



CEMADEN

Centro Nacional de Monitoramento e
Alertas de Desastres Naturais

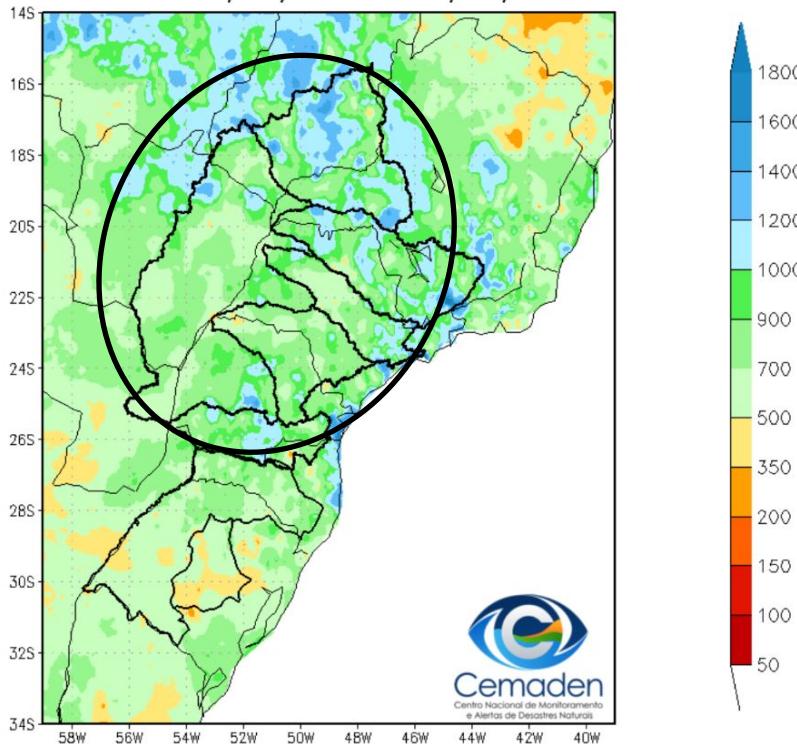
Monitoramento e Previsões
para a
Bacia do rio Paraná

25 de abril de 2025

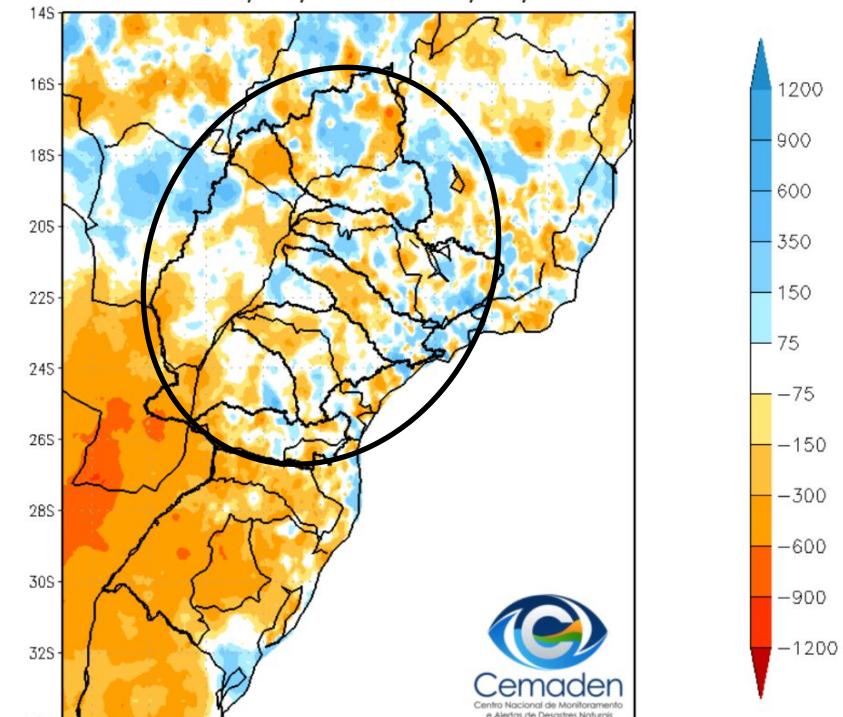


Precipitação acumulada no ano hidrológico 01/10/2024 a 24/04/2025

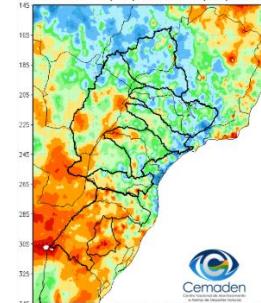
Precipitação Acumulada (mm) A.S.
Período: 01/10/2024 a 24/04/2025



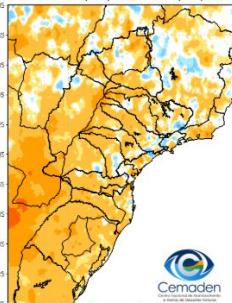
Anomalia de Precipitação (mm) A.S.
Período: 01/10/2024 a 24/04/2025



Precipitação Acumulada (mm) A.S.
Período: 26/12/2024 a 26/03/2025

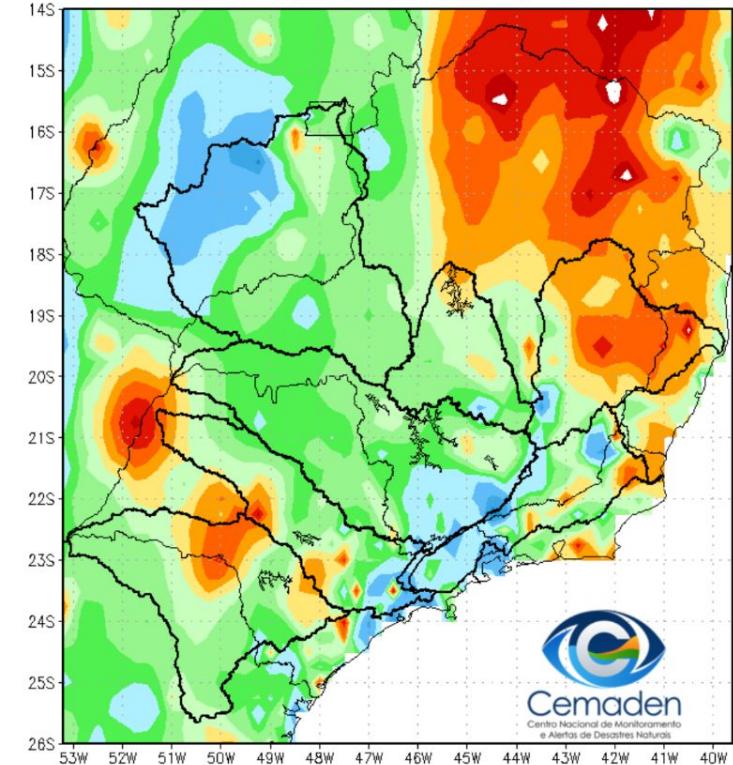


Anomalia de Precipitação (mm) A.S.
Período: 26/12/2024 a 26/03/2025

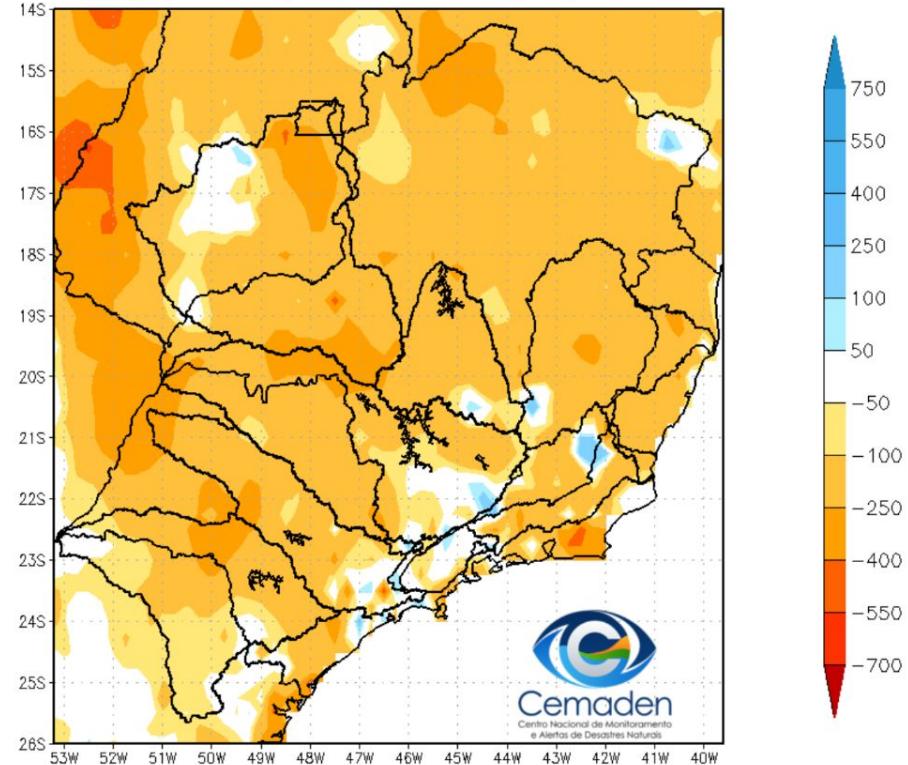


Precipitação acumulada nos últimos 90 dias

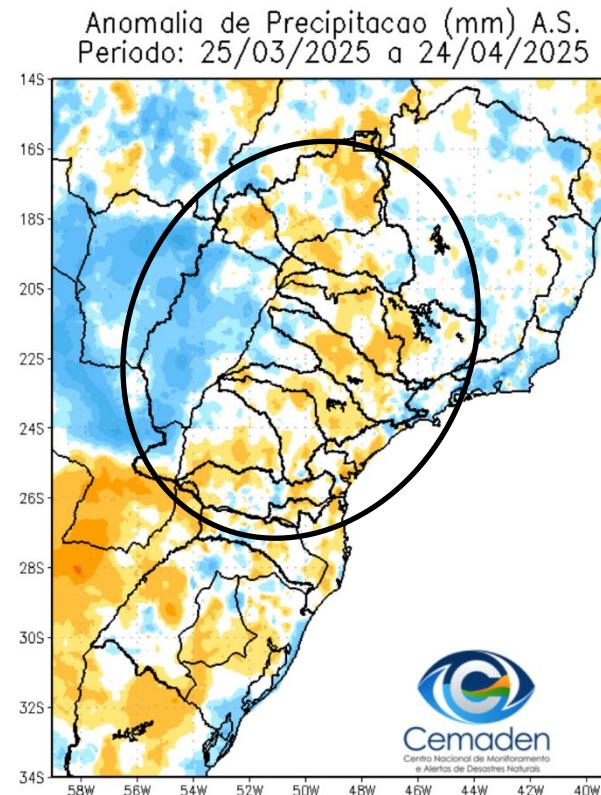
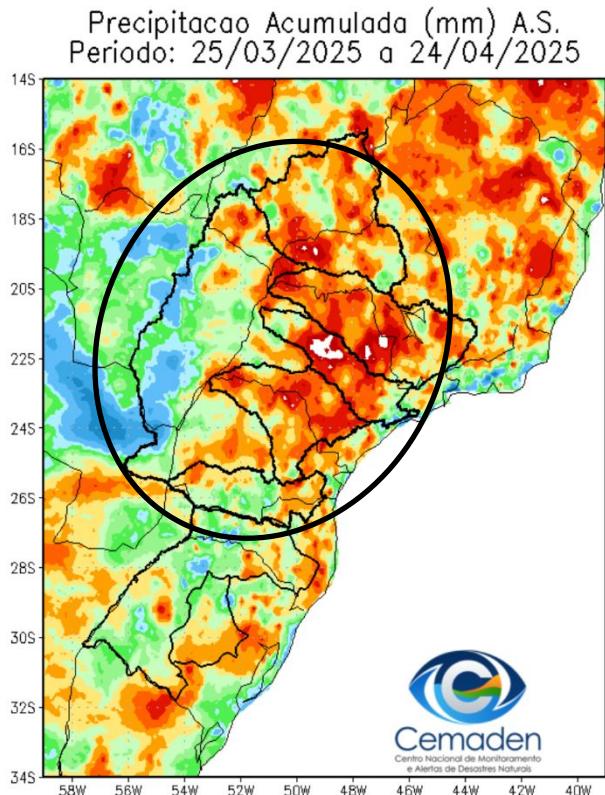
Precipitacao Acumulada (mm) A.S.
Periodo: 24/01/2025 a 24/04/2025



