



# CEMADEN

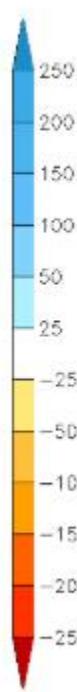
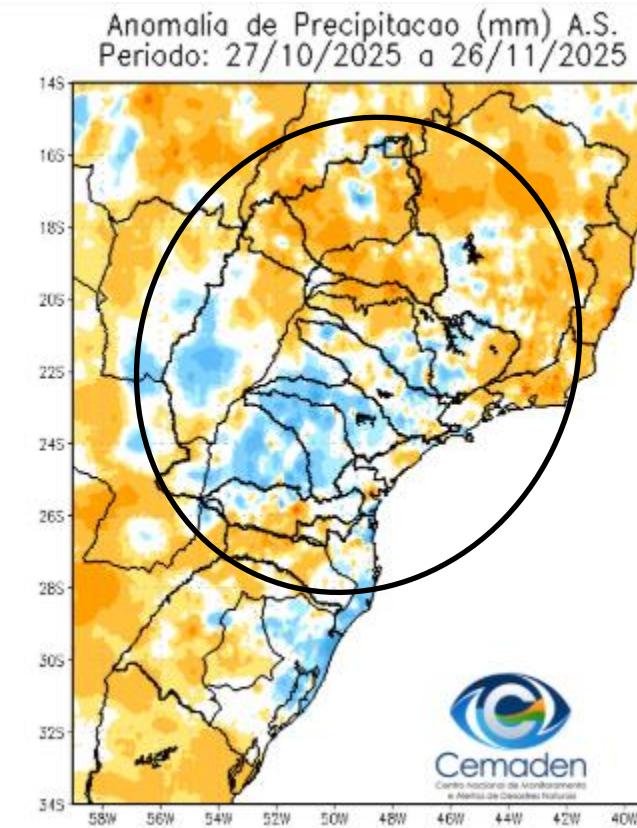
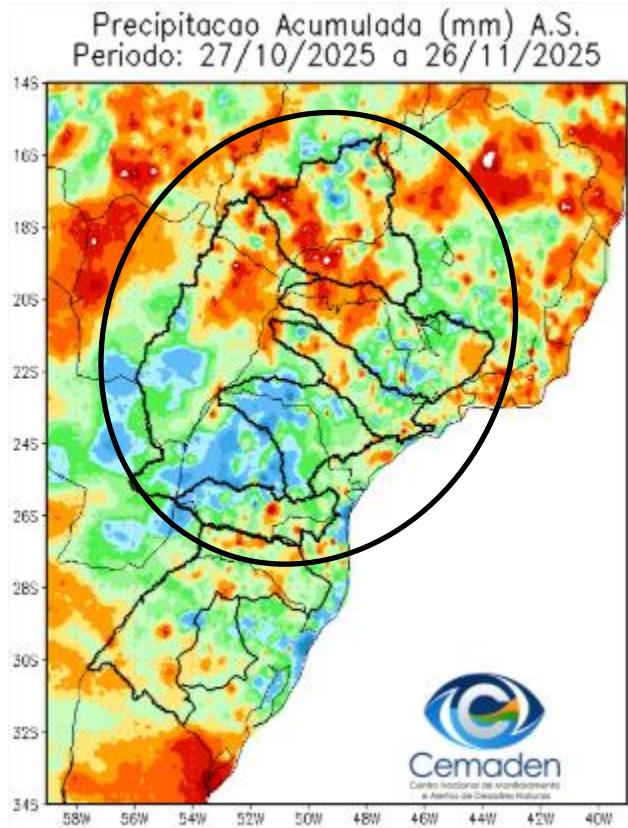
Centro Nacional de Monitoramento e  
Alertas de Desastres Naturais

Monitoramento e Previsões  
para a  
Bacia do rio Paraná

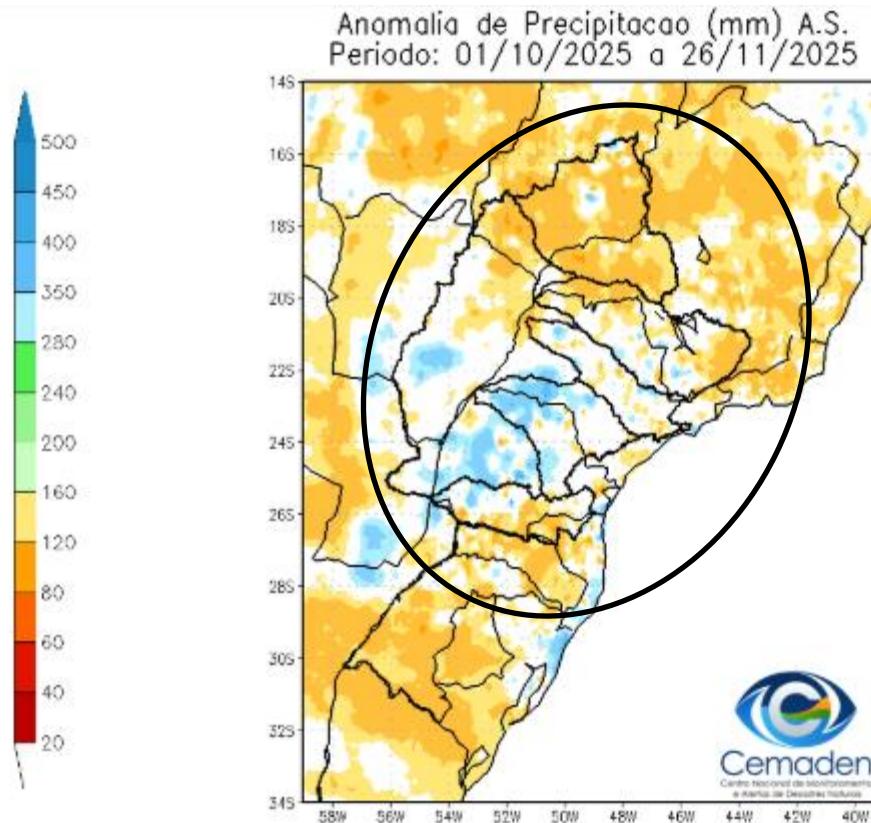
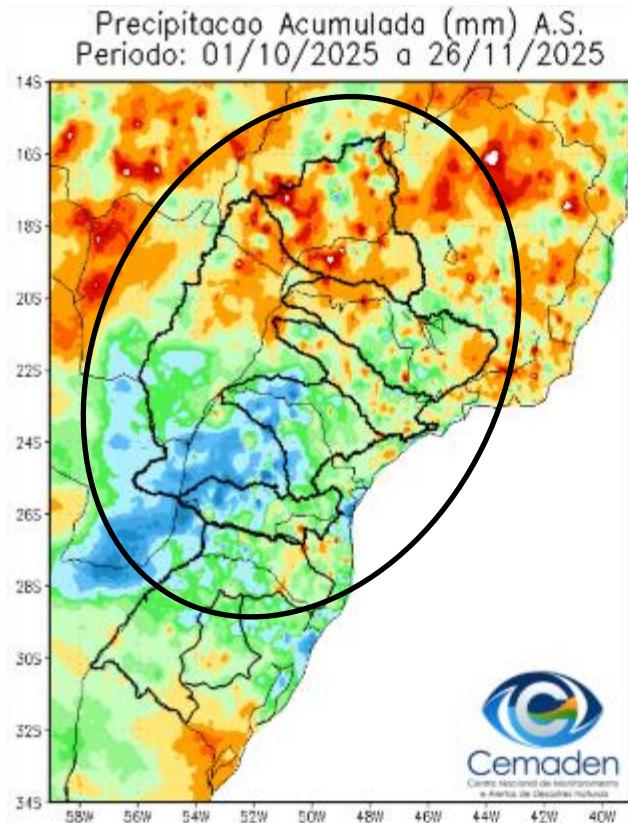
Novembro de 2025



## Precipitação acumulada nos últimos 30 dias

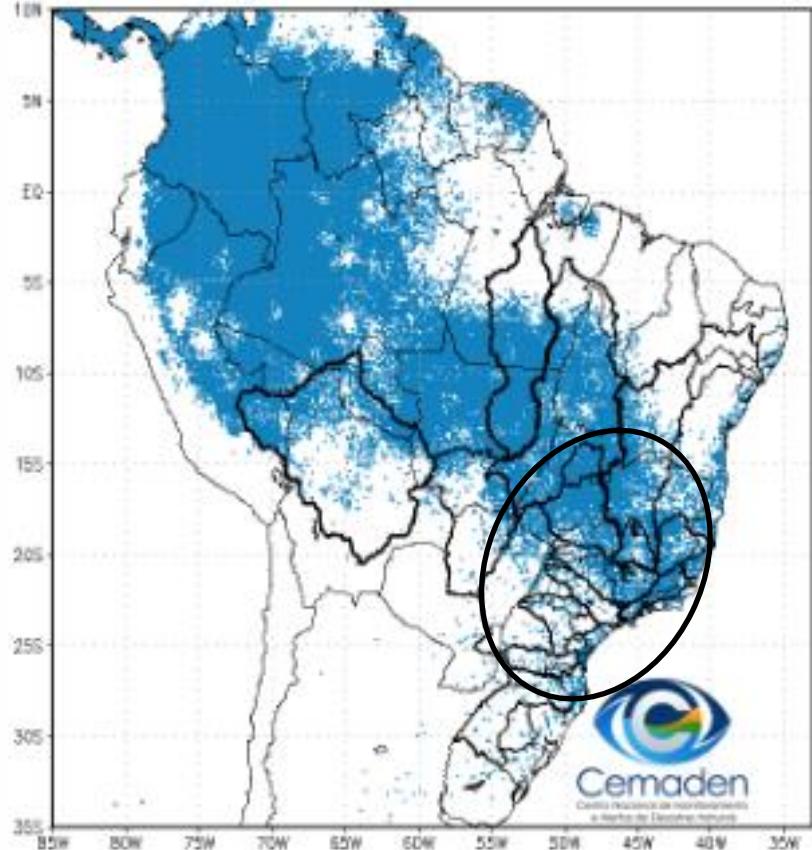


# Precipitação acumulada no ano hidrológico

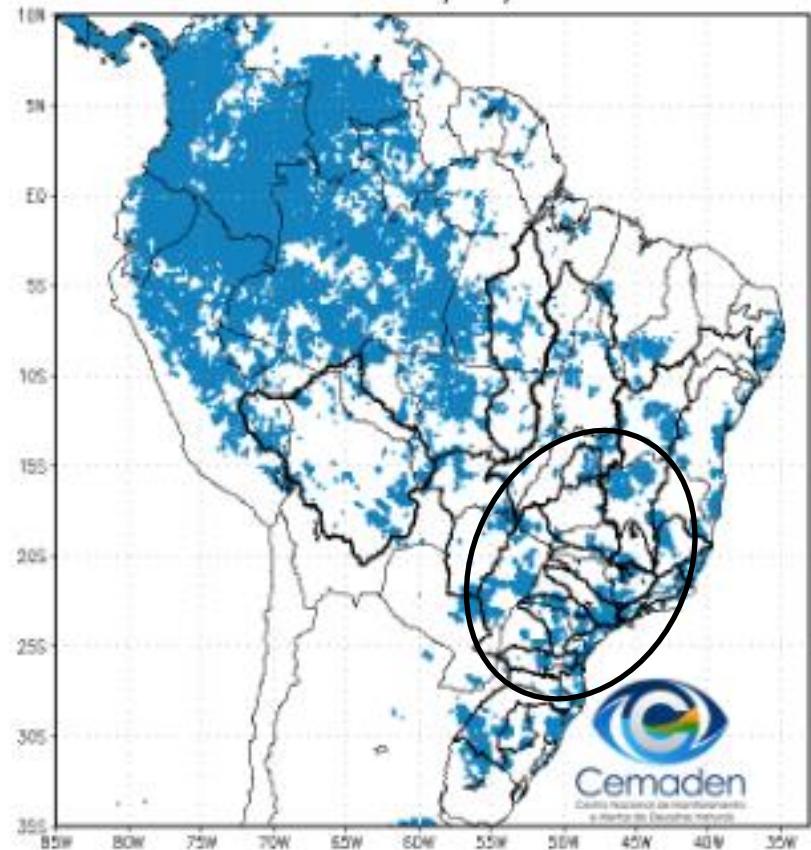


## Situação da Estação Chuvosa

Climatologia da Precipitação (2001–2024)  
Superior 3 mm/dia em 4 de 5 dias Período: 26/11

