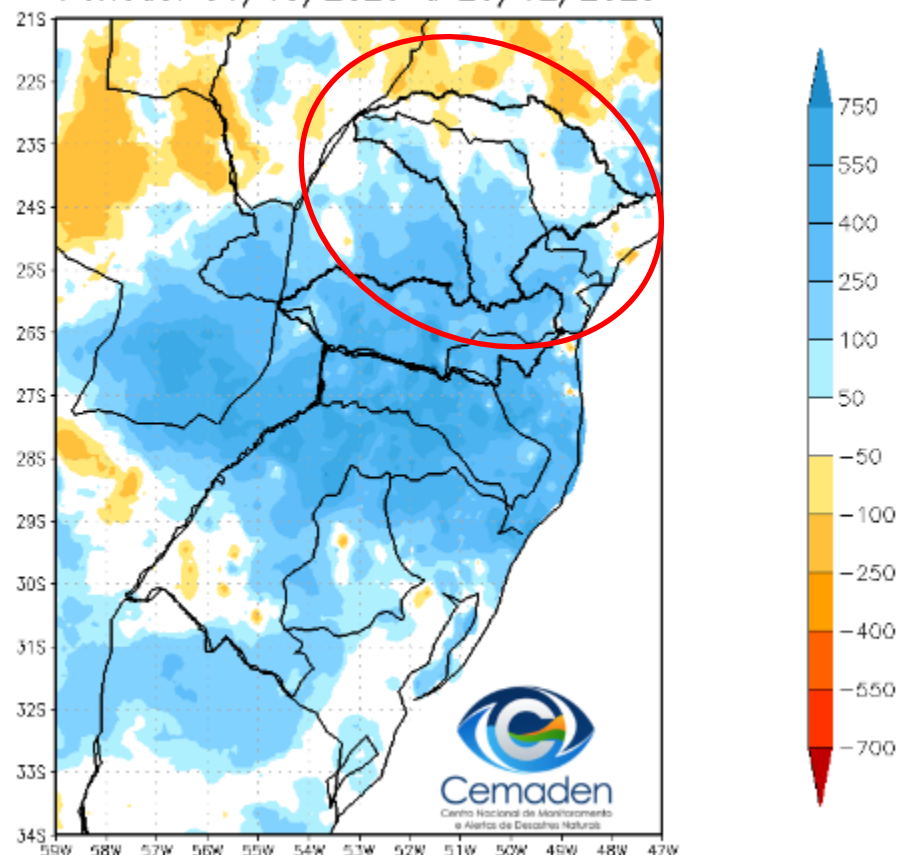


Precipitação acumulada Ano Hidrológico

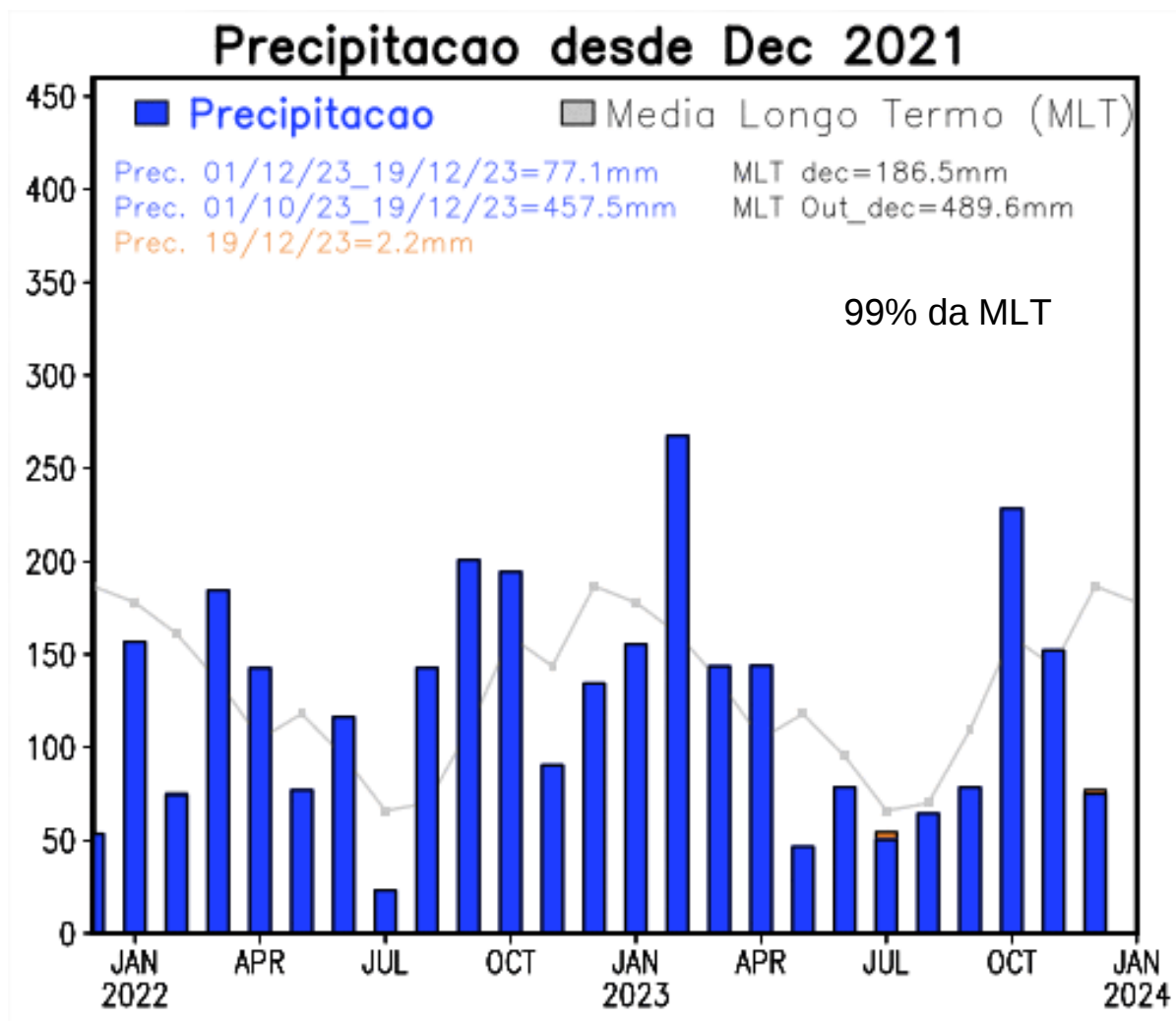
Precipitação Acumulada (mm) A.S.
Período: 01/10/2023 a 20/12/2023



Anomalia de Precipitação (mm) A.S.
Período: 01/10/2023 a 20/12/2023

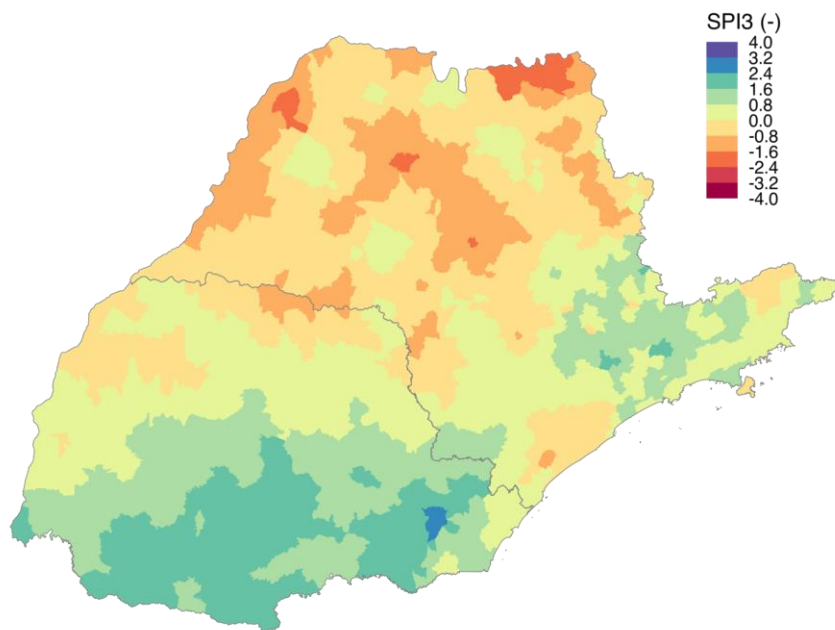


Evolução temporal da precipitação



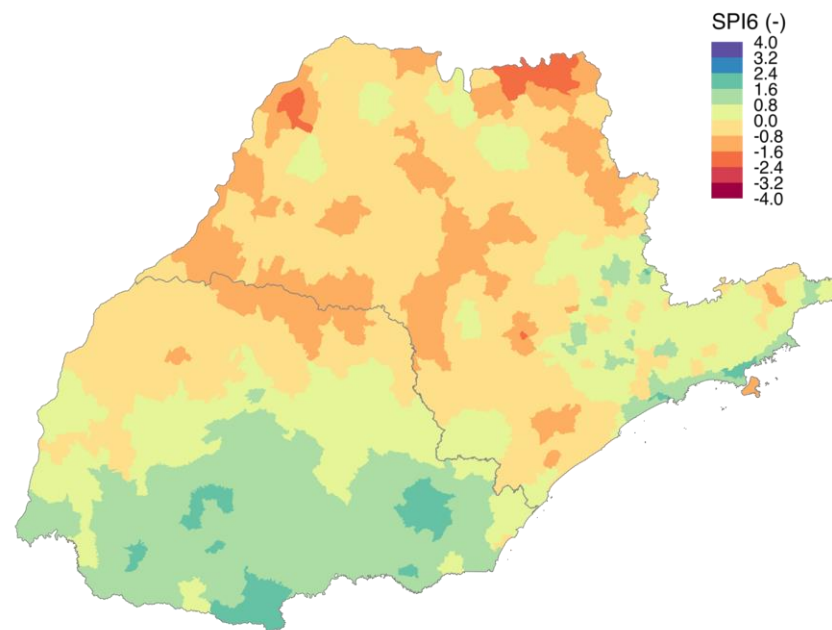
SPI: NOVEMBRO 2023

SPI-03



Novembro 2023
Índice Padronizado de Precipitação (SPI, 3 meses)
Dados: CPTEC/INPE / Preparação: Cemaden/MCTI