Anomalia de Precipitacao (mm) A.S.
Periodo: 24/01/2025 a 24/04/2025

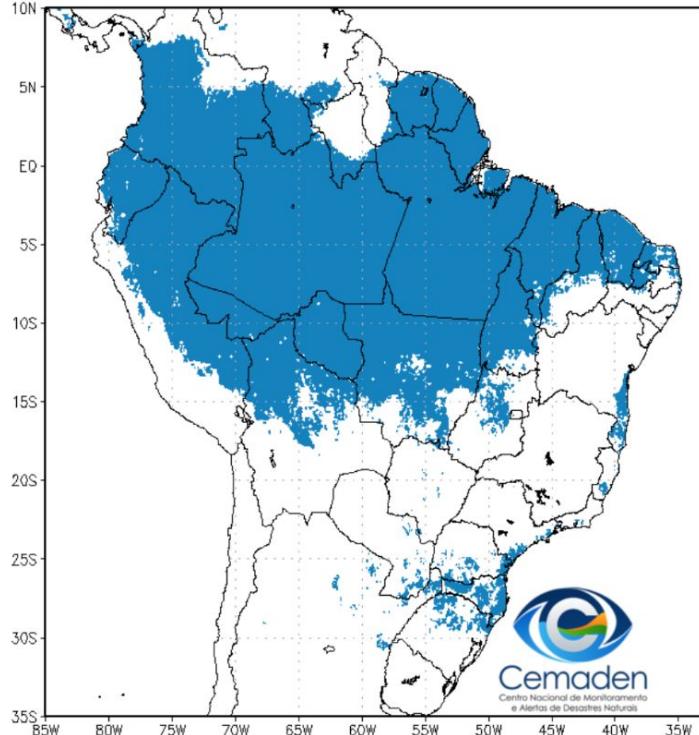


Precipitação acumulada nos últimos 30 dias

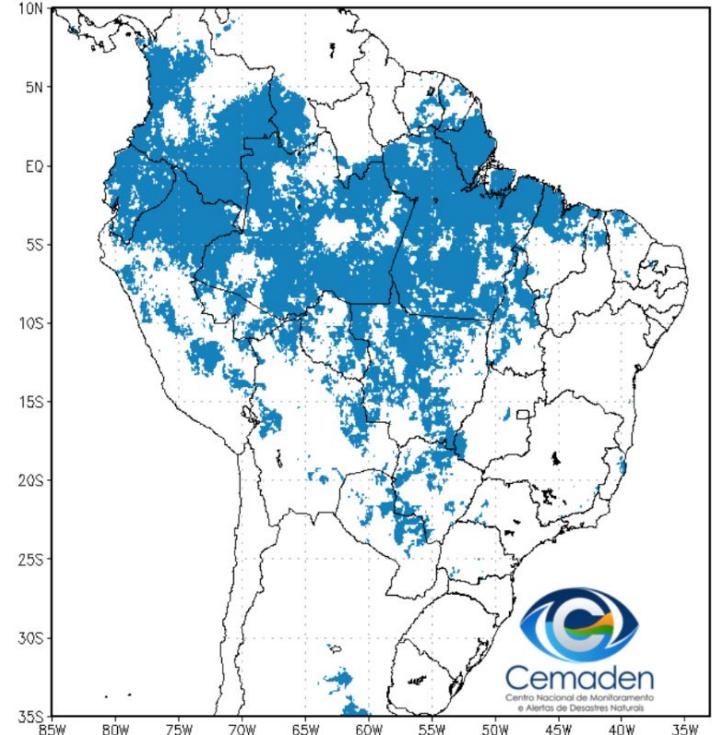


Situação da Estação Chuvosa

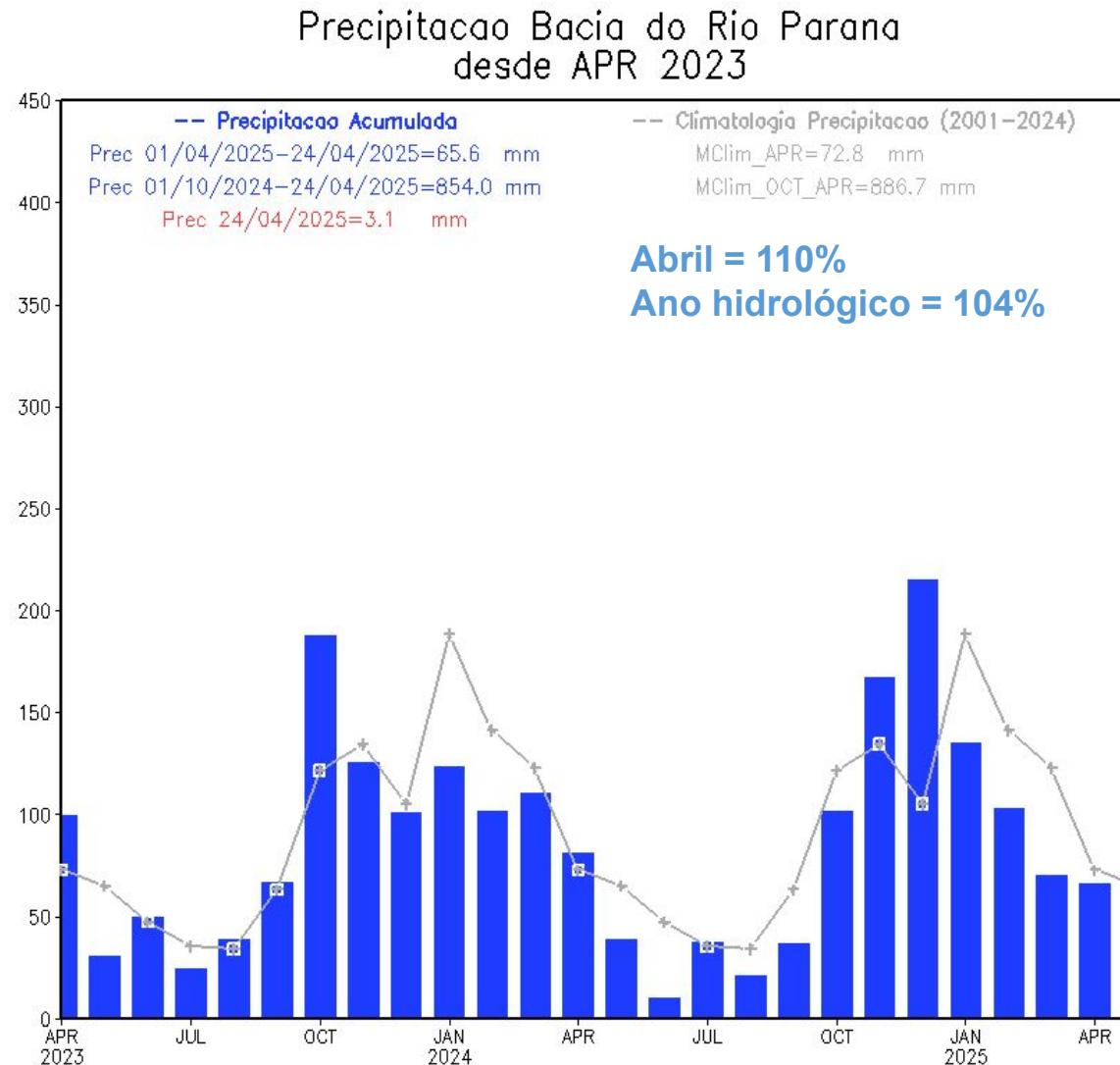
Climatologia da Precipitacao (2001–2024)
Inferior 2 mm/dia por 4 de 5 dias Período: 24/04



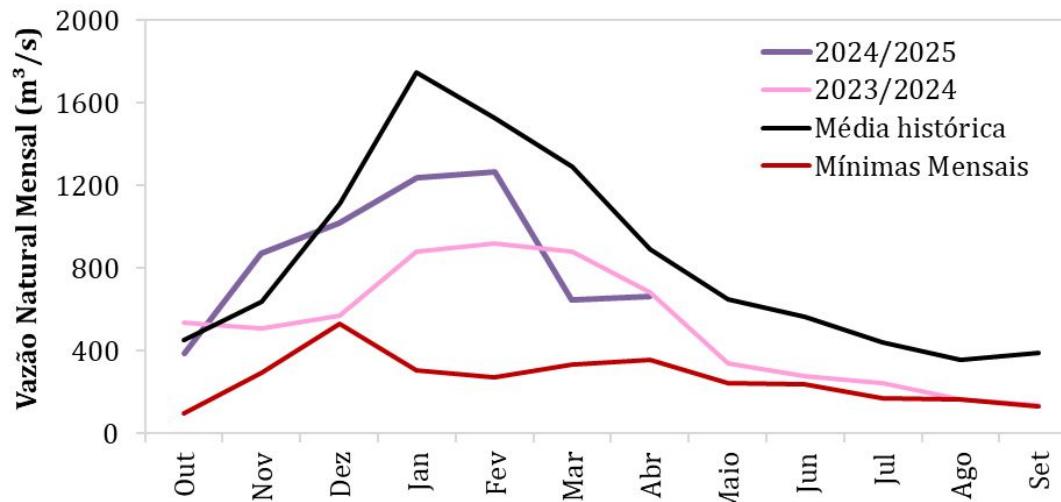
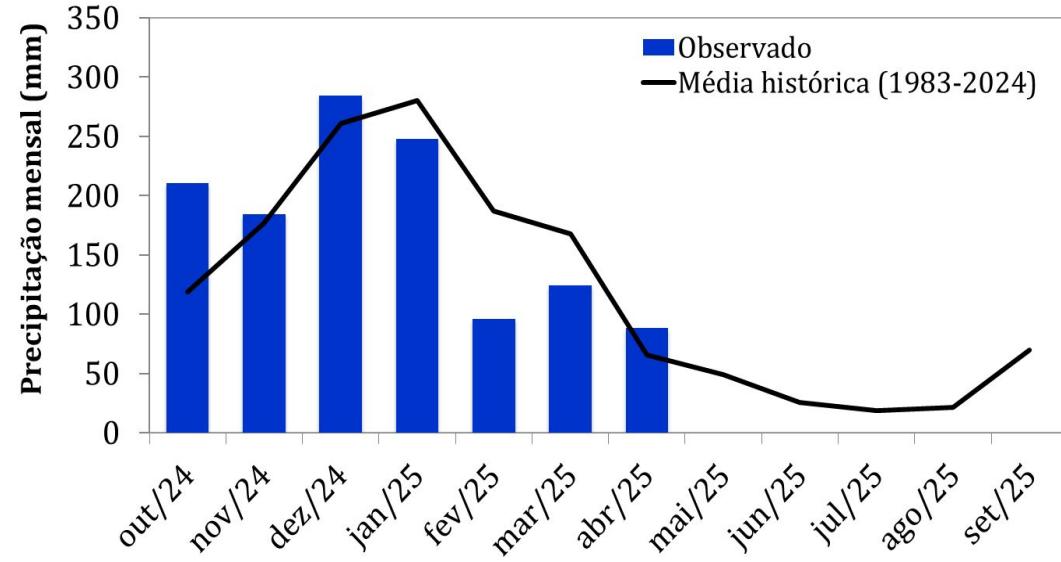
Precipitacao Inferior 2 mm/dia por 4 de 5 dias
Período: 24/04/2025



Precipitação acumulada nos últimos 24 meses



Monitoramento UHE Furnas



Precipitação

Estação Chuvosa - Out a Mar – 1192 mm

2023/2024: 1088 mm (91% da MLT)

2024/2025: 1148 mm (96% da MLT)

Estação Seca - Abr a Set – 250 mm

2023: 224 mm (90% da MLT)

2024: 102 mm (41% da MLT)

Mar/2025: 124 mm (74% da MLT)

Abr/2025*: 88 mm (135% da MLT)

*Até 23/04/2025

Vazão

Estação Chuvosa - Out a Mar – 1130 m³/s

2023/2024: 716 m³/s (63% da MLT)

2024/2025: 906 m³/s (80% da MLT)

Estação Seca - Abr a Set – 551 m³/s

2023: 495 m³/s (108% da MLT)

2024: 309 m³/s (56% da MLT)

Mar/25: 648 m³/s (50% da MLT)

Abr/25**: 663 m³/s (74% da MLT)

23/Abr/25: 596 m³/s (67% da MLT)

