

# Monitoramento e Previsões para a Bacia do rio Araguaia-Tocantins

MAIO 2025

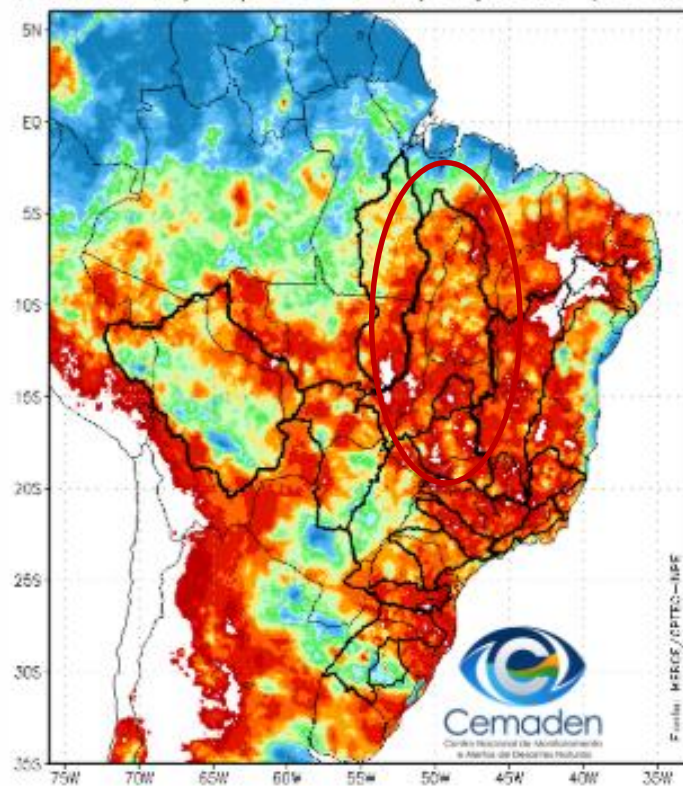


MINISTÉRIO DA  
CIÊNCIA, TECNOLOGIA  
E INOVAÇÃO

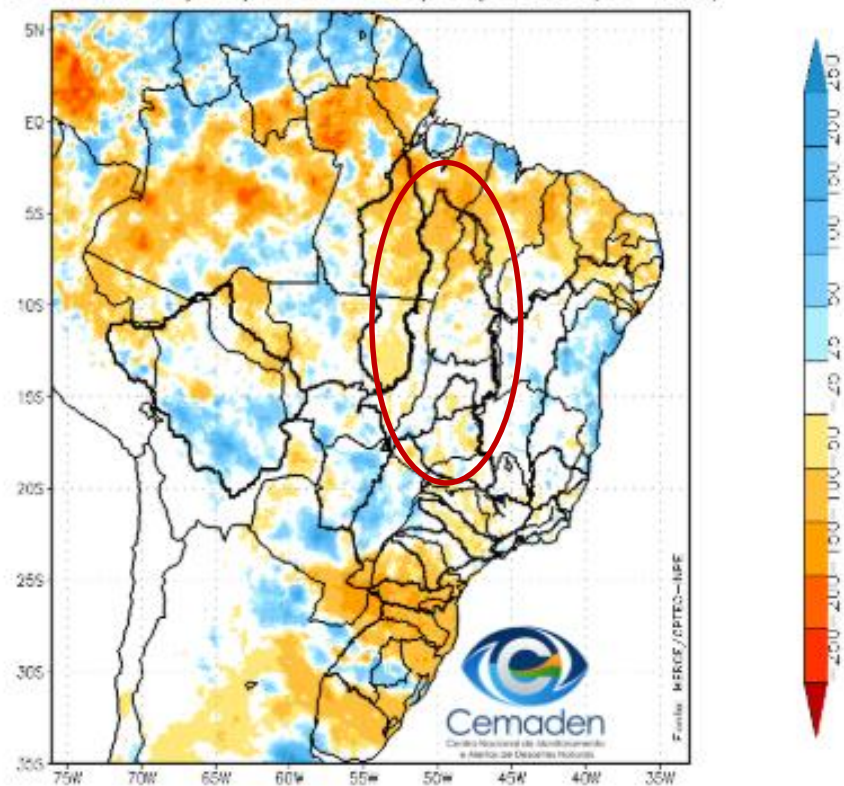


## Precipitação acumulada nos últimos 30 dias

Precipitação Acumulada (mm) A.S.  
Período: 19/04/2025 a 19/05/2025 (30 dias)



Anomalia de Precipitação (mm) A.S.  
Período: 19/04/2025 a 19/05/2025 (30 dias)