SPI-06

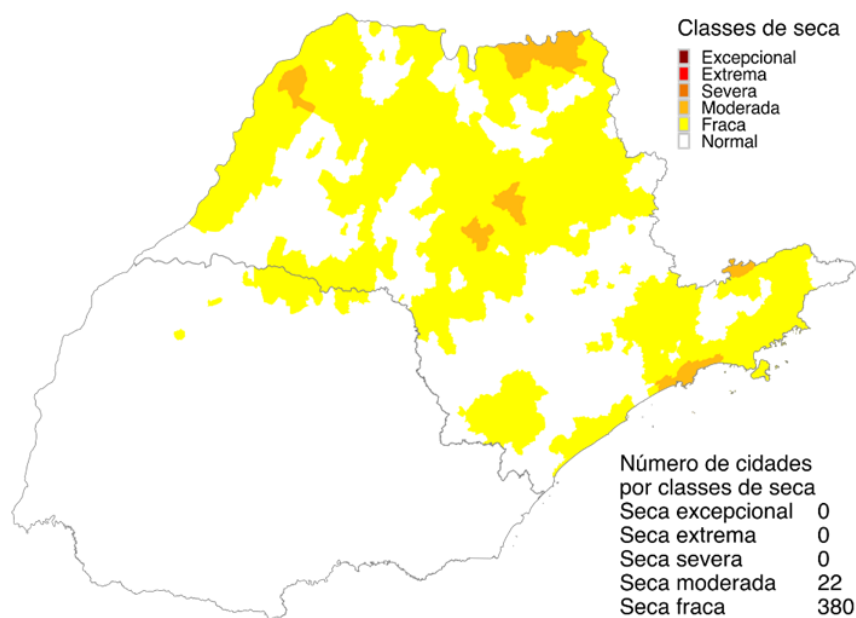


Novembro 2023
Índice Padronizado de Precipitação (SPI, 6 meses)
Dados: CPTEC/INPE / Preparação: Cemaden/MCTI

ÍNDICE INTEGRADO DE SECA - IIS

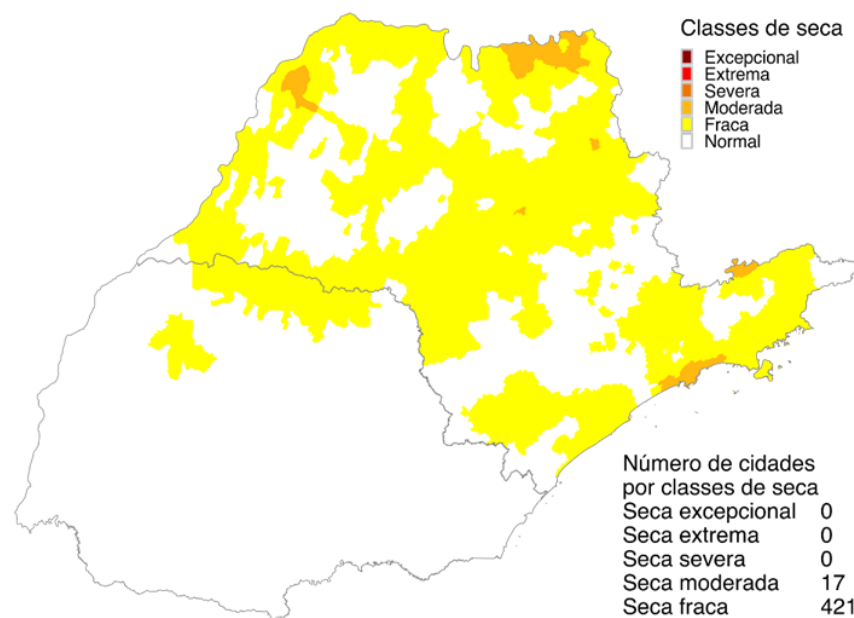
(SPI3 E 6 + VHI + AUS): NOVEMBRO/2023

IIS 3 MESES



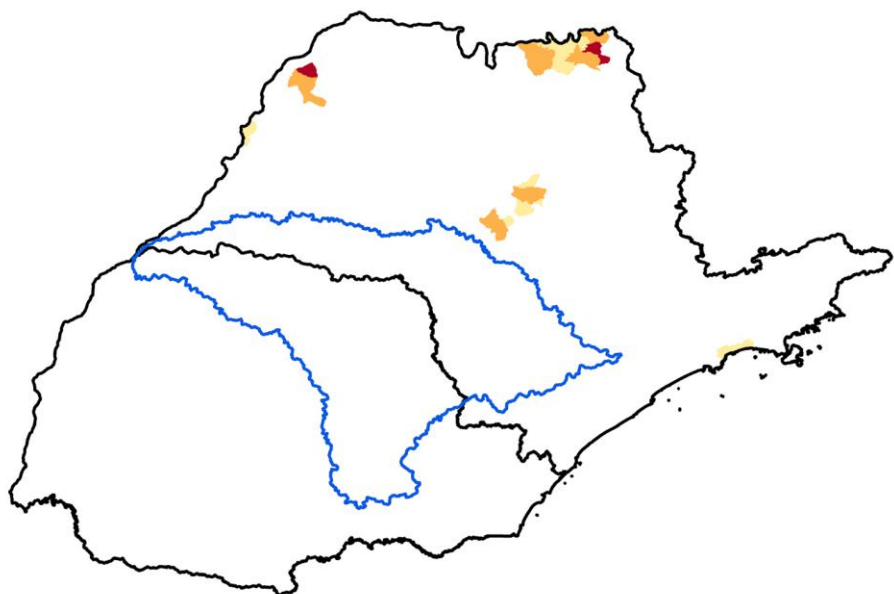
Novembro 2023
Índice Integrado de Seca (SPI3, VHI, US)
Dados: CPTEC/INPE - NOAA - NASA / Preparação: Cemaden/MCTI

IIS 6 MESES

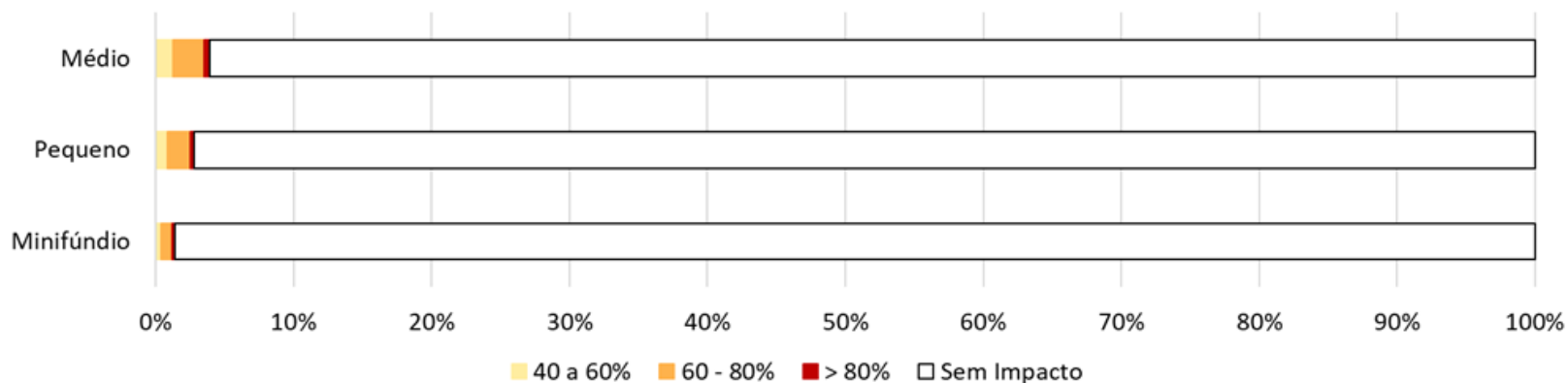


Novembro 2023
Índice Integrado de Seca (SPI6, VHI, US)
Dados: CPTEC/INPE - NOAA - NASA / Preparação: Cemaden/MCTI