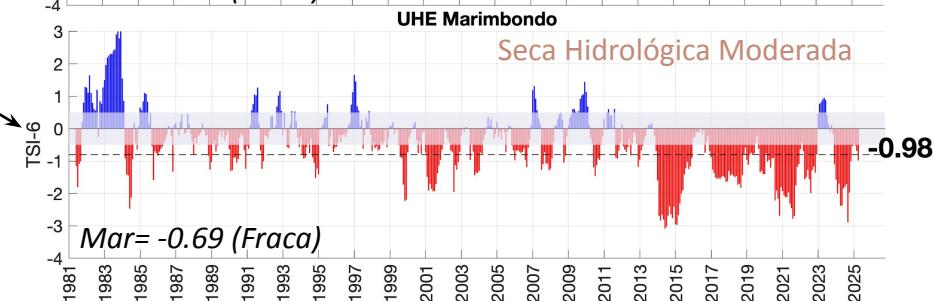
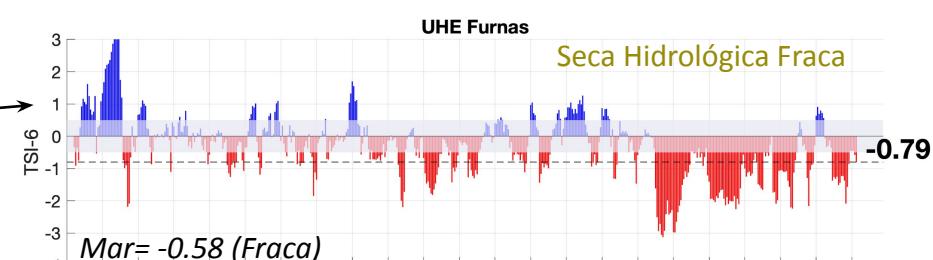
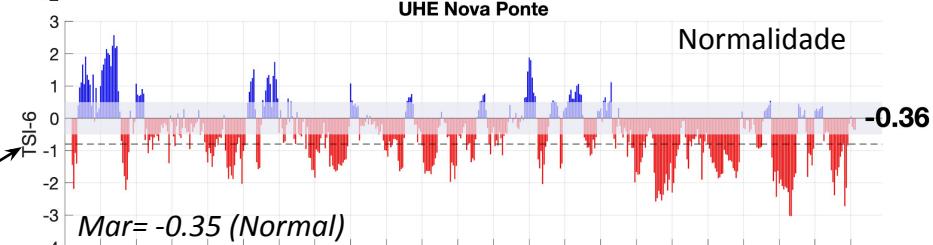
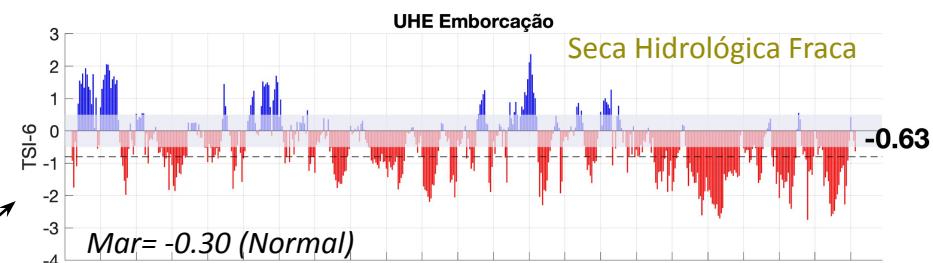
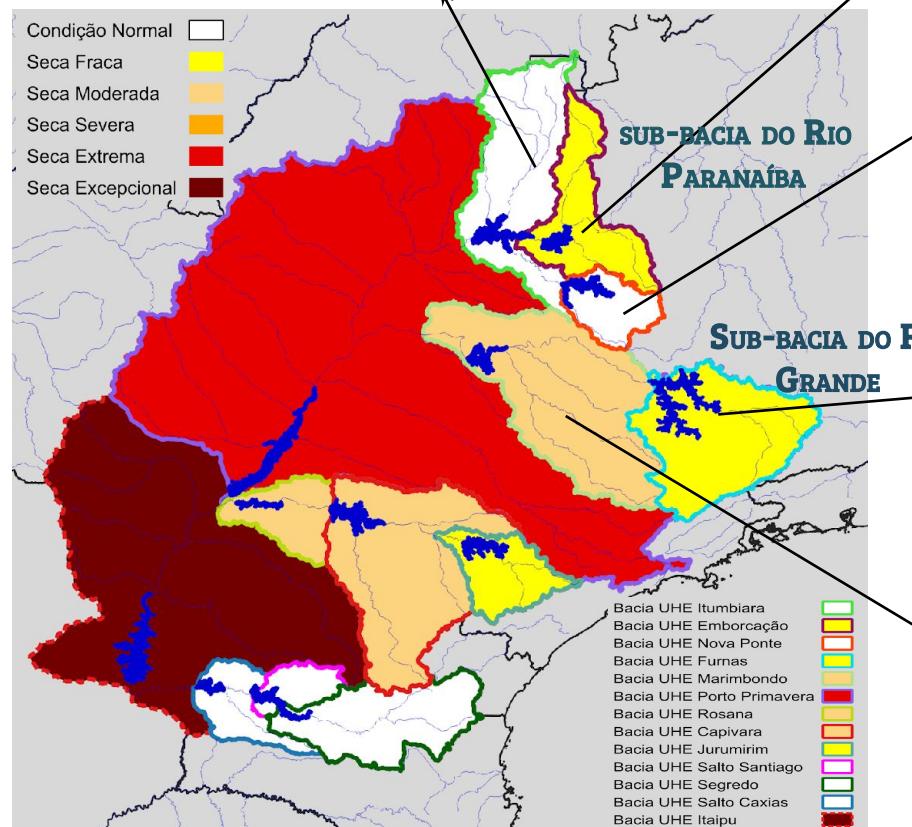
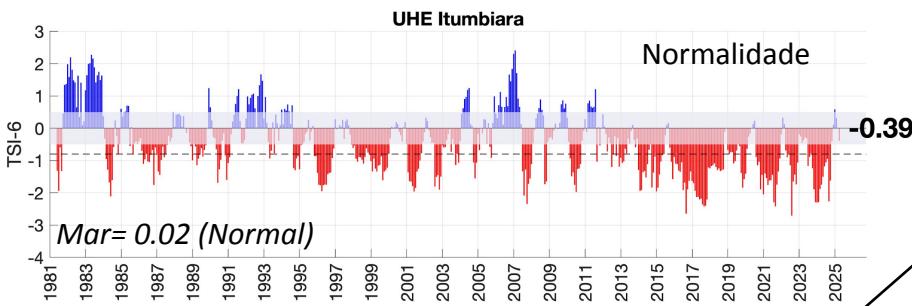
**Até 23/04/2025

Dados de precipitação: INMET, ANA, CEMADEN

Dados de vazão: ONS e ANA

BACIA DO RIO PARANÁ

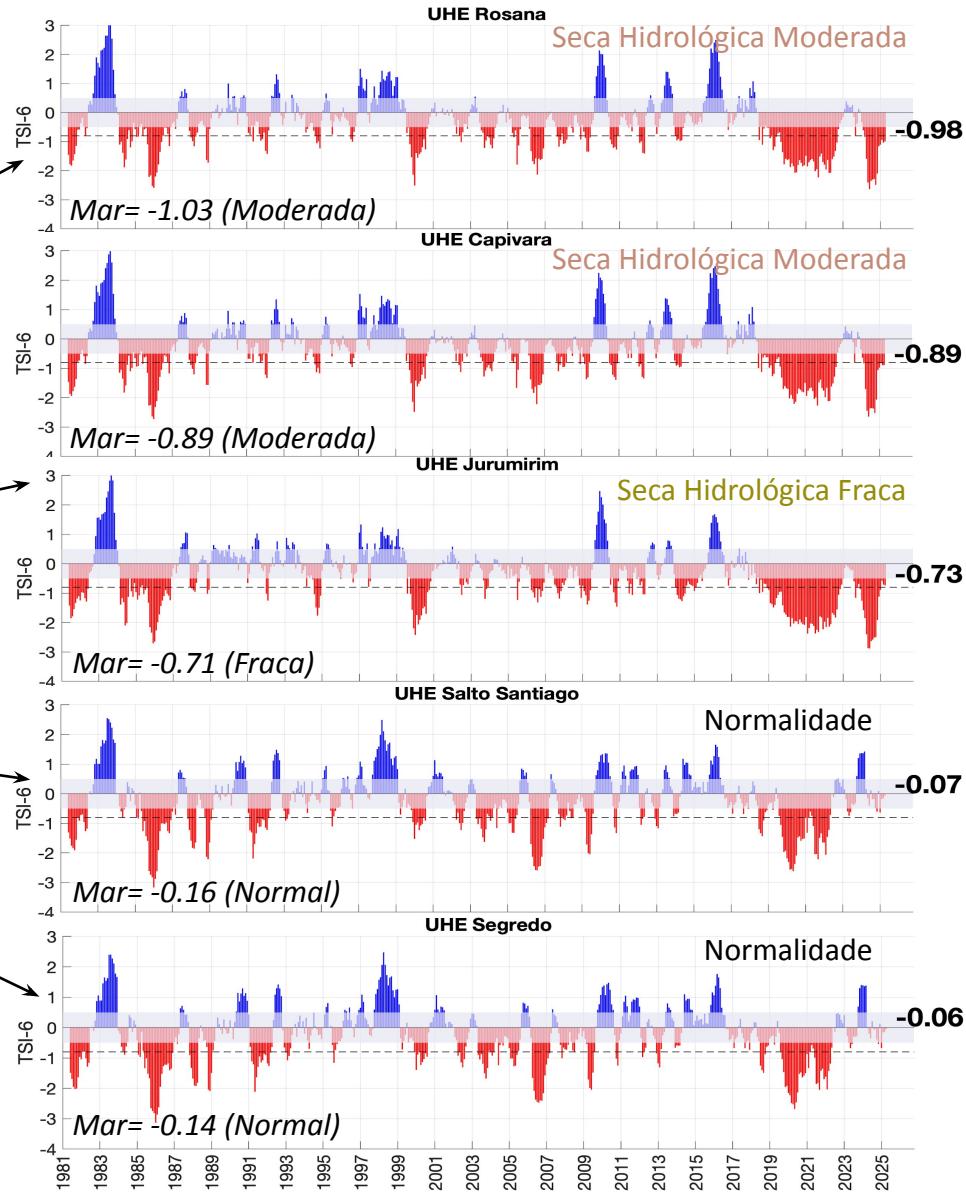
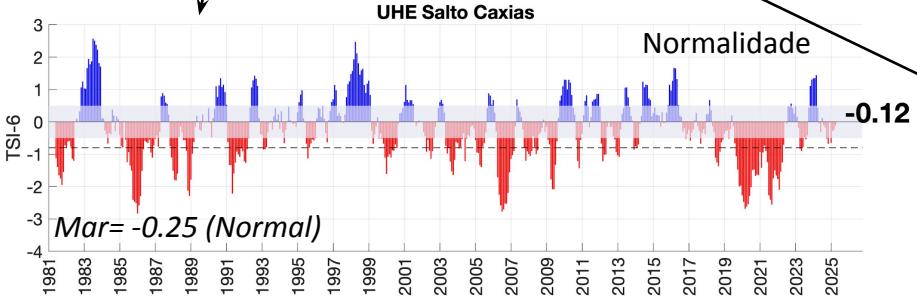
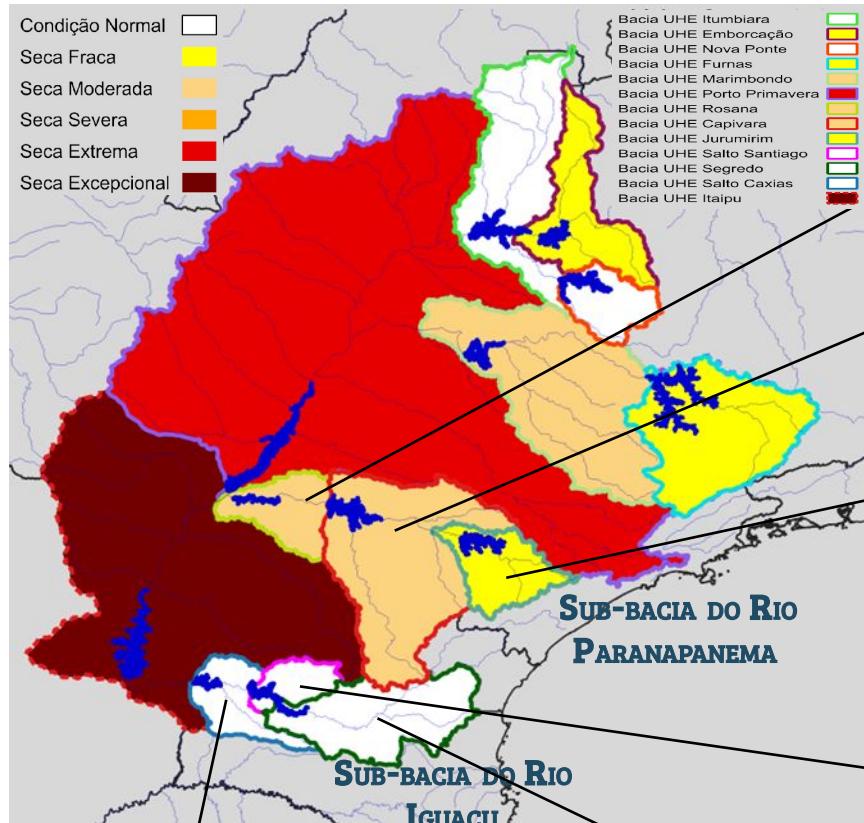
Abril/2025



BACIA DO RIO PARANÁ

Abril/2025

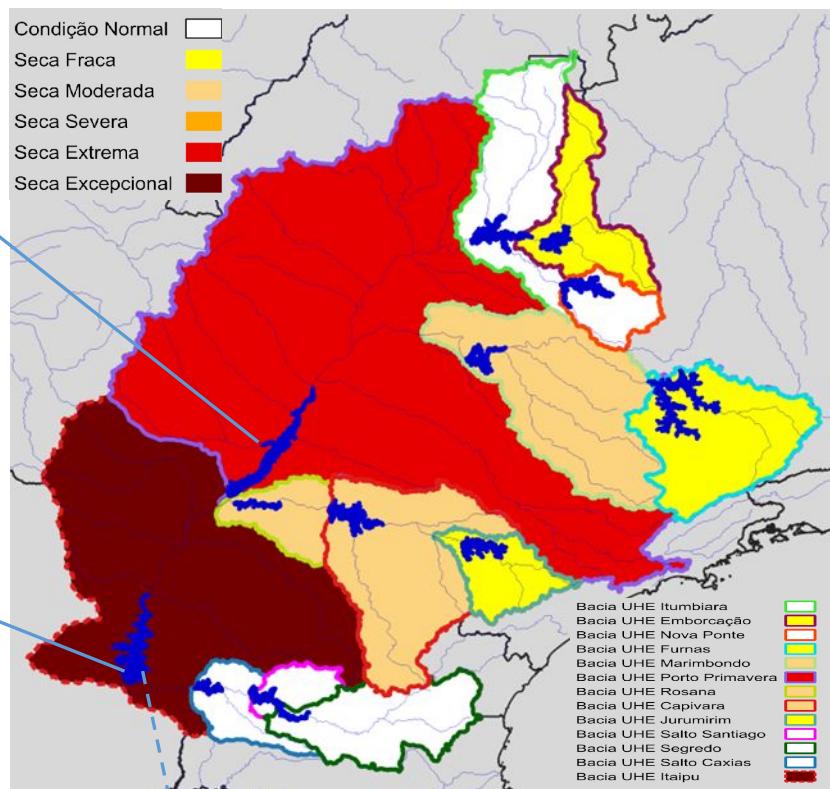
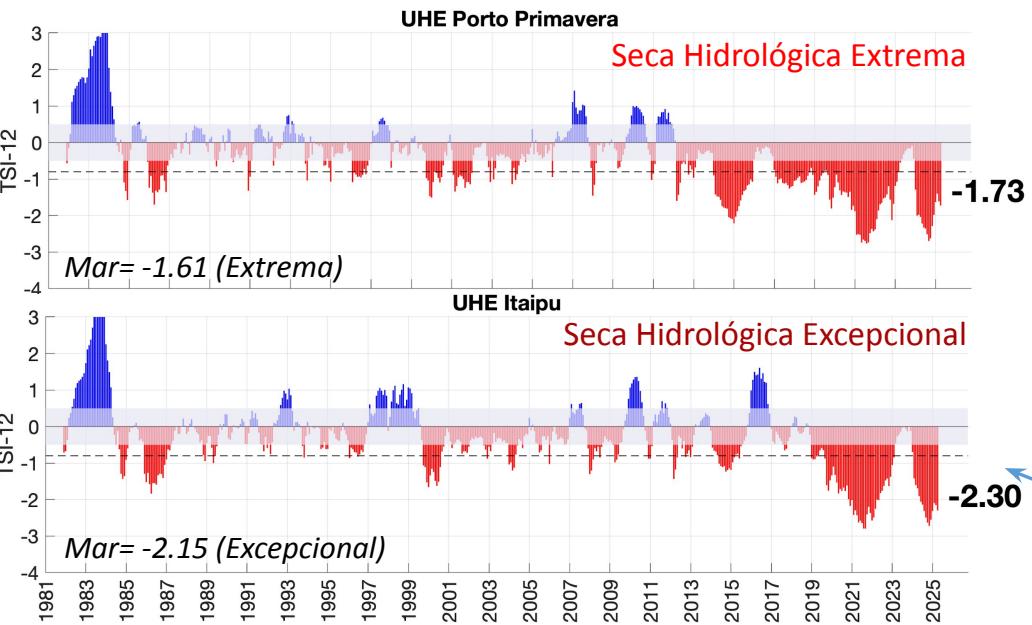
Índice de Seca Bivariado (Chuva-Vazão) – TSI 6



