



# CEMADEN

Centro Nacional de Monitoramento e  
Alertas de Desastres Naturais

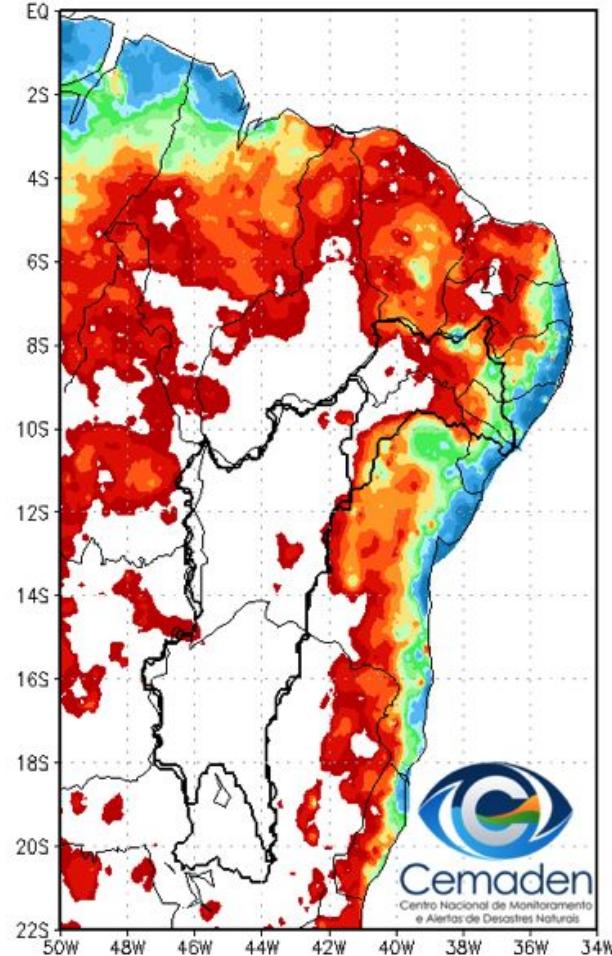
Monitoramento,  
Previsões e  
Projeções para a  
Bacia do Rio São  
Francisco

03 de Junho de 2025

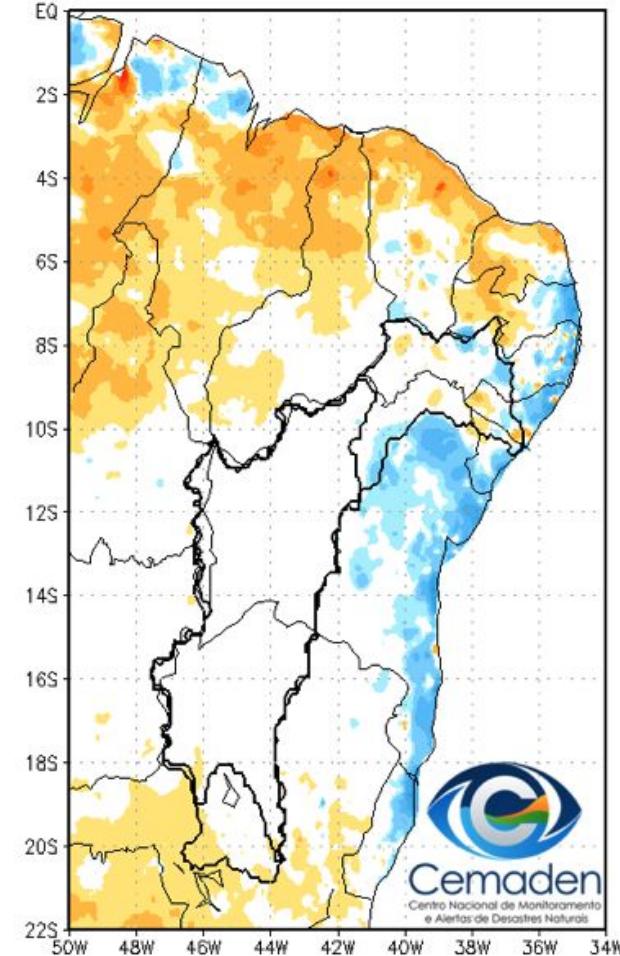


## Chuva dos últimos 30 dias

Precipitacao Acumulada (mm) A.S.  
Periodo: 02/05/2025 a 01/06/2025

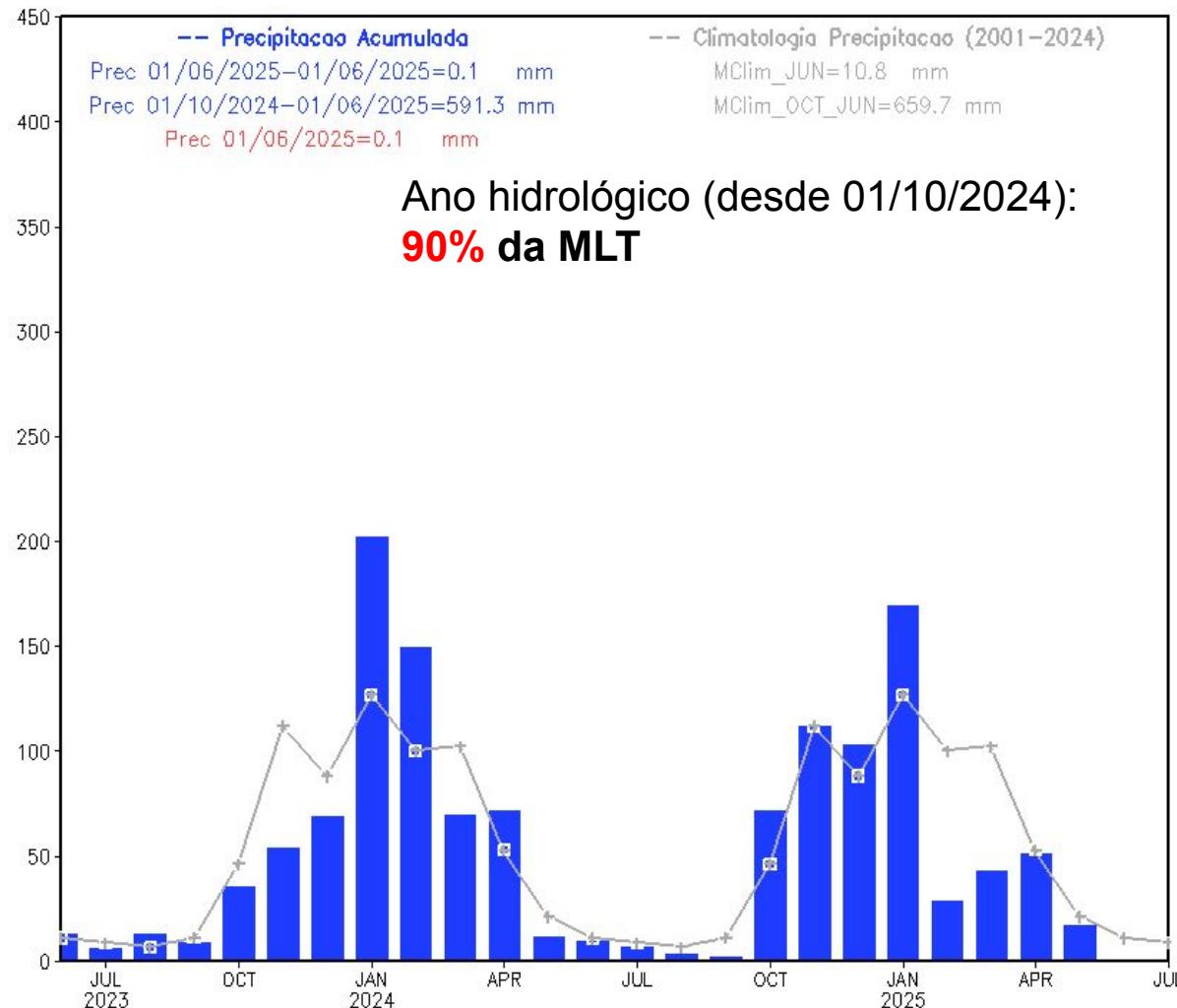


Anomalia de Precipitacao (mm) A.S.  
Periodo: 02/05/2025 a 01/06/2025

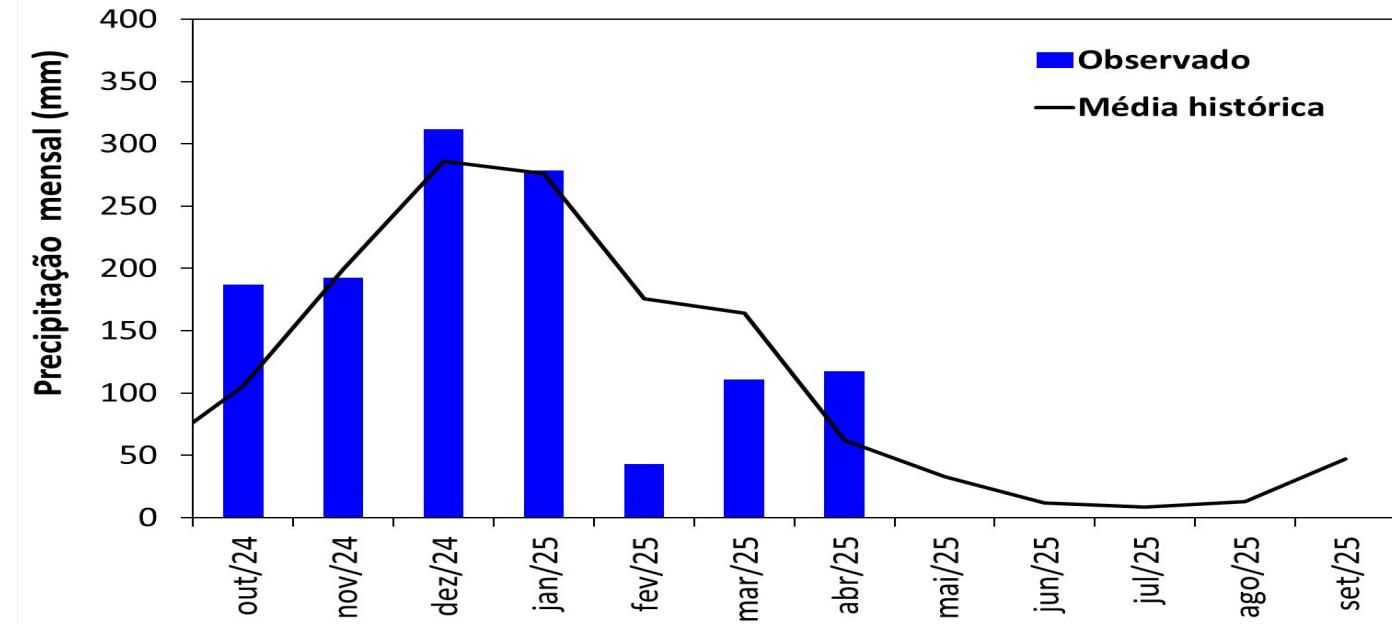


## Chuva dos últimos dois anos

Precipitacao Bacia do Rio Sao\_Francisco  
desde JUN 2023



# Monitoramento UHE Três Marias



## Precipitação

### Estação Chuvosa - Out a Mar - 1208 mm

2023/2024: 1057 mm (**87% da MLT**)

2024/2025: 1124 mm (**93% da MLT**)