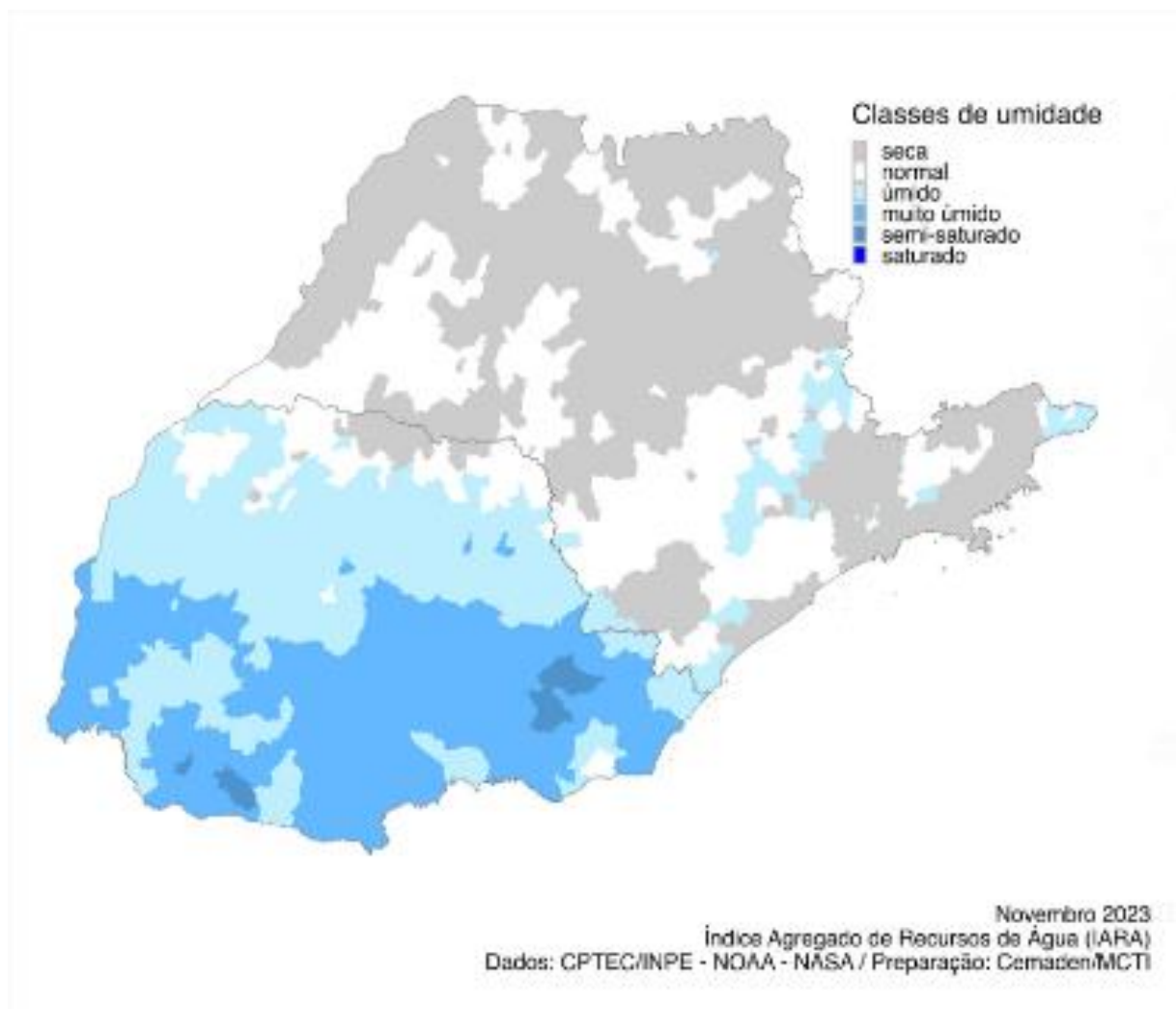
ÁREAS DE PASTAGENS E AGRÍCOLAS AFETADAS PELA SECA (SPI -Nov, US e VHI Dez)



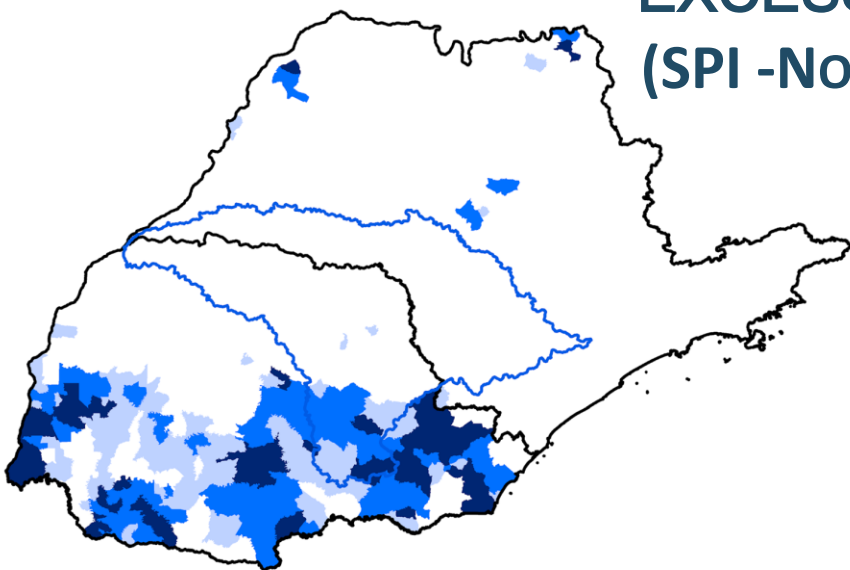
UF	40 a 60%	60 - 80%	> 80%
Minifúndio	846	1488	383
Pequeno	930	1712	294
Médio	476	819	148



IARA (SPI3, SM, VHI)



ÁREAS DE PASTAGENS E AGRÍCOLAS AFETADAS PELO EXCESSO DE CHUVA (SPI -Nov, US E VHI Dez)

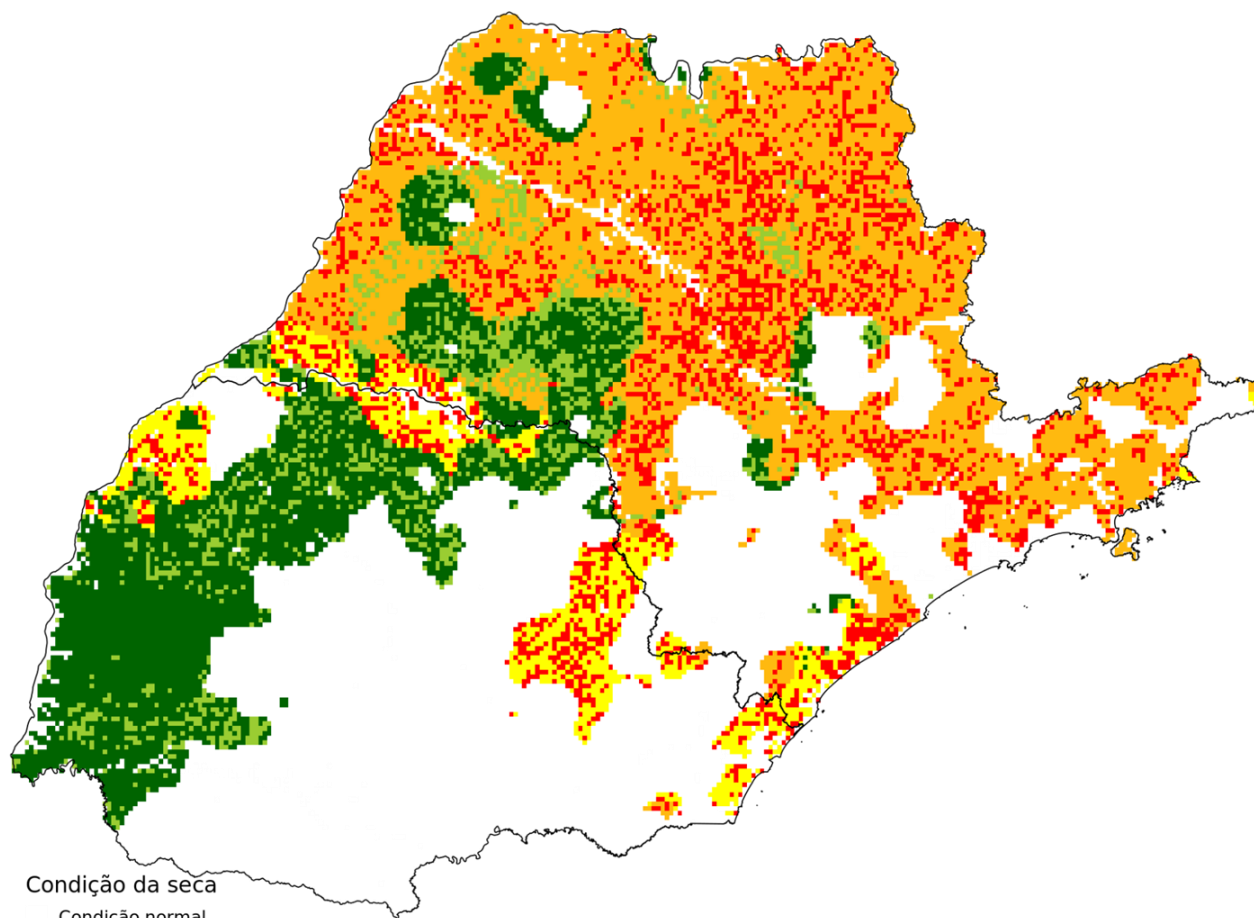


UF	40 a 60%	60 - 80%	> 80%
PR	57	54	47
SP	4	4	3

	40 a 60%	60 - 80%	> 80%	Imóveis Rurais Impactados > 40%
Paraná				
Minifundio	50022 (19%)	52972 (20%)	38935 (15%)	141929 (54%)
Pequena Propriedade	24192 (19%)	24540 (19%)	16622 (13%)	65354 (51%)
Media Propriedade	4519 (17%)	4073 (15%)	2861 (11%)	11453 (43%)
São Paulo				
Minifundio	441 (*)	975 (1%)	383 (*)	1799 (1%)
Pequena Propriedade	367 (*)	948 (1%)	294 (*)	1609 (2%)
Media Propriedade	213 (1%)	400 (1%)	148 (*)	761 (2%)

(*) Porcentagem inferior a 1%.