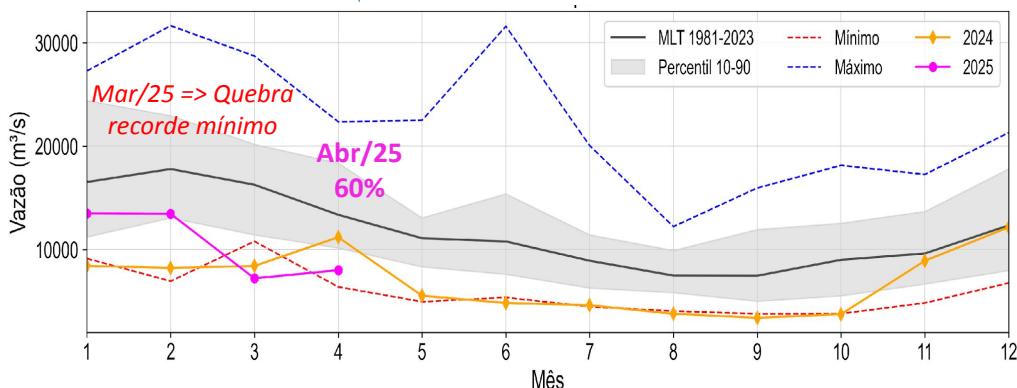
BACIA DO RIO PARANÁ

Abril/2025

Índice de Seca Bivariado (Chuva-Vazão) – TSI 12



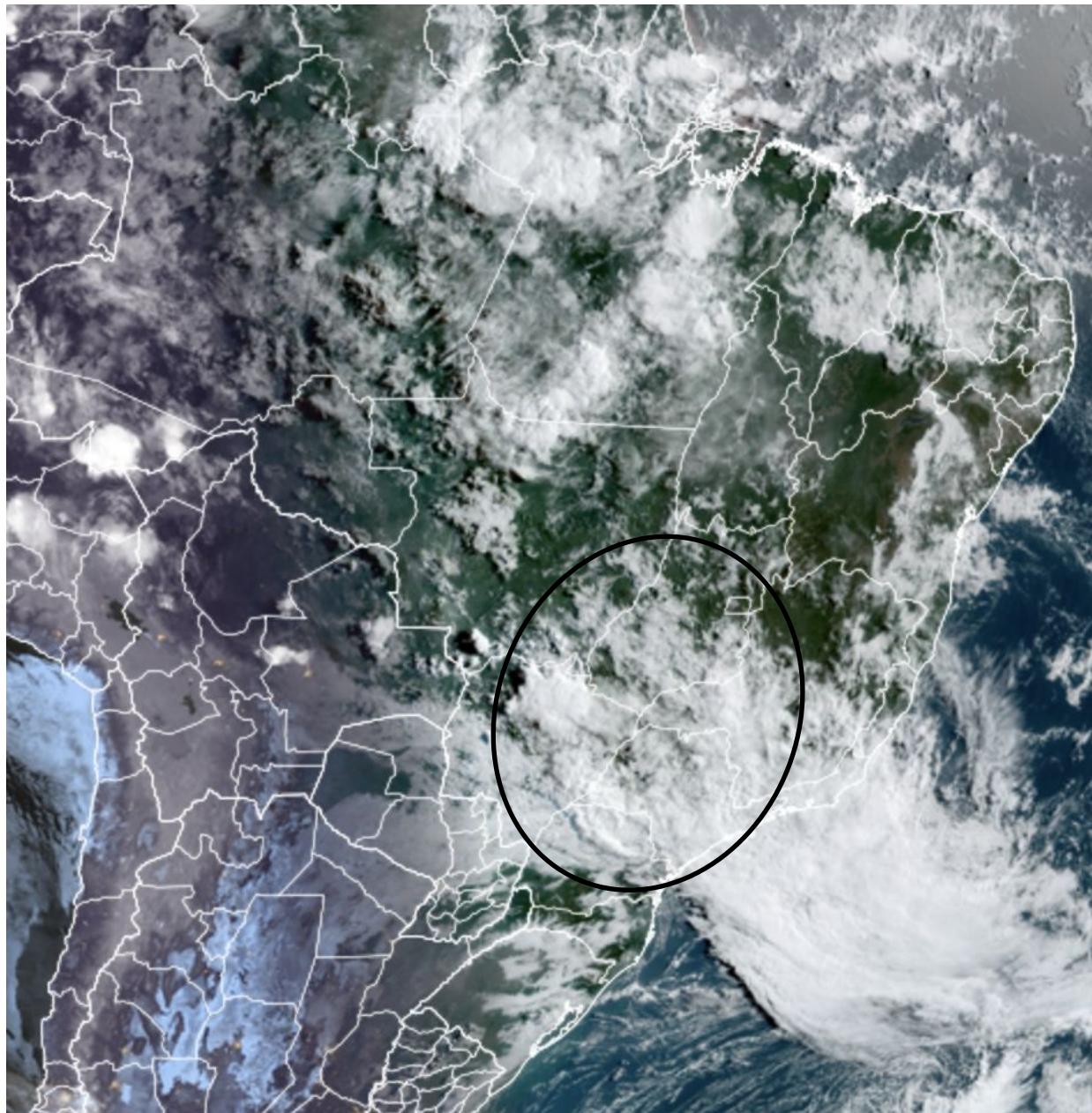
Série de dados = Jan/1981- Abr/2025



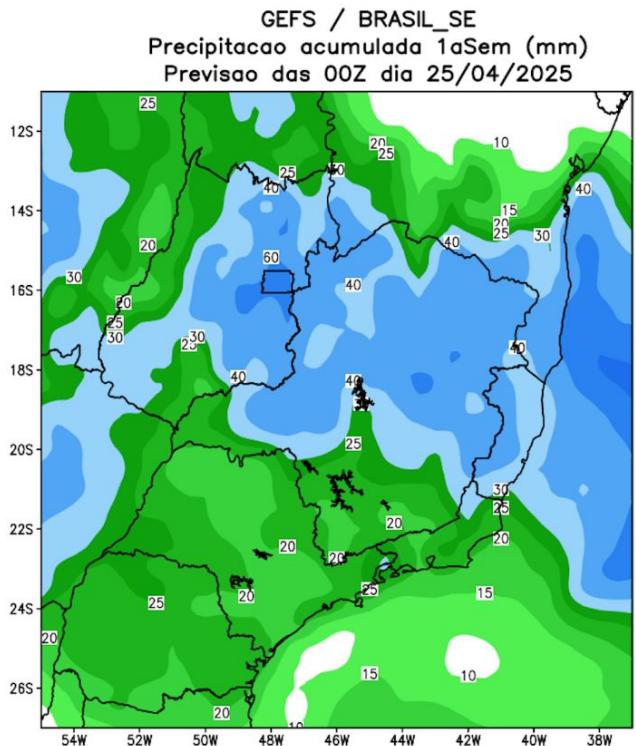
Fonte: CEMADEN/MCTI

Dados: Precipitação (CHIRPS) e Vazão (ONS e ANA)

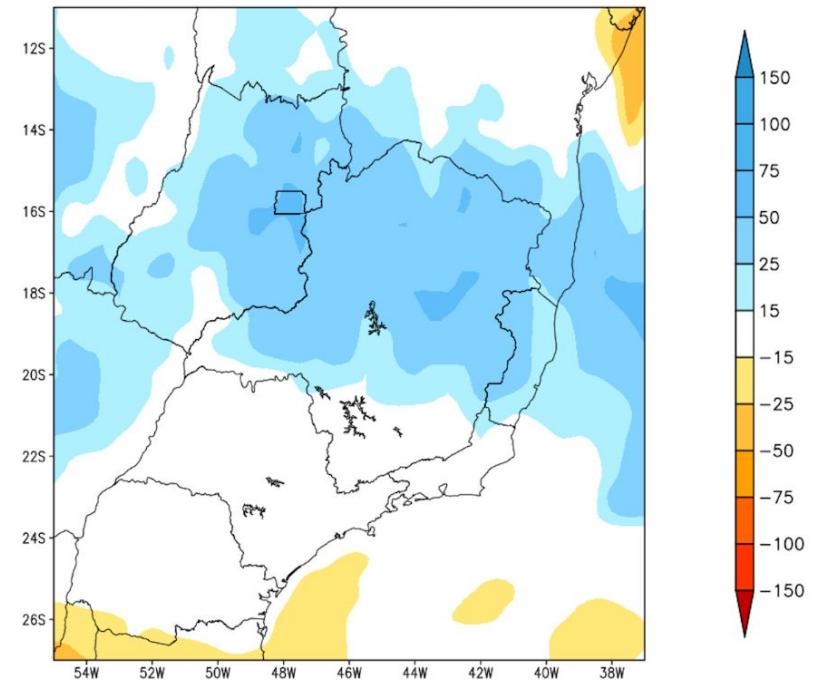
Situação meteorológica atual



Previsão de chuva para os próximos 7 dias

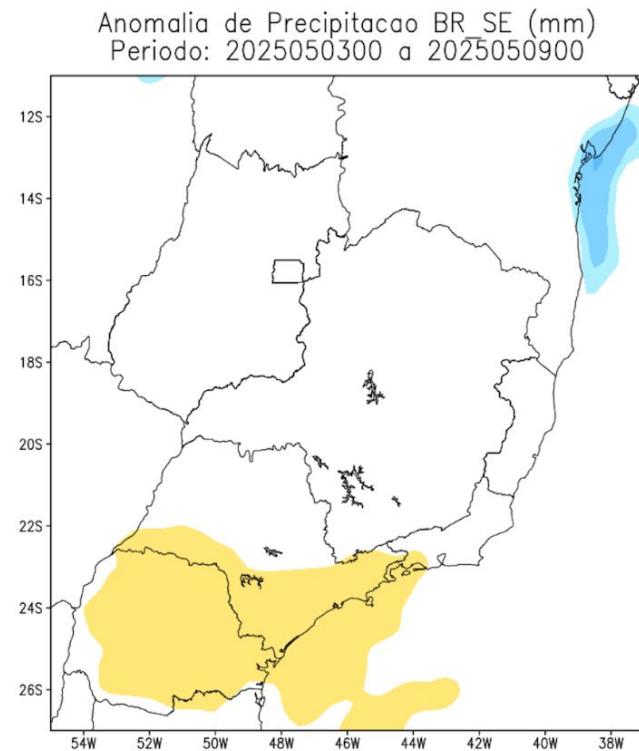
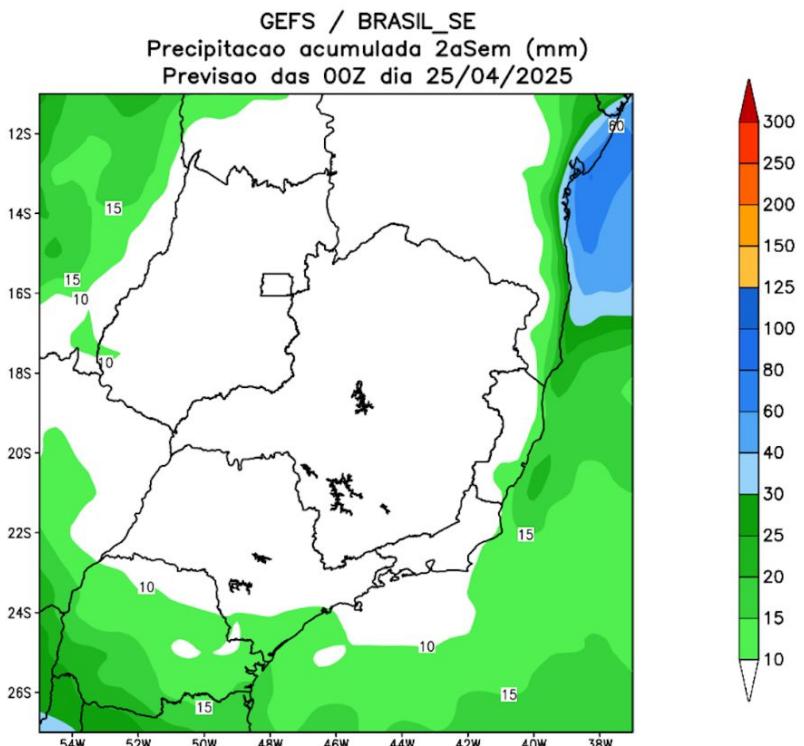