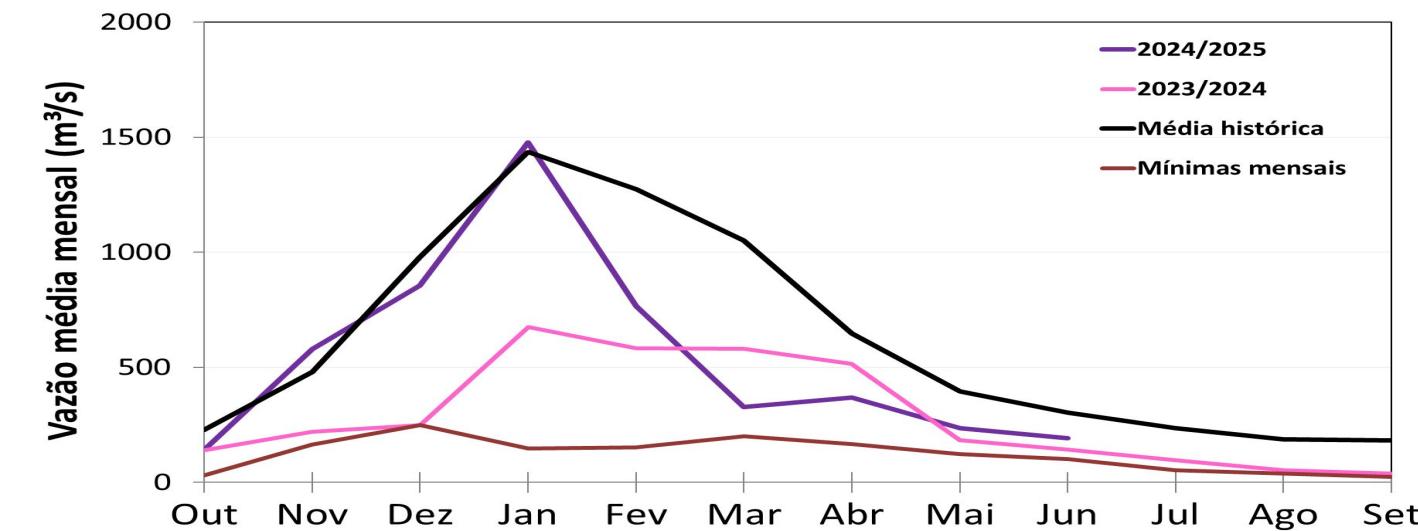
### Estação Seca - Abr a Set – 175 mm

2024: 57 mm (**32% da MLT**)

2025\*: 118 mm (**369% da MLT PARCIAL**)

Maio/25\*: 0.6 mm (MLT = 33 mm)

\*Até 31/05/2025



## Vazão

### Estação Chuvosa - Out a Mar - 908 m<sup>3</sup>/s

2023/2024: 408 m<sup>3</sup>/s (**45% da MLT**)

2024/2025: 691 m<sup>3</sup>/s (**76% da MLT**)

### Estação Seca - Abr a Set - 325 m<sup>3</sup>/s

2024: 172 m<sup>3</sup>/s (**53% da MLT**)

2025\*\*: 265 m<sup>3</sup>/s (**82% da MLT**)

Maio/25: 235 m<sup>3</sup>/s (**59% da MLT**)

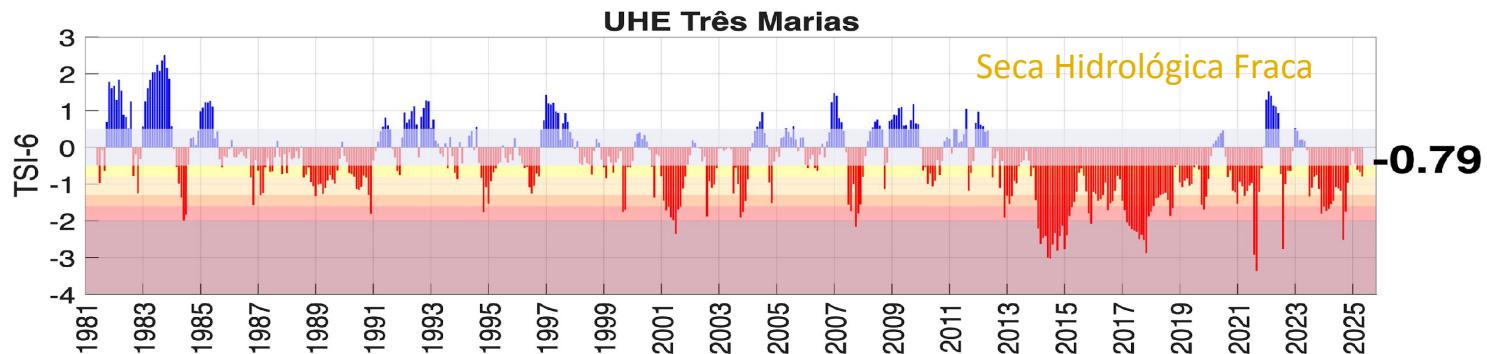
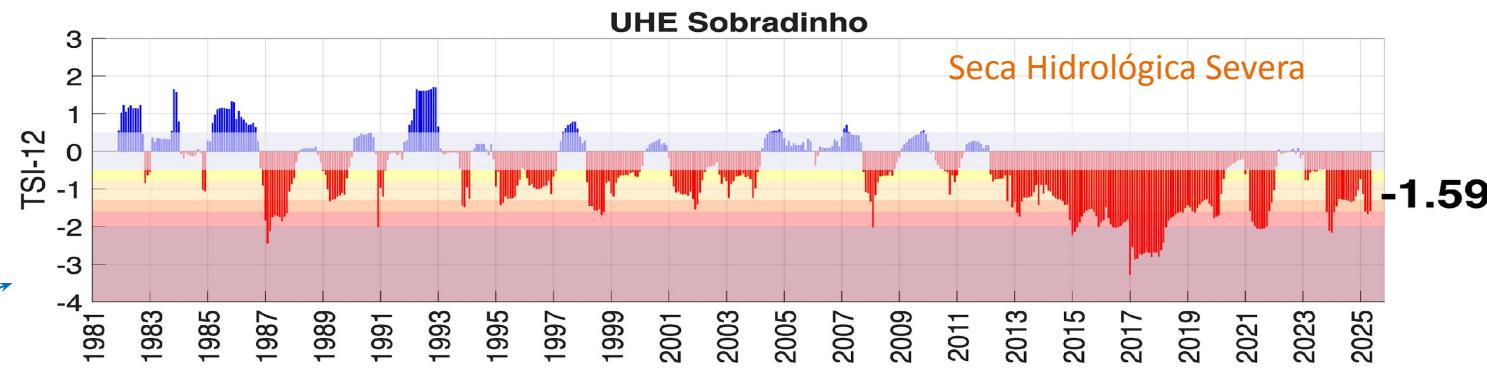
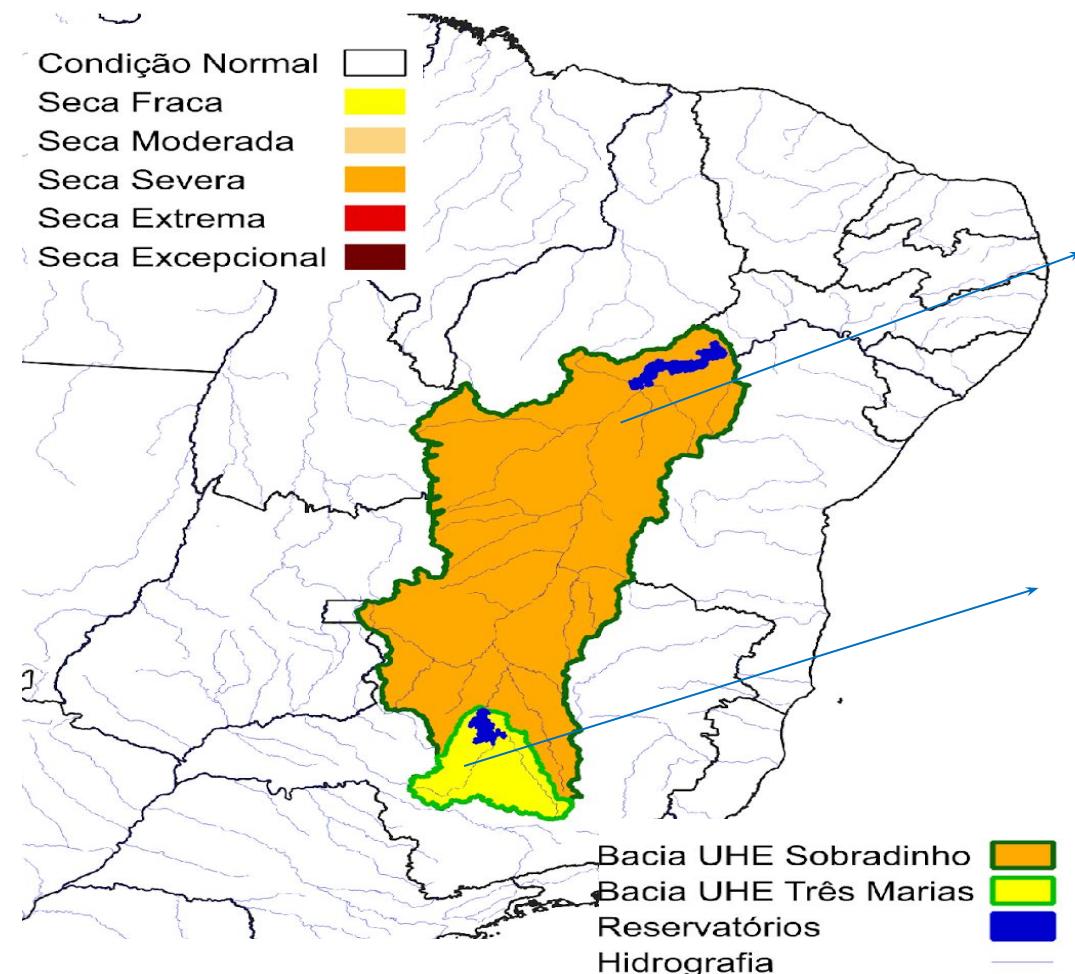
01/jun/25: 193 m<sup>3</sup>/s (**63% da MLT**)