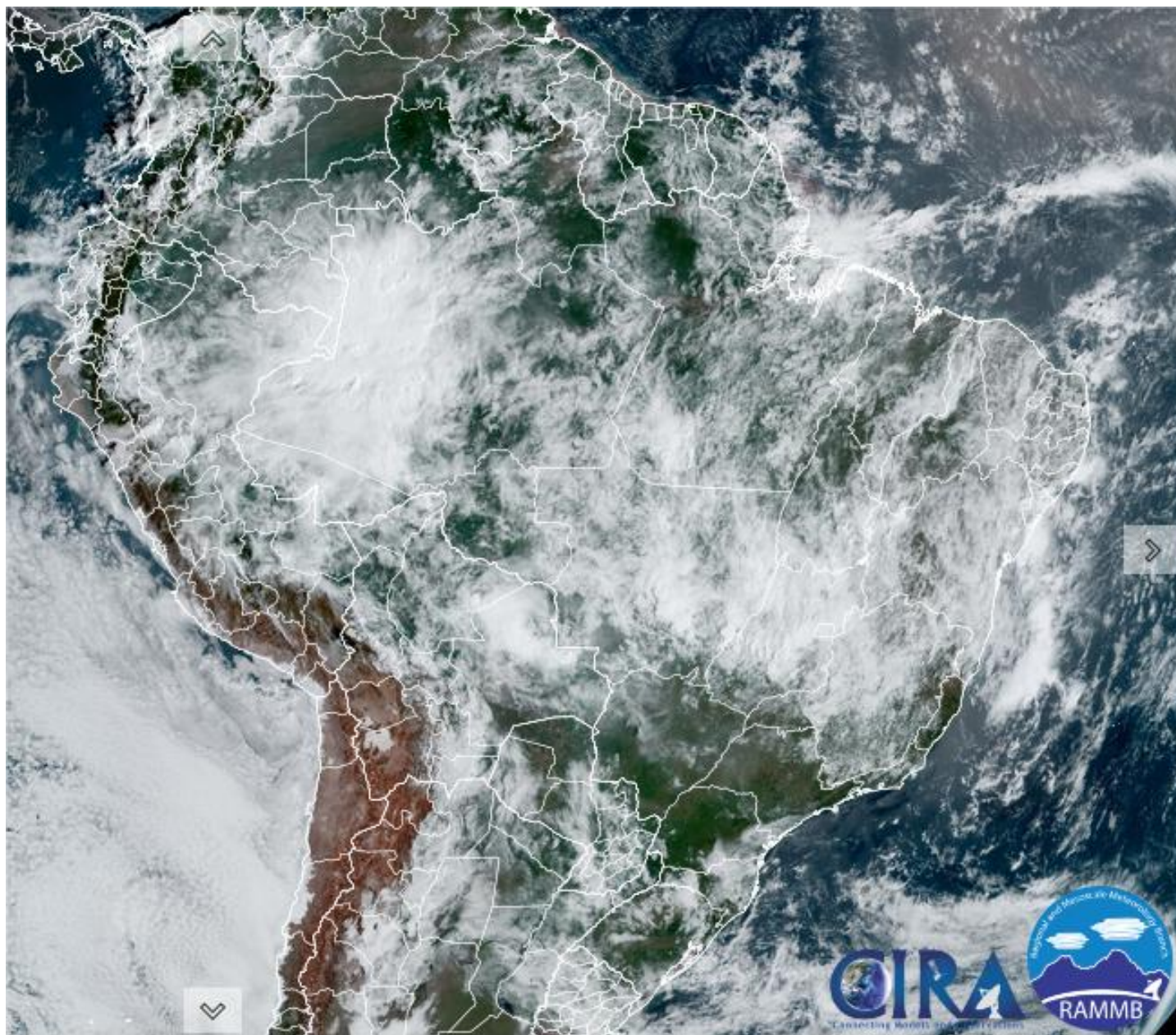
PROGRESSÃO INCREMENTAL DAS CONDIÇÕES DE SECA (PICS) NOVEMBRO 2023



Condição da seca

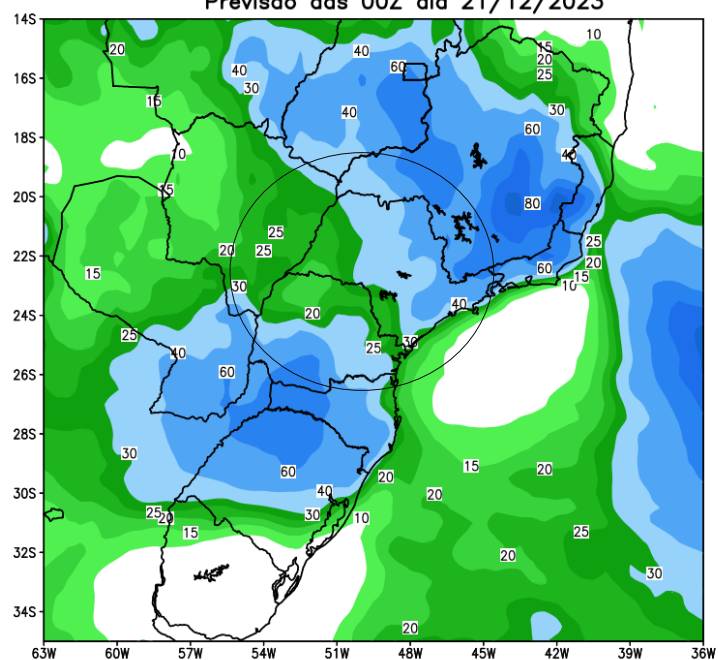
- Condição normal
- Observação - chuva abaixo da média (SPI ↓)
- Atenção - chuva abaixo da média e stress hídrico no solo (SPI ↓ & US ↓)
- Alerta de seca - chuva abaixo da média e stress vegetativo (SPI ↓ & VHI ↓)
- Stress vegetativo & tendência de melhora na chuva (VHI ↓ & SPI ↑)
- Em recuperação (SPI ↑)

Situação meteorológica atual

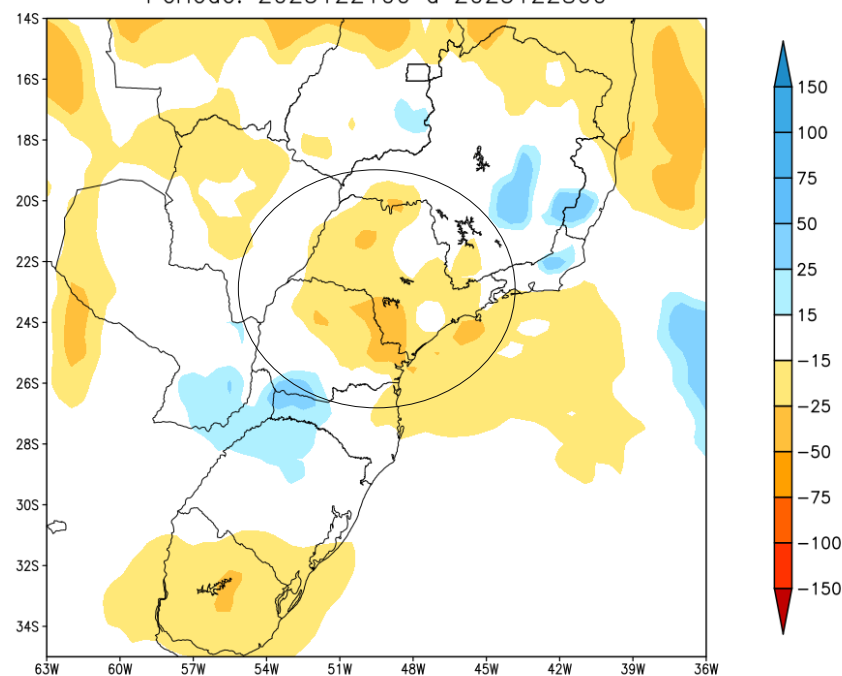


Previsão de chuva próximos 7 dias

GEFS / BRASIL_SUL
Precipitação acumulada 1aSem (mm)
Previsão das 00Z dia 21/12/2023



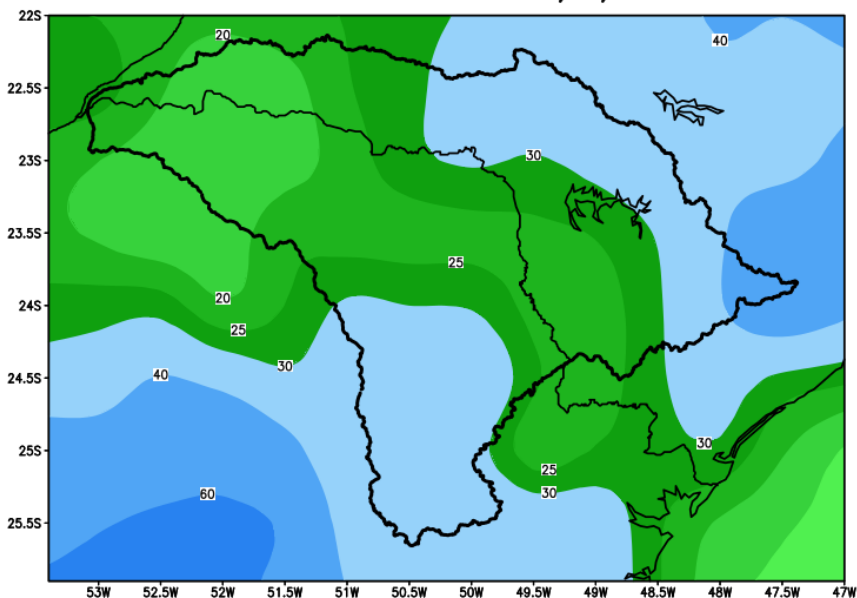
Anomalia de Precipitação BR SUL (mm)
Período: 2023122100 a 2023122800