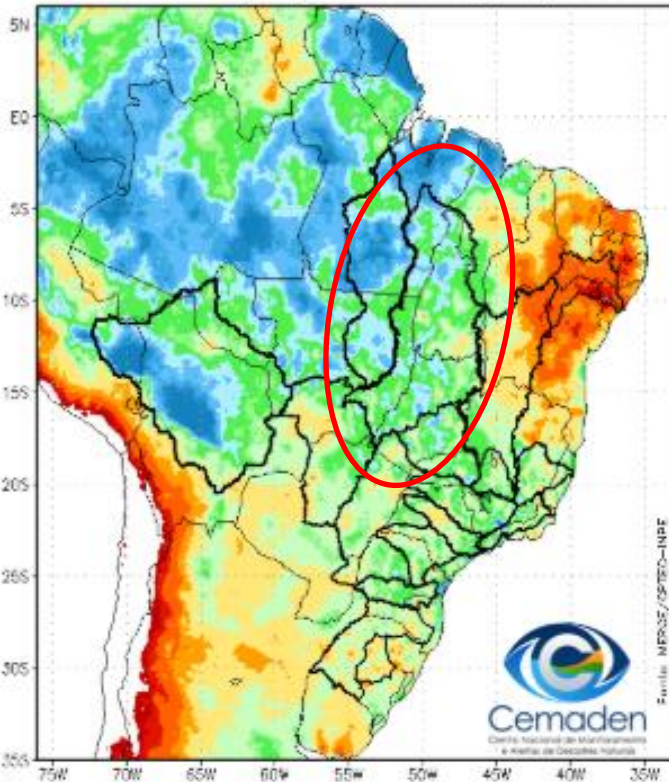


Fonte dos dados: Merge/INPE

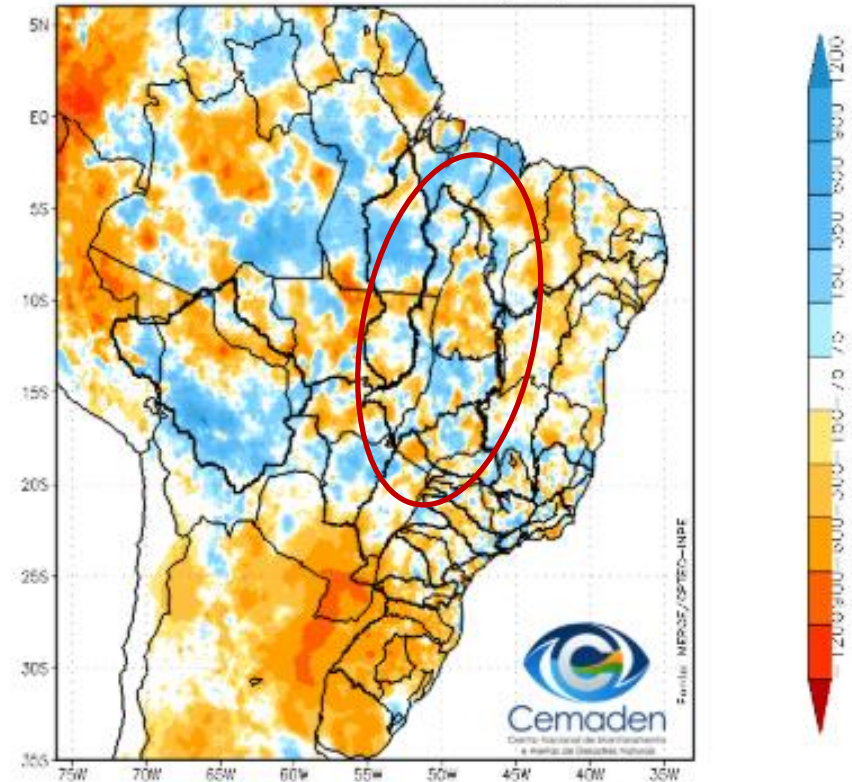


# Precipitação acumulada no Ano Hidrológico

Precipitação Acumulada (mm) Ano Hidrológico  
Período: 01/10/2024 a 19/05/2025



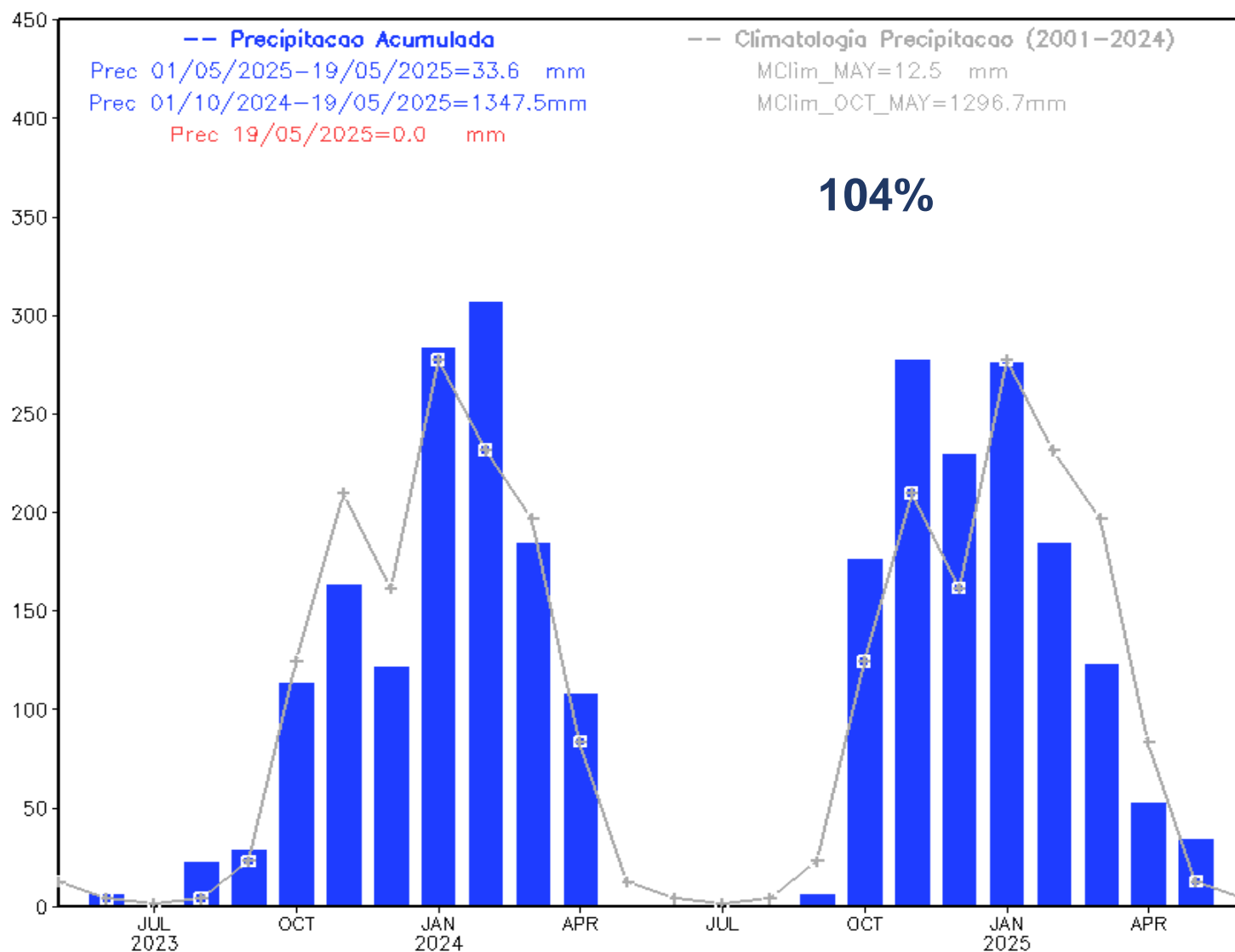
Anomalia de Precipitação (mm) Ano Hidrológico  
Período: 01/10/2024 a 19/05/2025