\*\*Até 01/06/2025

# Monitoramento UHE Três Marias e Sobradinho

## Índice Padronizado Bivariado (Chuva-Vazão) – TSI: Longo Prazo

**Maio/2025**

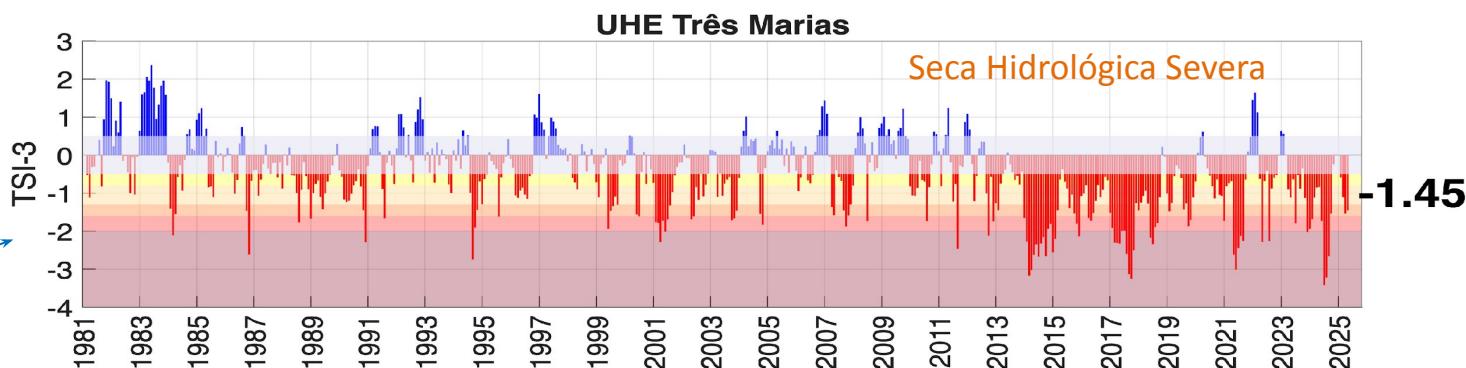
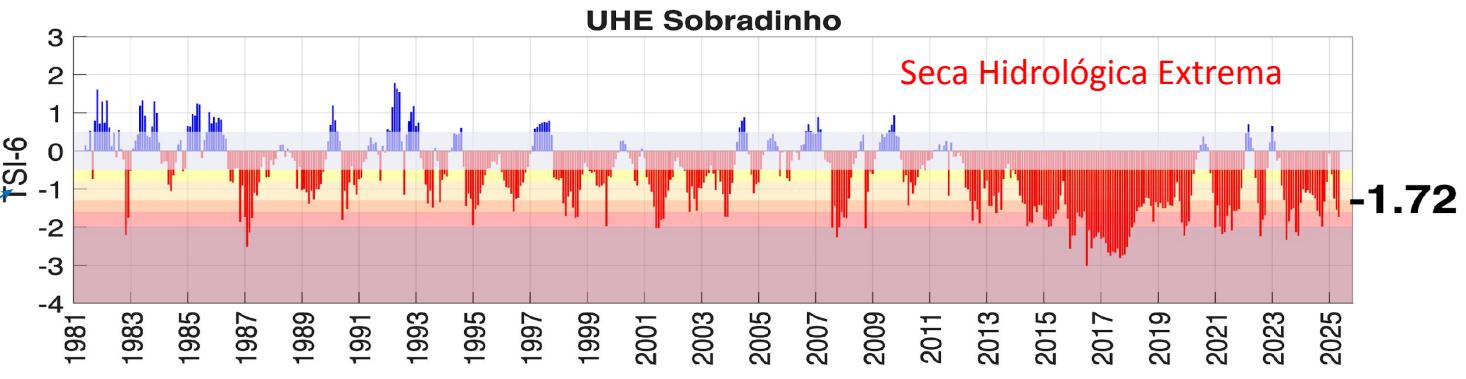
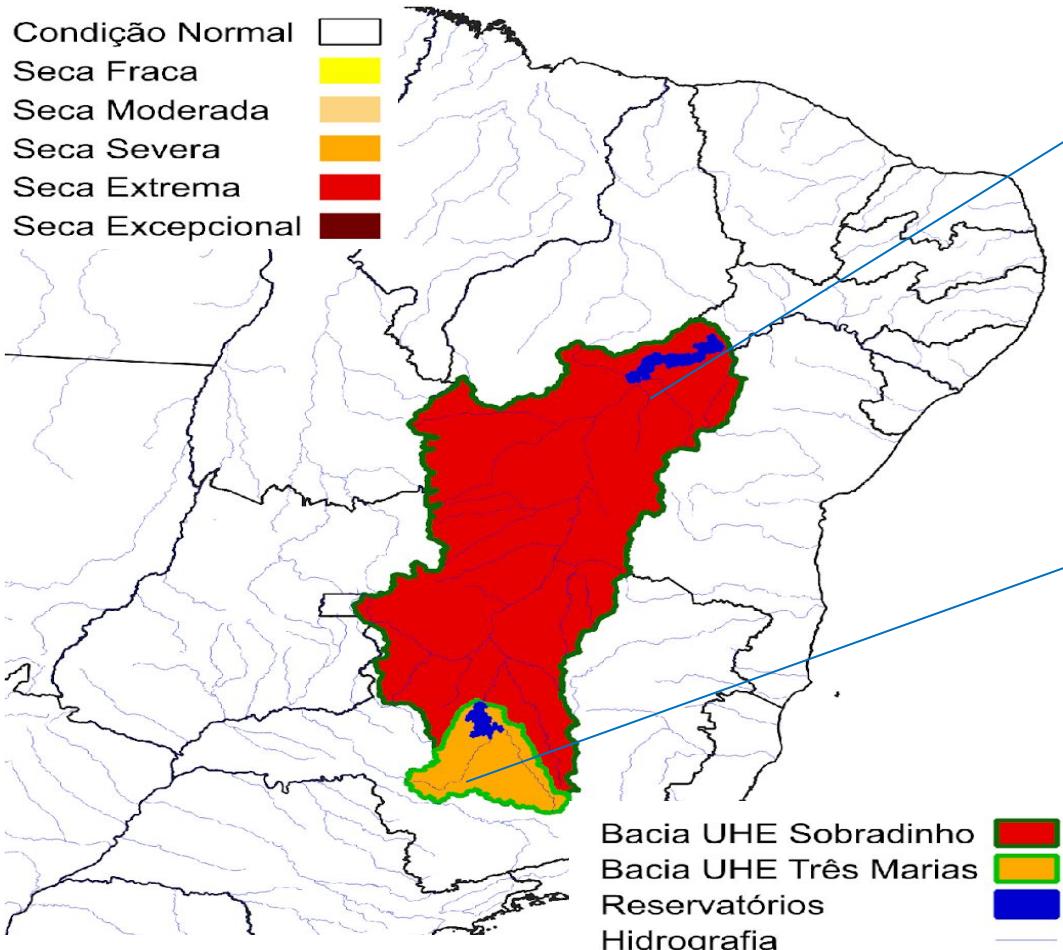


Bacia afluente à UHE:	TSI-Abril	TSI-Maio
Sobradinho	Extrema (-1.67)	Severa (-1.59)
Três Marias	Fraca (-0.68)	Fraca (-0.79)

# Monitoramento UHE Três Marias e Sobradinho

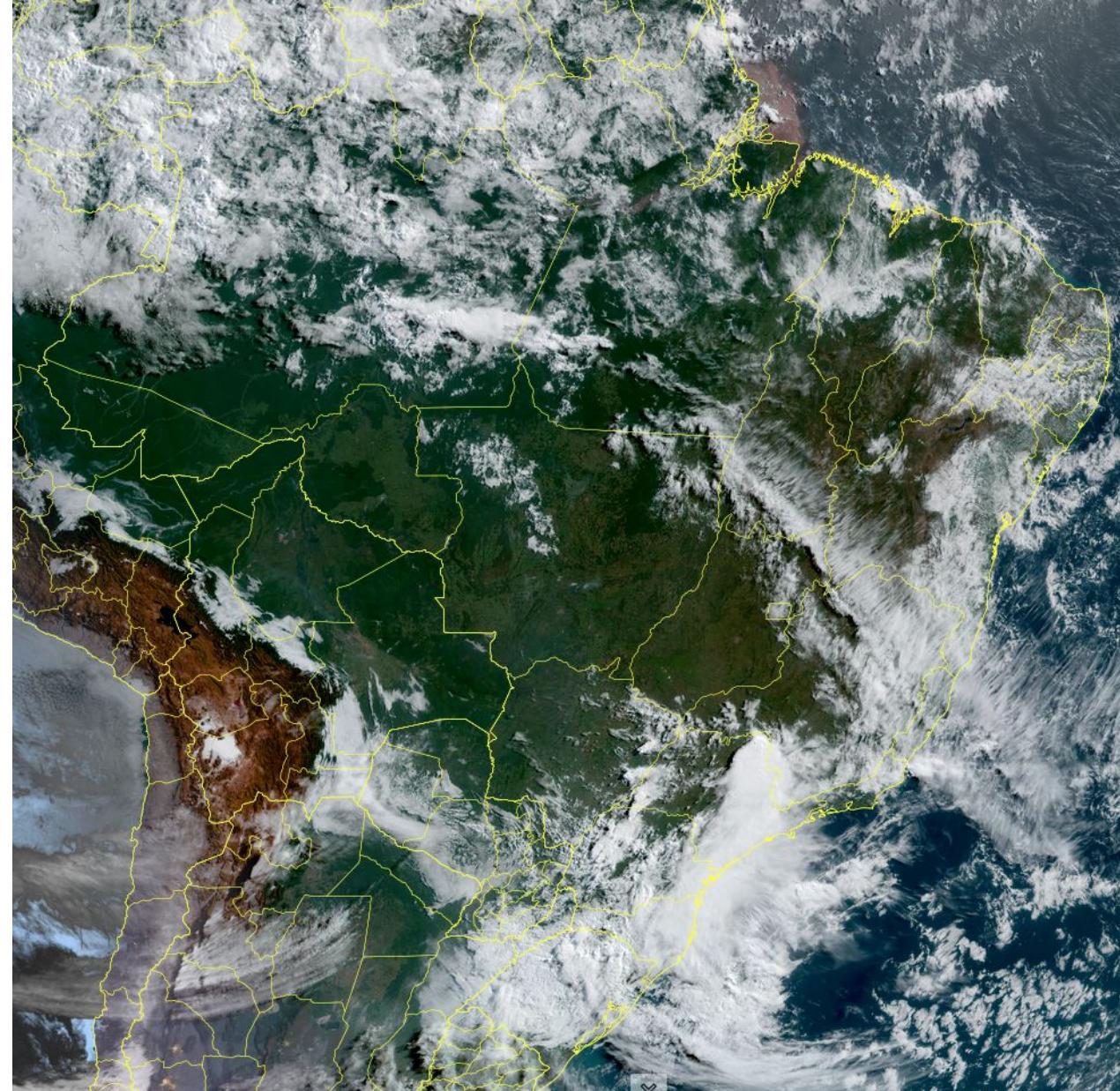
## Índice Padronizado Bivariado (Chuva-Vazão) – TSI: Curto Prazo

**Maio/2025**



Bacia afluente à UHE:	TSI-Abr	TSI-Maio
Sobradinho	Severa (-1.56)	Severa (-1.45)
Três Marias	Severa (-1.55)	Extrema (-1.72)