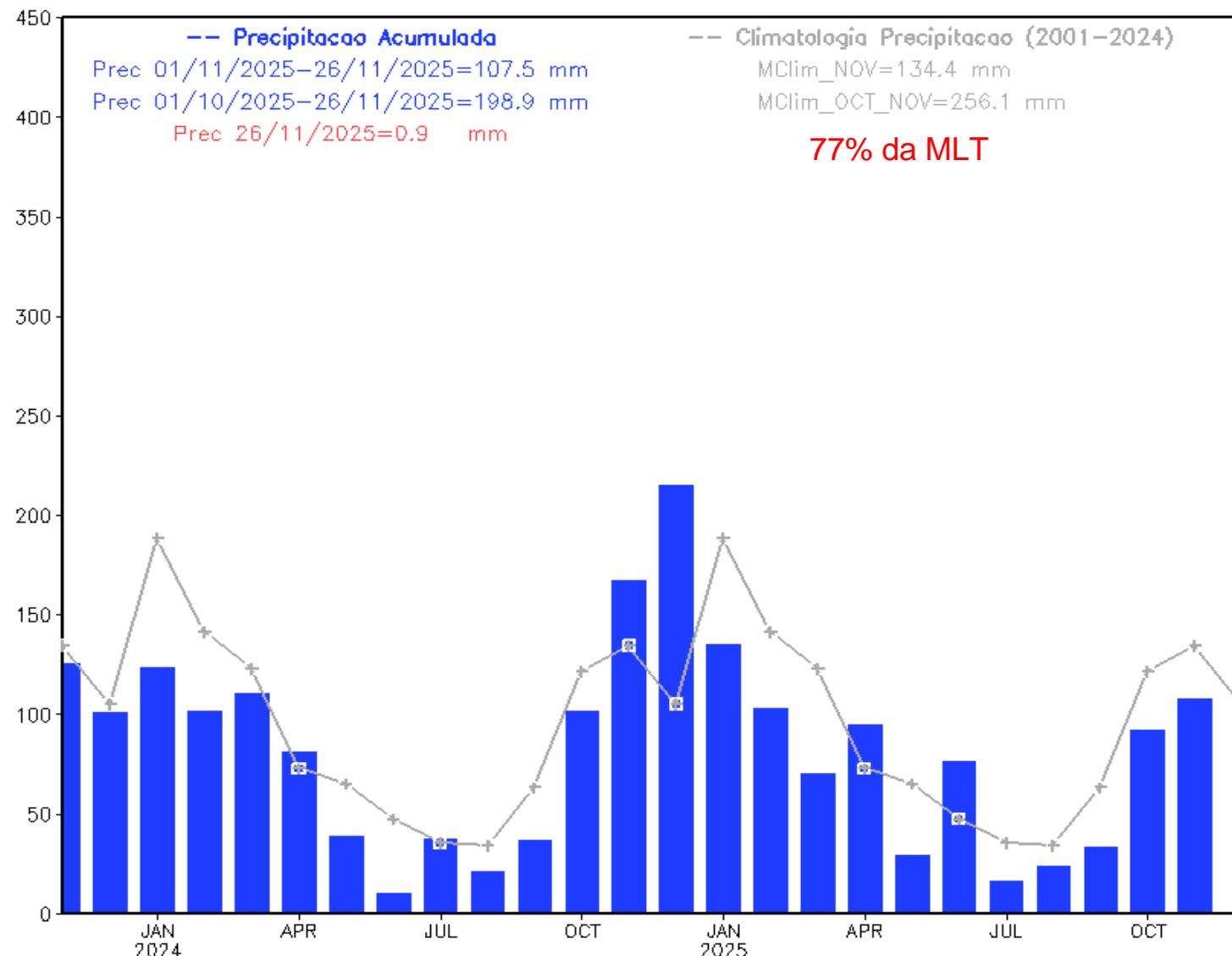


Precipitação A.S. Superior a 3 mm/dia por 4 de 5 dias  
Período: 26/11/2025

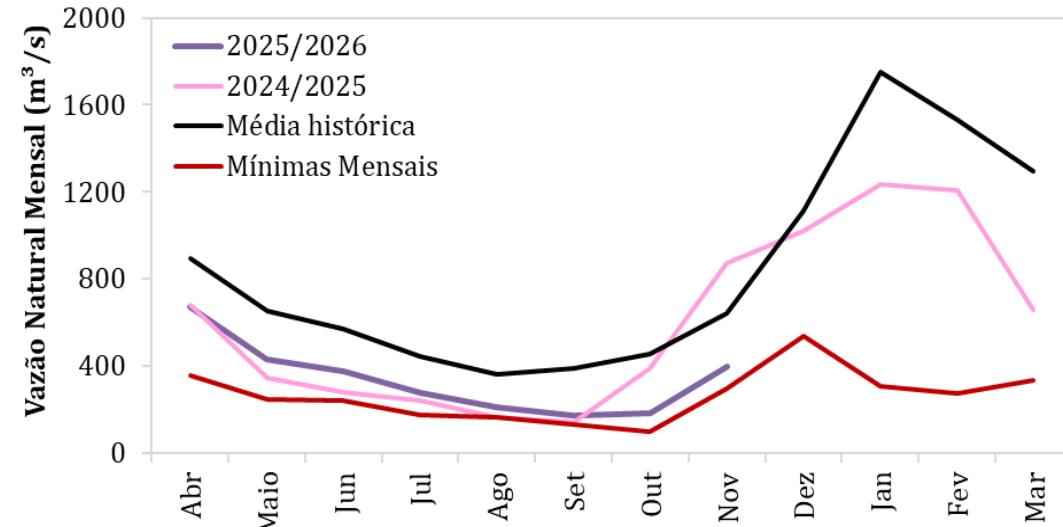
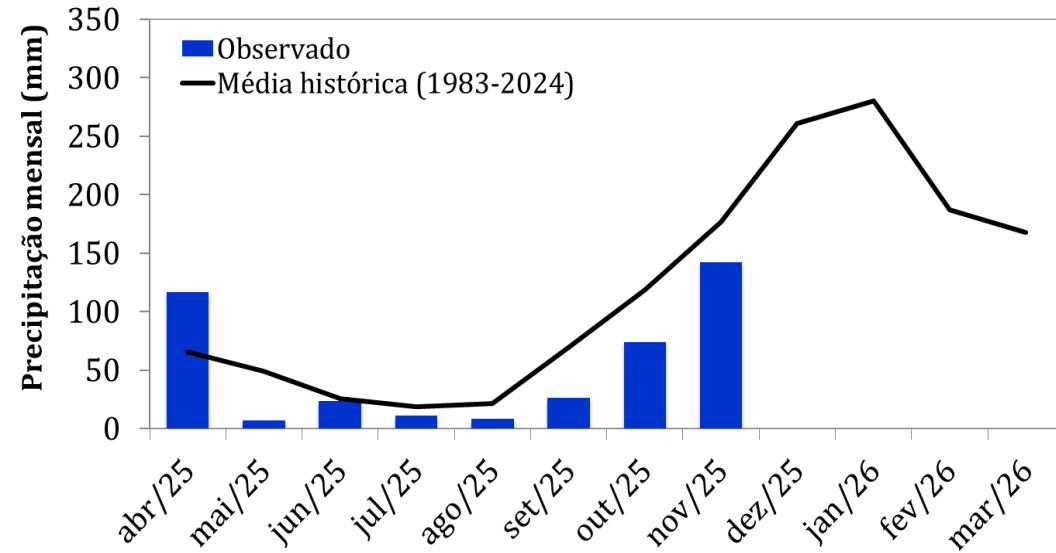


# Precipitação acumulada nos últimos 24 meses

## Precipitacao Bacia do Rio Parana desde NOV 2023



# Monitoramento UHE Furnas



Média de Longo Término – MLT = 1983-

## Precipitação

### Estação Chuvosa - Out a Mar – 1192 mm

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

2025/2026\*: 216 mm (**60% da MLT PARCIAL**)

### Estação Seca - Abr a Set – 250 mm

2024: 102 mm (**41% da MLT**)

2025: 193 mm (**77% da MLT**)

**Nov/2025\***: 142 mm (**80% da MLT**)

\*Até 24/11/2025

## Vazão

### Estação Chuvosa - Out a Mar – 1130 m<sup>3</sup>/s

2024/2025: 897 m<sup>3</sup>/s (**79% da MLT**)

2025/2026\*\*: 289 m<sup>3</sup>/s (**29% da MLT**)

### Estação Seca - Abr a Set – 551 m<sup>3</sup>/s

2024: 309 m<sup>3</sup>/s (**56% da MLT**)

2025: 356 m<sup>3</sup>/s (**65% da MLT**)

**Nov/25\*\***: 396 m<sup>3</sup>/s (**62% da MLT**)

**24/Nov/25**: 336 m<sup>3</sup>/s (**53% da MLT**)

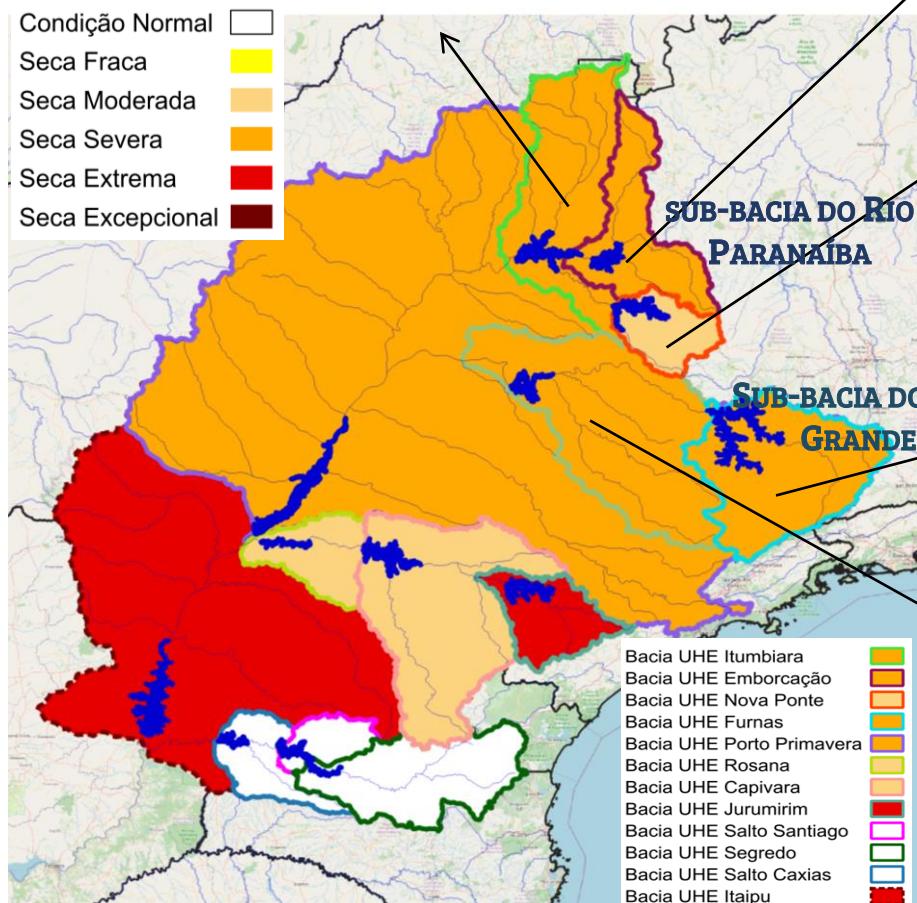
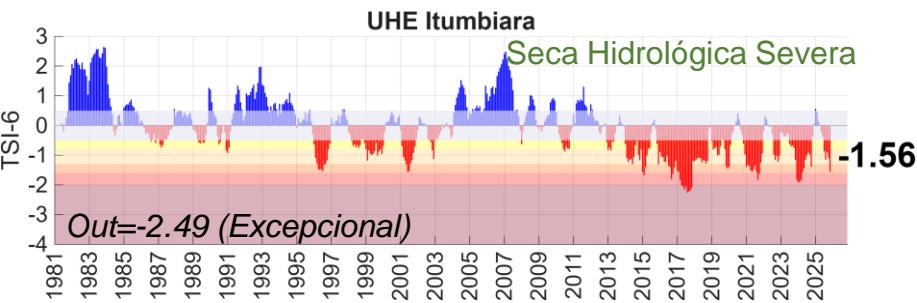
\*\*Até 24/11/2025

Dados de precipitação: INMET, ANA, CEMADEN

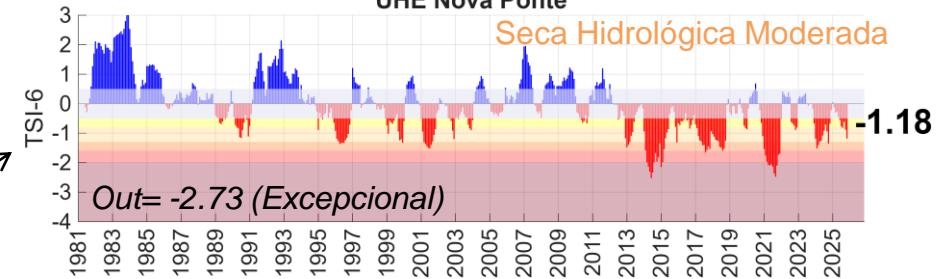
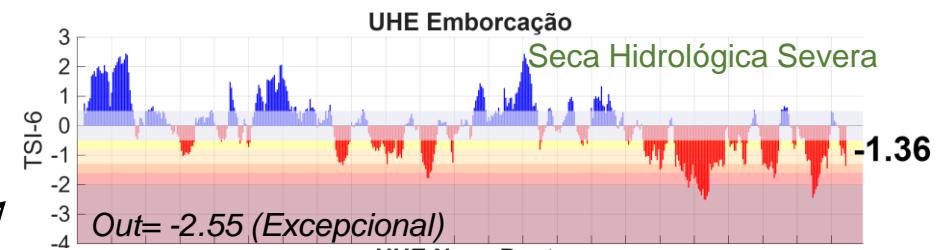
Dados de vazão: ONS e ANA