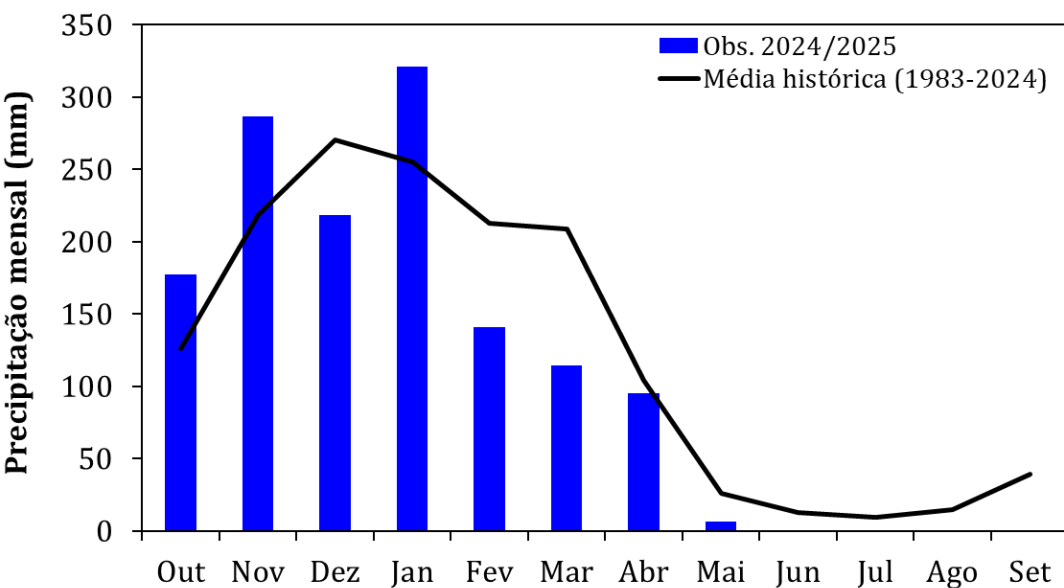
Fonte dos dados: Merge/INPE

# Precipitação Acumulada nos últimos Dois Anos

## Precipitacao Bacia do Rio Tocantins desde MAY 2023



# Monitoramento UHE Serra da Mesa



## Precipitação

### Estação Chuvosa - Out a Abr – 1396 mm

2023/2024: 1245 mm (**89% da MLT**)

2024/2025: 1355 mm (**97% da MLT**)

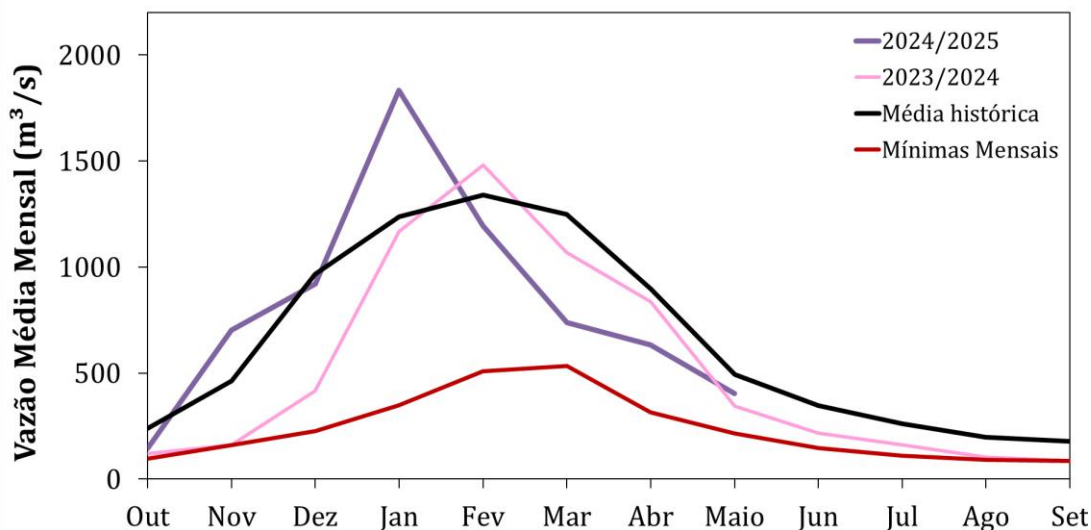
### Estação Seca - Maio a Set – 105 mm

2024: 2 mm (**2% da MLT**)

2025\*: 6 mm (**11% da MLT PARCIAL**)

**Maio/2025\*: 6 mm (25% da MLT)**

\*Até 18/05/2025



## Vazão

### Estação Chuvosa - Out a Abr – 913 m³/s

2023/2024: 751 m³/s (**82% da MLT**)

2024/2025: 881 m³/s (**97% da MLT**)

### Estação Seca - Maio a Set – 295 m³/s

2024: 183 m³/s (**62% da MLT**)

2025\*\*: 405 m³/s (**137% da MLT**)