## Situação meteorológica atual

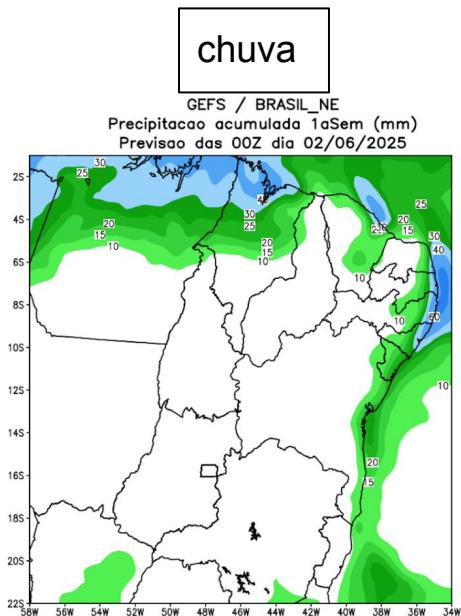


Fonte: GOES-19/NOAA, CIRA/Univ. Colorado

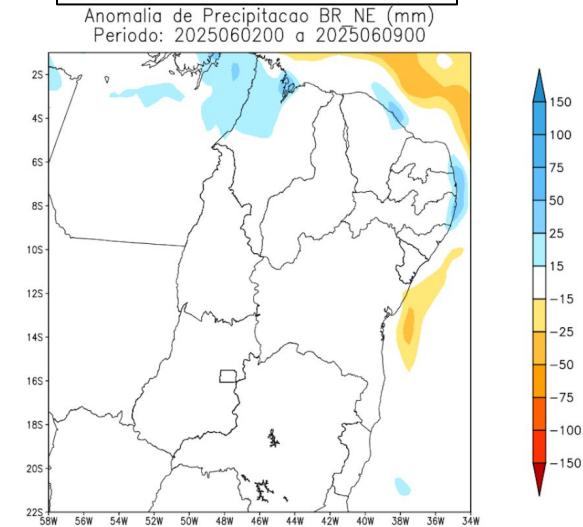
# CHUVA

## próximas 2 semanas

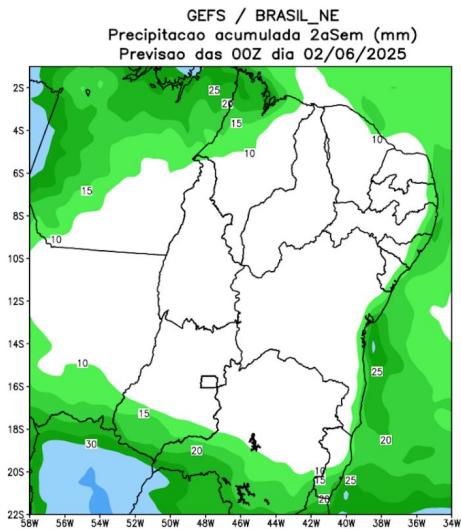
Semana 1



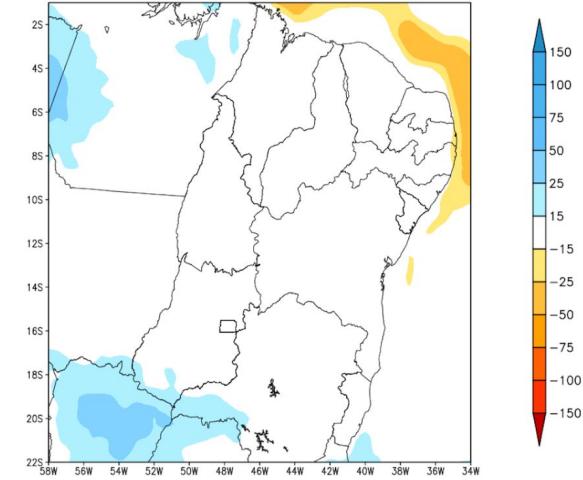
anomalia de chuva



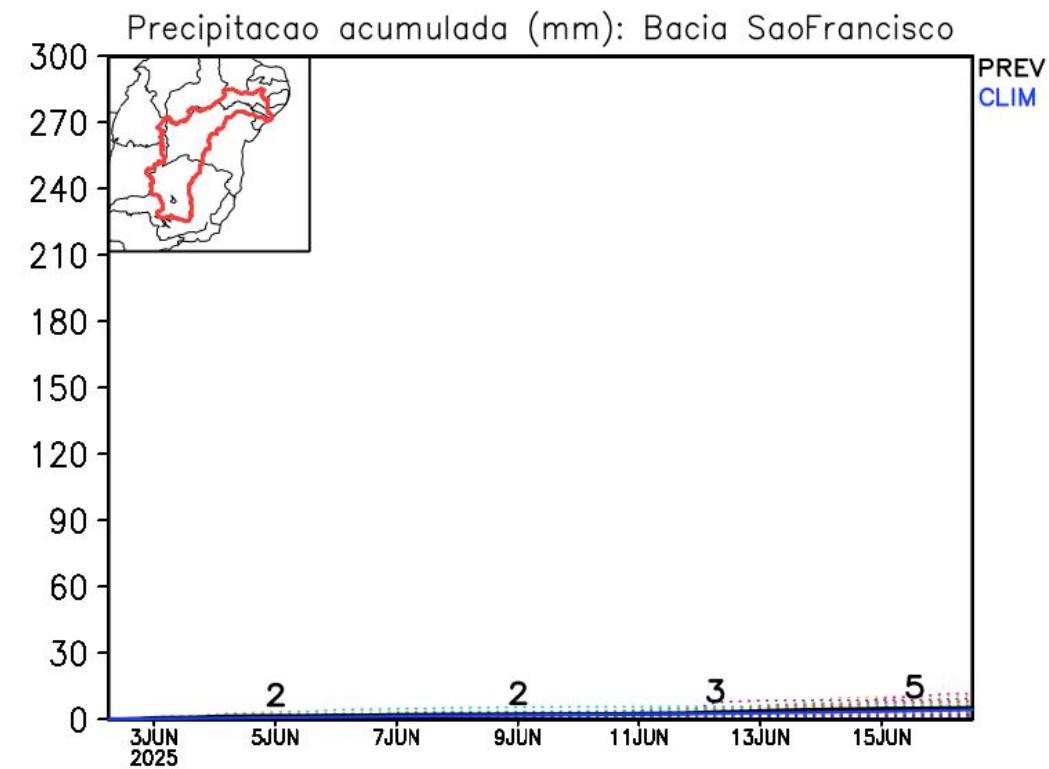
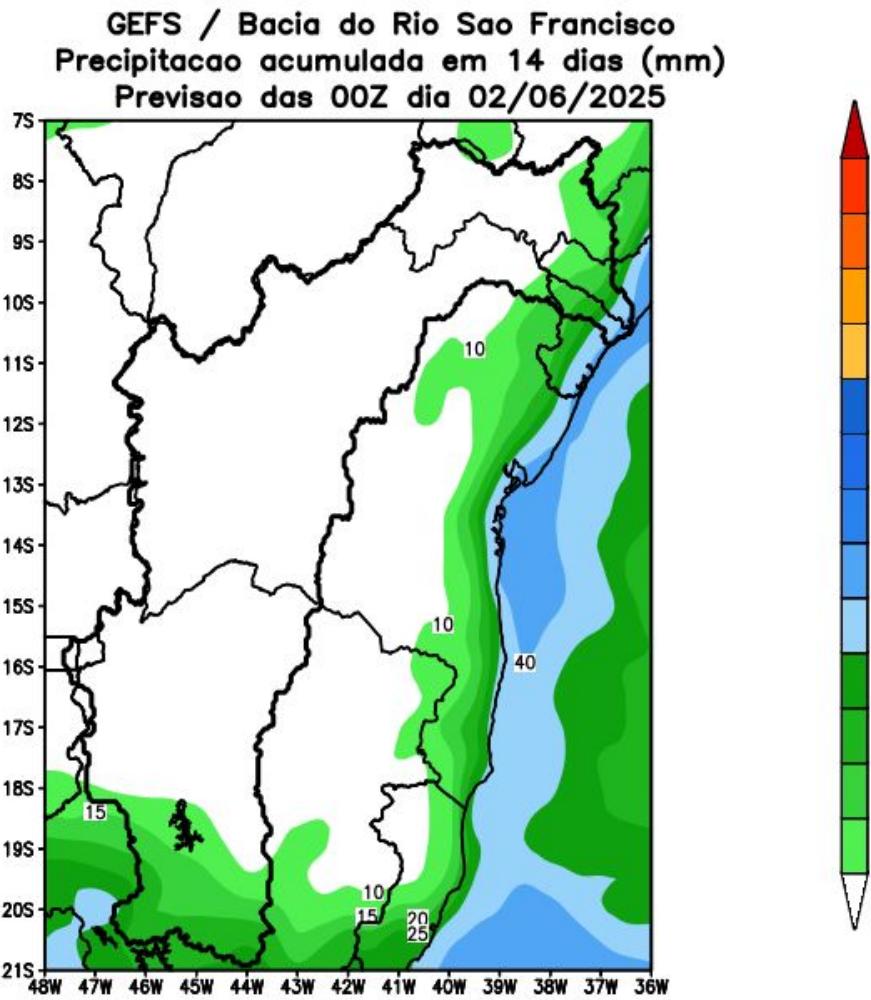
Semana 2



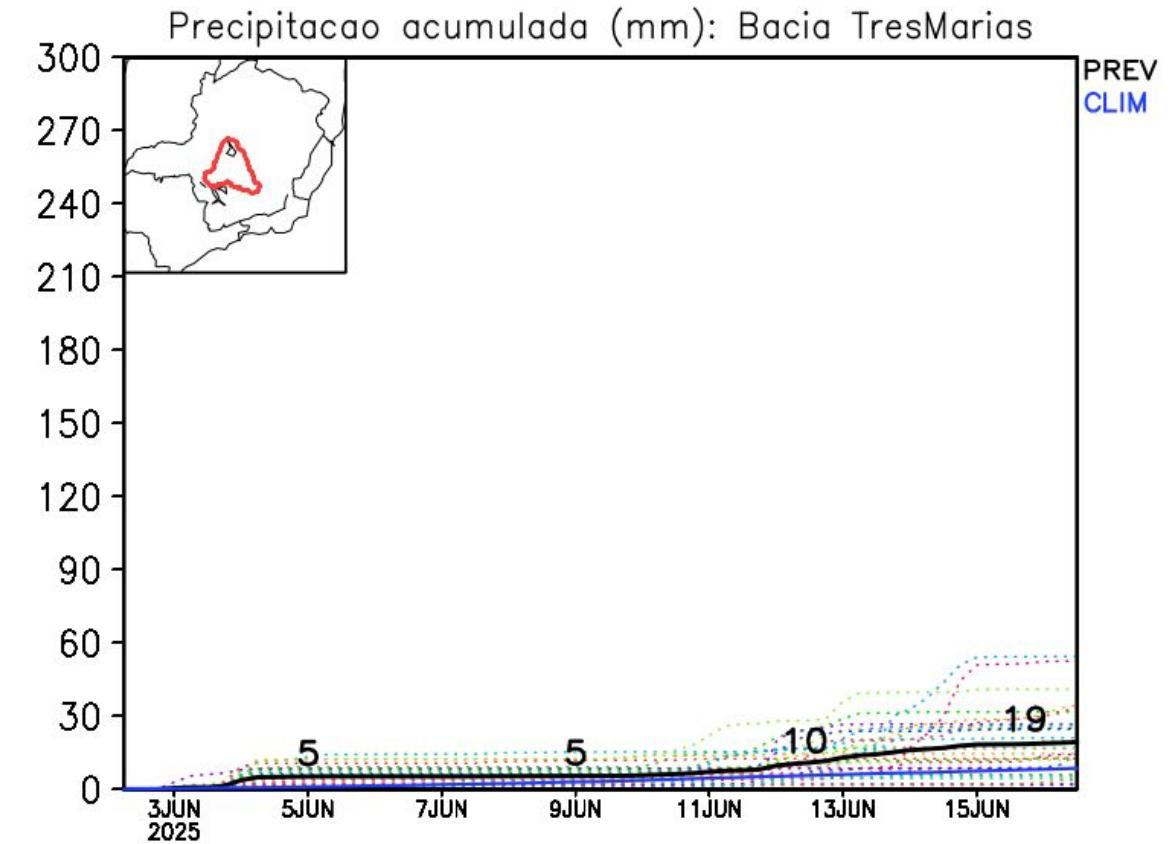
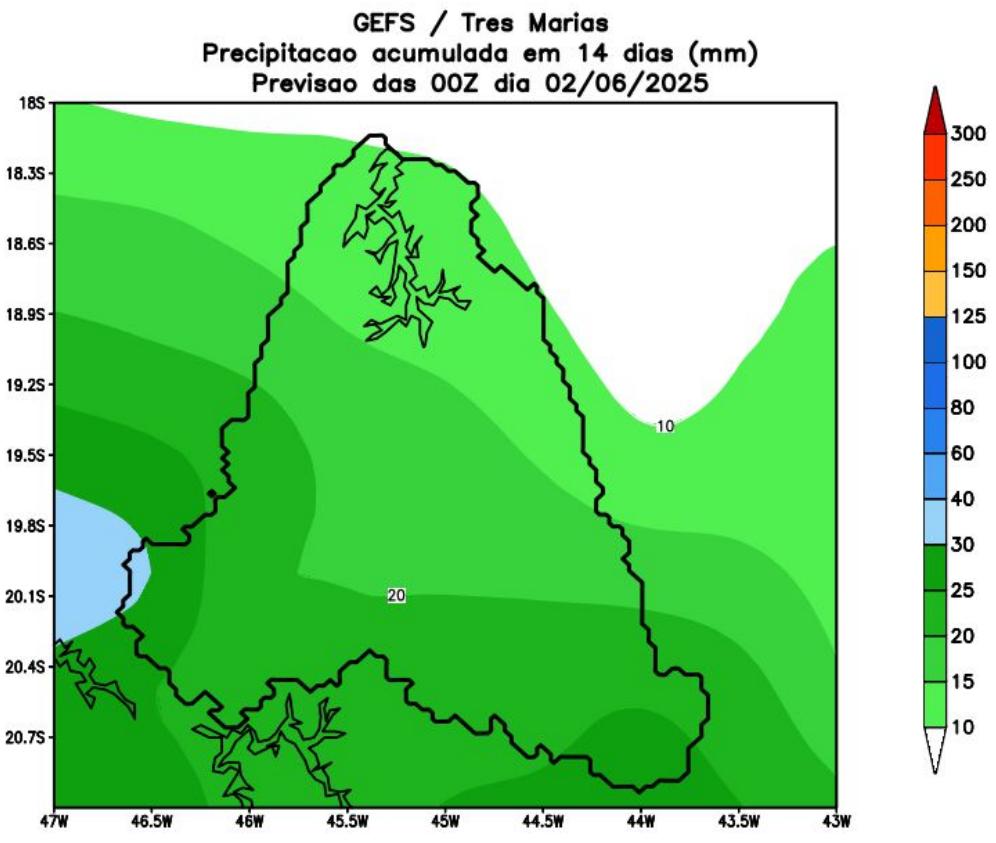
Anomalia de Precipitacao BR\_NE (mm)  
Periodo: 2025061000 a 2025061600