Anomalia de Precipitacao BR SE (mm)
Periodo: 2025042500 a 2025050200



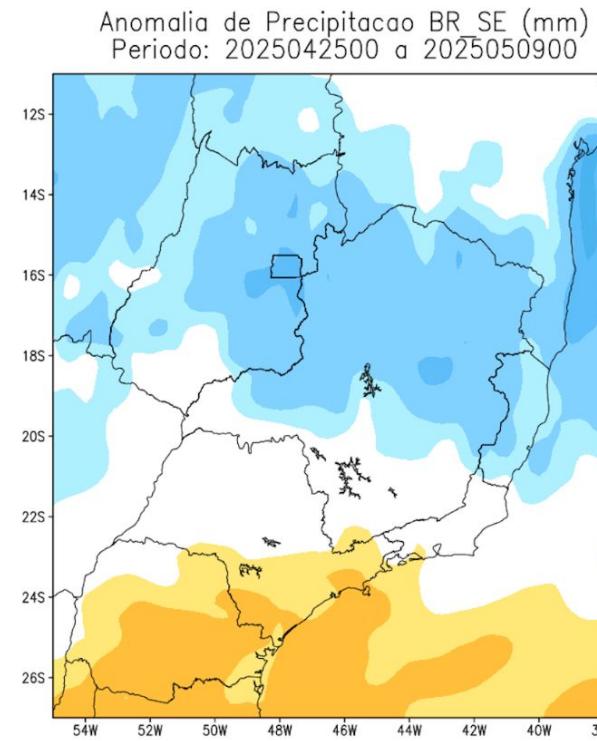
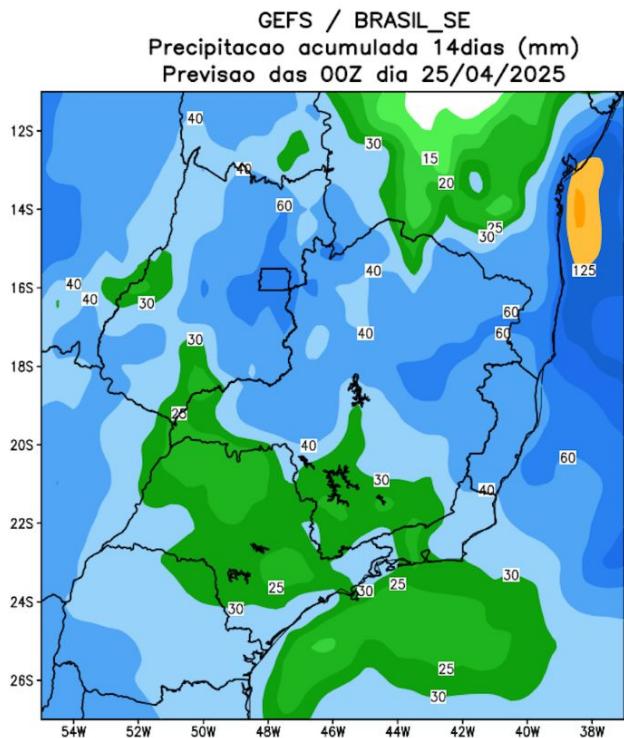
Fonte: GEFS/NOAA

Tendência para a 2ª Semana

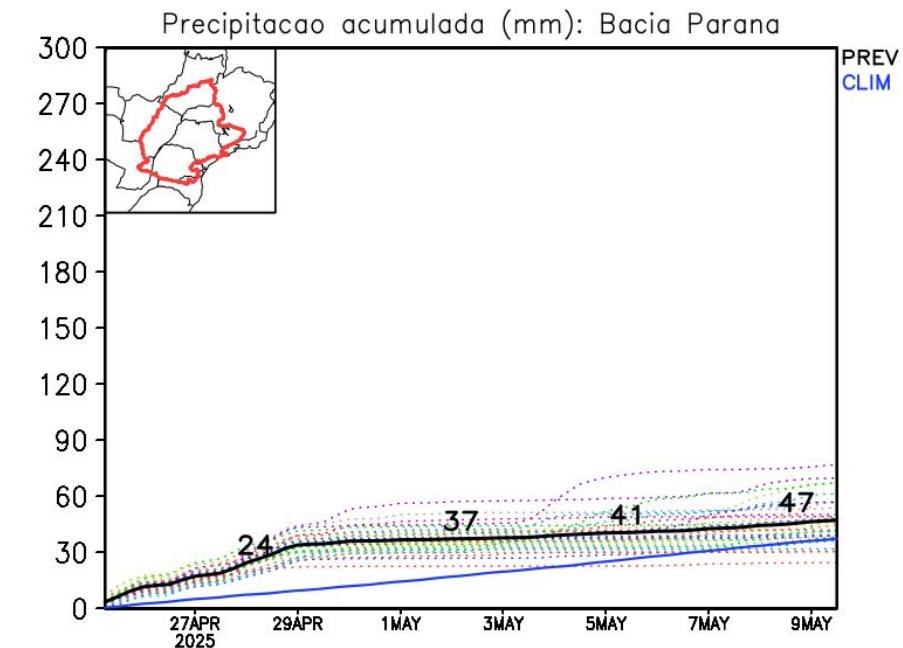
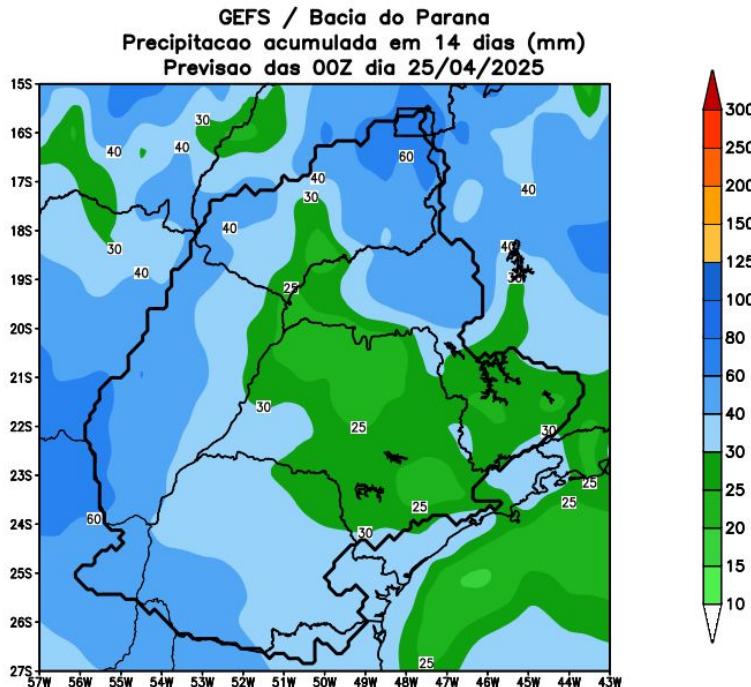


Fonte: GEFS/NOAA

Acumulado para as duas próximas semanas

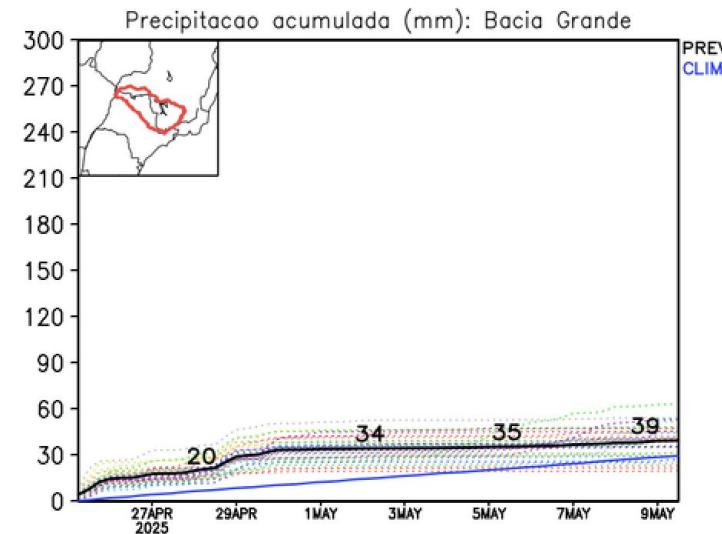
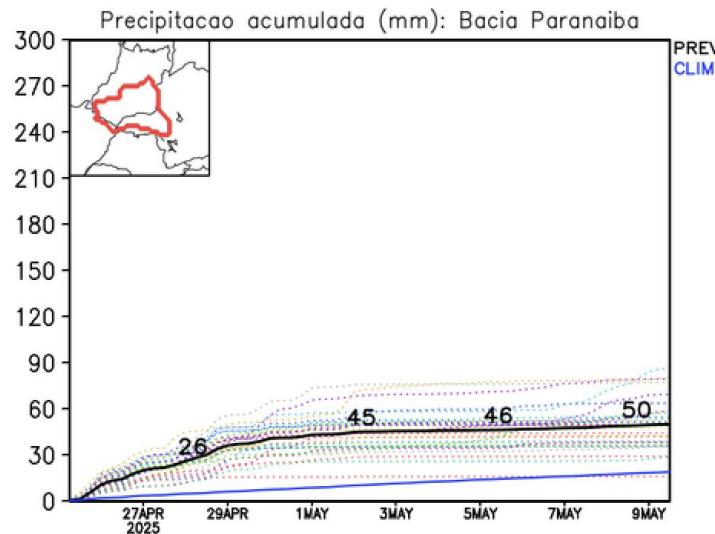
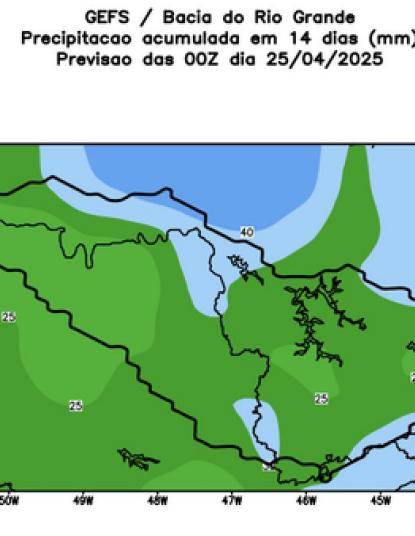
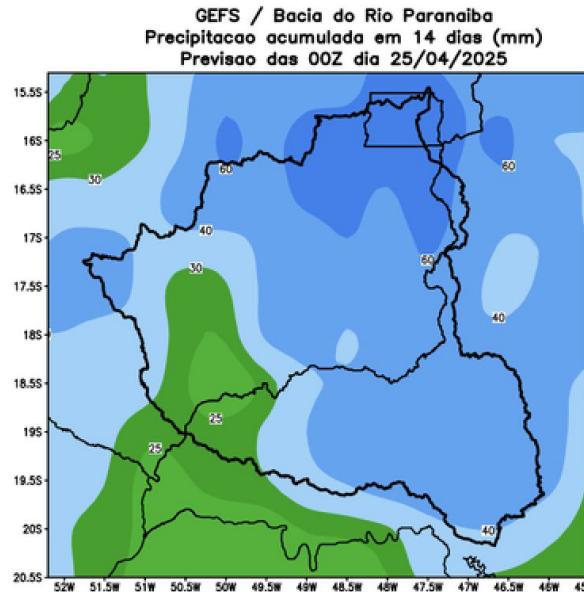


Previsão de chuva para os próximos 7 dias

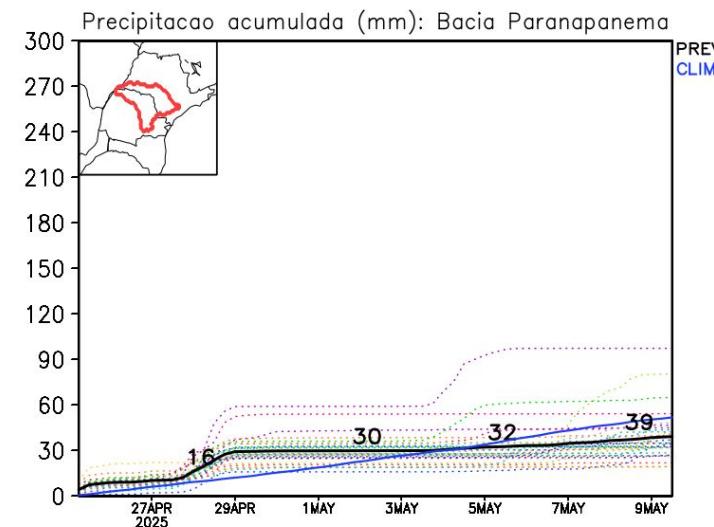
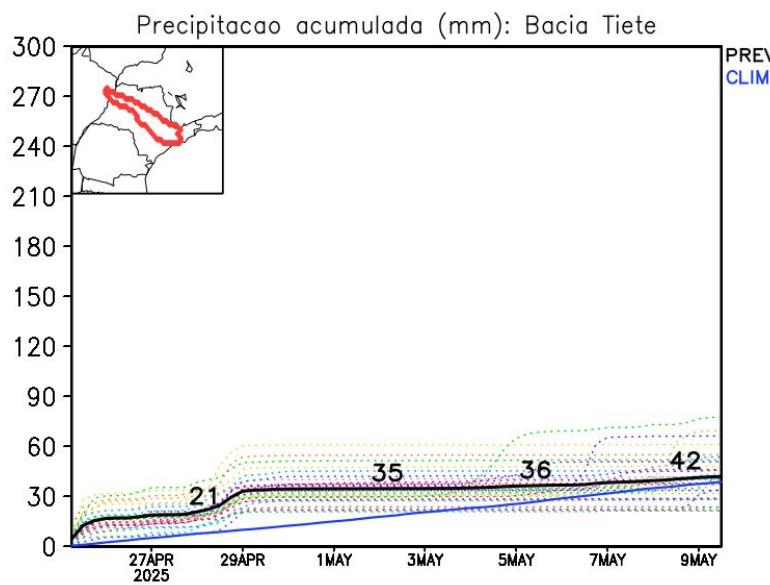
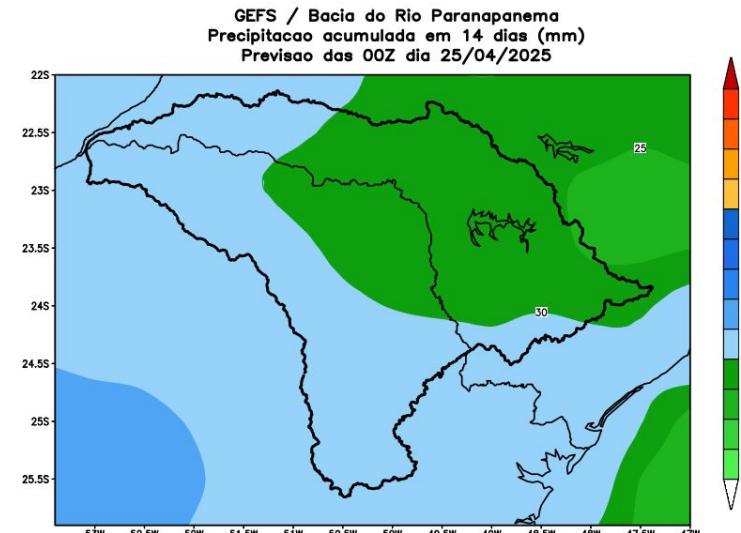
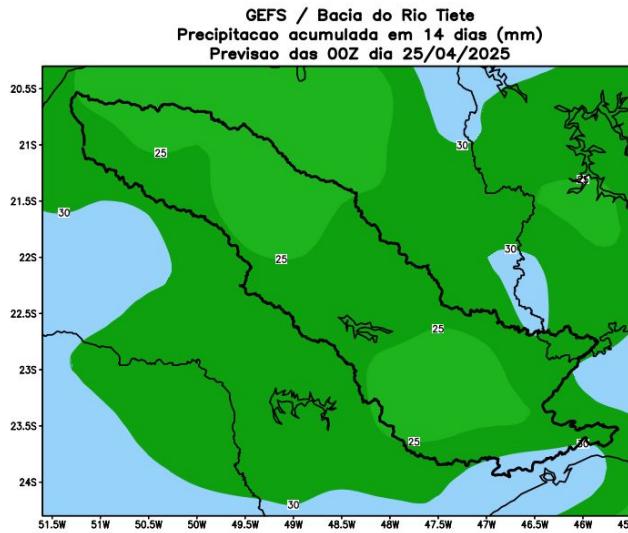