**Maio/25\*\*: 405 m³/s (82% da MLT)**

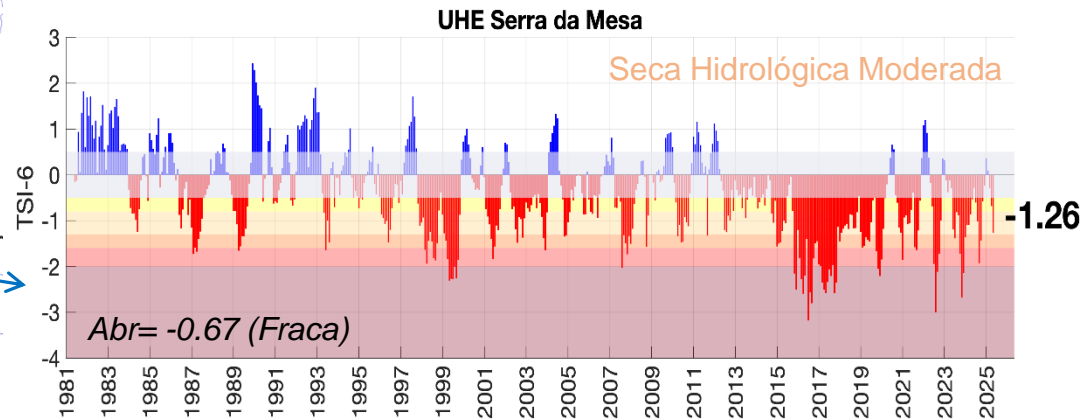
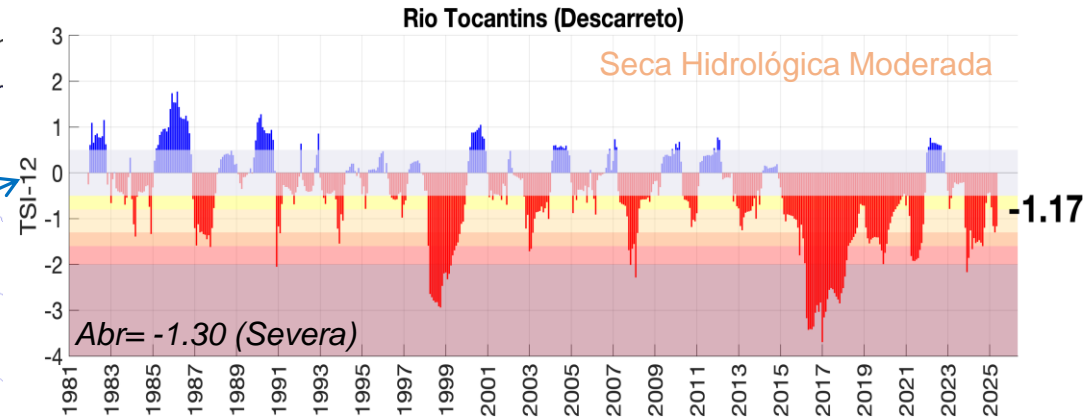
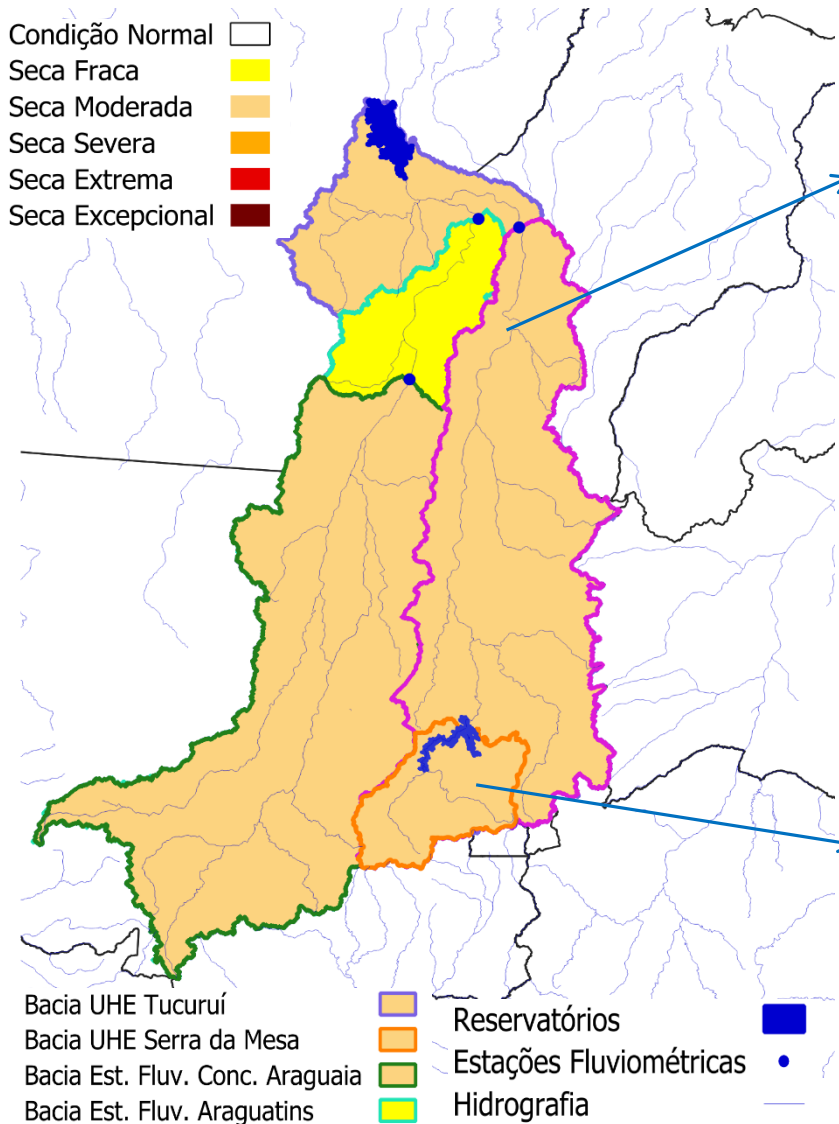
**18/Maio/25: 360 m³/s (73% da MLT)**

\*\*Até 18/05/2025

# Índice Bivariado de Seca (Precipitação-Cota/Vazão) - TSI

## Escala de longo prazo

Maio/2025



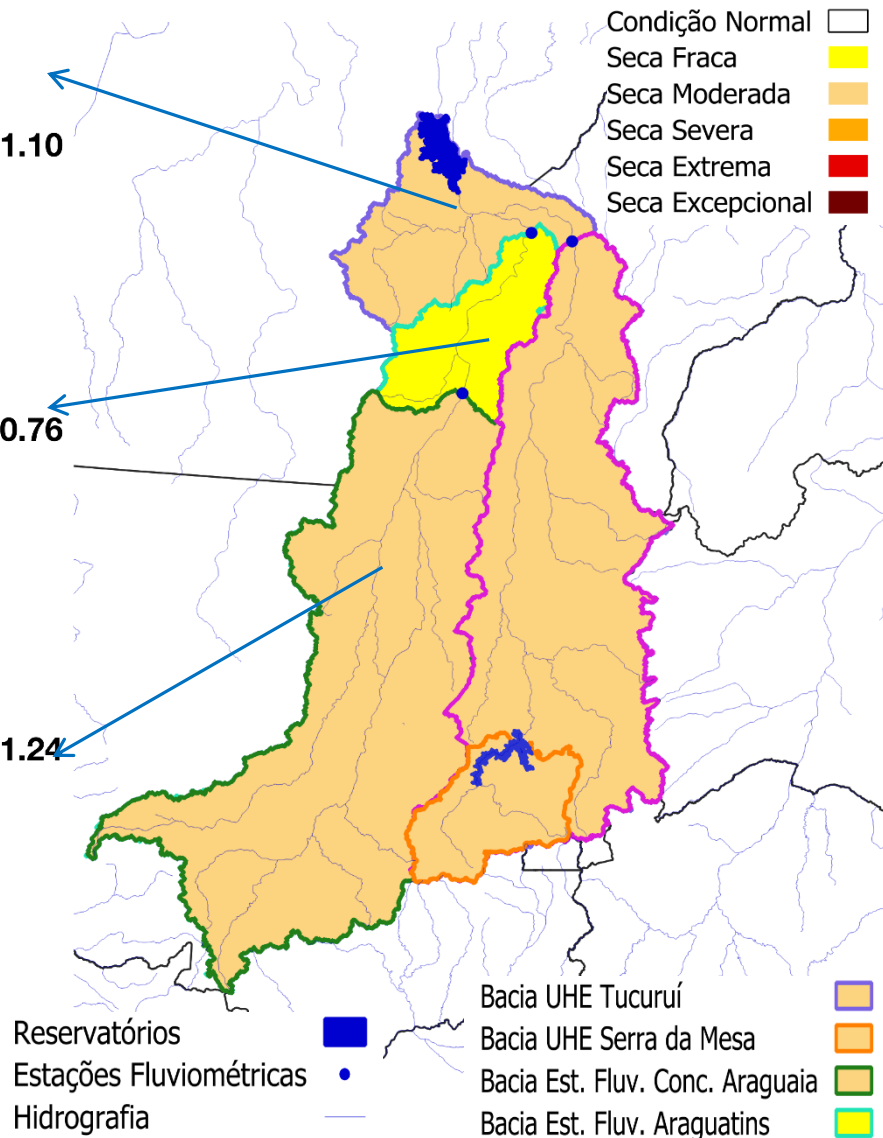
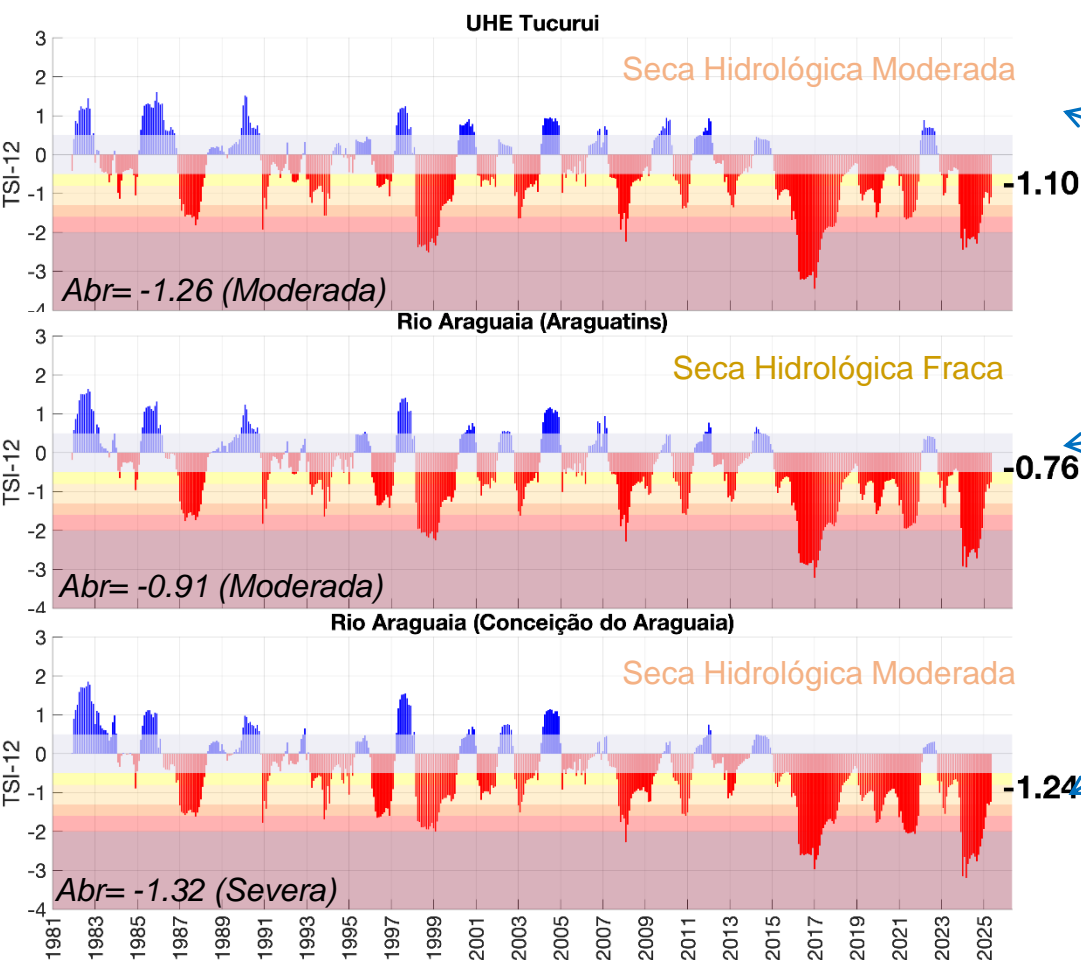
Fonte: CEMADEN