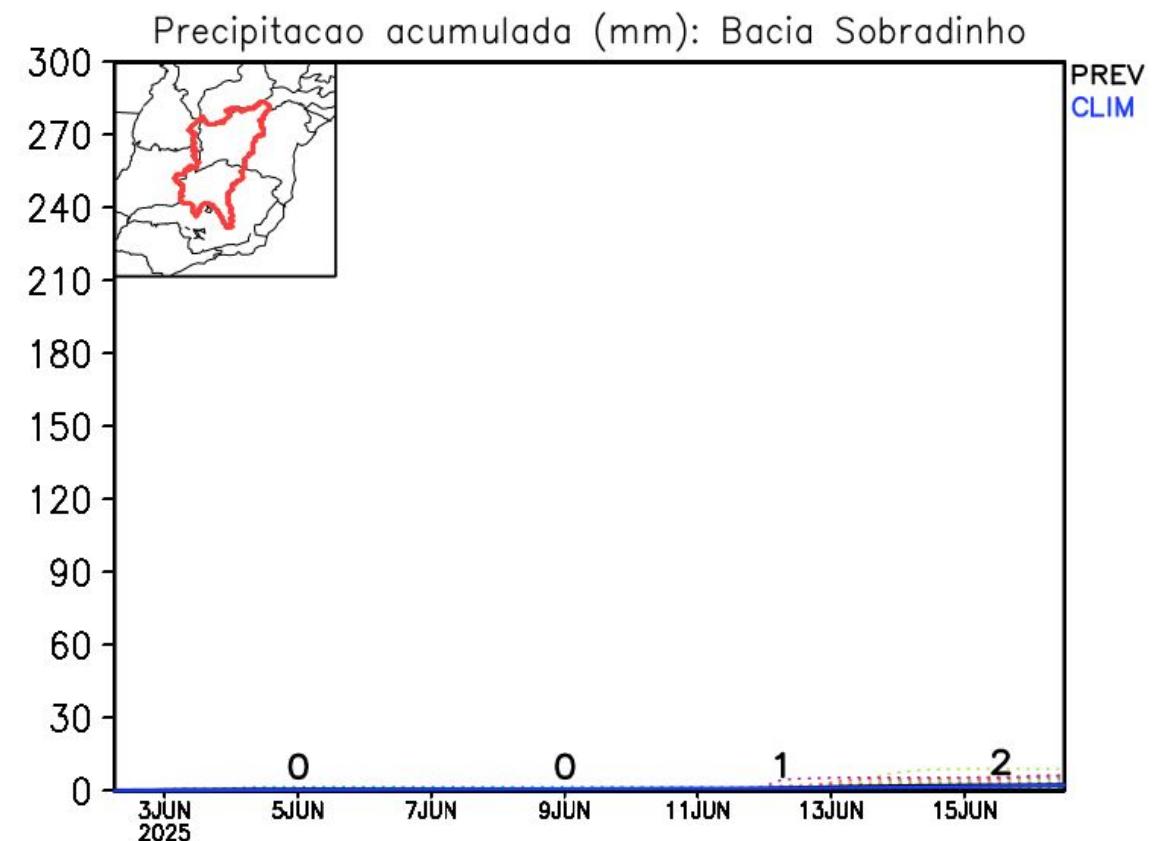
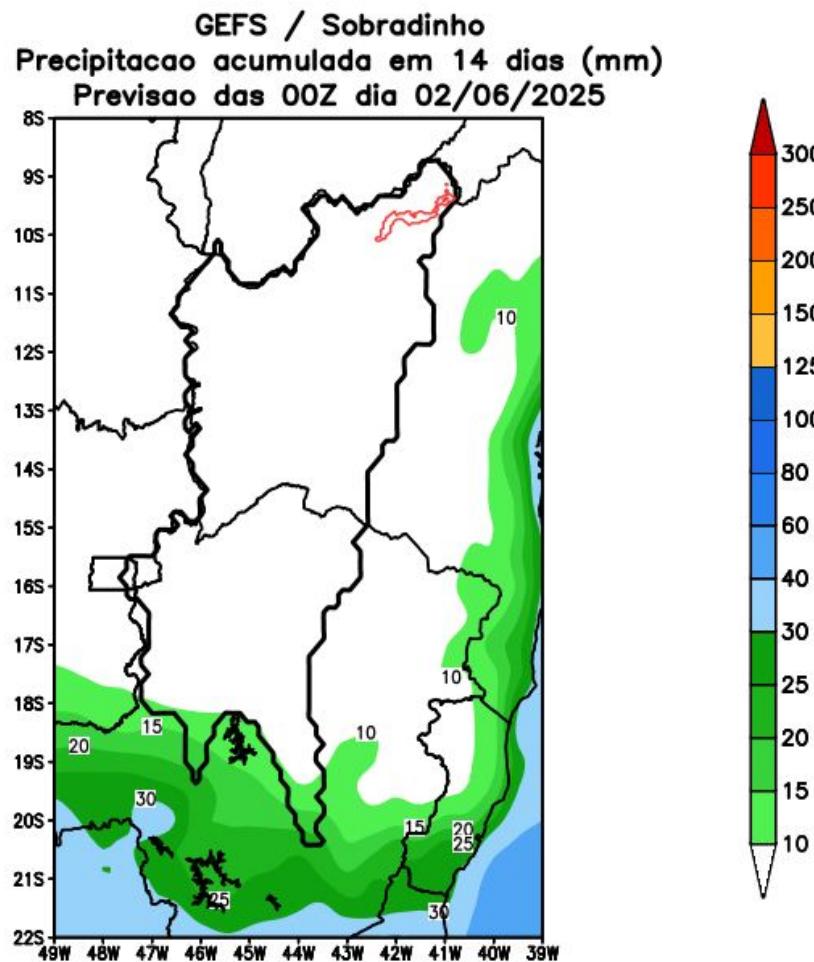
## Bacia do rio São Francisco