# BACIA DO RIO PARANÁ

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



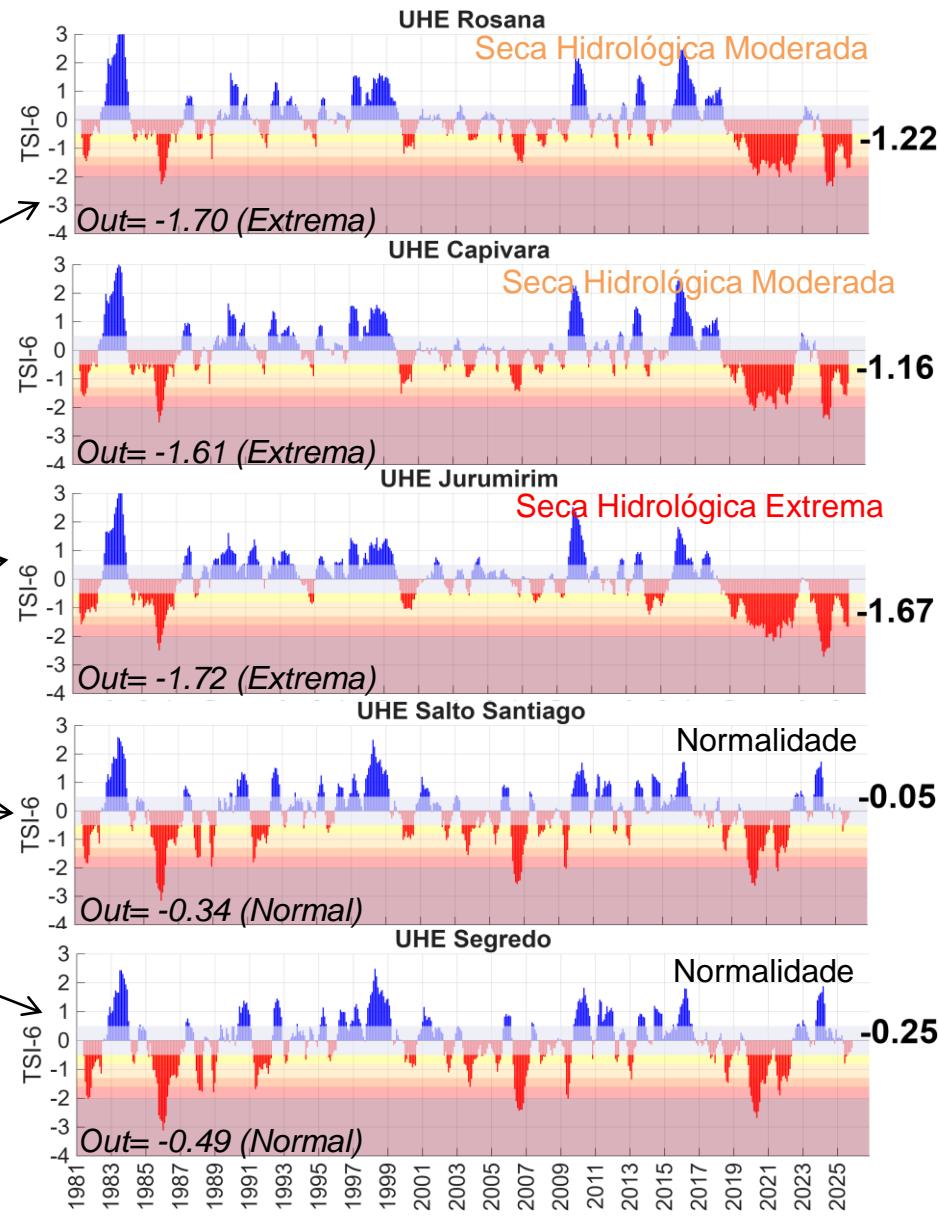
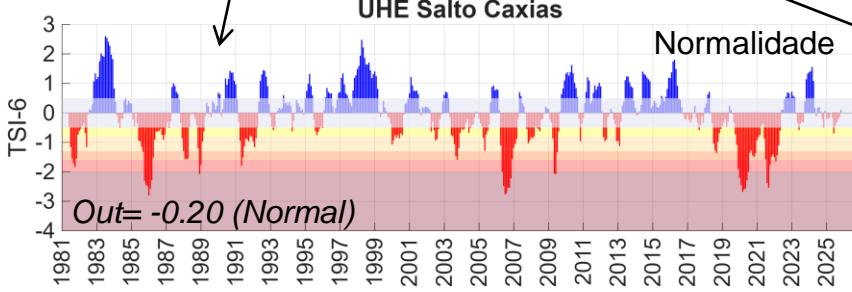
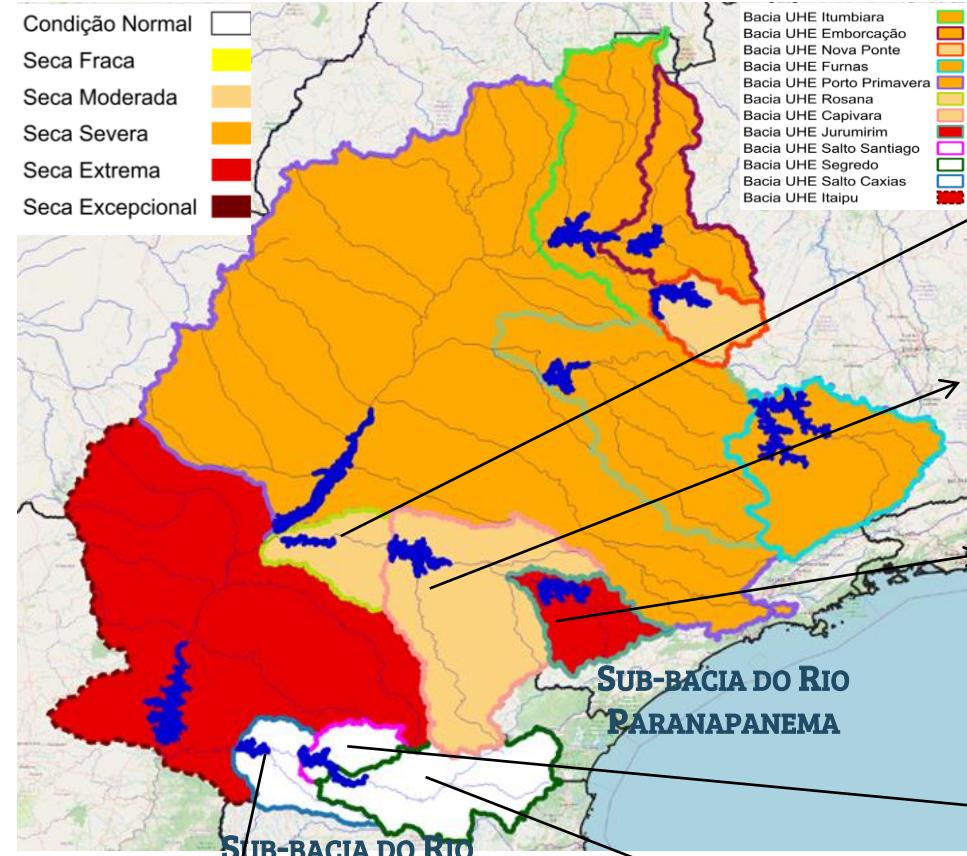
**Novembro/2025**



# BACIA DO RIO PARANÁ

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

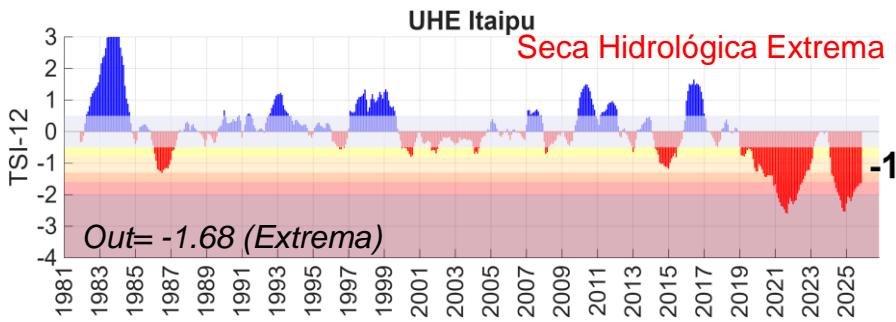
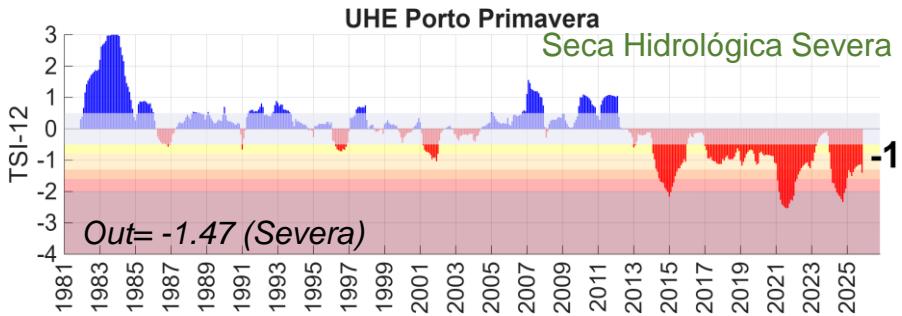
Novembro/2025



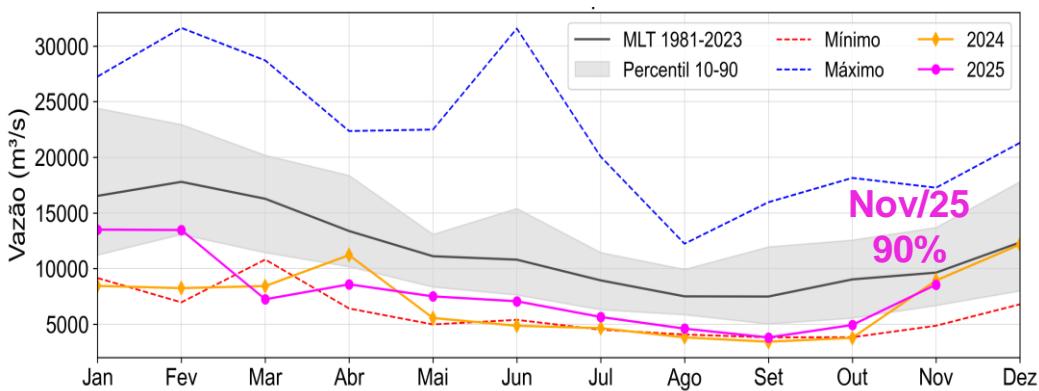
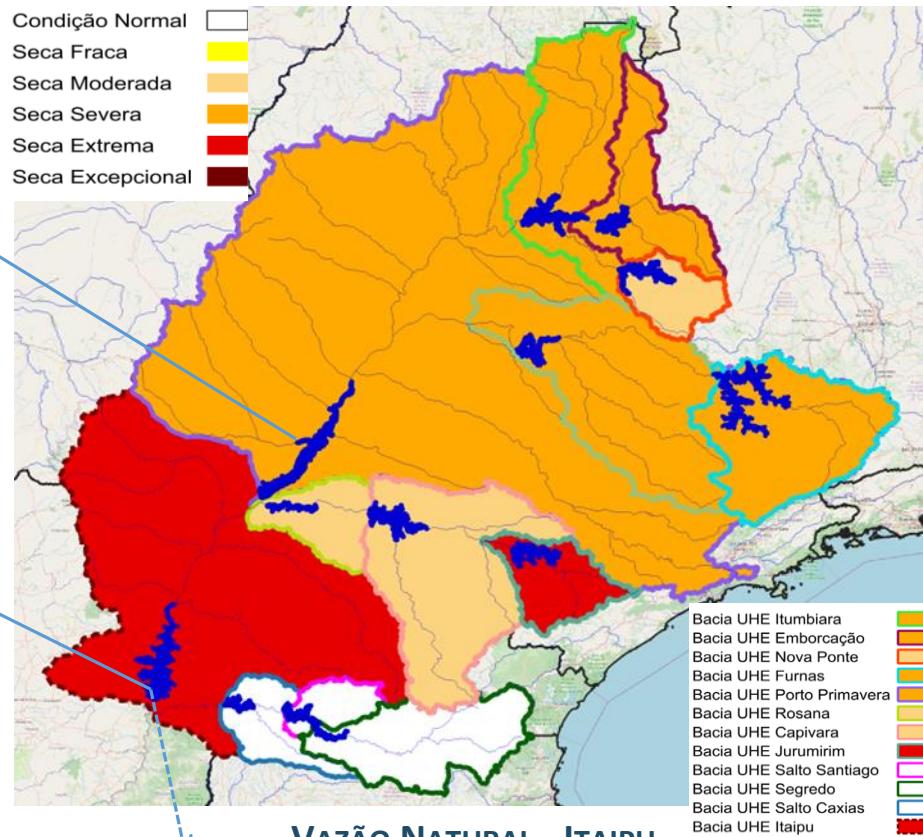
# BACIA DO RIO PARANÁ