Dados: Precipitação (Cemaden/INMET/CHIRPS) e  
Vazão (ONS/ANA) - Jan/1981-Maio/25.

# Índice Bivariado de Seca (Precipitação-Cota/Vazão) - TSI

## Escala de longo prazo

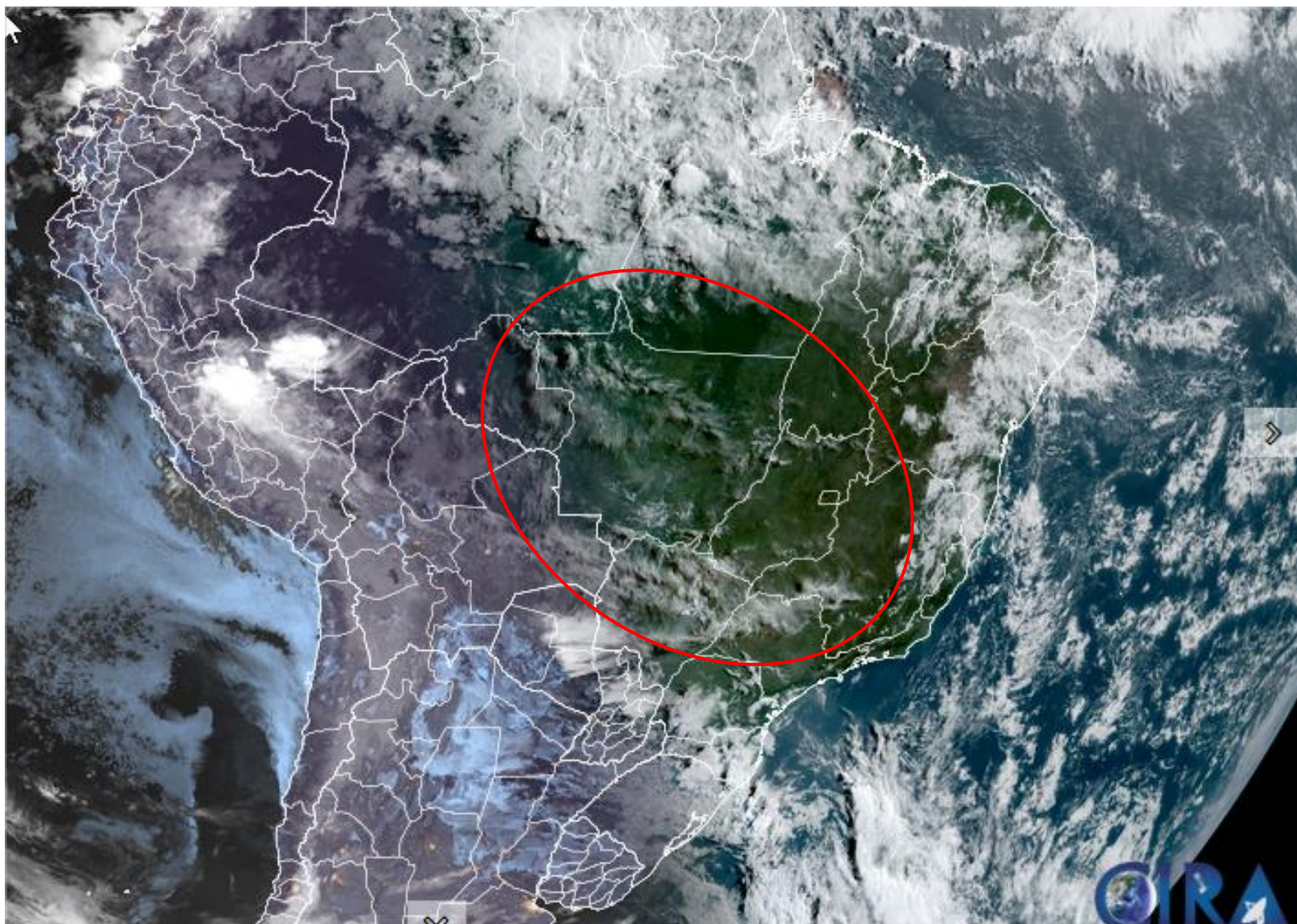
**Maio/2025**



Fonte: CEMADEN  
Dados: Precipitação (Cemaden/INMET/CHIRPS) e  
Vazão (ONS/ANA) - Jan/1981-Maio/2025.