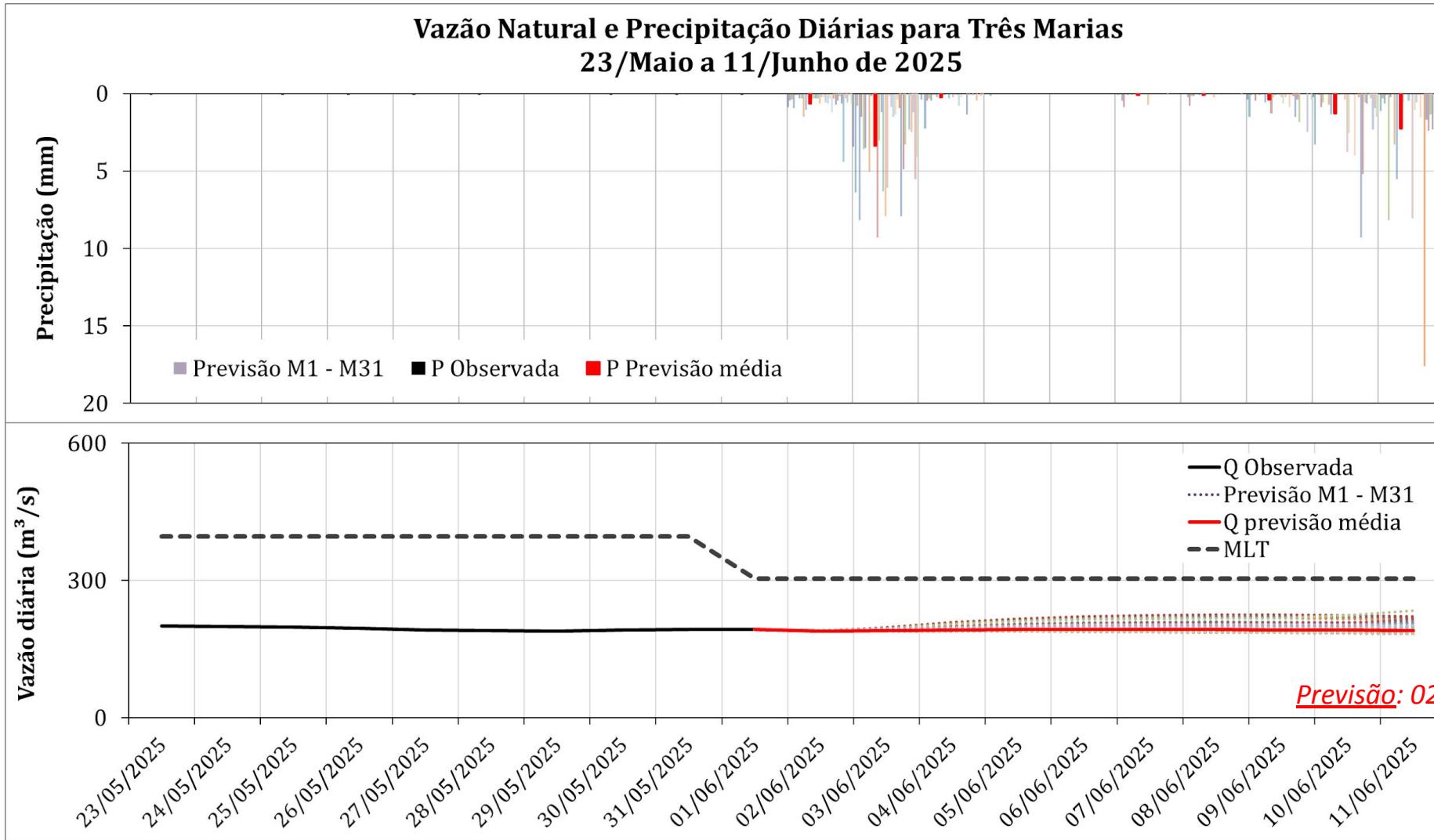
## Bacia de Três Marias



## Bacia de Sobradinho



# UHE Três Marias: Previsão de Vazão (modelo PDM/CEMADEN)



Previsão média para  
os próximos 10 dias: 191 m<sup>3</sup>/s

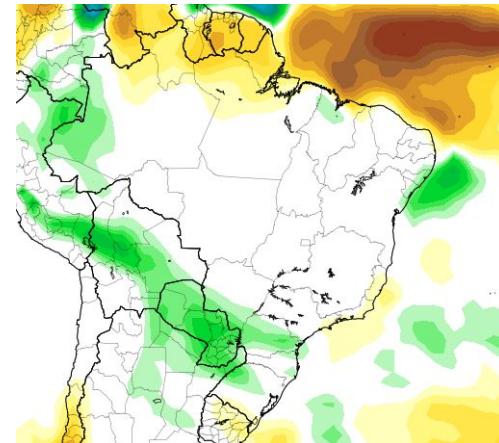


63% da MLT de Junho

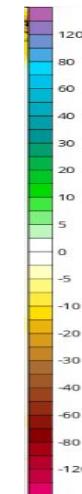
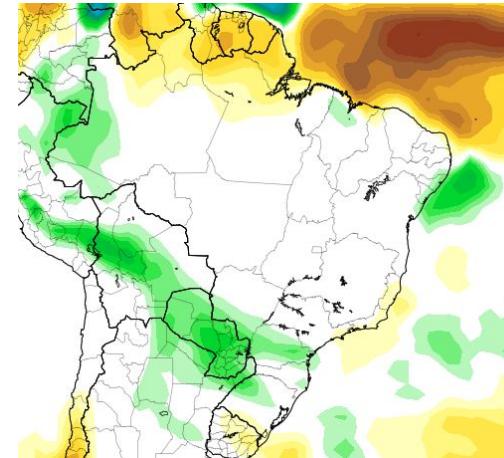
## Anomalia de Chuva 3a e 4a semanas

CFS/NOAA

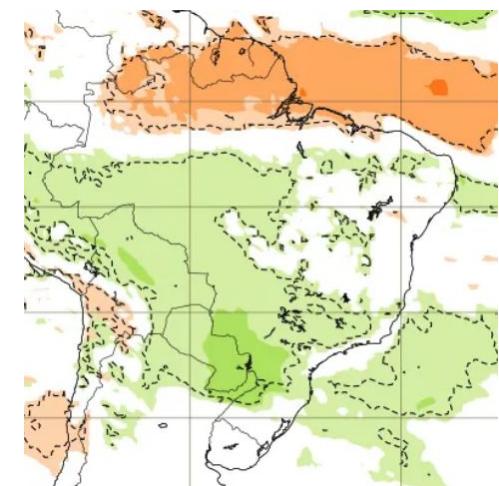
16-22 Junho



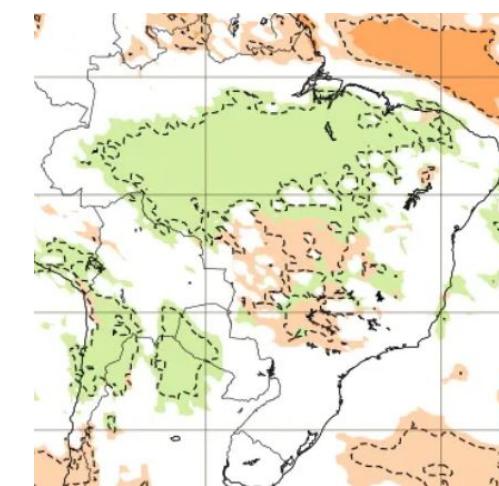
23-29 Junho



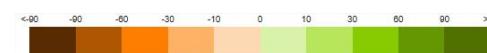
ECMWF



16-22 Junho

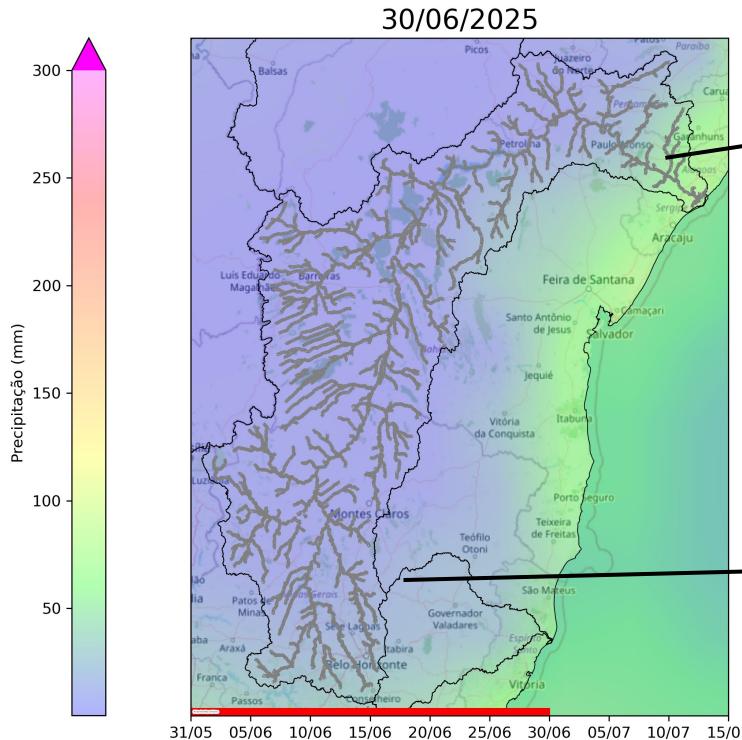


23-29 Junho



# Previsão de vazão natural na Bacia Rio São Francisco (Modelo hidrológico MHD)

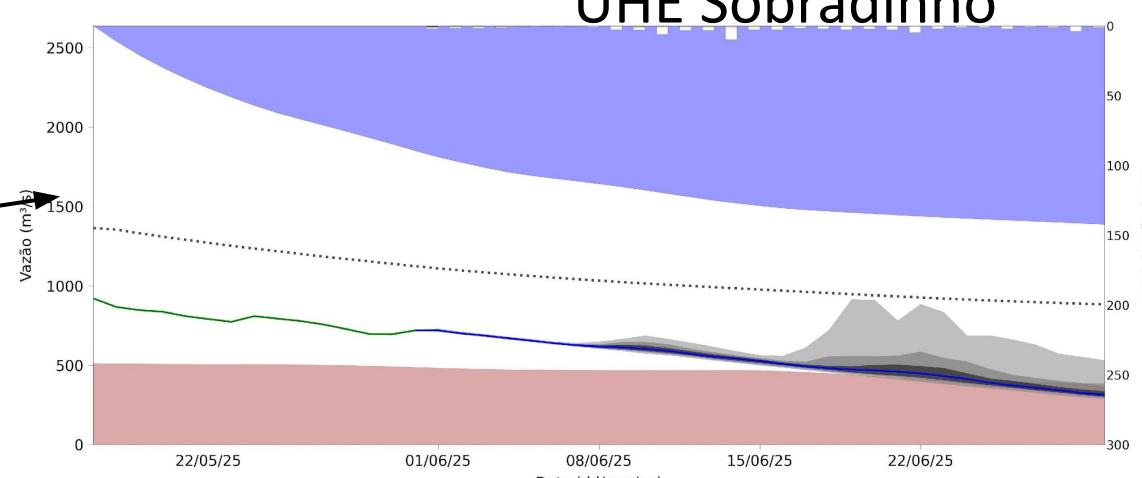
**Previsão: 31/05/2025 a 30/06/2025**



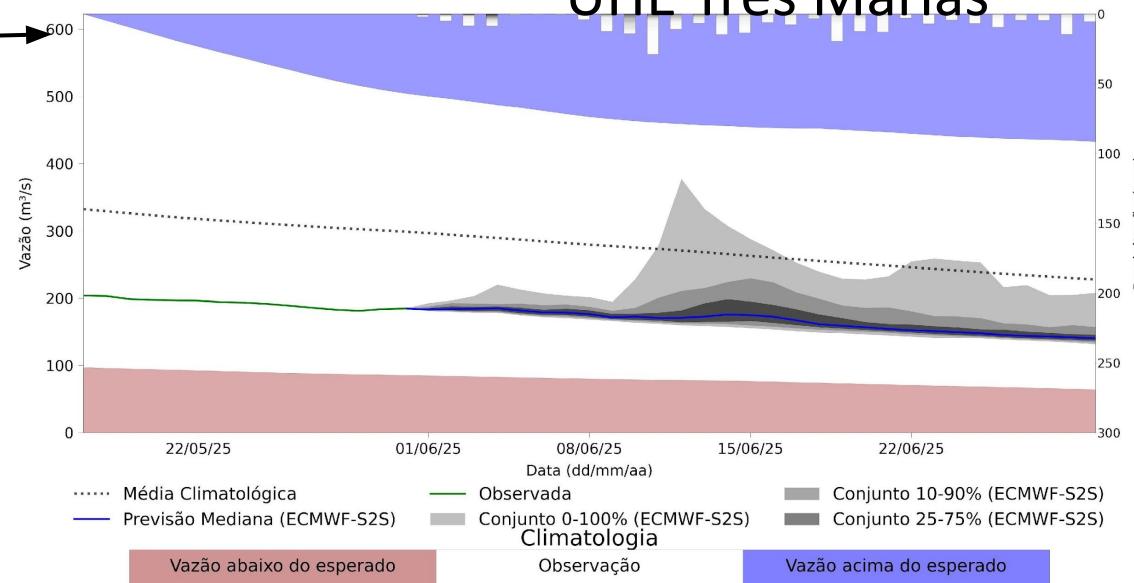
*Fonte: Meteorologia (INMET/MERGE); Vazão (ANA/ONS)*