Novembro/2025

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



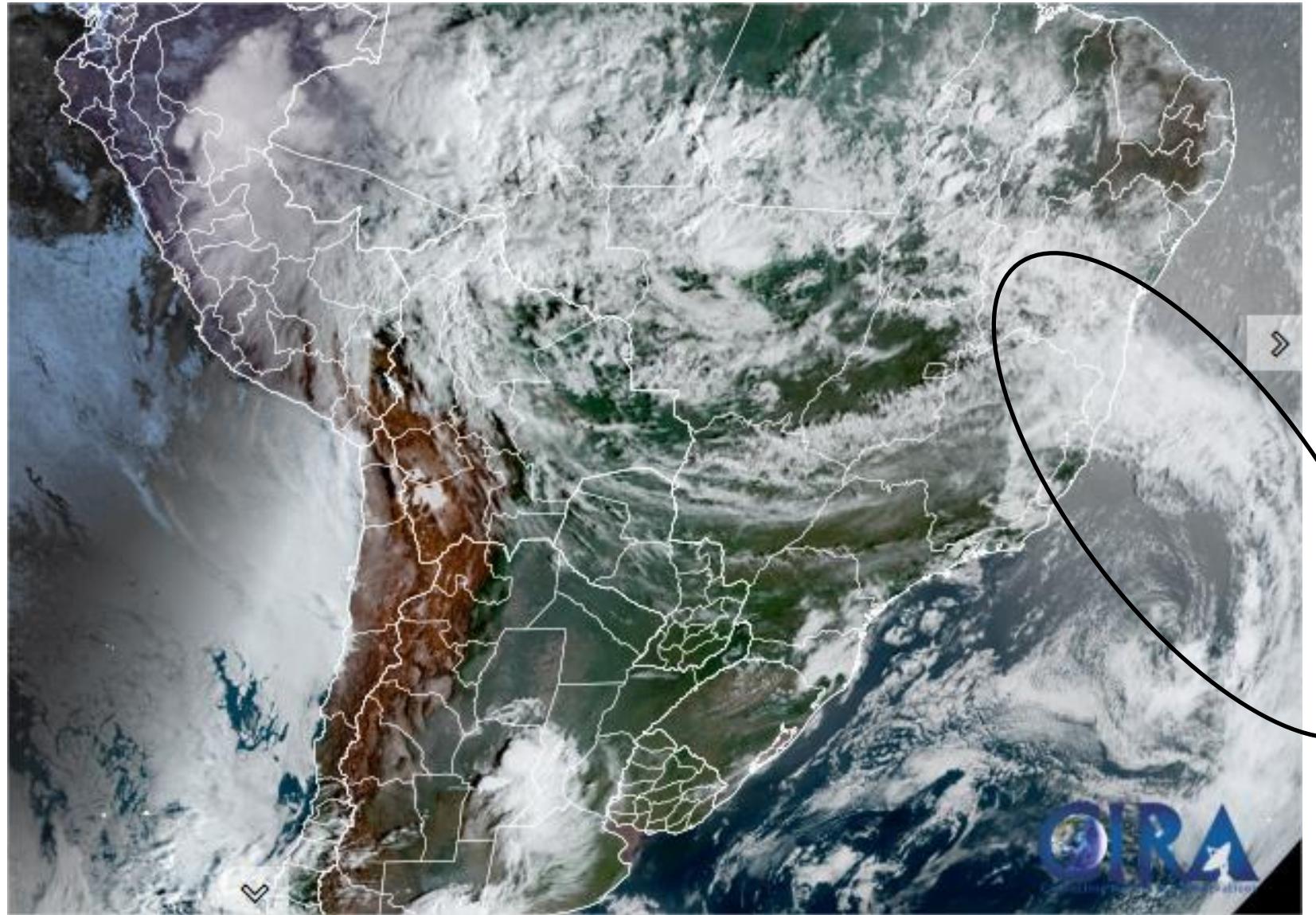
Série de dados = Jan/1981- Nov/2025



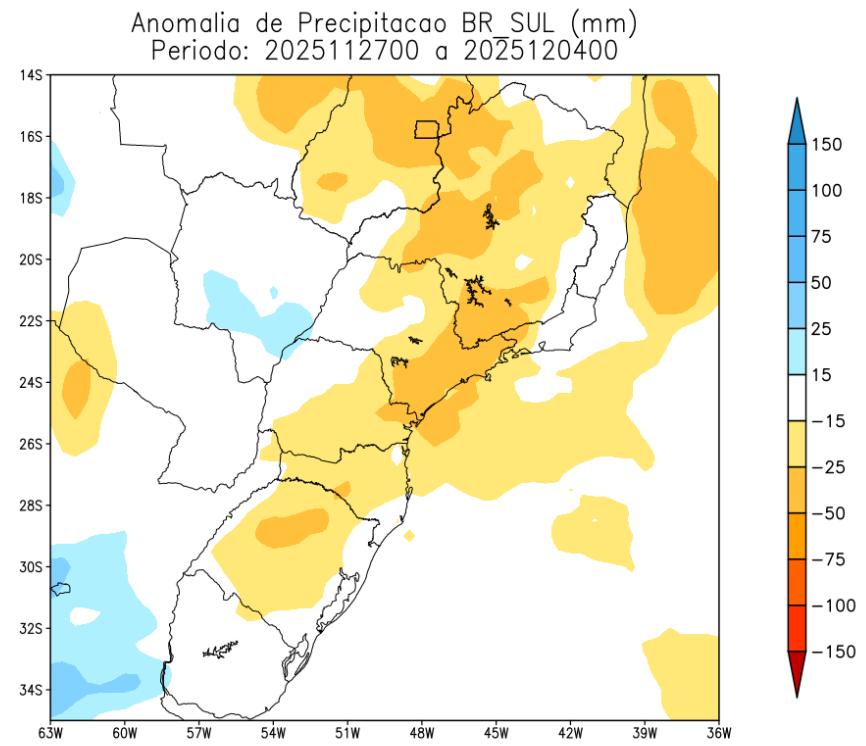
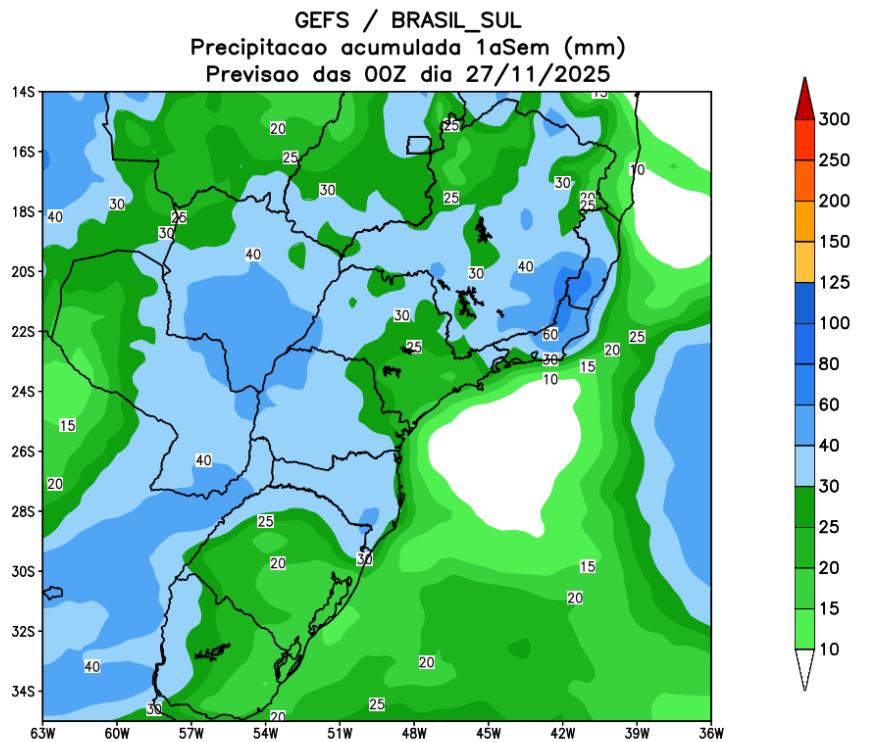
Fonte: CEMADEN/MCTI

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

## Situação meteorológica atual

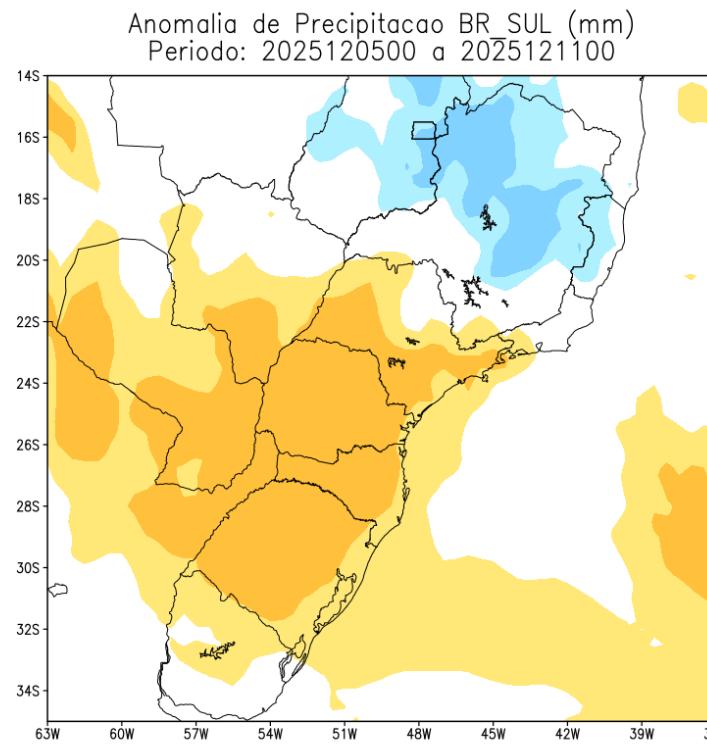
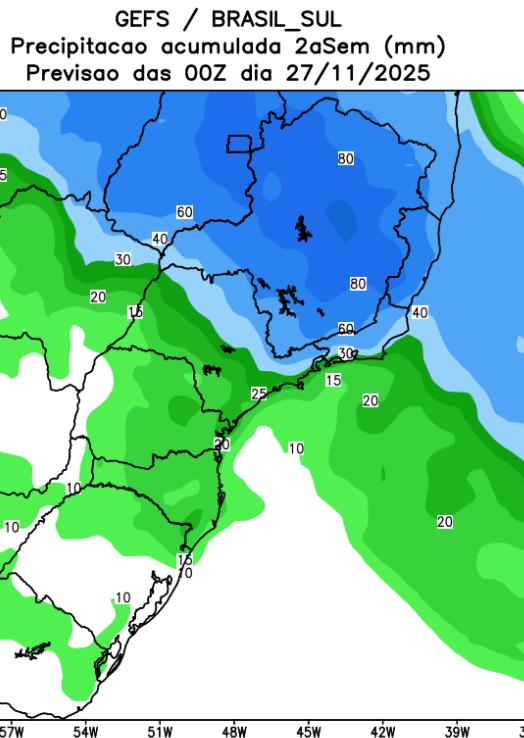


# Previsão de chuva para os próximos 7 dias



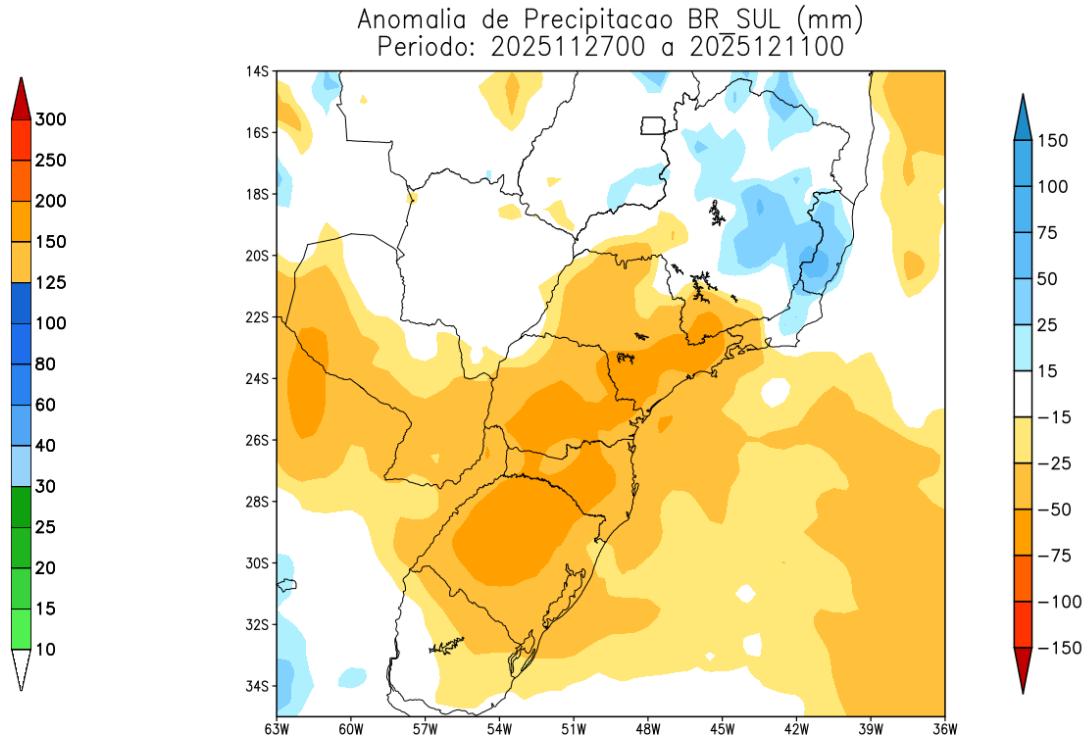
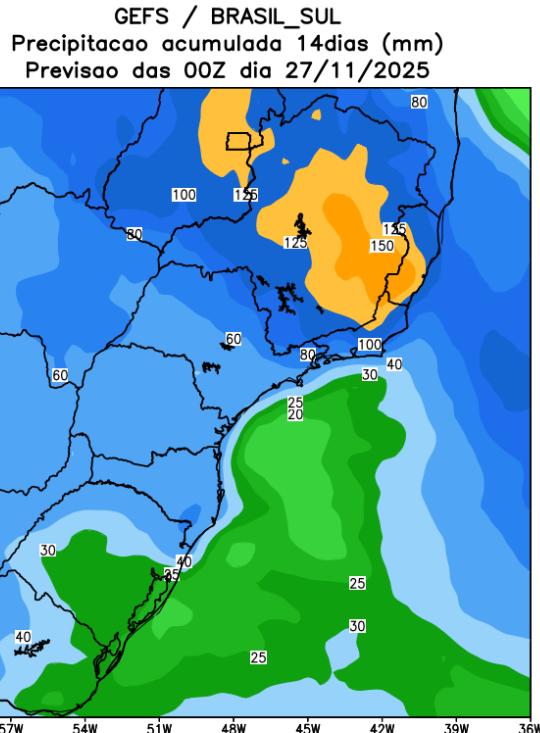
Fonte: GEFS/NOAA