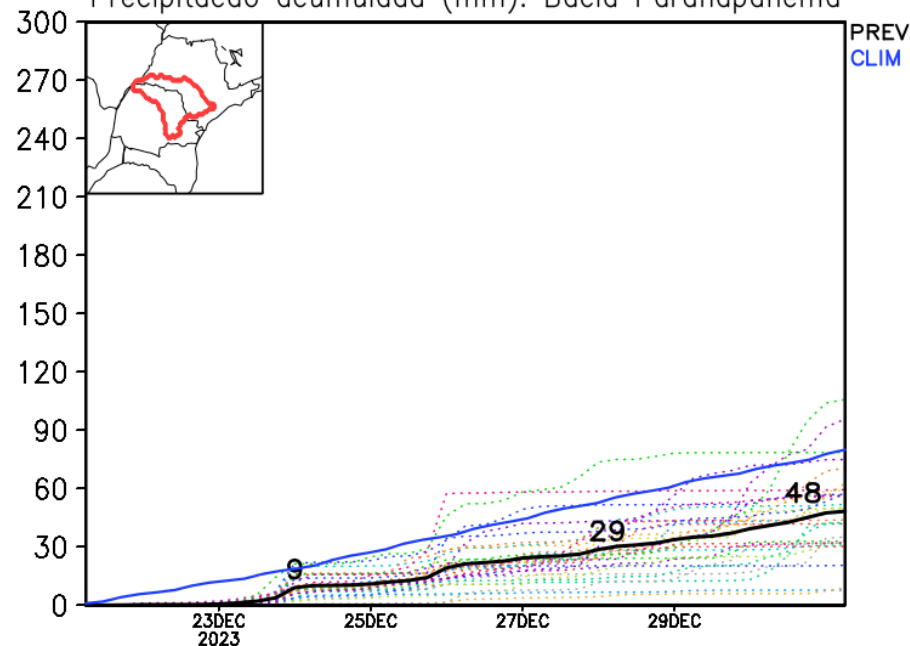
MODELO GFS

Previsão para a bacia do rio Paranapanema

GEFS / Bacia do Rio Paranapanema
Precipitação acumulada em 7 dias (mm)
Previsão das 00Z dia 21/12/2023

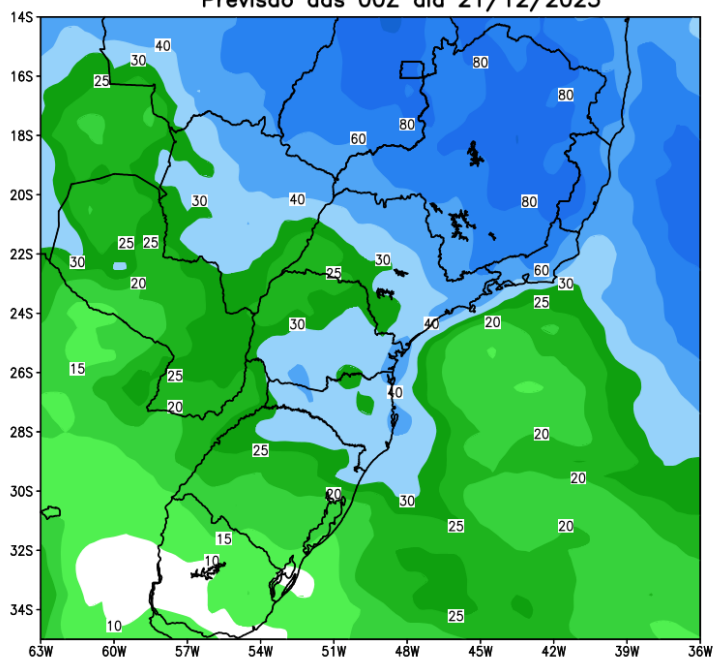


Precipitação acumulada (mm): Bacia Paranapanema

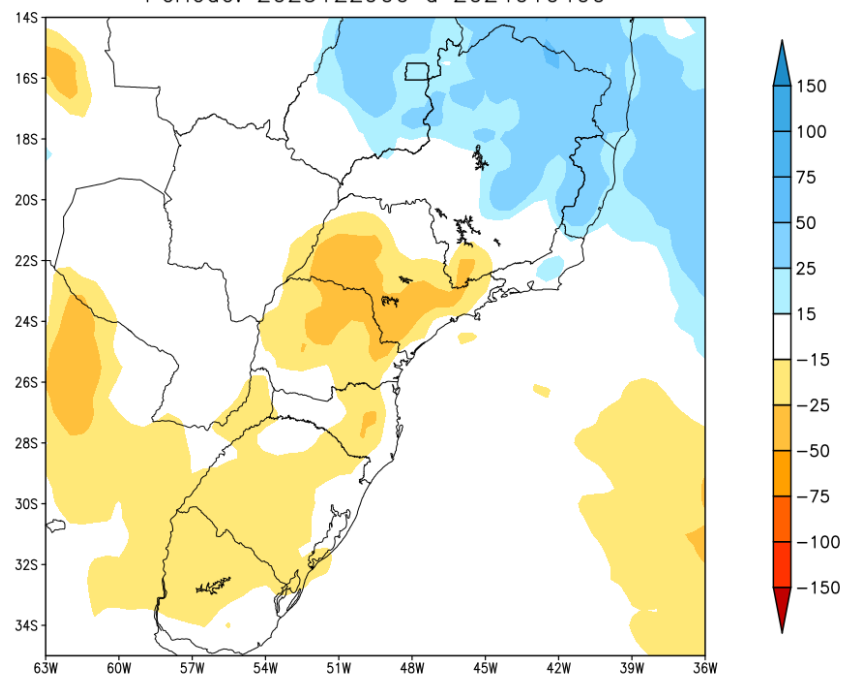


Tendência para a segunda semana

GEFS / BRASIL_SUL
Precipitação acumulada 2aSem (mm)
Previsão das 00Z dia 21/12/2023



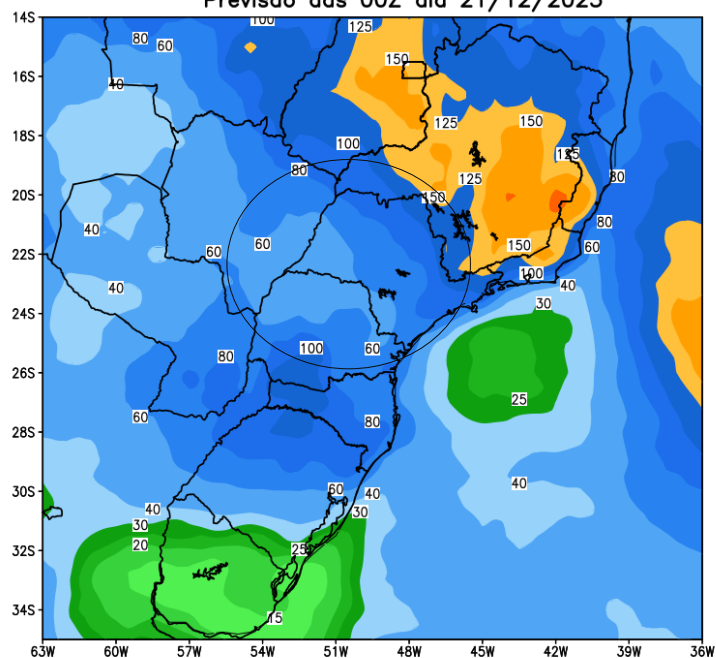
Anomalia de Precipitação BR SUL (mm)
Período: 2023122900 a 2024010400



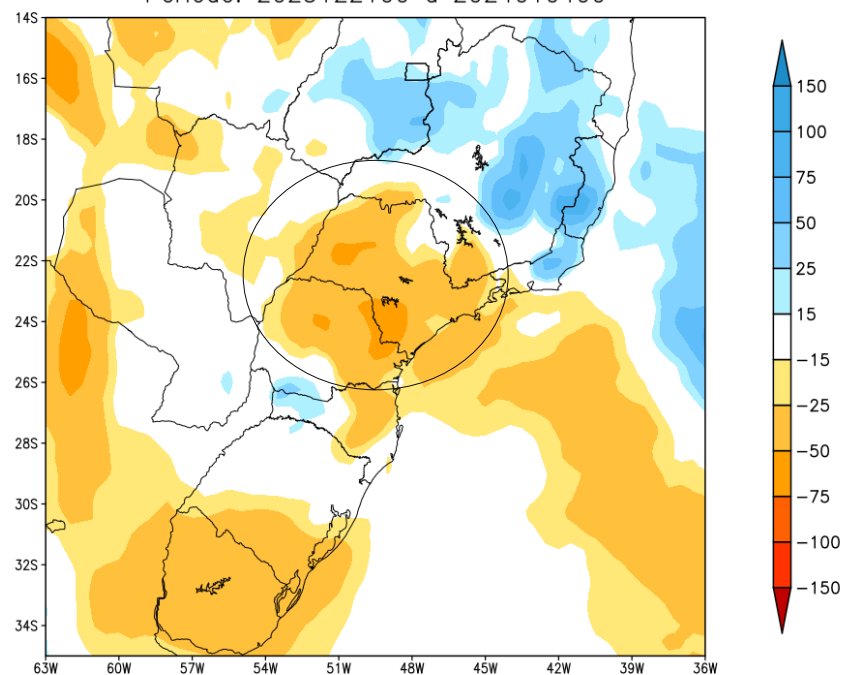
MODELO GFS

Tendência para as duas próximas semanas

GEFS / BRASIL_SUL
Precipitação acumulada 14 dias (mm)
Previsão das 00Z dia 21/12/2023