MLT: 1993-2024

## *Previsão Meteorológica: ECMWF-S2S*

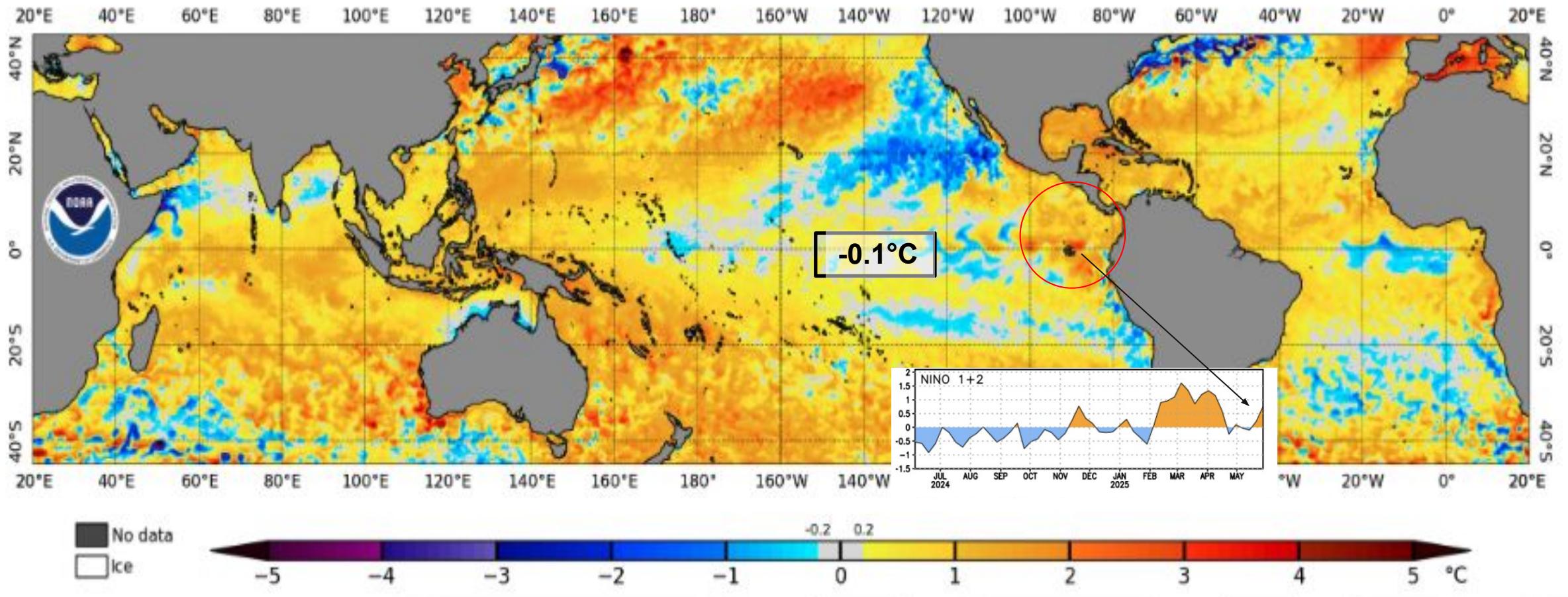


# UHE Três Marias



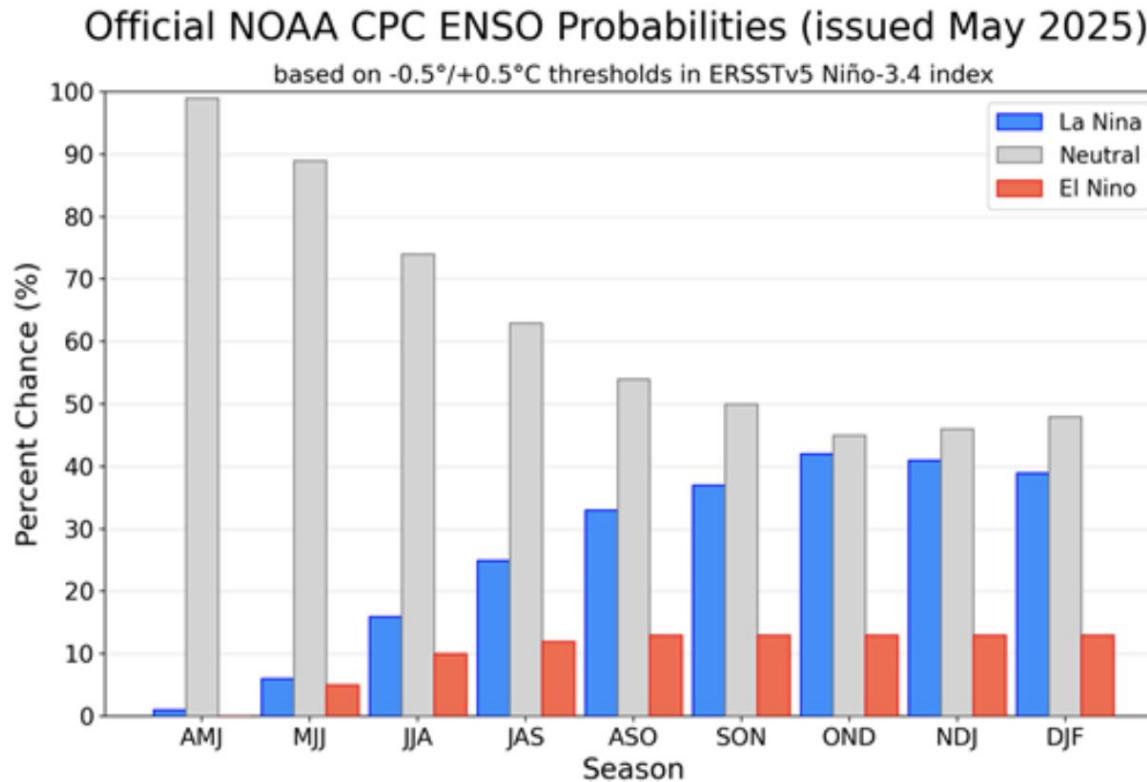
## Status Atual: [La Niña](#)

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



FONTE: NOAA

# Previsão do “ENSO”

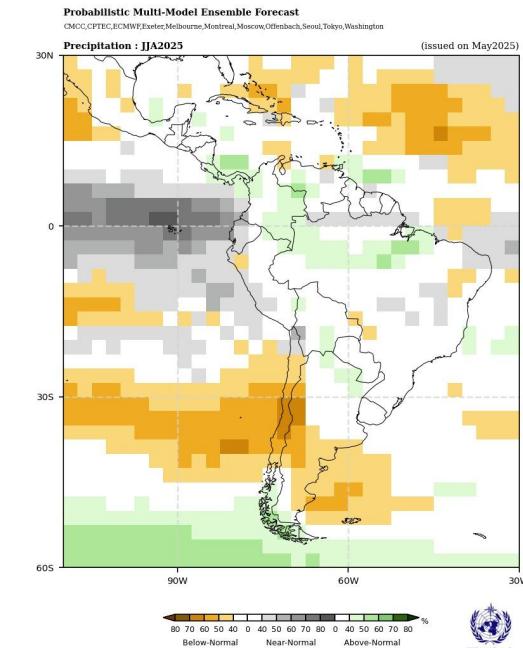
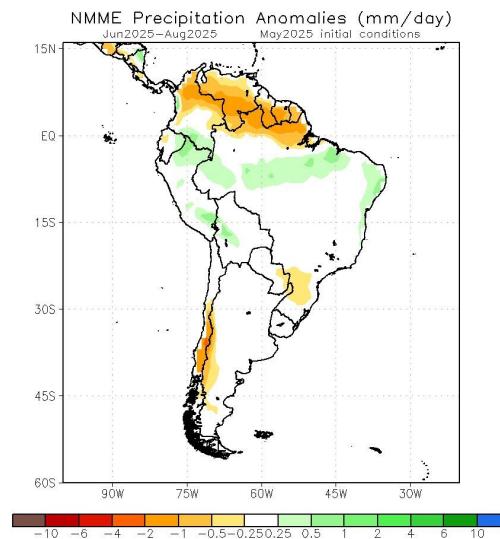
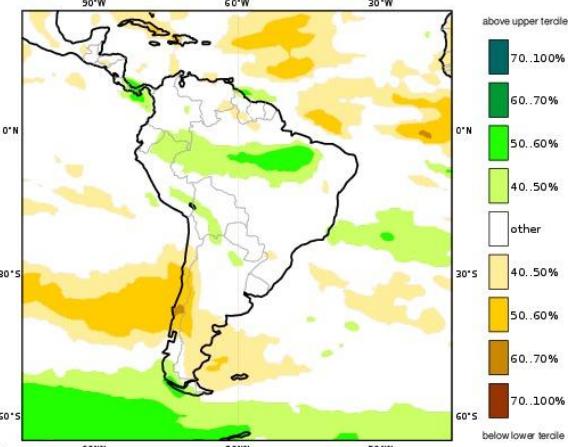


Situação => NEUTRALIDADE

# Previsão Sazonal de Chuva Multi-Modelo

Junho-Julho-Agosto

C3S multi-system seasonal forecast  
Prob(most likely category of precipitation)  
Nominal forecast start: 01/05/25  
Unweighted mean

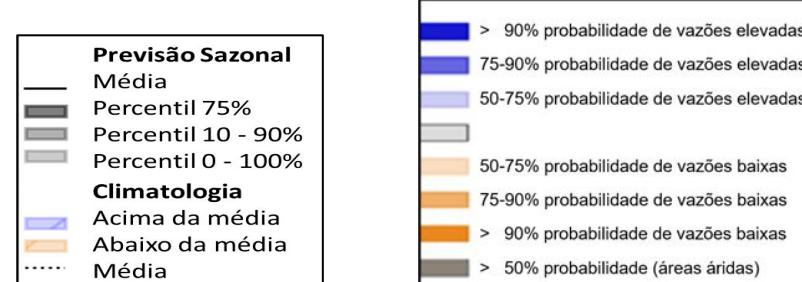
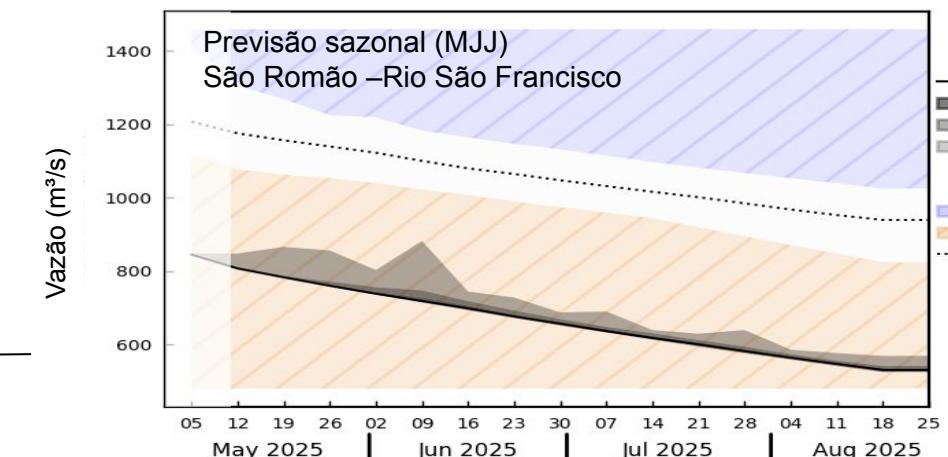
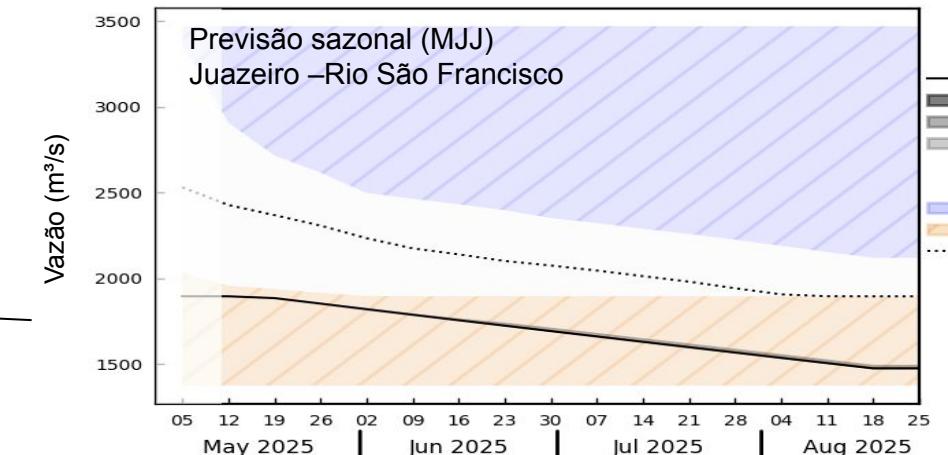
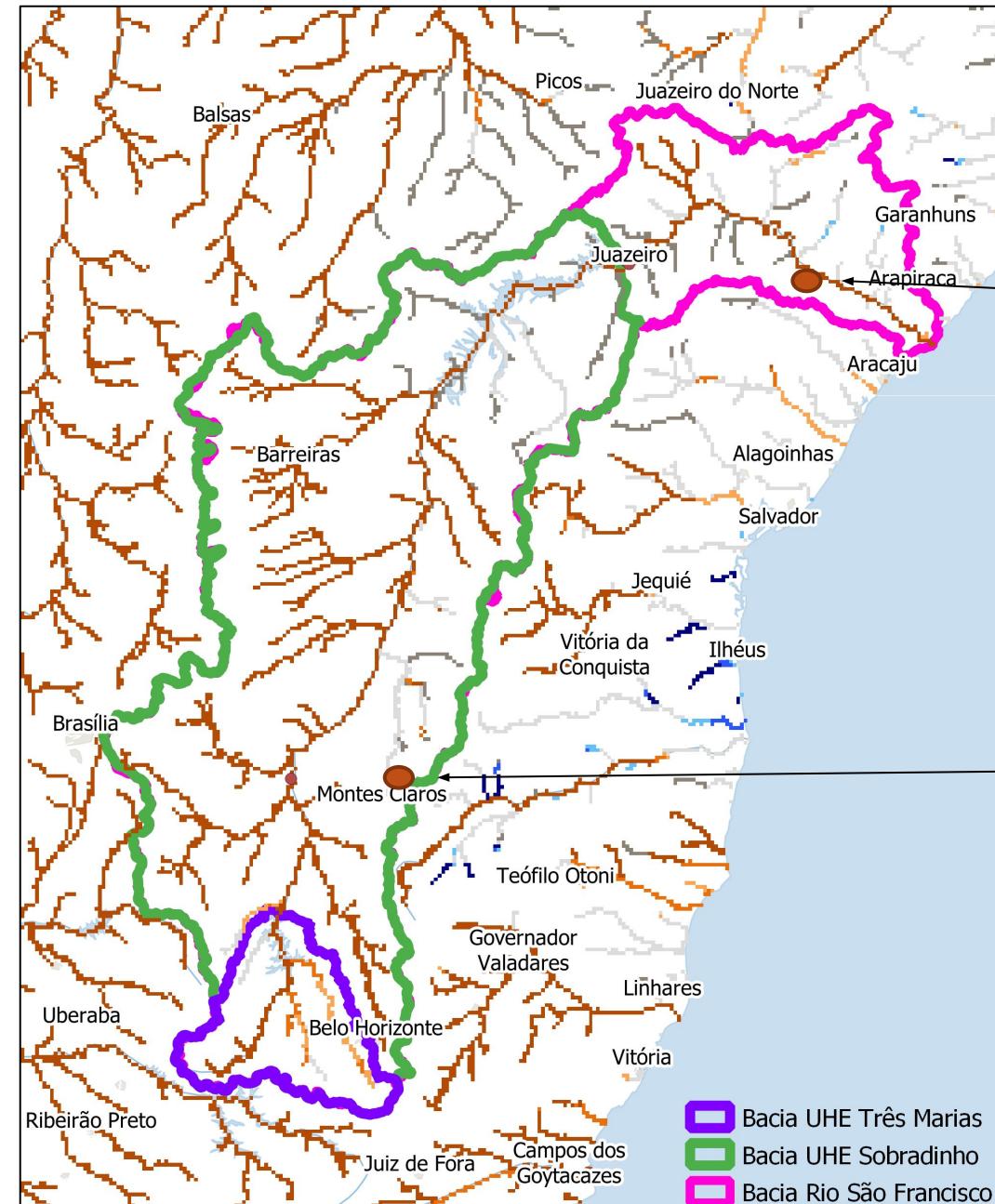