## Tendência para a 2ª Semana



Fonte: GEFS/NOAA

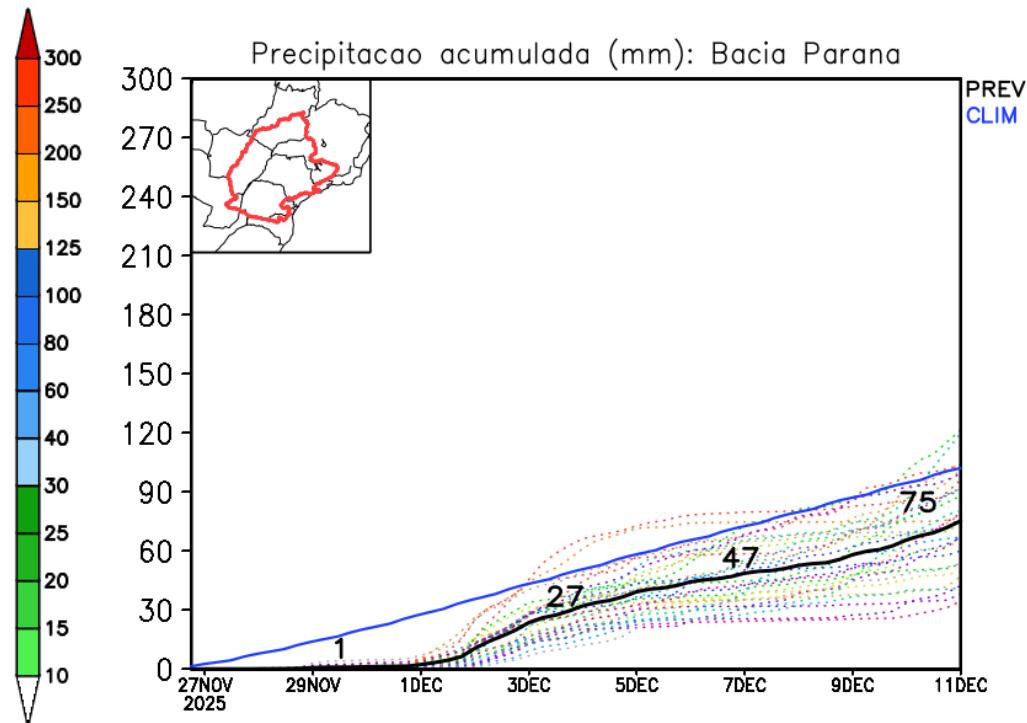
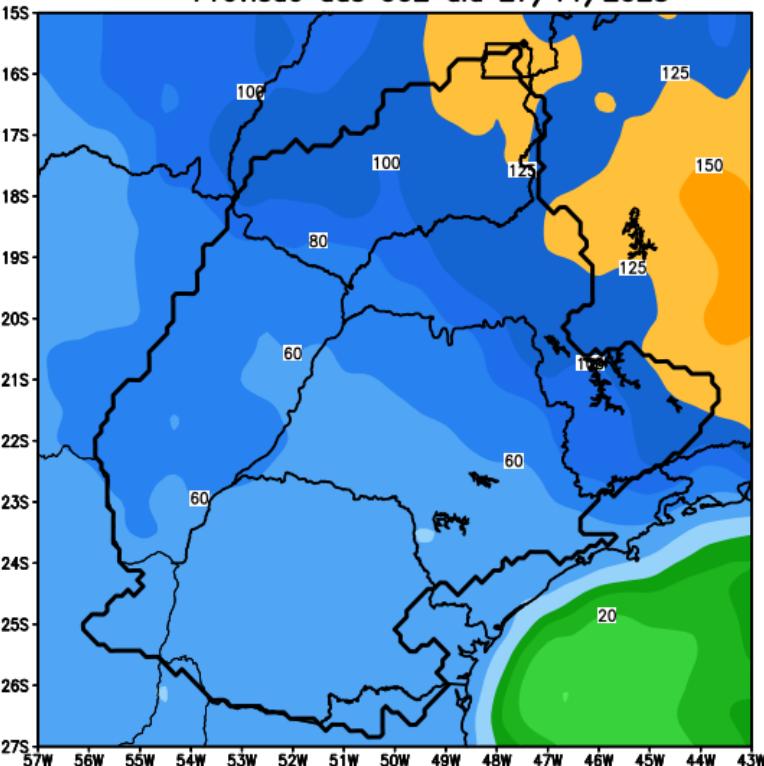
# Acumulado para as duas próximas semanas



Fonte: GEFS/NOAA

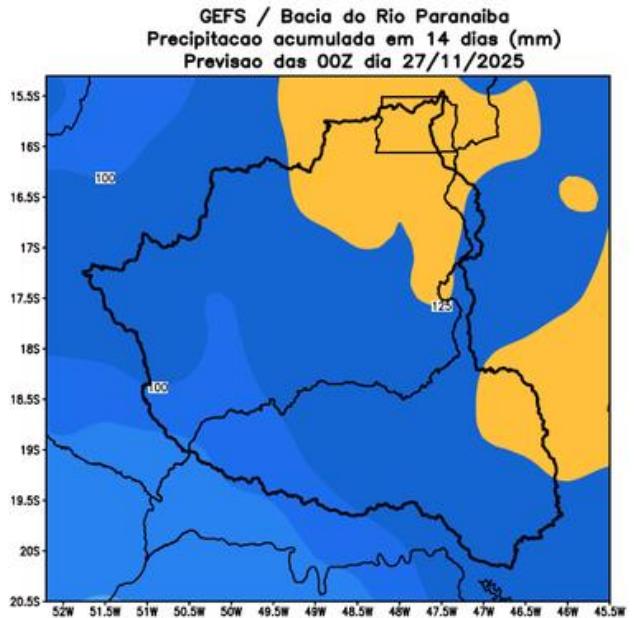
# Previsão de chuva para os próximos 14 dias

GEFS / Bacia do Parana  
Precipitacao acumulada em 14 dias (mm)  
Previsao das 00Z dia 27/11/2025

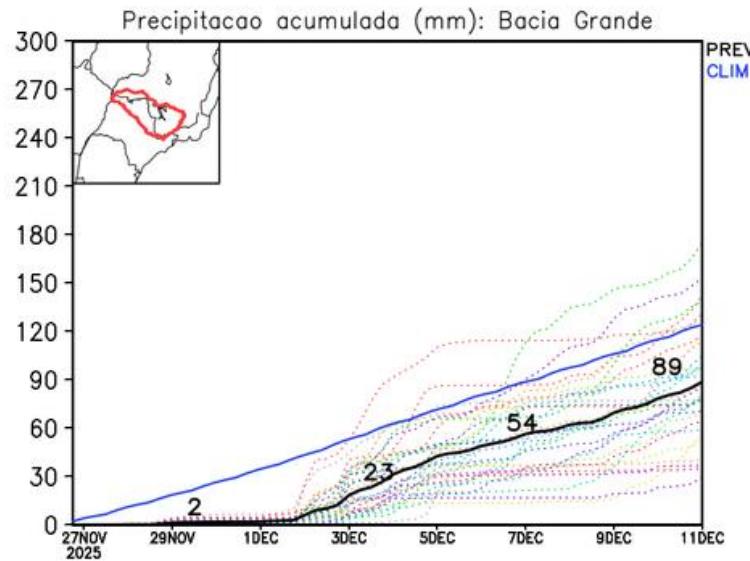
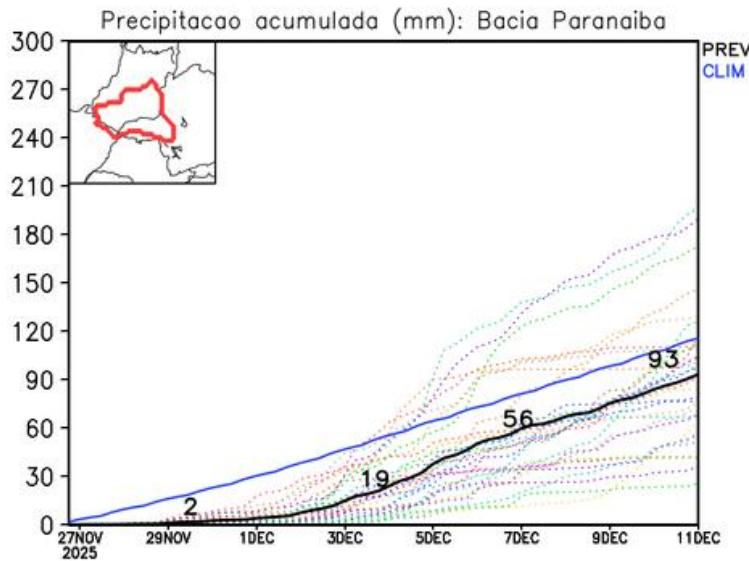
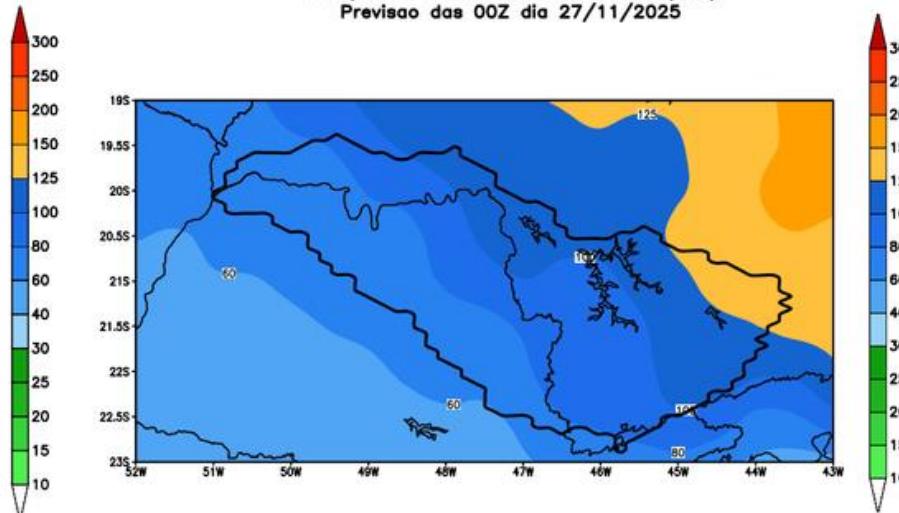


Fonte: GEFS/NOAA

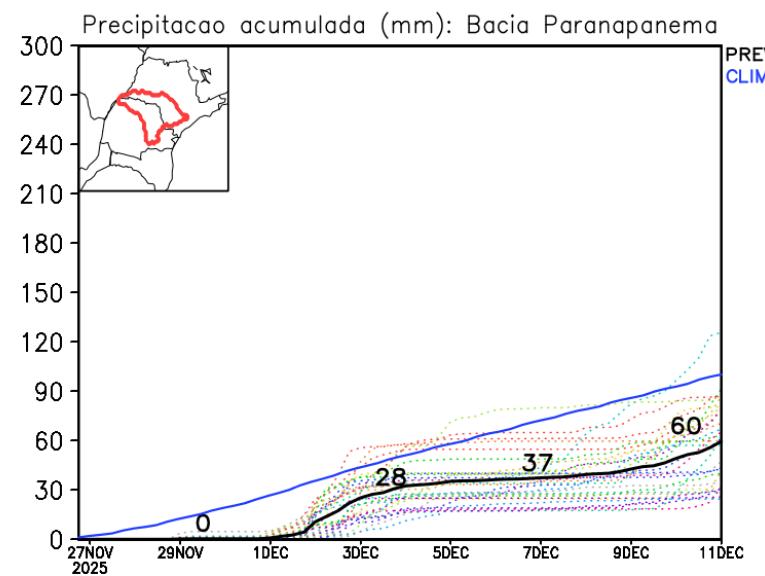
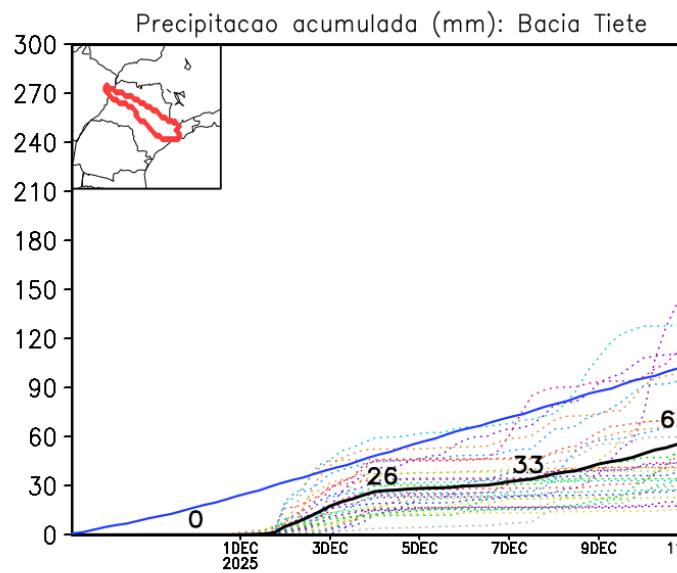
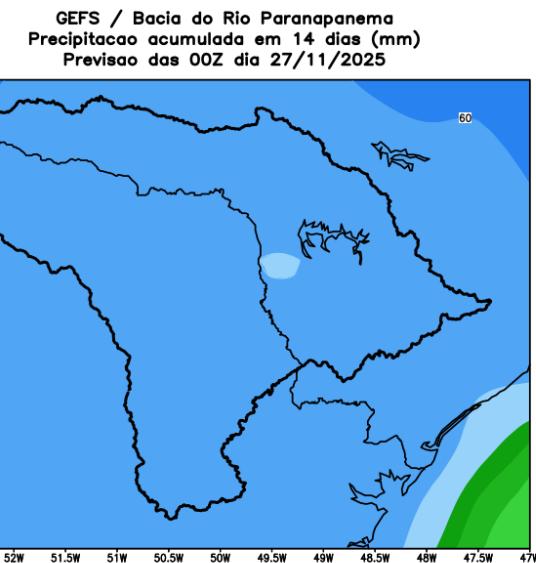
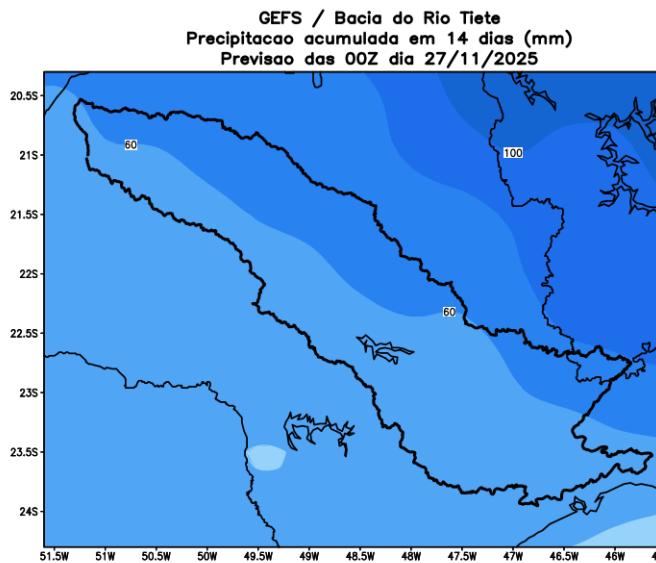
# Bacia do rios Paranaíba e Grande