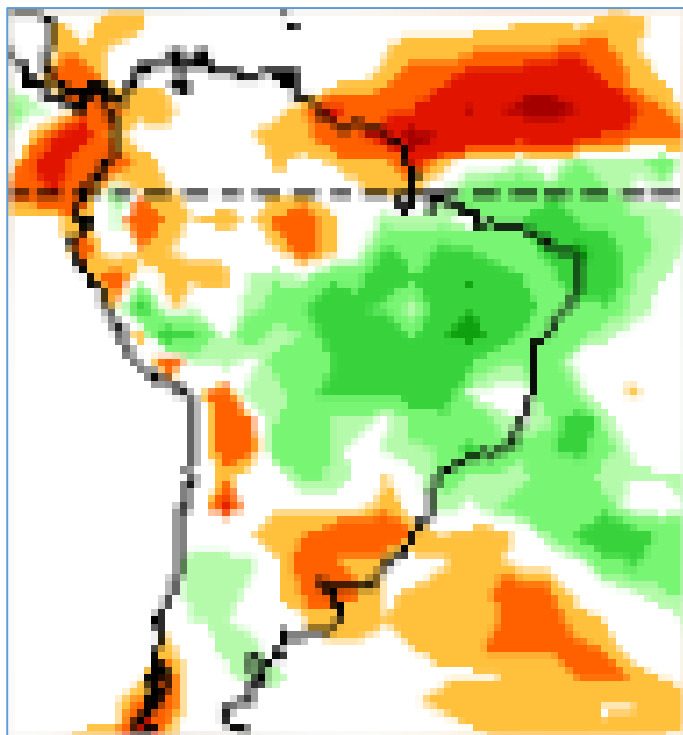
Anomalia de Precipitação BR_SUL (mm)
Período: 2023122100 a 2024010400



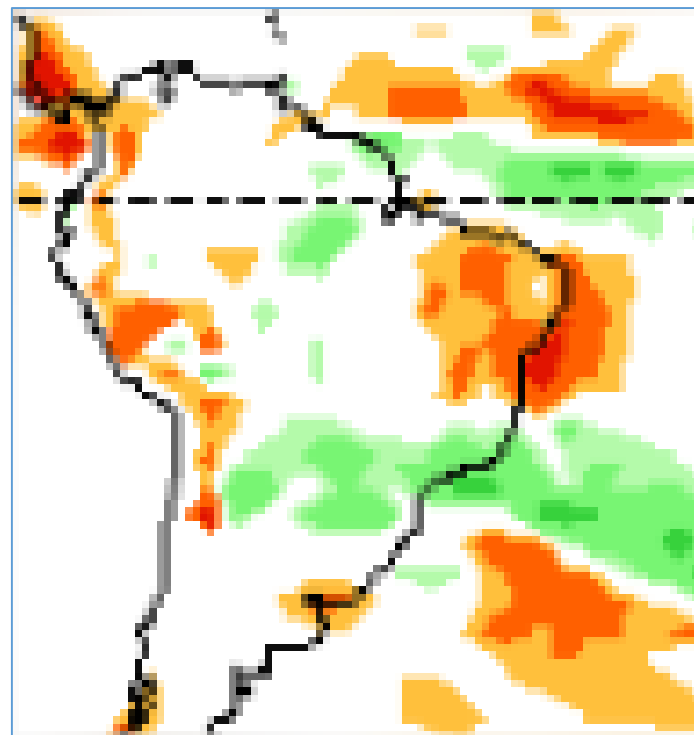
MODELO GFS

Tendência 3a e 4a semanas

04-10/01

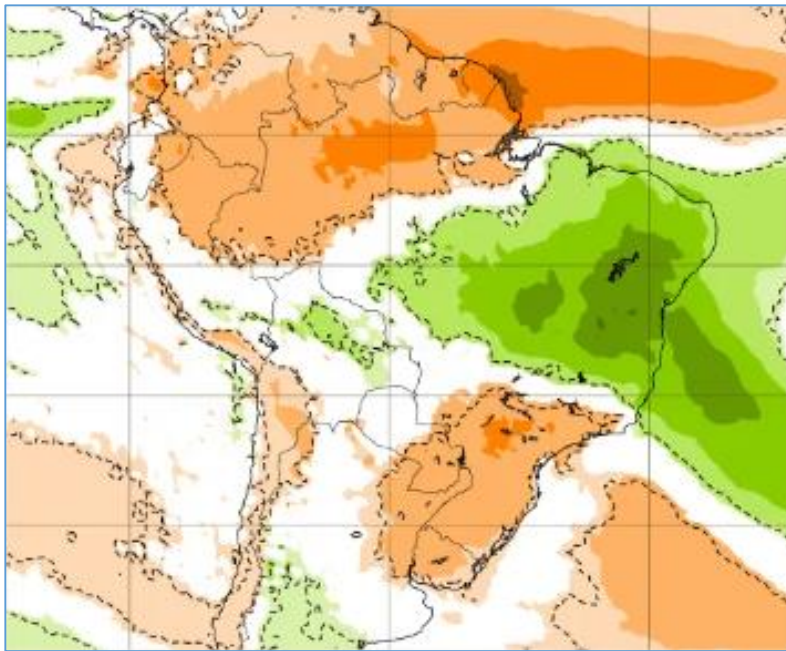


11-17/01

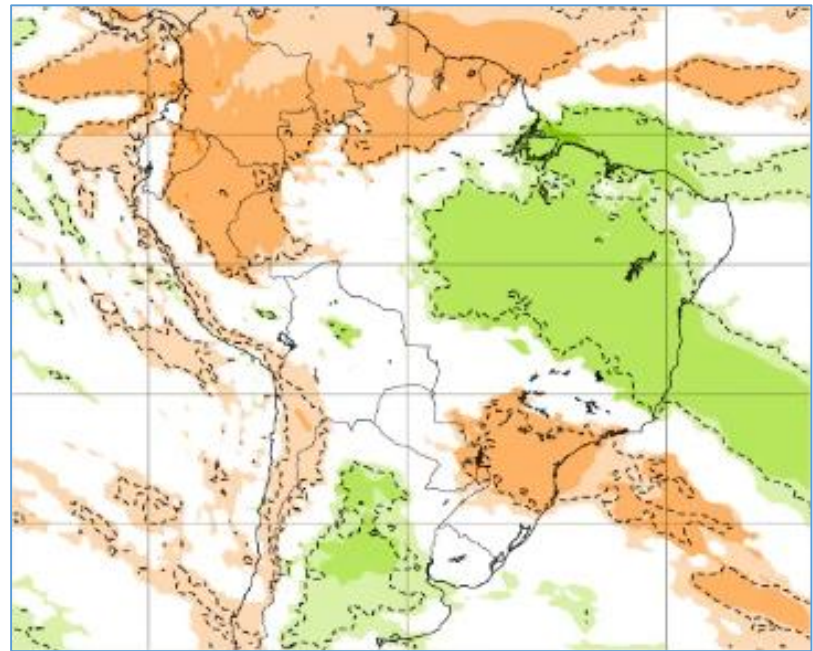


Tendência para 3ª e 4ª semanas

01-08/01

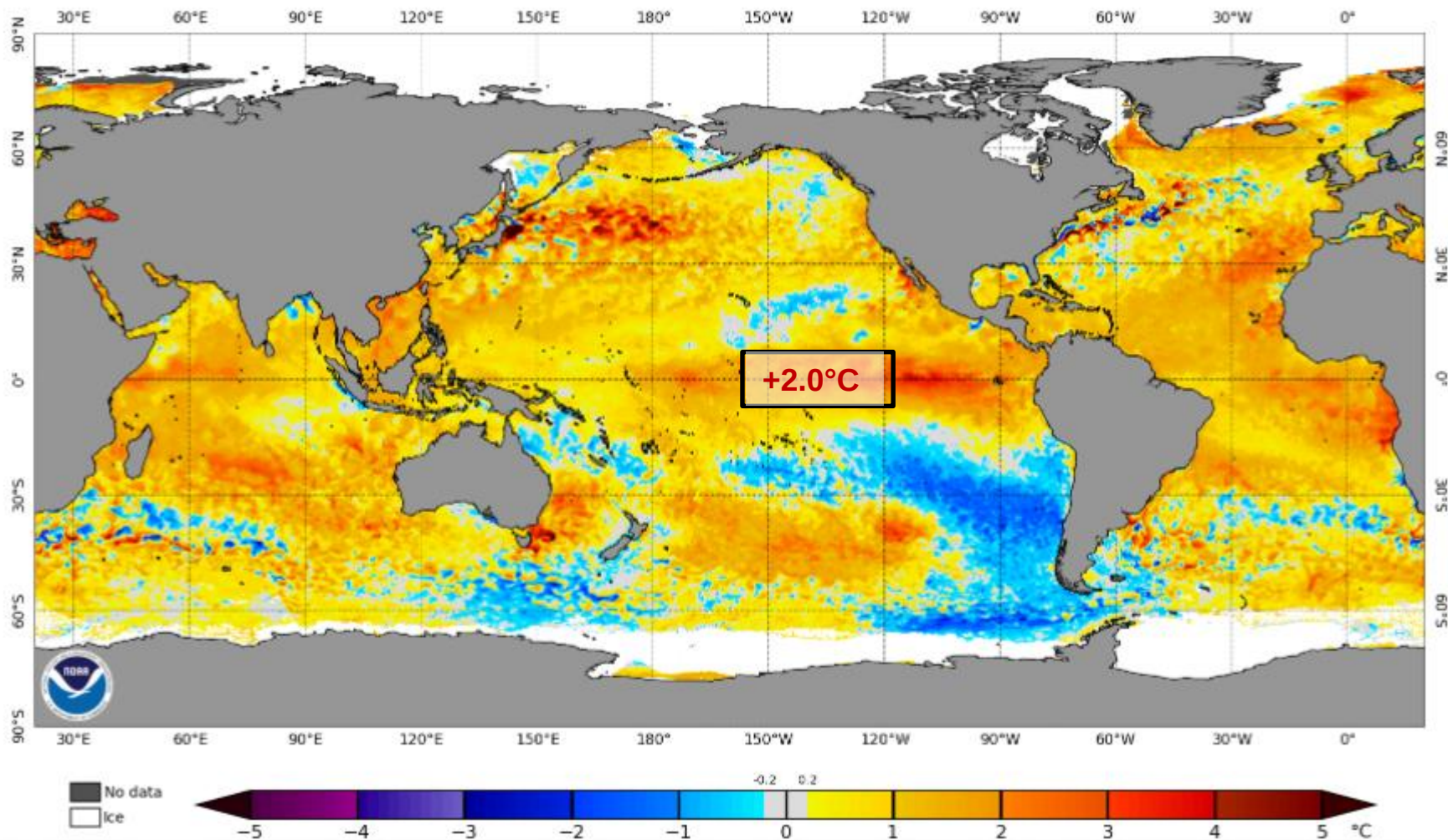


08-15/01



Status Atual: El Niño

NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 17 Dec 2023



Previsão do “ENSO”