Fonte: GEFS/NOAA

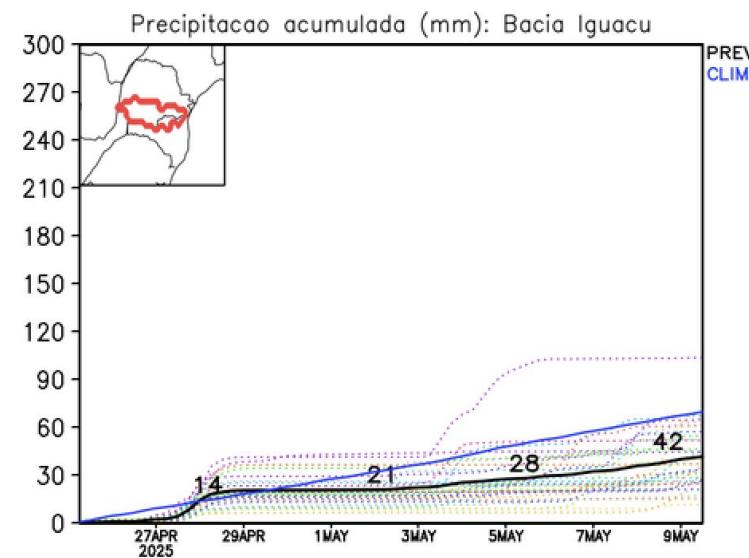
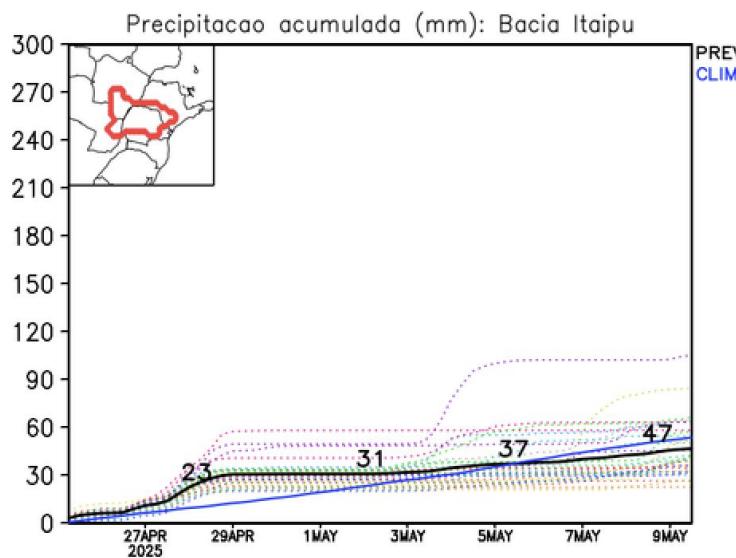
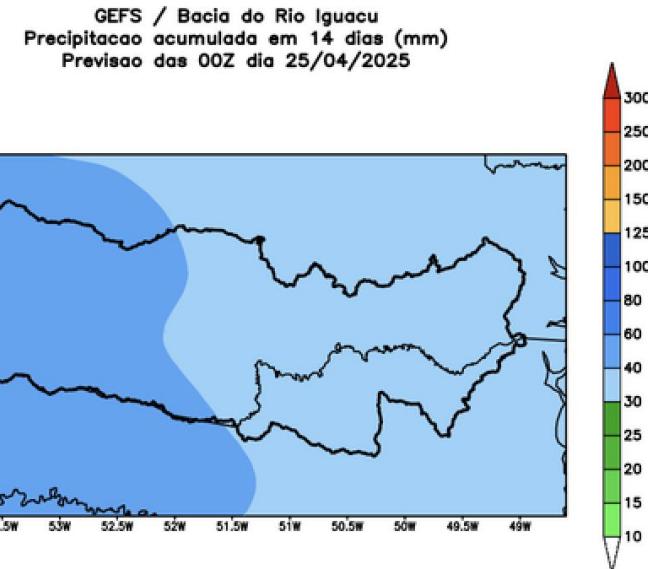
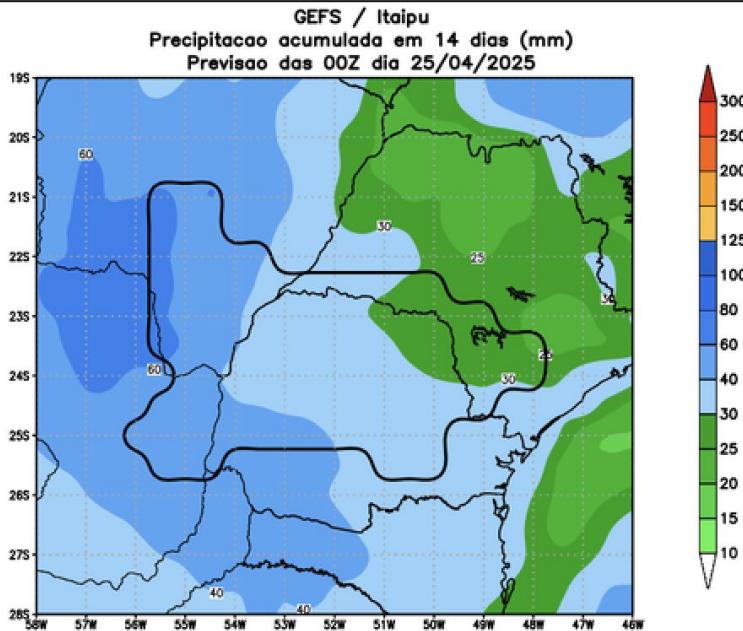
Bacia do rios Paranaíba e Grande



Bacia do rios Tietê e Paranapanema

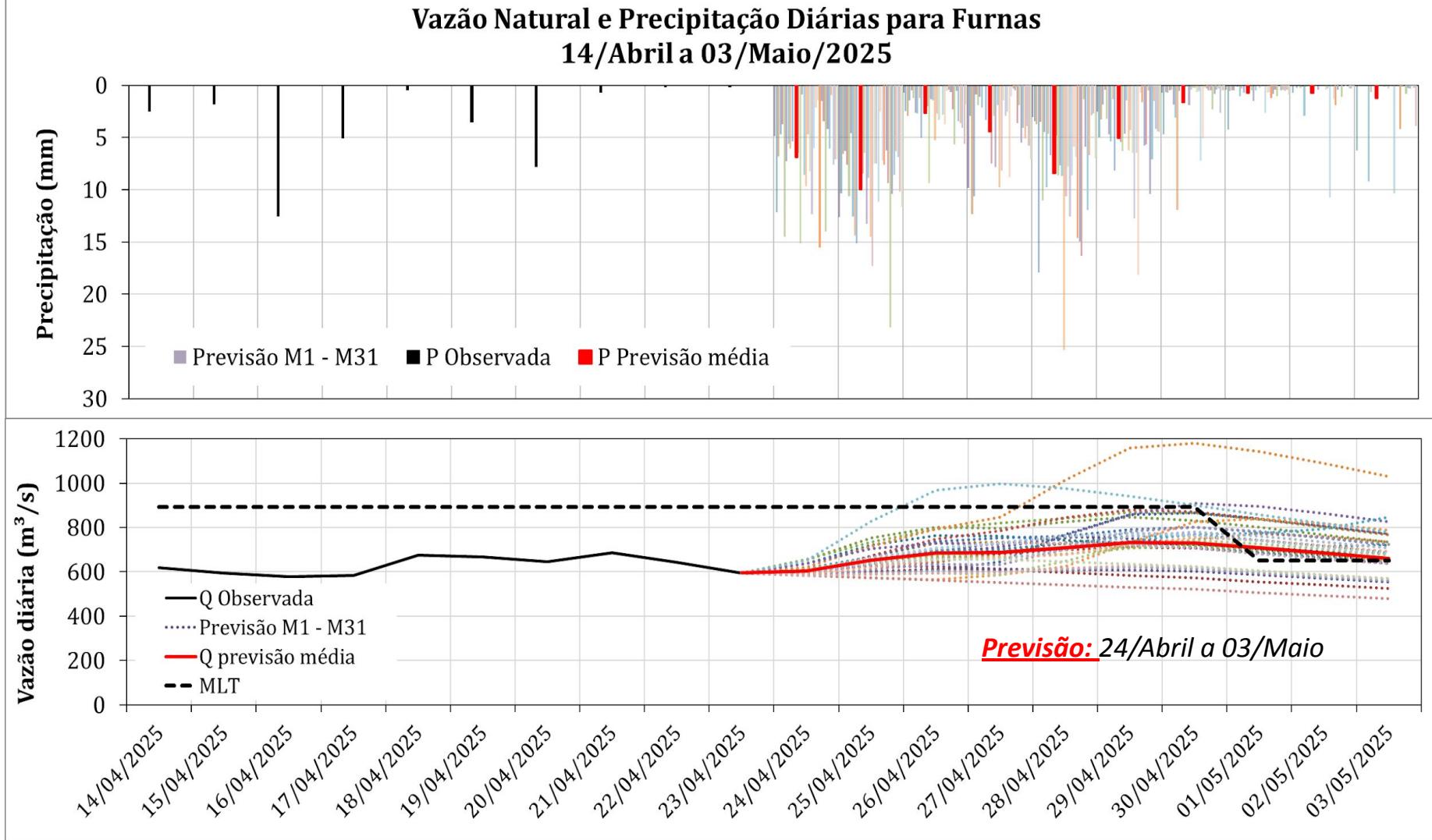


Bacia do Itaipu e Iguaçu



Furnas: Previsão de Vazão (modelo hidrológico PDM-CEMADEN)

Vazão Natural e Precipitação Diárias para Furnas
14/Abril a 03/Maio/2025



Previsão média para os próximos 10 dias: 686 m^3/s

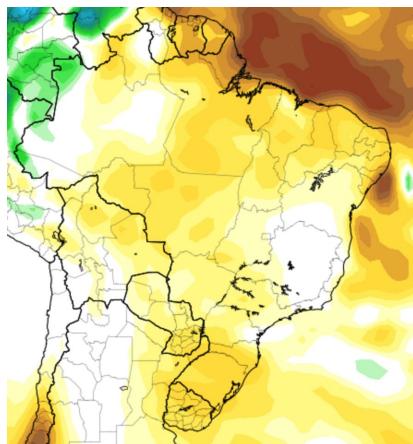
(MLT Abr= $894 \text{ m}^3/\text{s}$; MLT Maio = $650 \text{ m}^3/\text{s}$)

Anomalia de Chuva

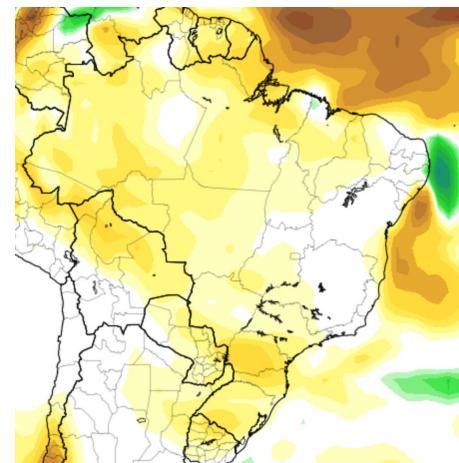
3a e 4a semanas

CFS/NOAA

08-14 Maio



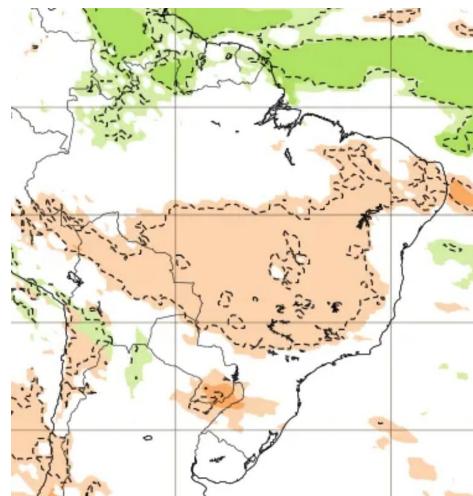
15-21 Maio



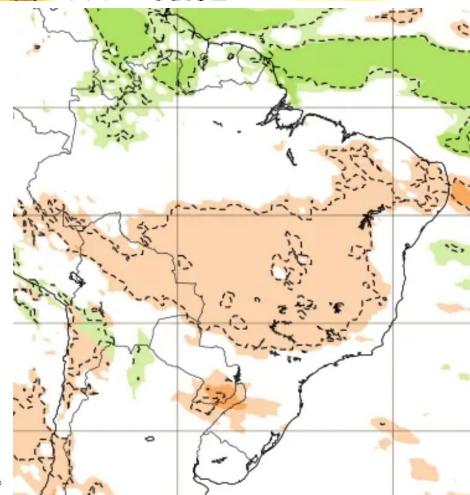
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ECMWF