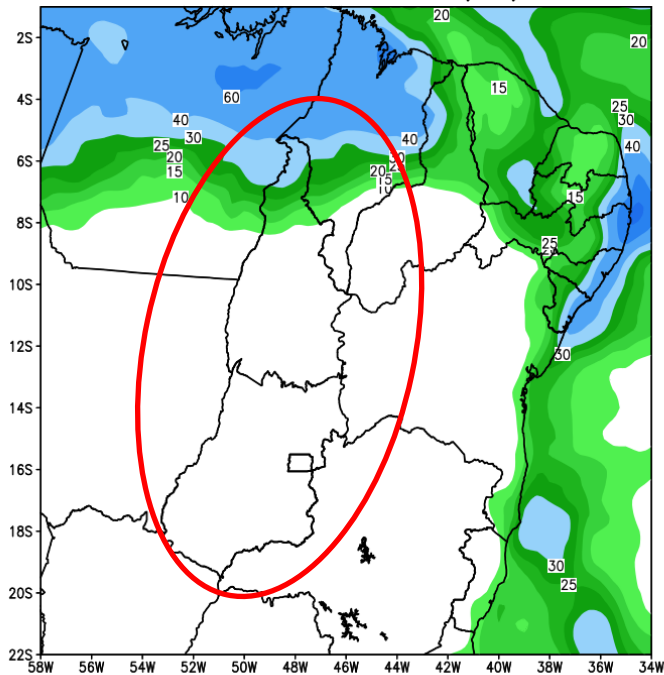
# Situação meteorológica atual



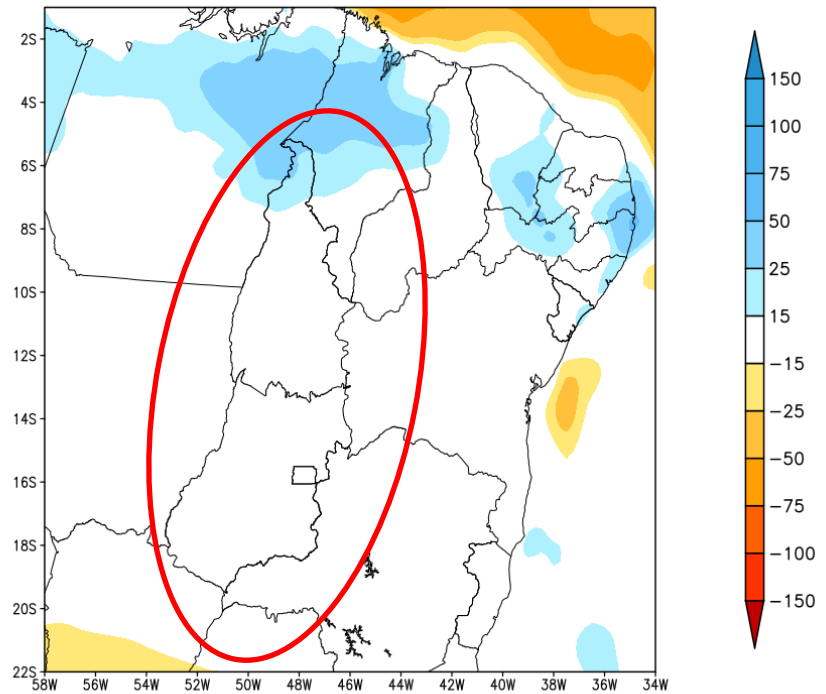


# Previsão de chuva - 1a Semana

GEFS / BRASIL\_NE  
Precipitacao acumulada 1aSem (mm)  
Previsao das 00Z dia 20/05/2025



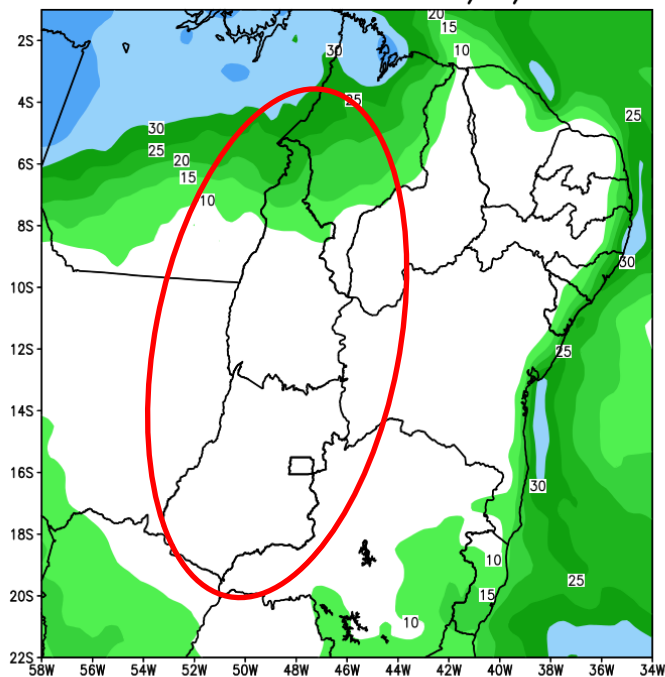
Anomalia de Precipitacao BR\_NE (mm)  
Periodo: 2025052000 a 2025052700