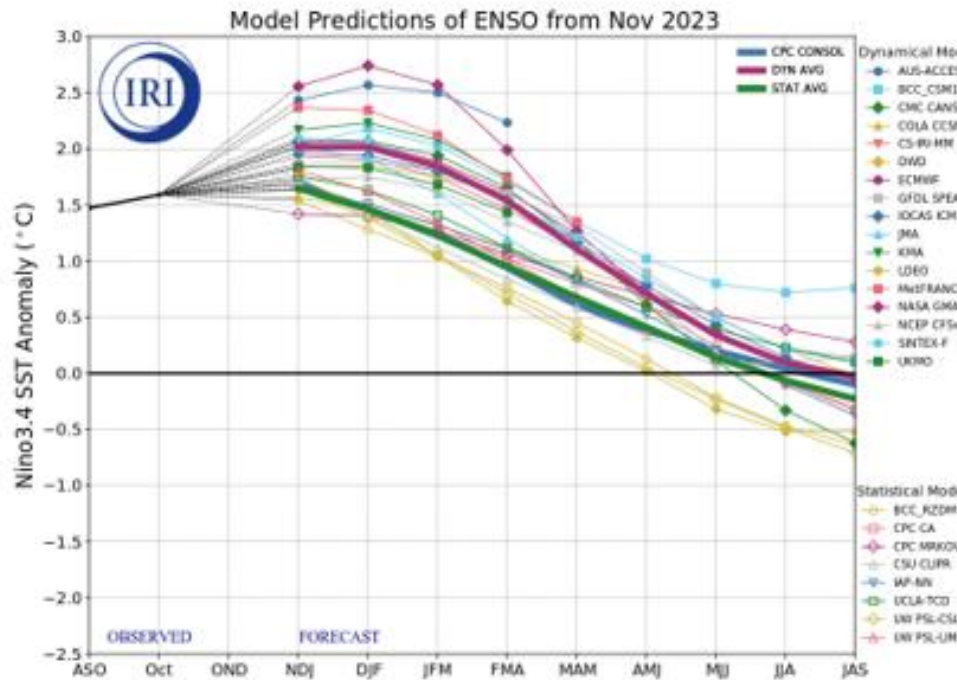
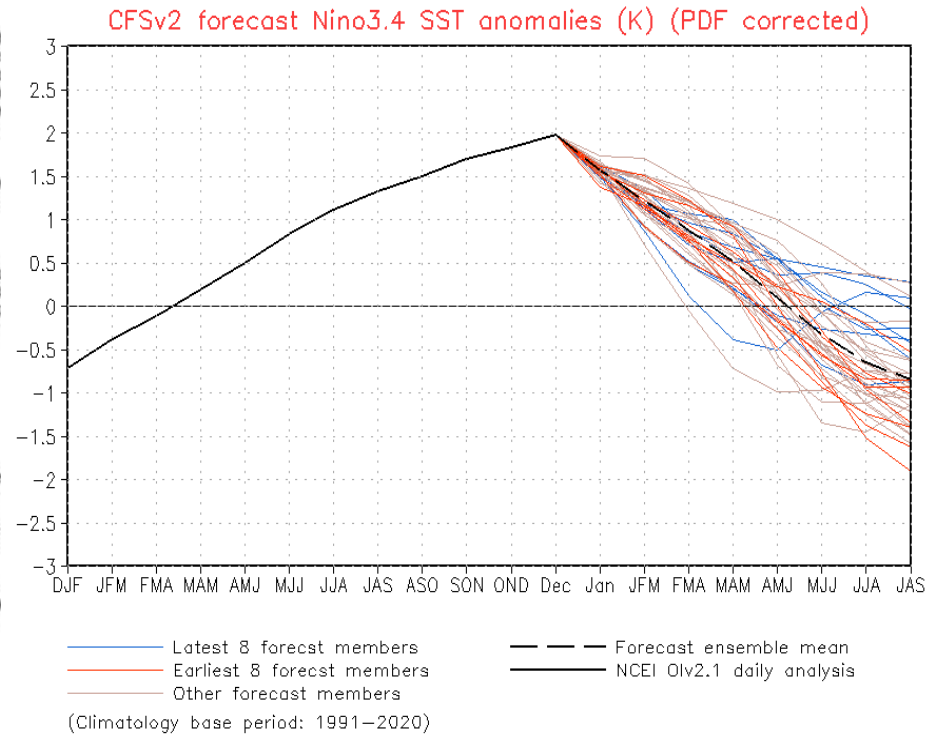


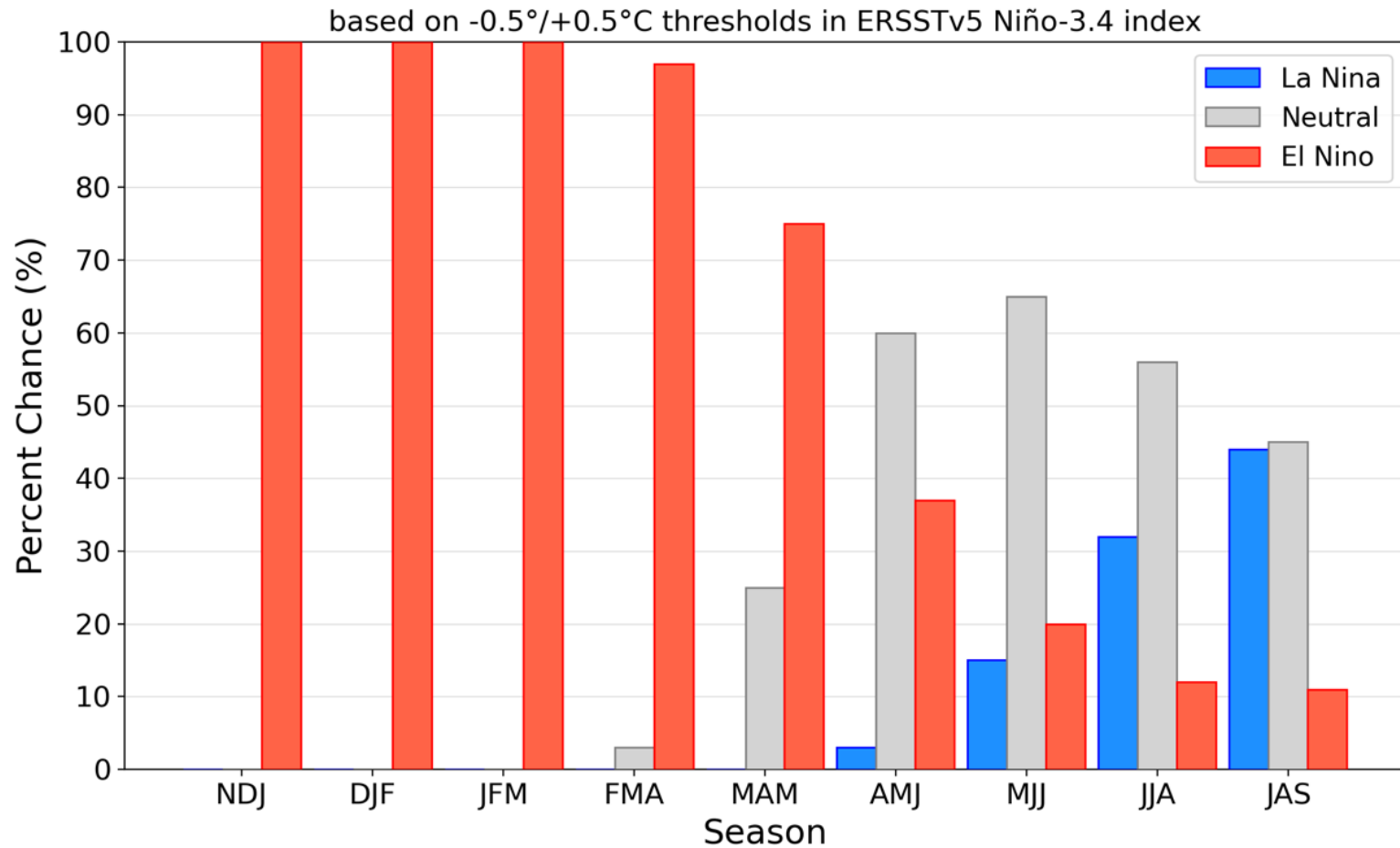
Figure provided by the International Research Institute (IRI) for Climate and Society (updated 20 November 2023).