12-18 Maio



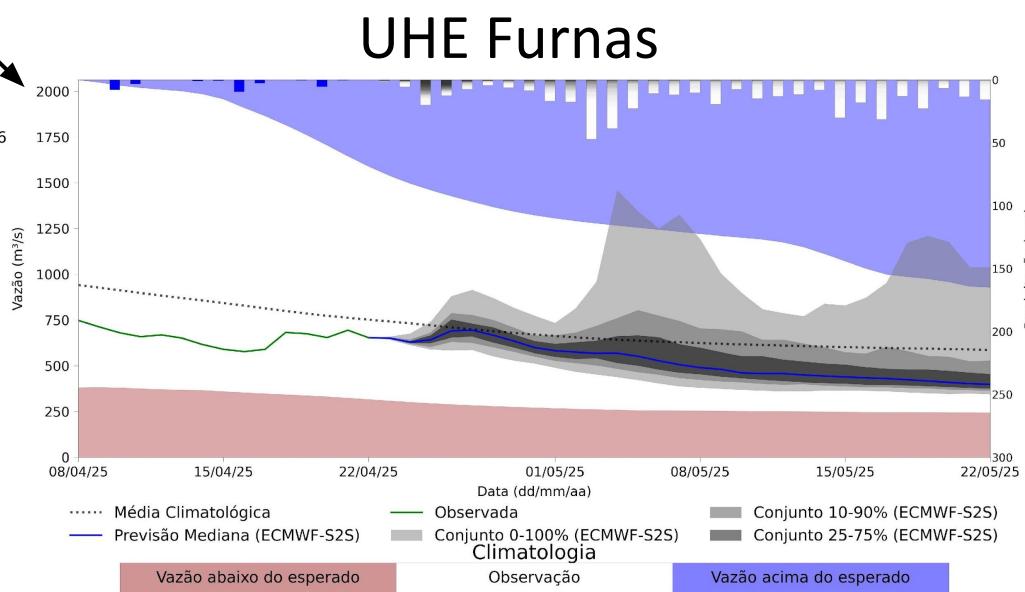
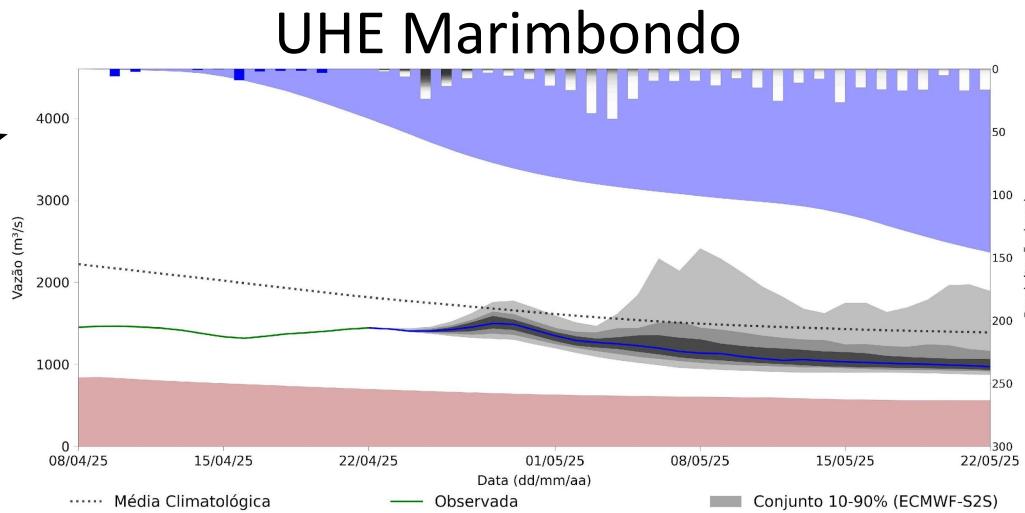
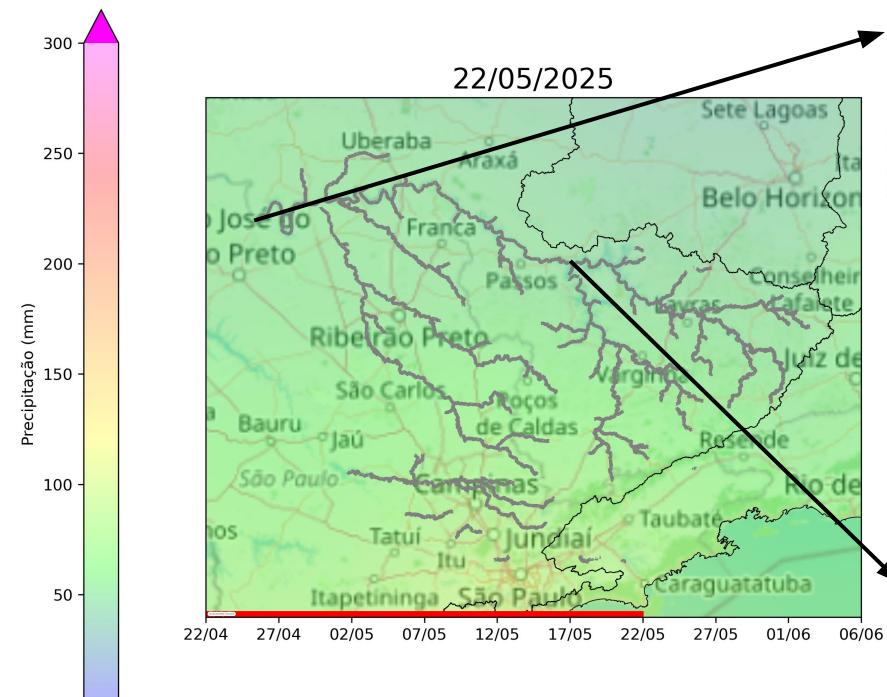
19-25 Maio



CFSv2 Accumulated Precip. Anomaly (mm)

Previsão de vazão natural na Bacia do Rio Grande 30 dias (Modelo hidrológico MHD)

PREVISÃO: 22/04/25 a 22/05/25



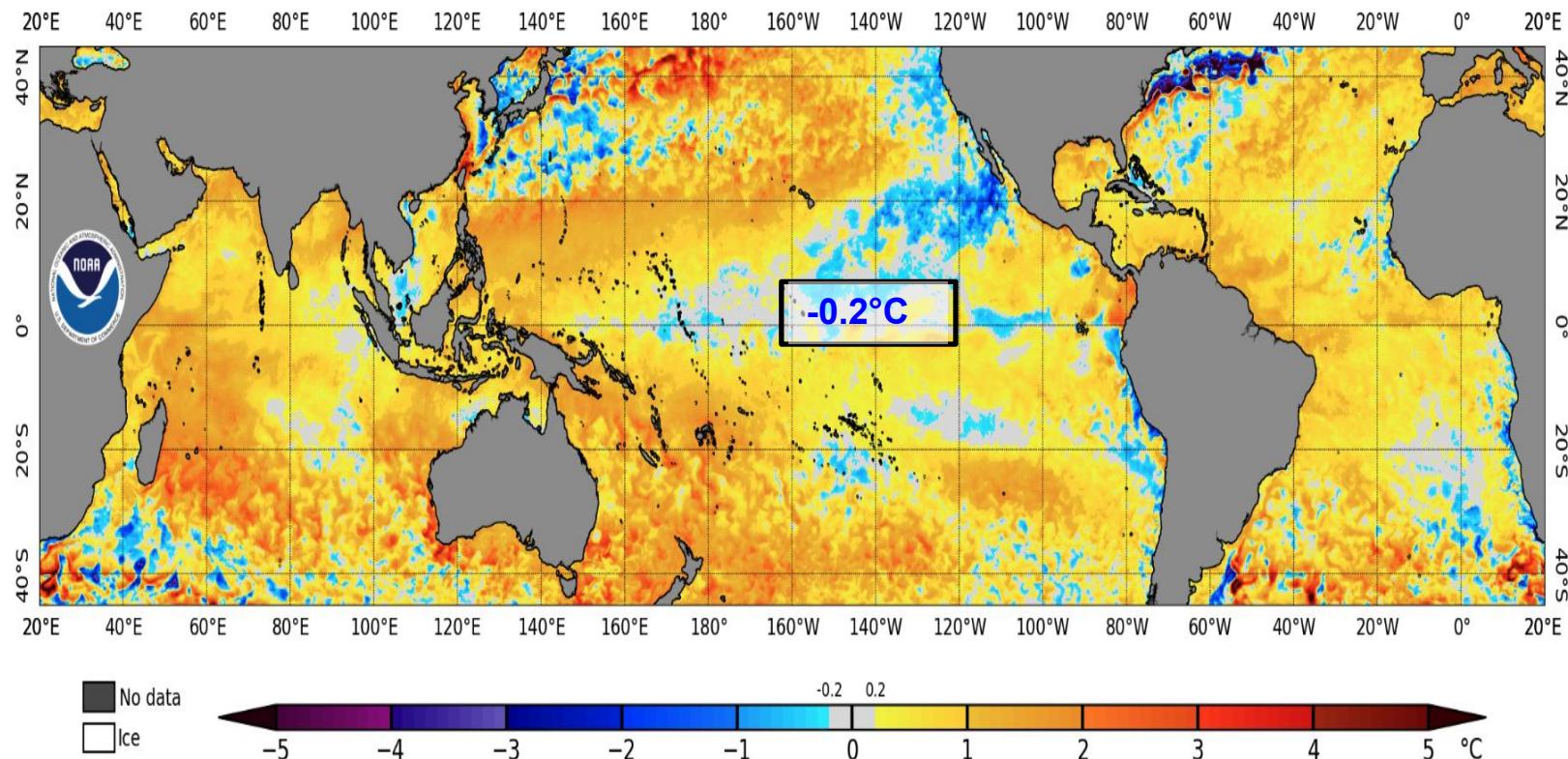
Fonte: Meteorologia (INMET/MERGE); Vazão (ANA/ONS)

MLT: 1993-2023

Previsão Meteorológica: ECMWF-S2S

Status Atual: Neutralidade

NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 23 Apr 2025



Previsão do “ENSO”

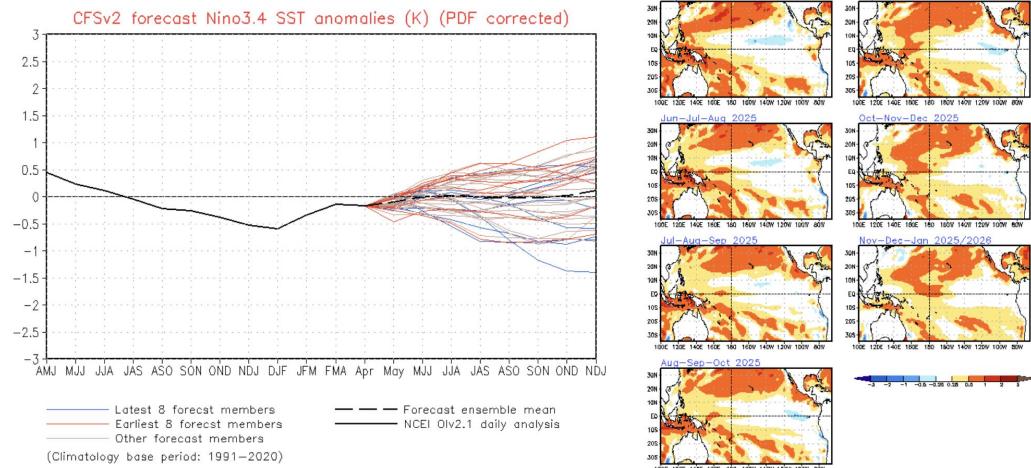
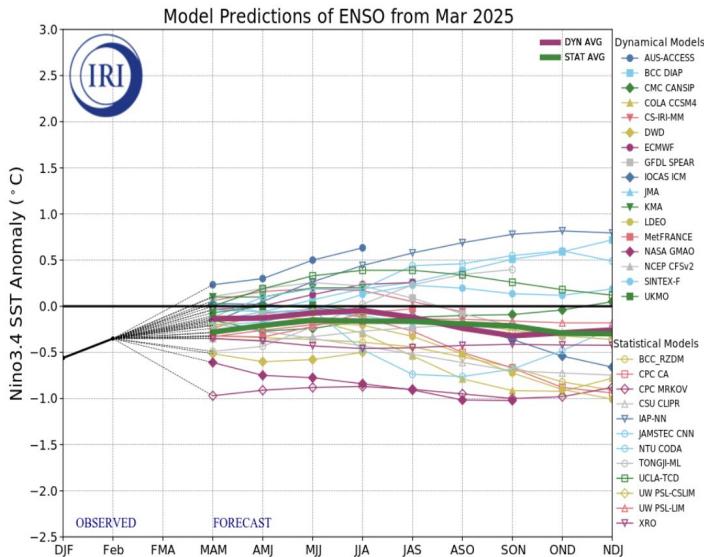
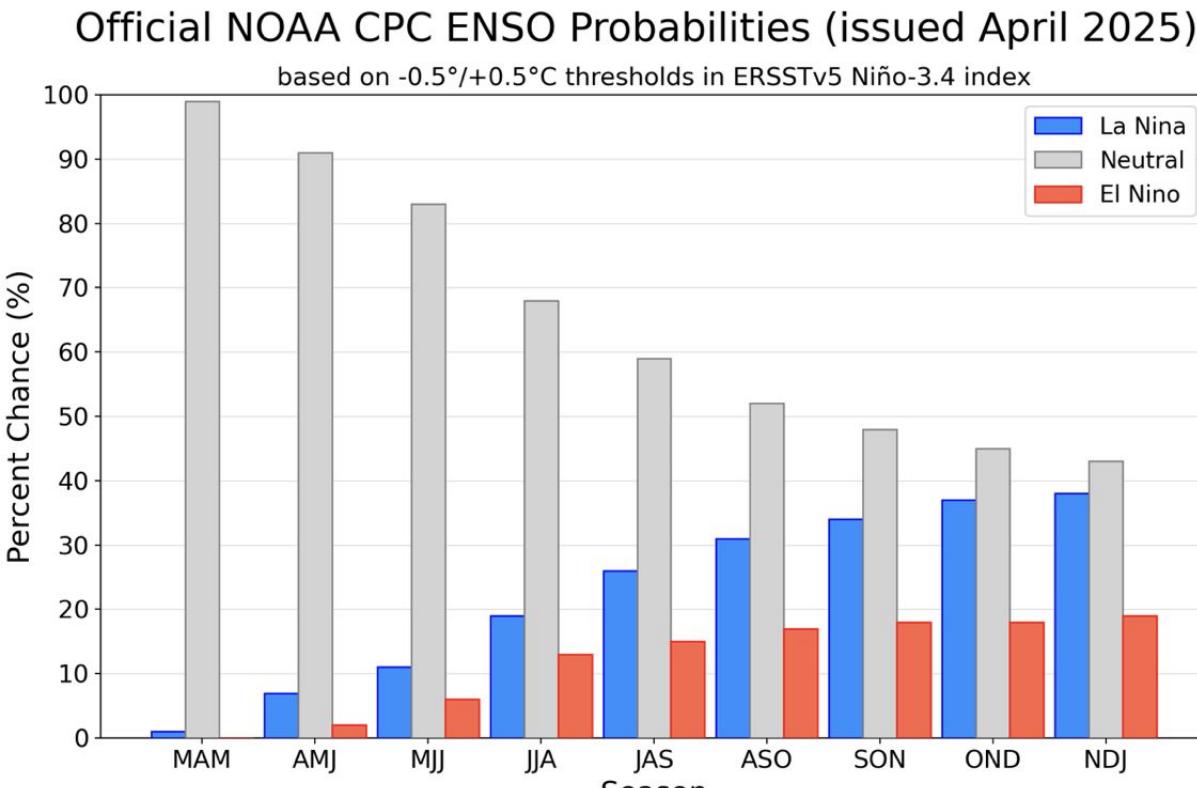


Figure provided by the International Research Institute (IRI) for Climate and Society (updated 19 March 2025).