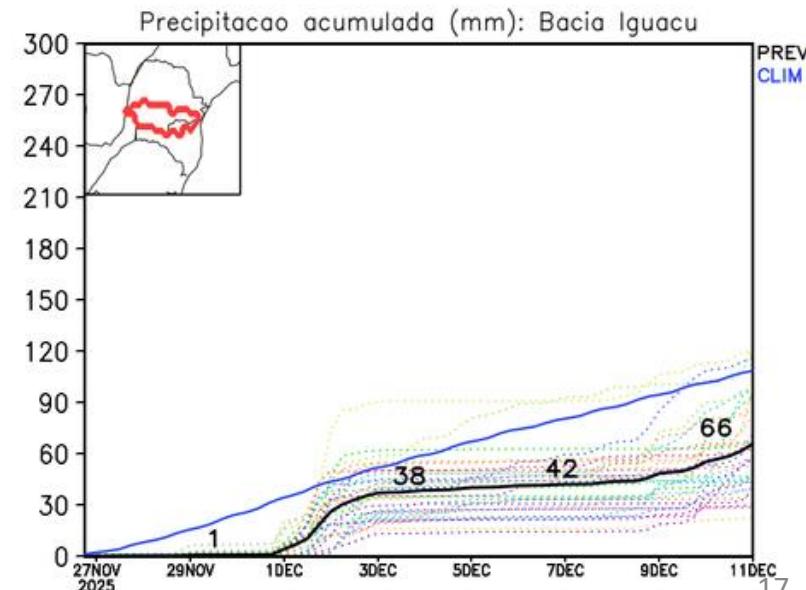
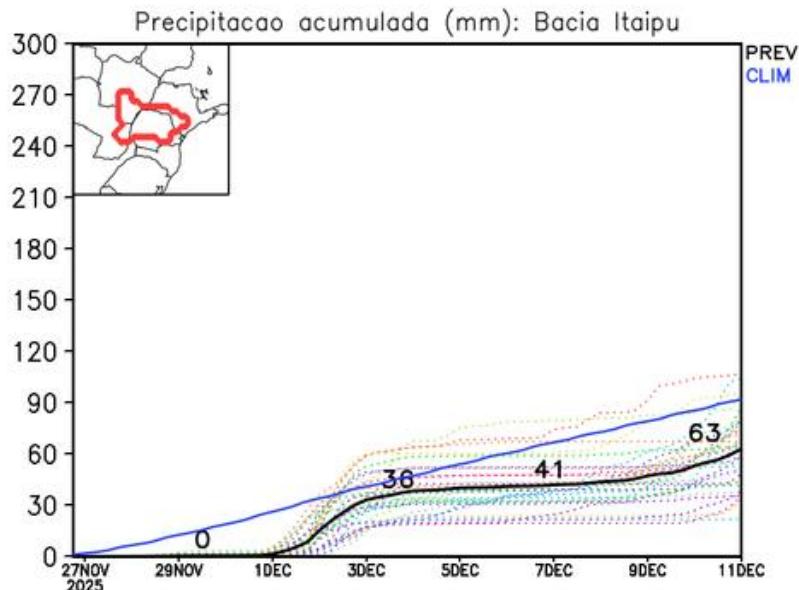
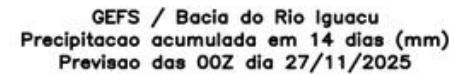
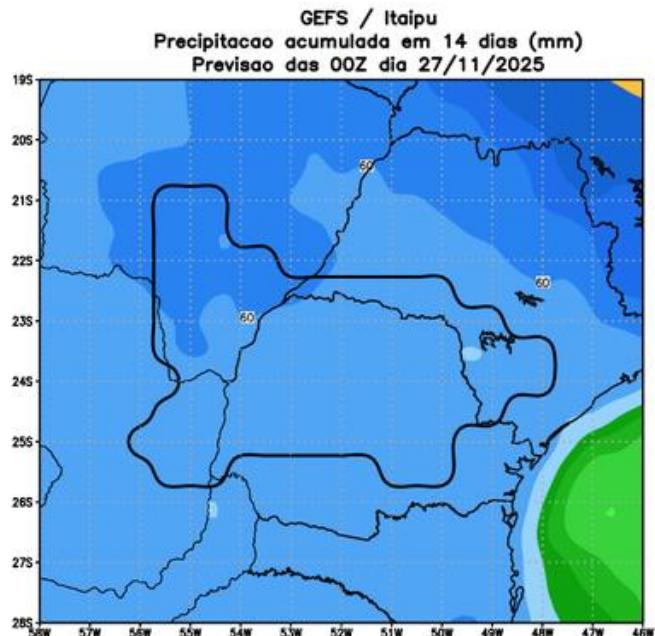
GEFS / Bacia do Rio Grande  
Precipitacao acumulada em 14 dias (mm)  
Previsao das 00Z dia 27/11/2025



# Bacia do rios Tietê e Paranapanema

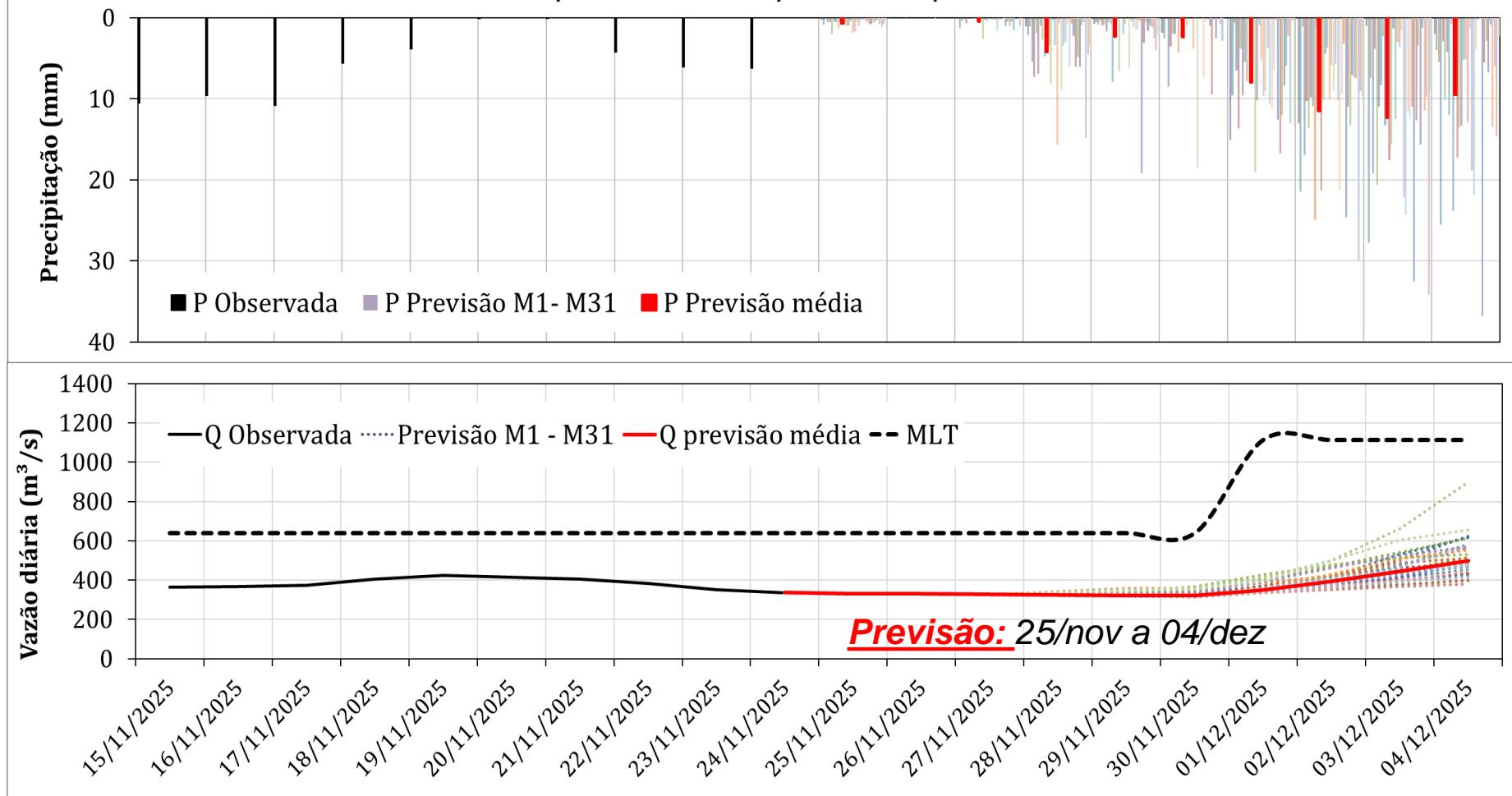


# Bacia do Itaipu e Iguaçu



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

Vazão Natural e Precipitação Diárias para Furnas  
15/Novembro a 04/Dezembro/2025



Previsão média para os  
próximos 10 dias: 364  $\text{m}^3/\text{s}$



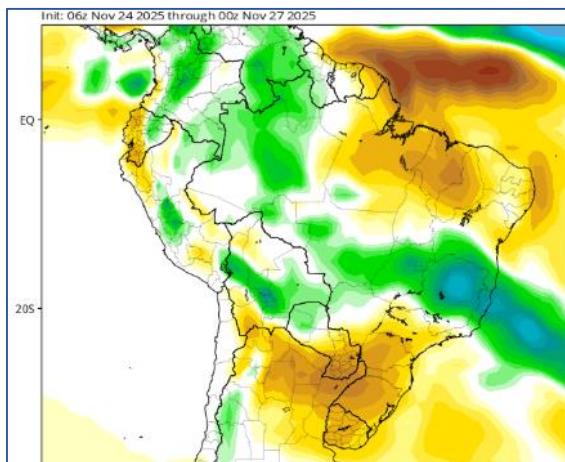
57% MLT Novembro  
33% MLT Dezembro

# Anomalia de Chuva

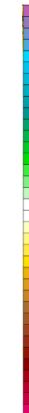
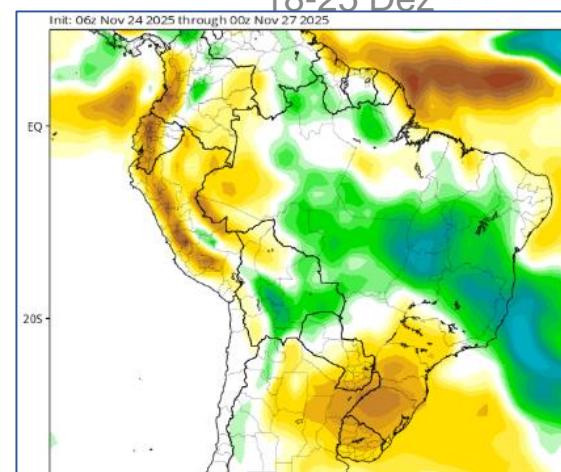
3a e 4a semanas