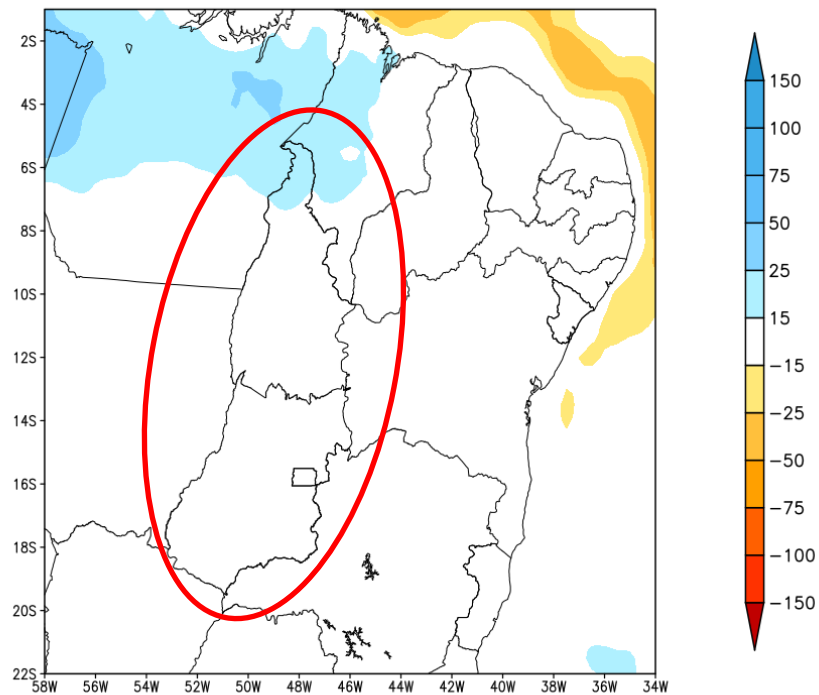
Fonte: GEFS/NOAA

# Previsão de chuva - 2a Semana

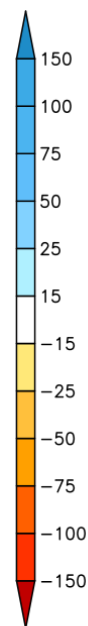
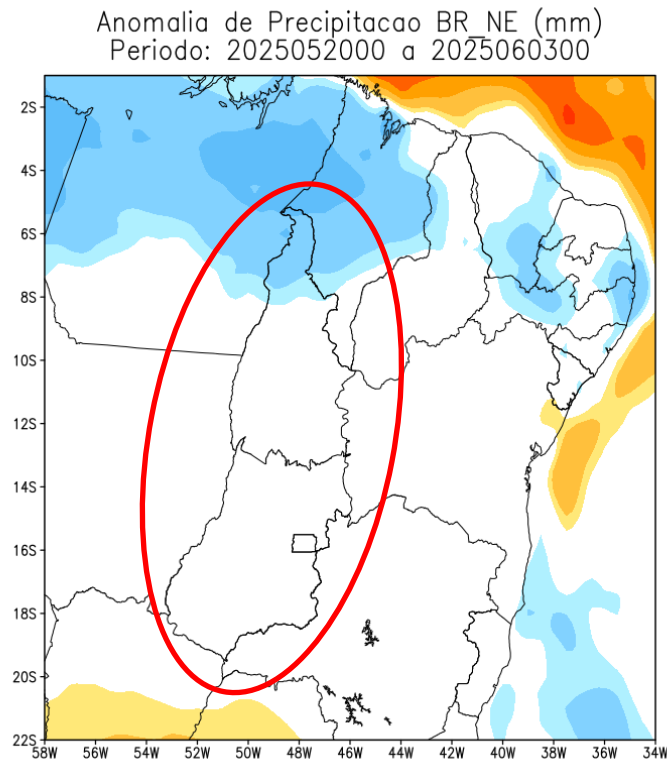
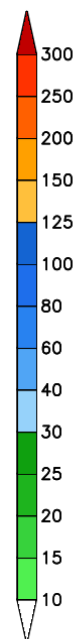
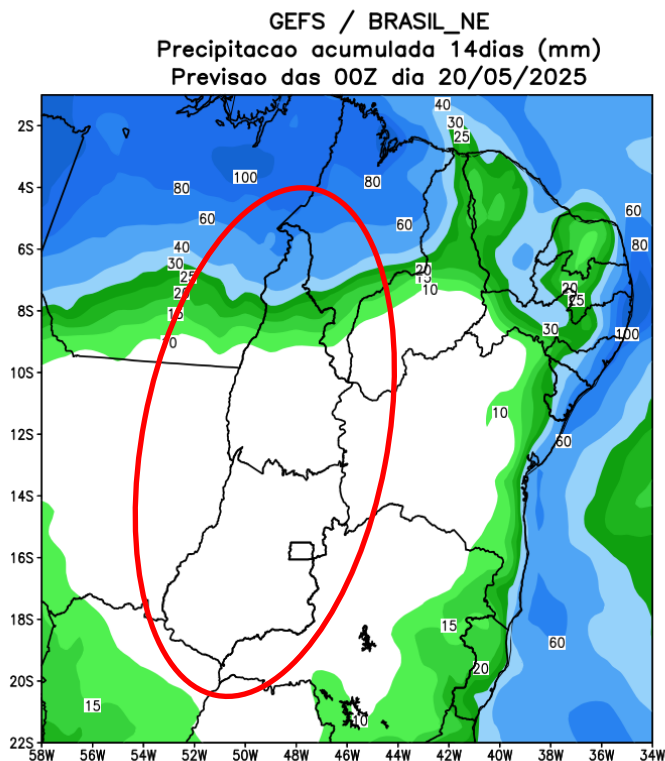
GEFS / BRASIL\_NE  
Precipitacao acumulada 2aSem (mm)  
Previsao das 00Z dia 20/05/2025



Anomalia de Precipitacao BR NE (mm)  
Periodo: 2025052800 a 2025060300



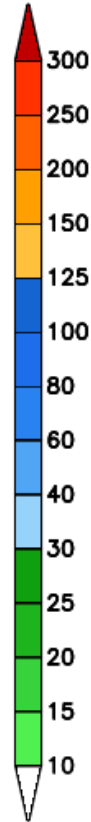
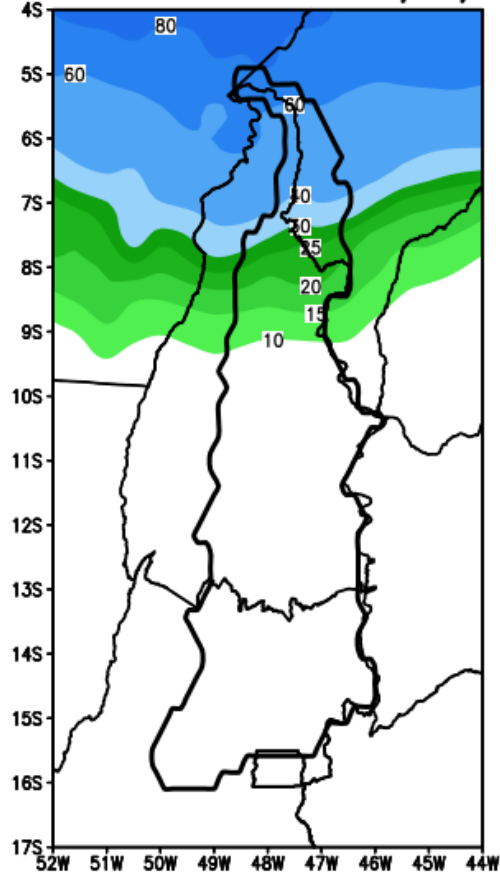
# Previsão de chuva - acumulada 2 semanas