Modelos Europeus

Modelos Norte Americanos

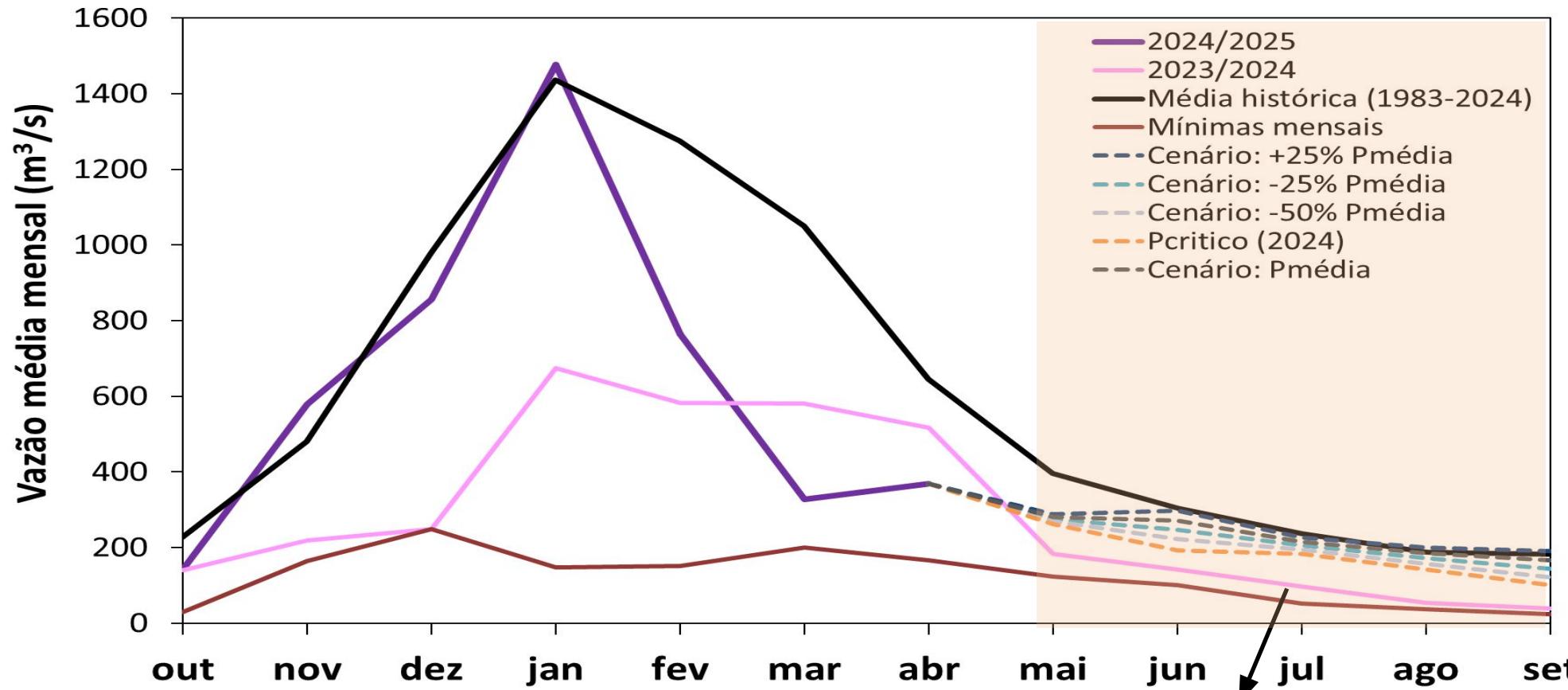
Modelos da WMO

# Previsão Sazonal de Vazão (Maio, Junho e Julho-MJJ) do Sistema Global de Previsão de Vazão (Global Flood Awareness System-GloFAS) para a Bacia do Rio São Francisco



Fonte: <https://www.globalfloods.eu/glofas-forecasting/>

# Três Marias: Projeção de Vazão (Modelo hidrológico PDM-CEMADEN)

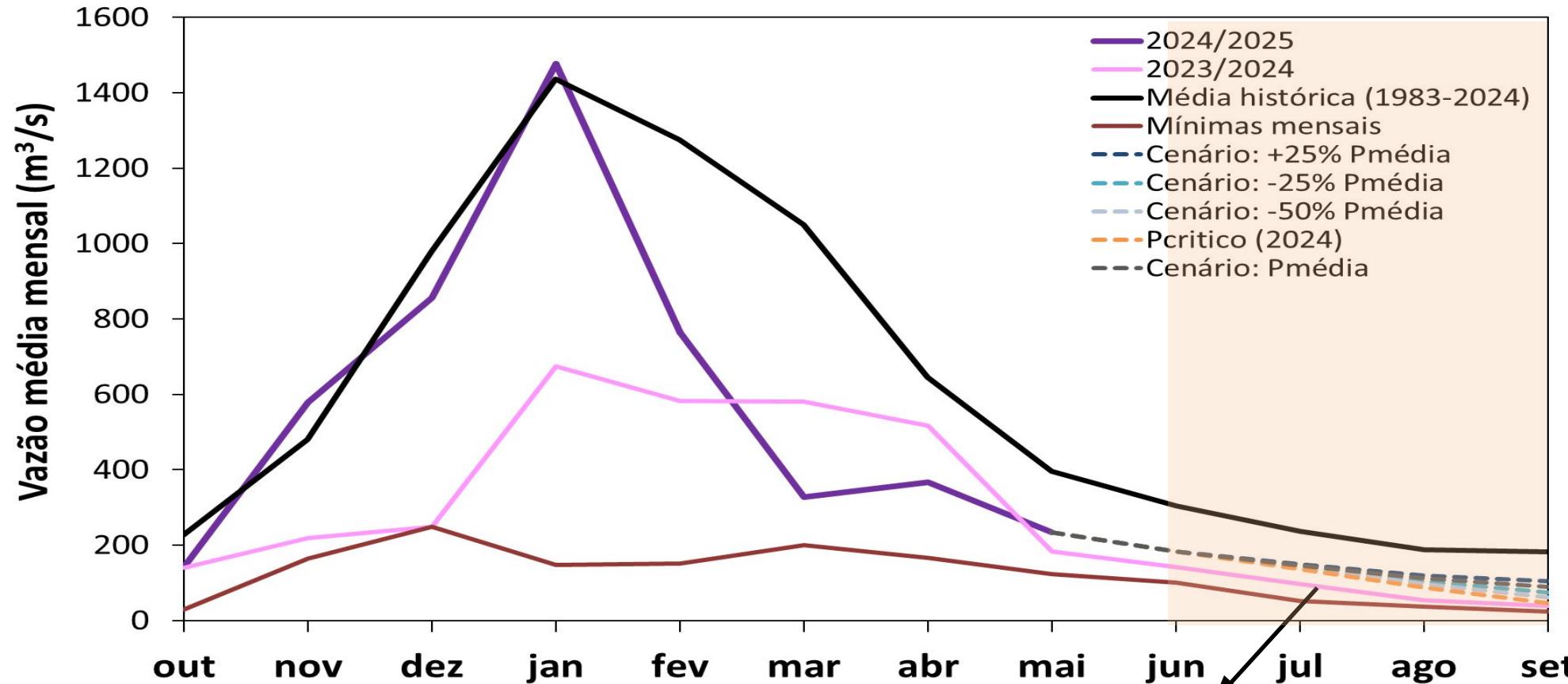


**Maio-Set (Meses secos 2025)**

**MLT: 261  $\text{m}^3/\text{s}$**

Vazão	% MLT
240 $\text{m}^3/\text{s}$	92%
224 $\text{m}^3/\text{s}$	86%
209 $\text{m}^3/\text{s}$	80%
193 $\text{m}^3/\text{s}$	74%
176 $\text{m}^3/\text{s}$	67%

# Três Marias: Projeção de Vazão (Modelo hidrológico PDM-CEMADEN)



**Jun-Set (Meses secos 2025)**

**MLT: 227  $\text{m}^3/\text{s}$**

Vazão	% MLT
139 $\text{m}^3/\text{s}$	61%
133 $\text{m}^3/\text{s}$	58%
126 $\text{m}^3/\text{s}$	56%
120 $\text{m}^3/\text{s}$	53%
114 $\text{m}^3/\text{s}$	50%