CFS/NOAA

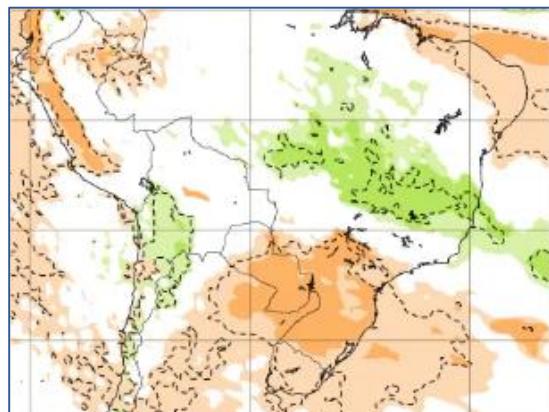
11-18 Dez



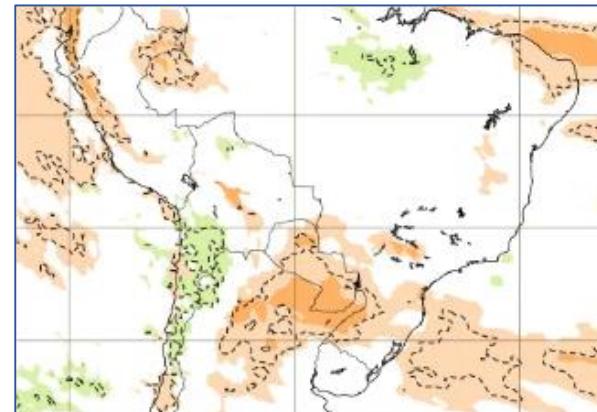
18-25 Dez



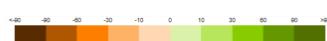
ECMWF



15-22 Dez

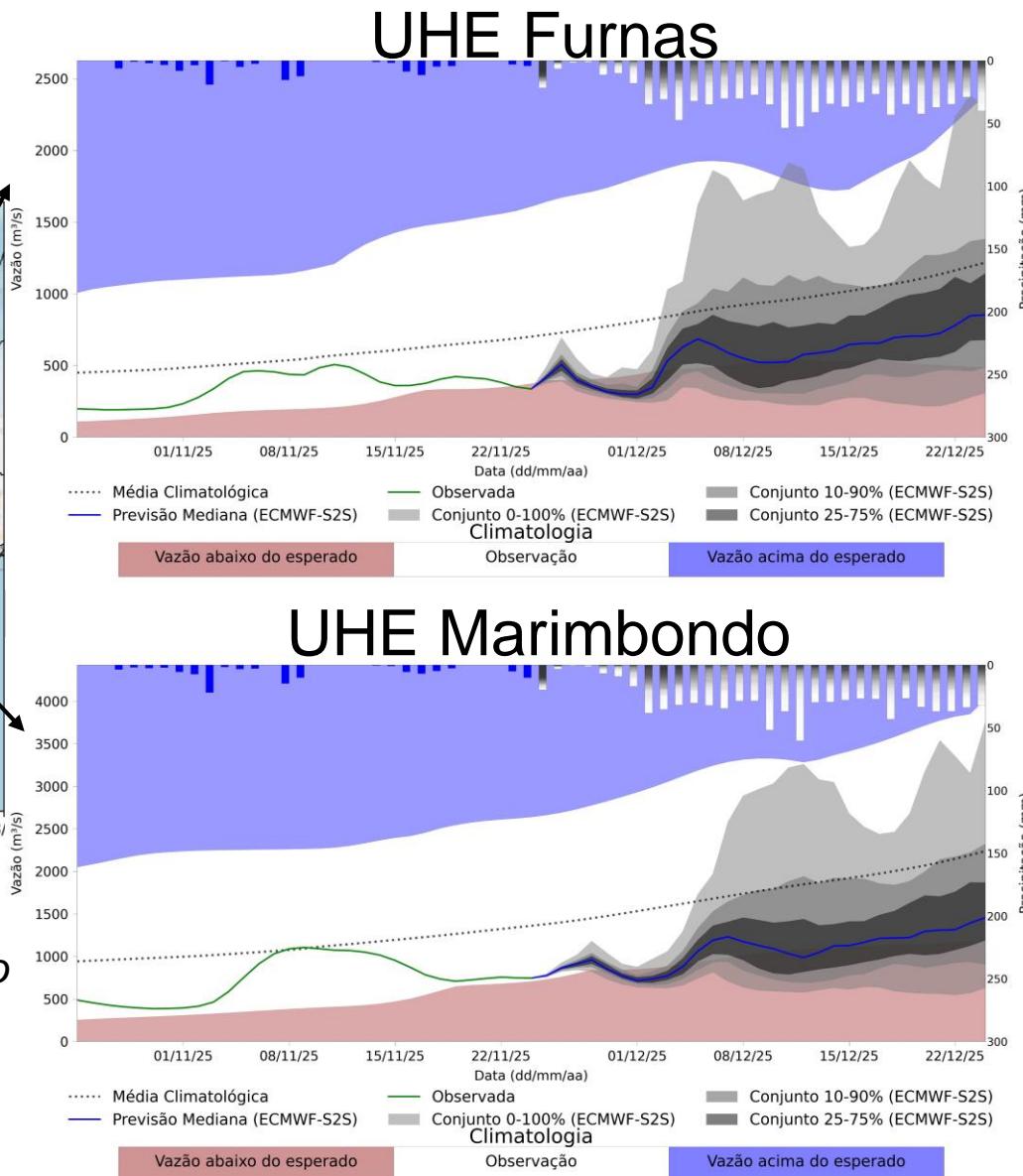
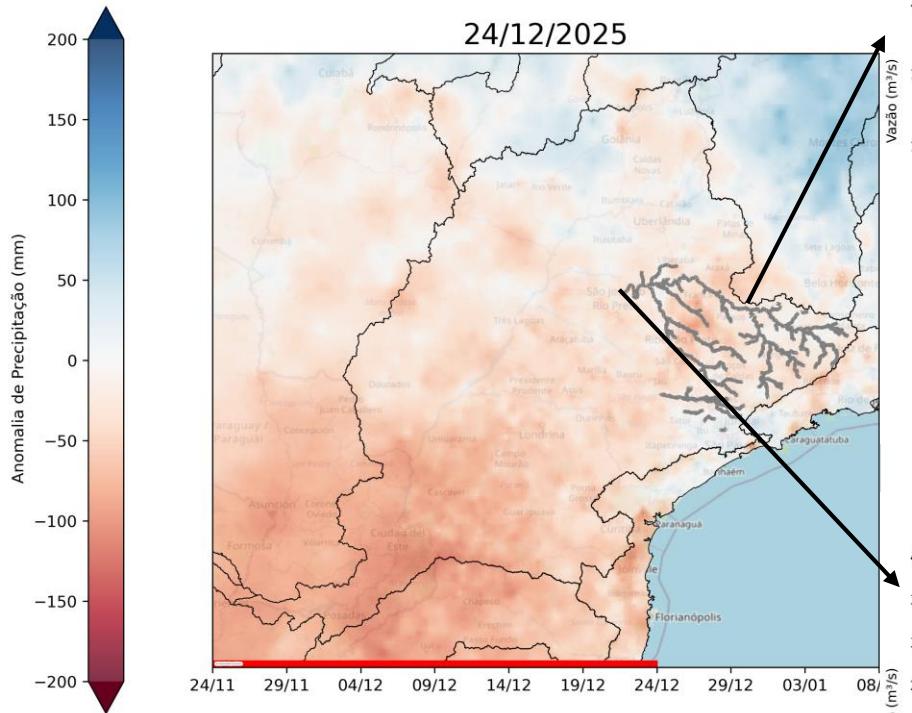


22-29 Dez



## Previsão de vazão natural na Bacia do Rio Grande

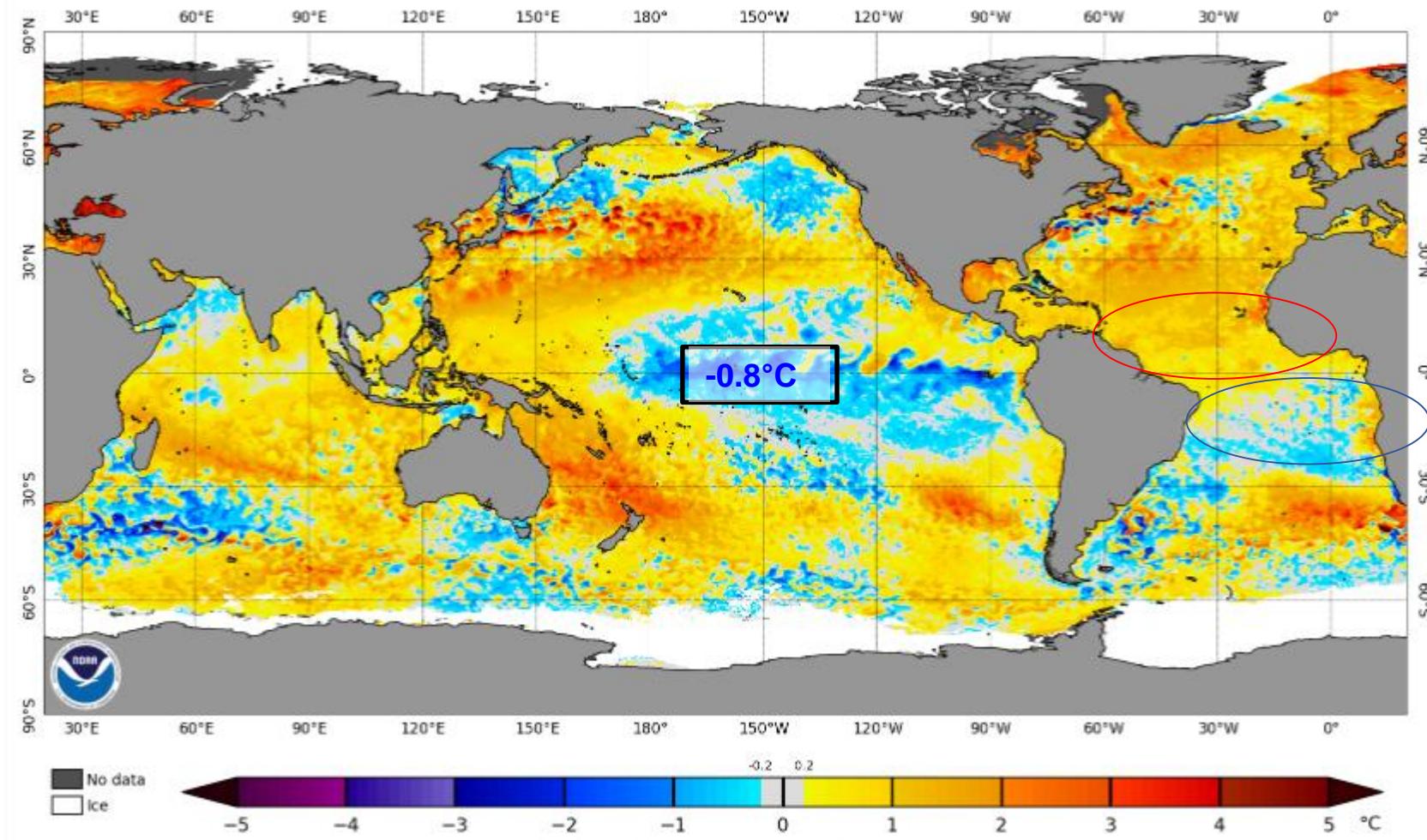
**PREVISÃO: 24/11/25 a 24/12/25**



Fonte: Meteorologia (INMET/MERGE); Vazão (ANA/ONS)  
MLT: 1993-2024  
Previsão Meteorológica: ECMWF-S2S

# Status Atual: La Niña

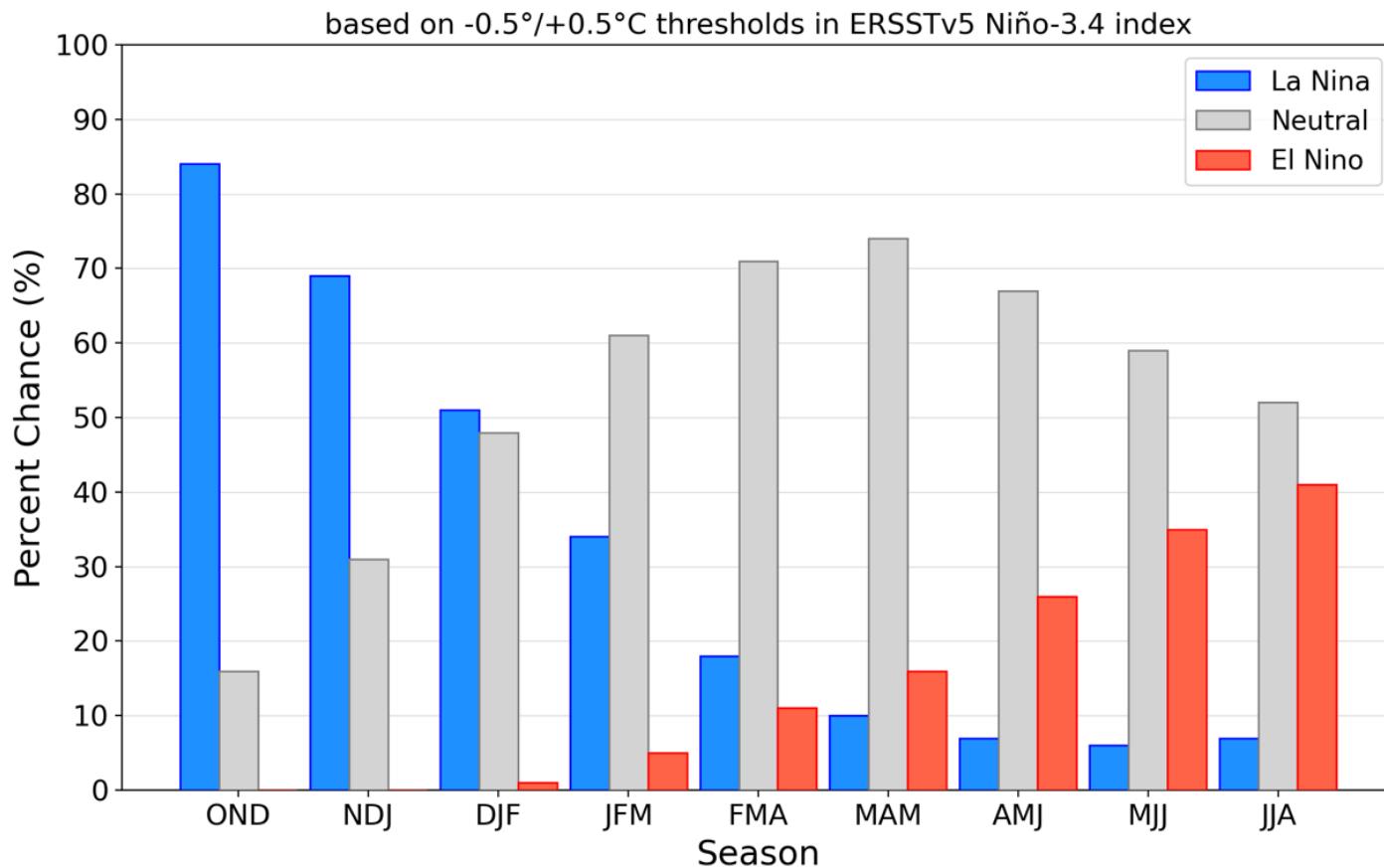
NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 25 Nov 2025