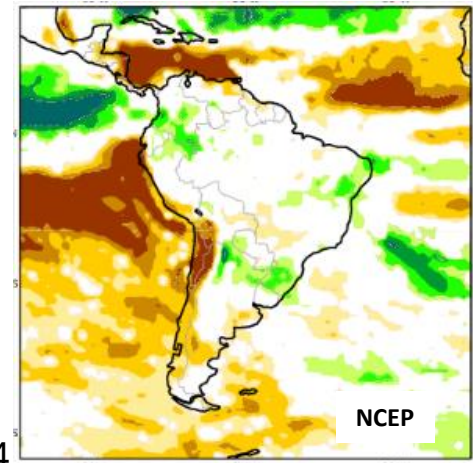
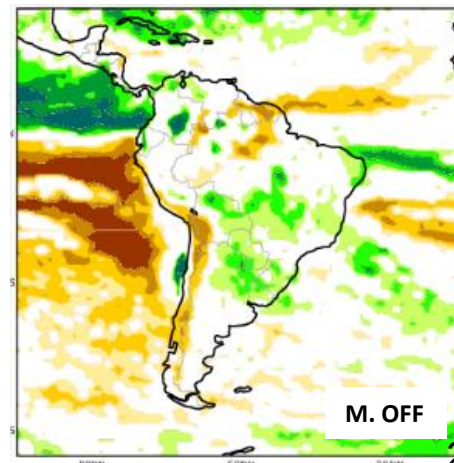
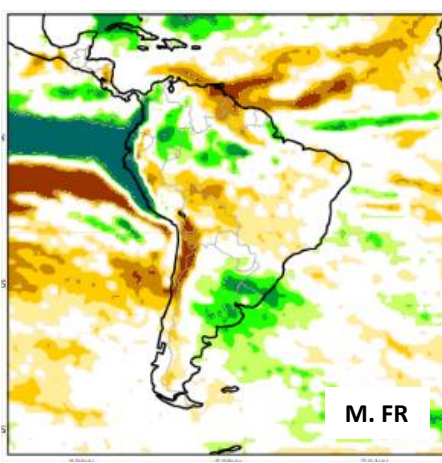
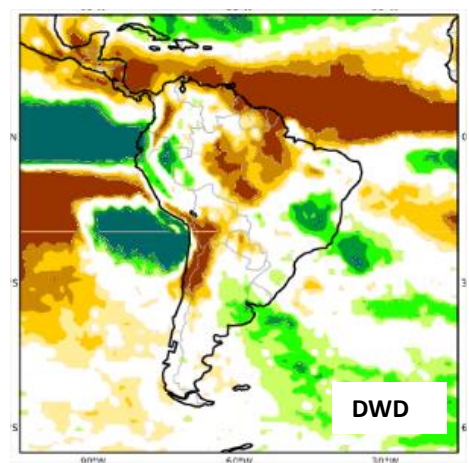
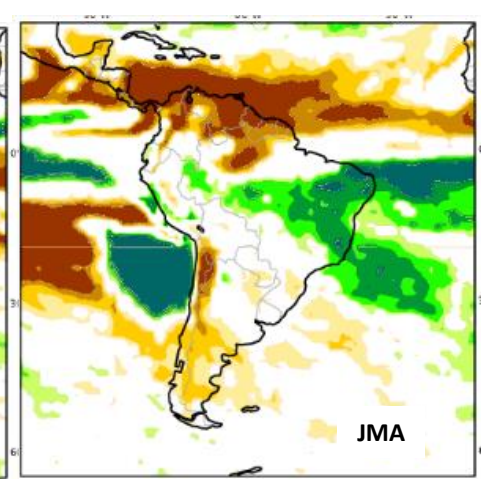
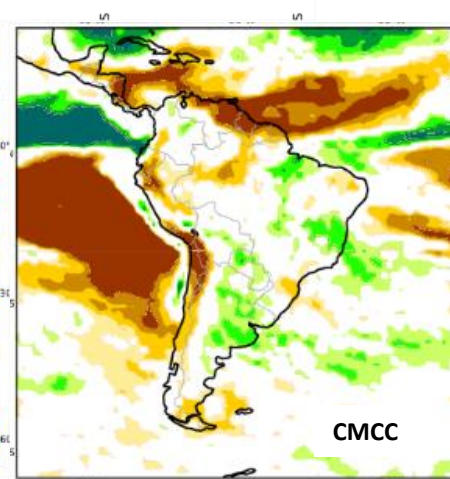
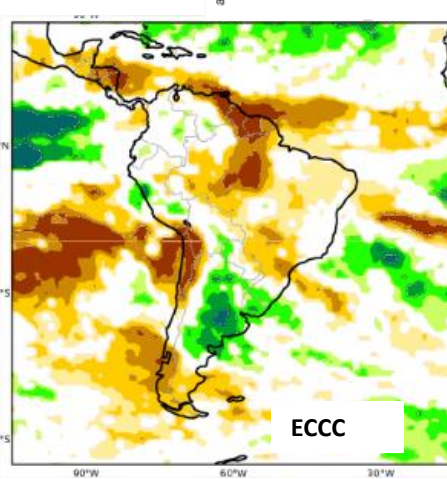
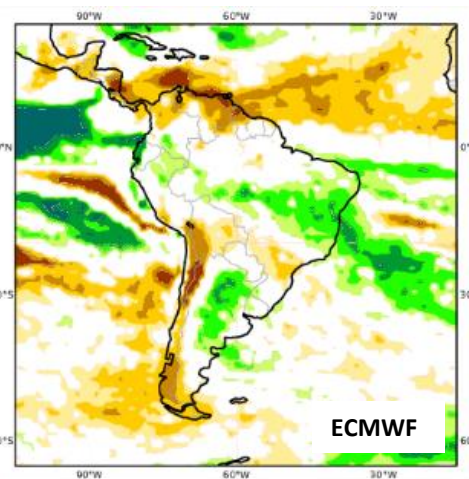
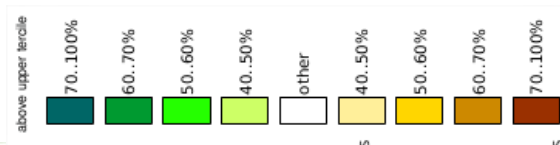
Atualizado 18 de dezembro

Previsão do “ENSO”

Official NOAA CPC ENSO Probabilities (issued Dec. 2023)

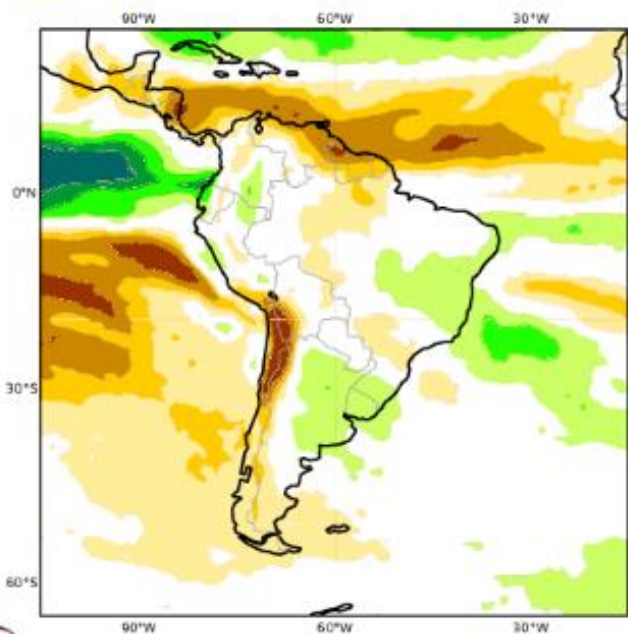


Previsão Sazonal de Chuva JFM

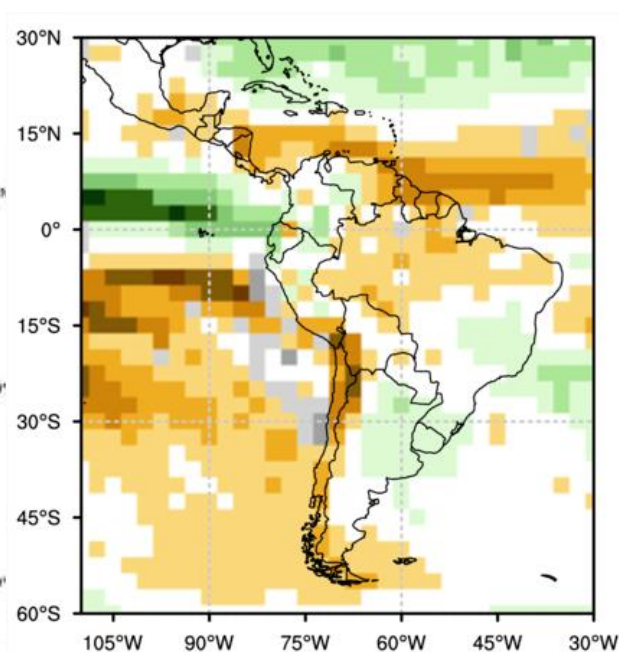


Previsão Sazonal de Chuva Multi-Modelo para JFM

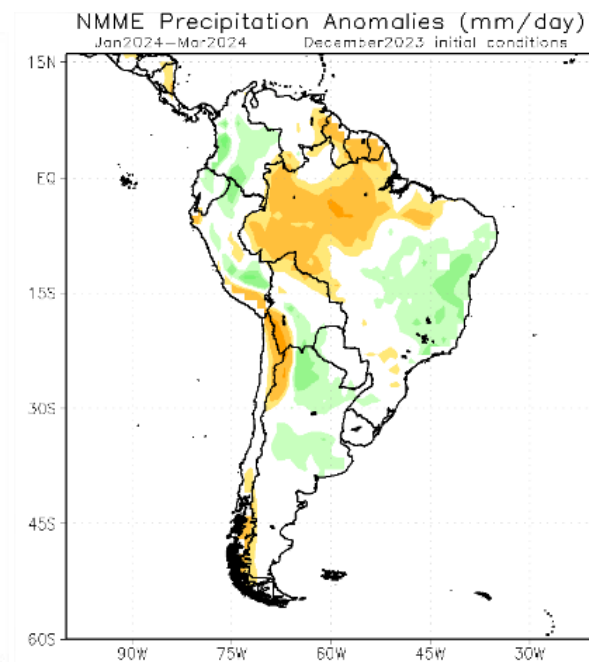
C3S multi-system seasonal forecast
Prob(most likely category of precipitation)
Nominal forecast start: 01/12/23
Unweighted mean



Modelos Europeus



Modelos da Organização
Meteorológica Mundial



Modelos Americanos