Atualizado em 20 de Abril

Previsão do “ENSO”



Previsão Sazonal de Chuva Multi-Modelo

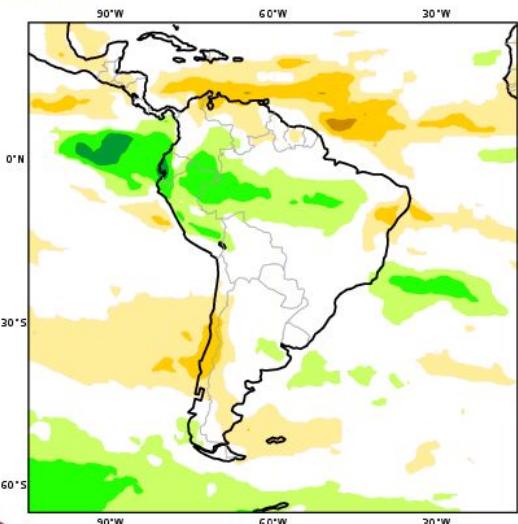
Maio-Junho-Julho

C3S multi-system seasonal forecast

Prob(most likely category of precipitation)

Nominal forecast start: 01/04/25

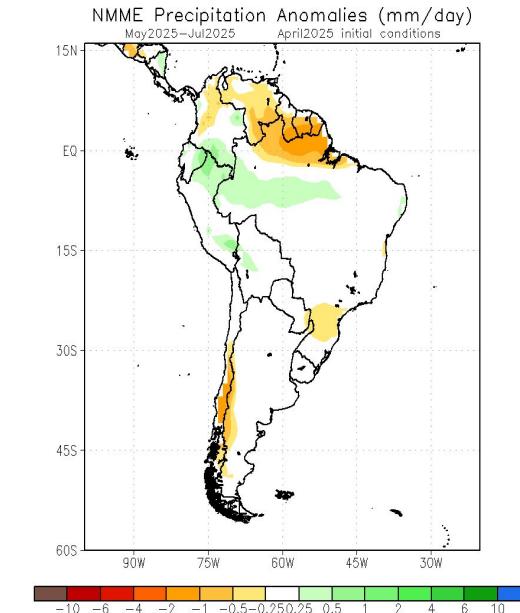
Unweighted mean



Climate
Change Service
climate.copernicus.eu

Modelos Europeus

MJJ 2025

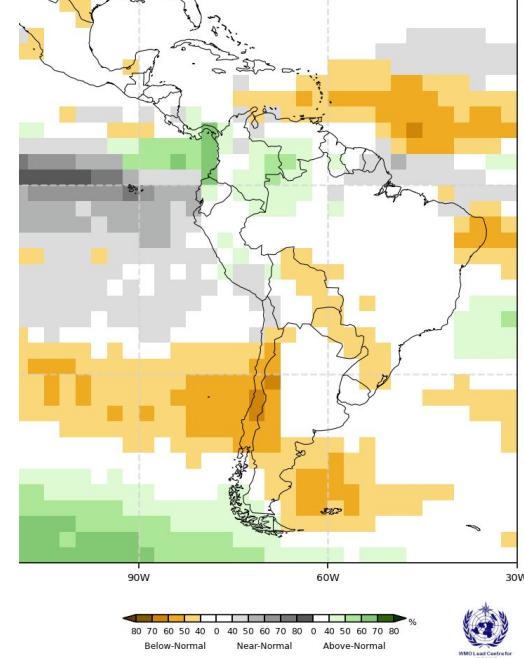


Probabilistic Multi-Model Ensemble Forecast

CMCC,CPTEC,ECMWF,Exeter,Melbourne,Montreal,Offenbach,Seoul,Tokyo,Toulouse,Washington

precipitation : MJJ2025

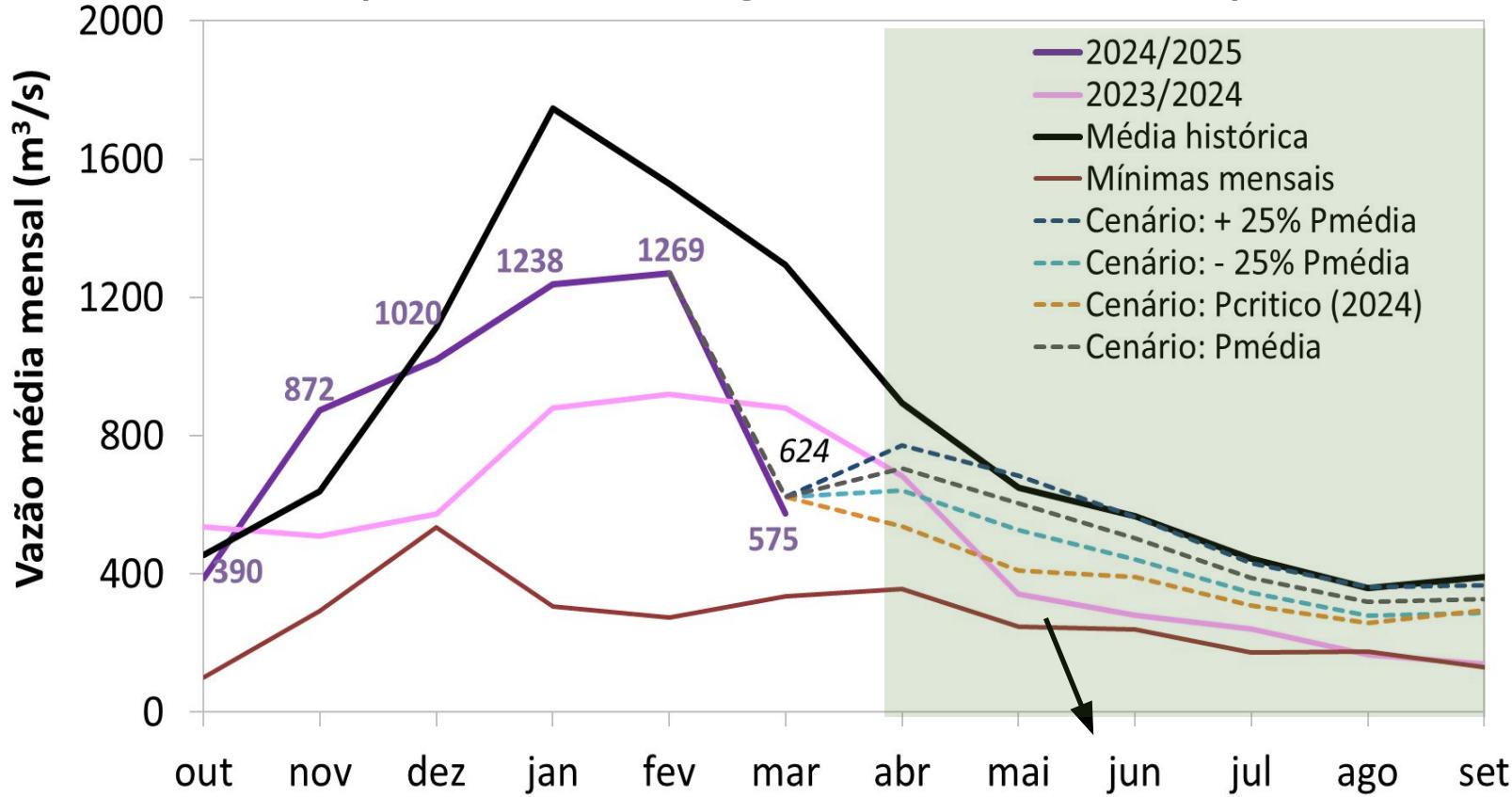
(issued on Mar2025)



Modelos Norte Americanos

Modelos da WMO

Furnas: Projeção de Vazão (modelo hidrológico PDM-CEMADEN)

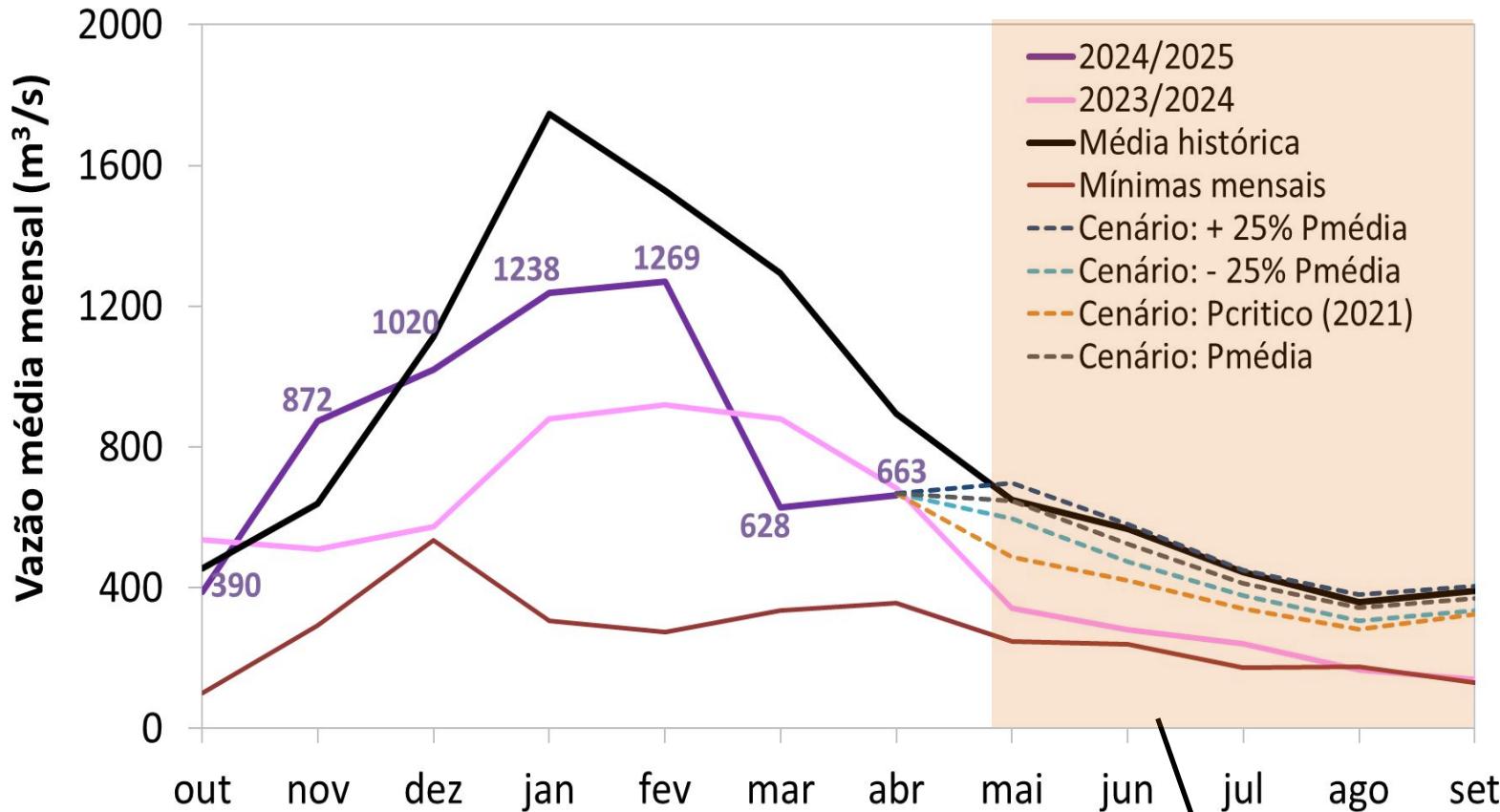


Abril-Setembro (Meses Secos)
MLT: 551 m³/s

Vazão	% MLT
530 m^3/s	96%
475 m^3/s	86%
421 m^3/s	76%
367 m^3/s	67%

Furnas: Projeção de Vazão

(modelo hidrológico PDM-CEMADEN)



Maio-Setembro (Meses Secos)

MLT: 482 m³/s

Vazão	%
MLT	104%
503 m^3/s	
460 m^3/s	95%
418 m^3/s	87%
371 m^3/s	77%