FONTE: NOAA

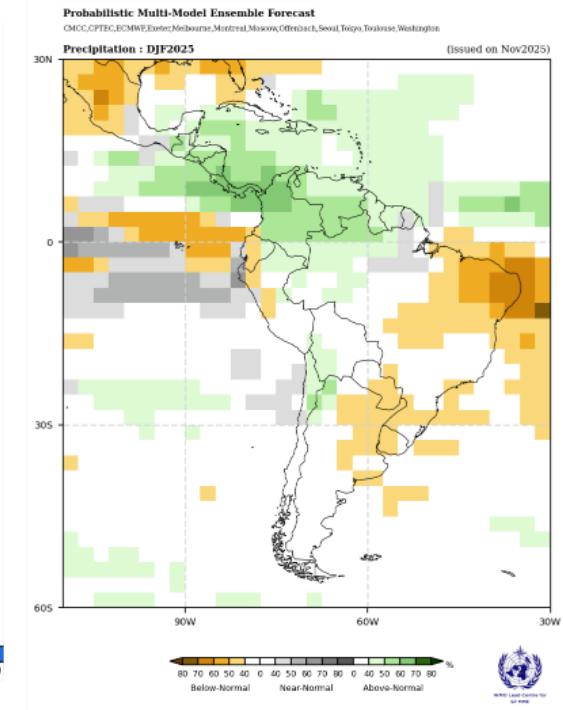
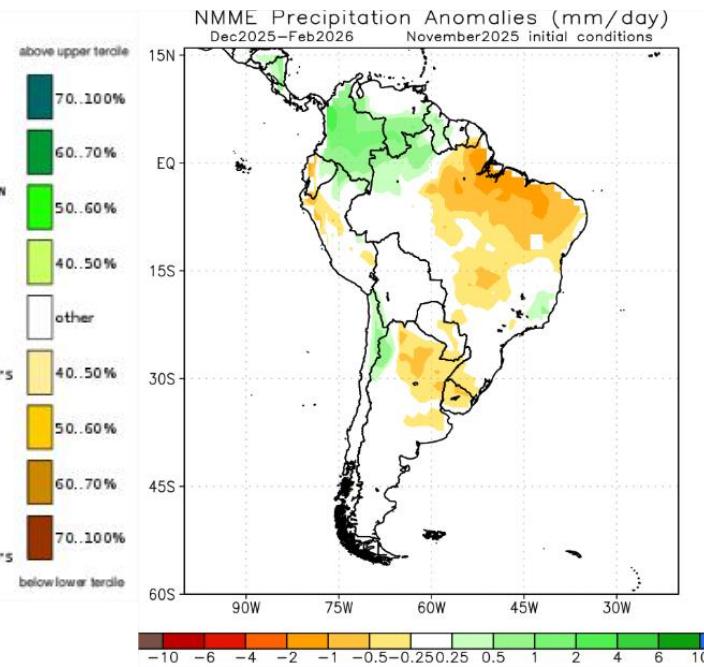
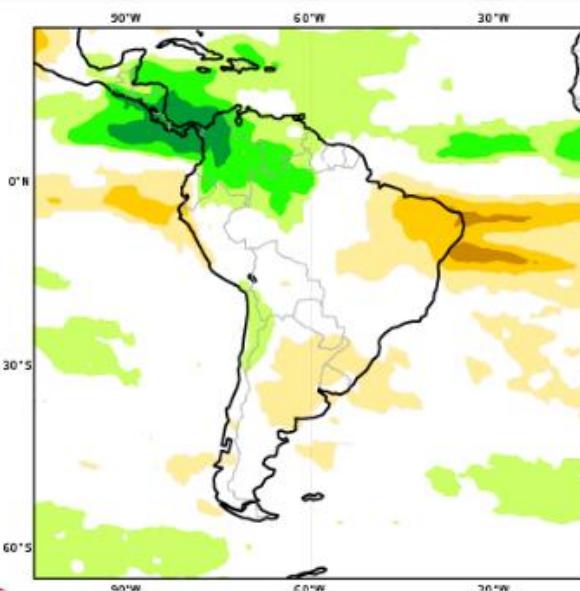
# Previsão do “ENSO”

Official NOAA CPC ENSO Probabilities (issued November 2025)



# Previsão Sazonal de Chuva Multi-Modelo

Dezembro-Janeiro-Fevereiro



Modelos Europeus

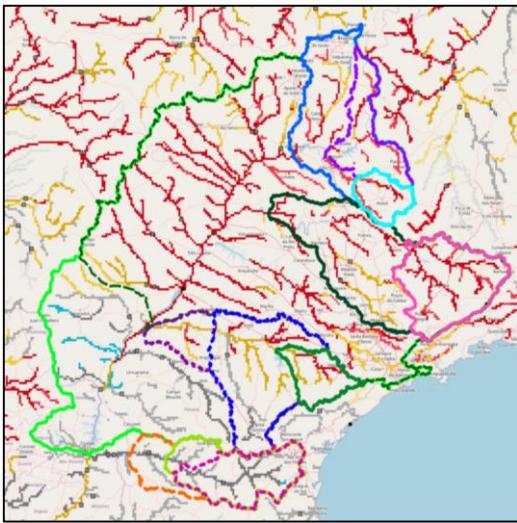
Modelos Norte Americanos

Modelos da WMO

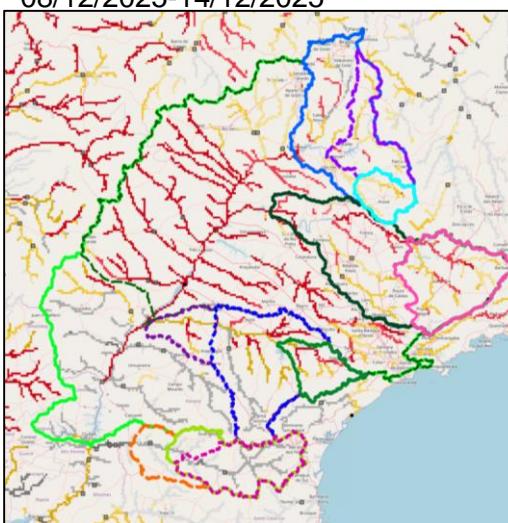
# Previsão Sub-sazonal (45 dias) para a Bacia do Rio Paraná (Sistema Global de Previsão de Vazão - GloFAS)

Previsão: 26/11/2025 – 05/01/2026

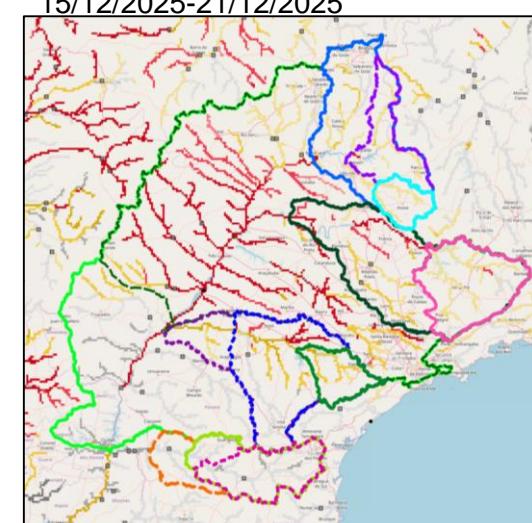
01/12/2025-07/12/2025



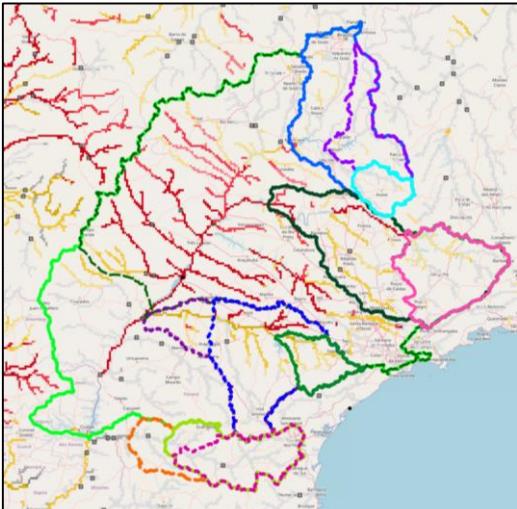
08/12/2025-14/12/2025



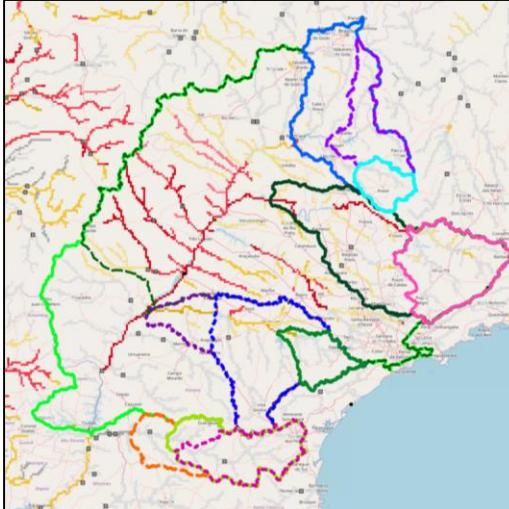
15/12/2025-21/12/2025



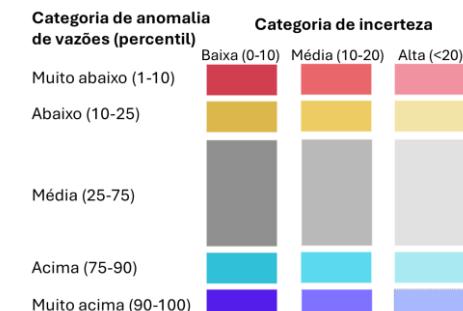
22/12/2025-28/12/2025



29/12/2025-05/01/2026



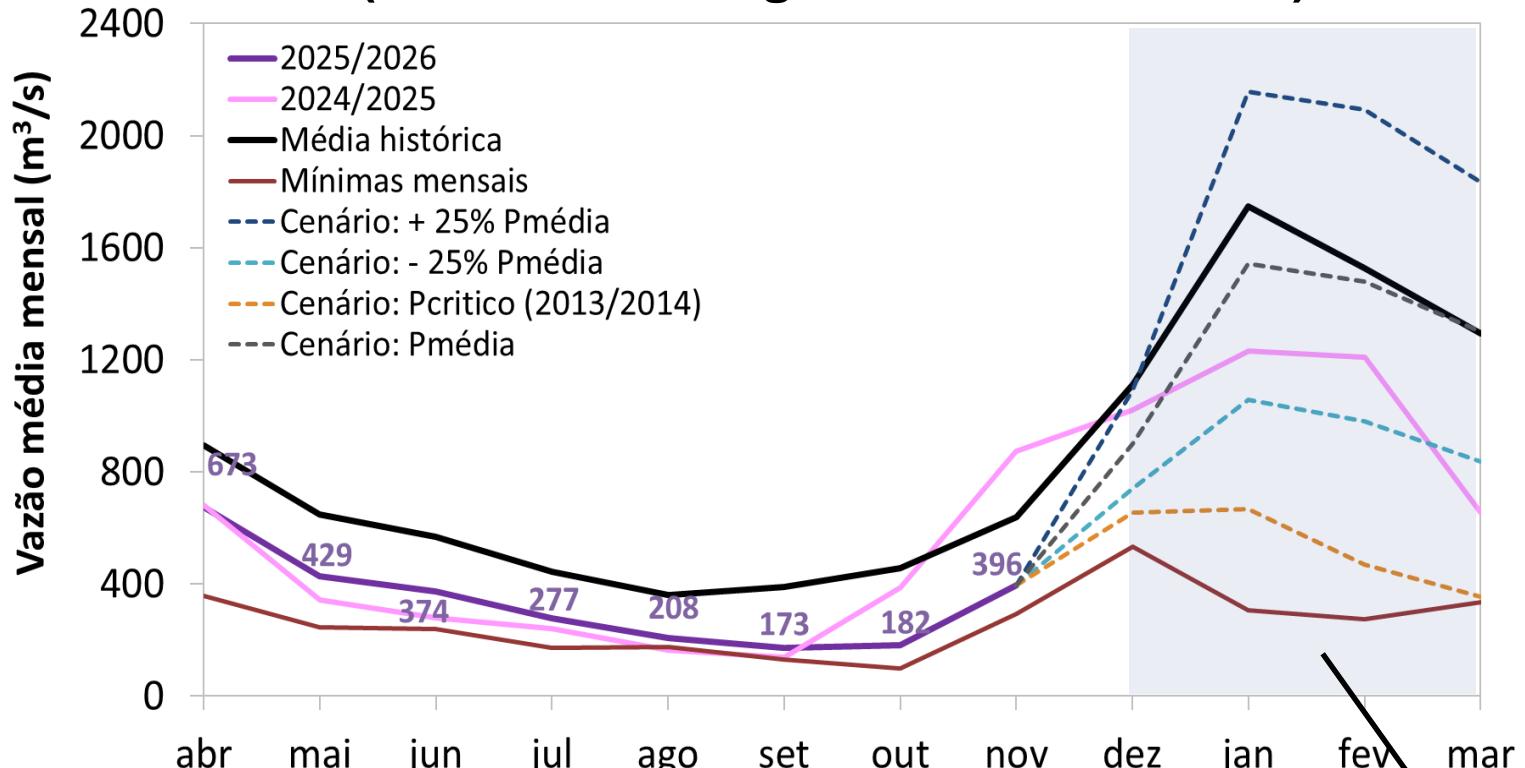
- Bacia UHE Jurumirim
- Bacia UHE Nova Ponte
- Bacia UHE Furnas
- Bacia UHE Segredo
- Bacia UHE Marimbondo
- Bacia UHE Emborcação
- Bacia UHE Salto Santiago
- Bacia UHE Capivara
- Bacia UHE Salto Caxias
- Bacia UHE Rosana
- Bacia UHE Itumbiara
- Bacia UHE Porto Primavera
- Bacia UHE Itaipu



Fonte: Previsão Meteorológica: ECMWF

Previsão de vazão: Lisflood/GloFAS Forecast  
<https://www.globalfloods.eu/glofas-forecasting/>

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



Dez-Mar (Meses Chuvosos)

MLT: 1421  $m^3/s$

Vazão	% MLT
1794 $m^3/s$	126%
1307 $m^3/s$	92%
904 $m^3/s$	64%
2013/2014 (49% MLT)	536 $m^3/s$
	38%