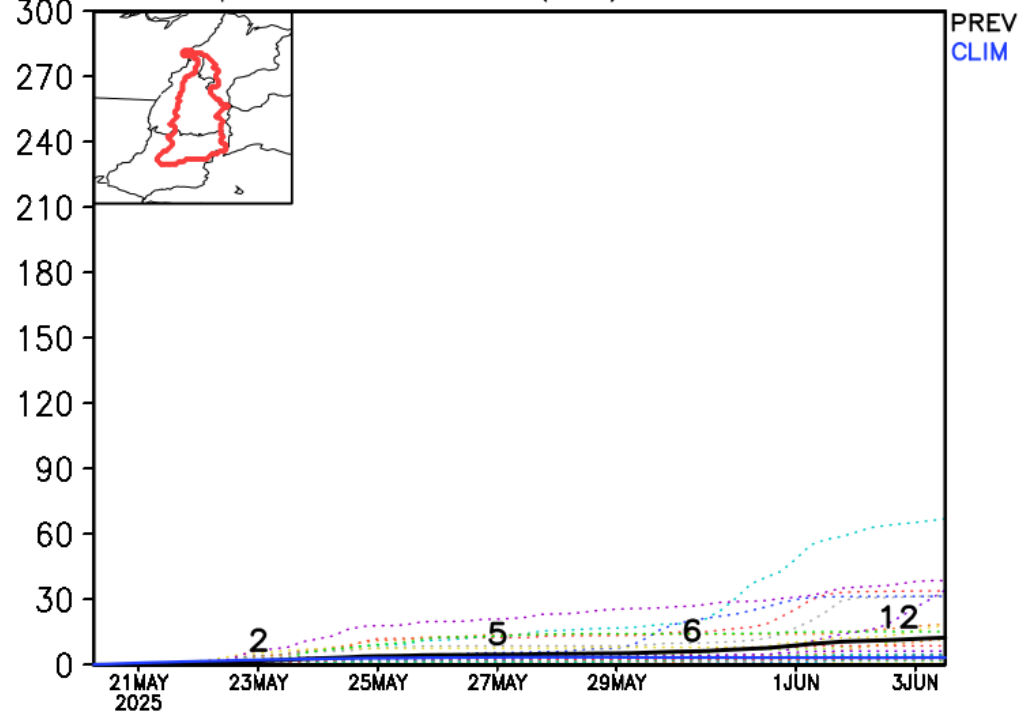


# Previsão Bacia Rio Tocantins

GEFS / Bacia Tocantins  
Precipitação acumulada em 14 dias (mm)  
Previsão das 00Z dia 20/05/2025



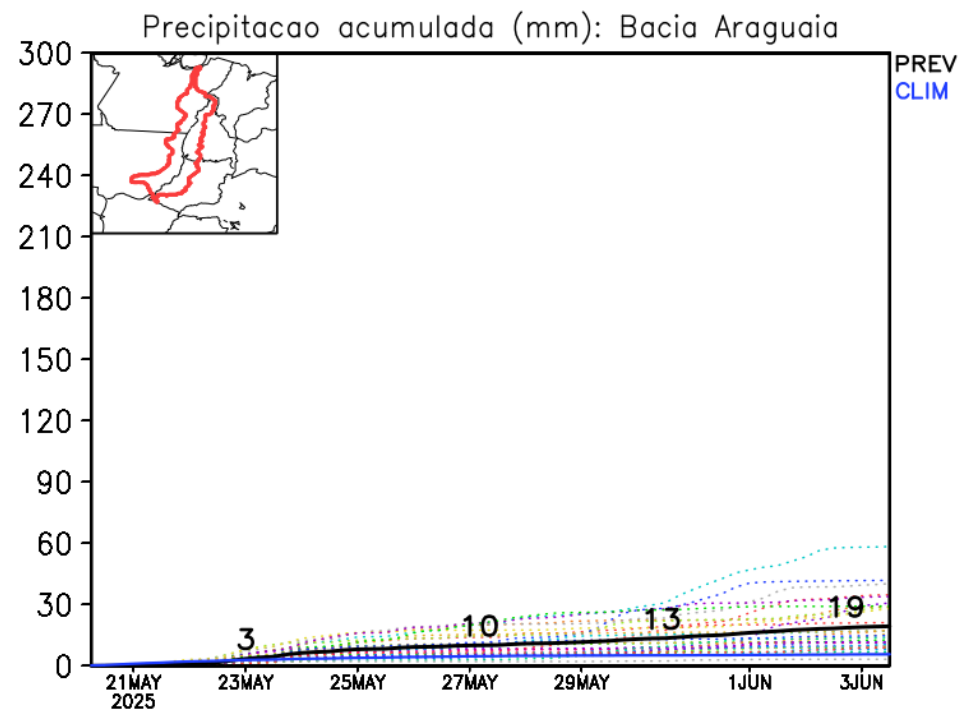
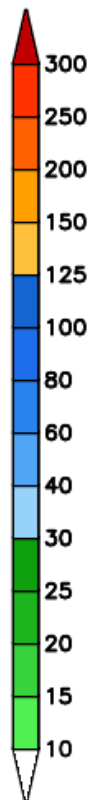
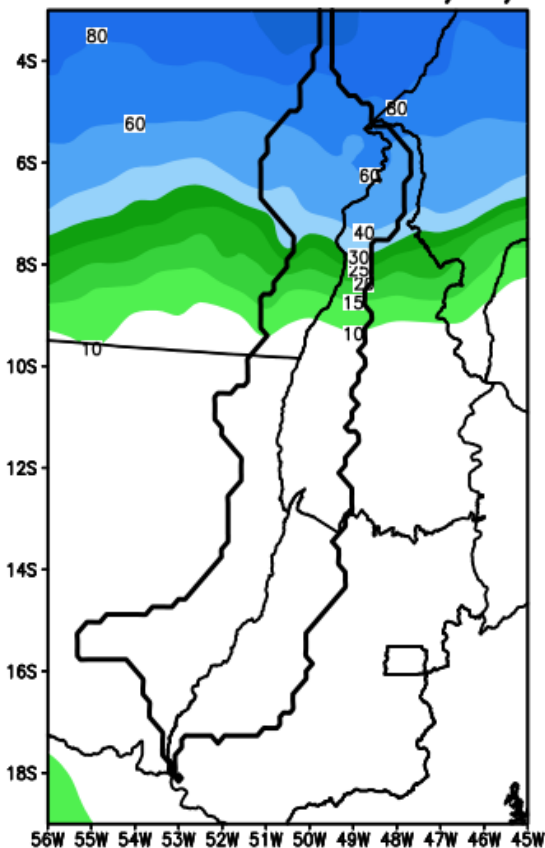
Precipitação acumulada (mm): Bacia Tocantins



Fonte: GEFS/NOAA

# Previsão Bacia Rio Araguaia

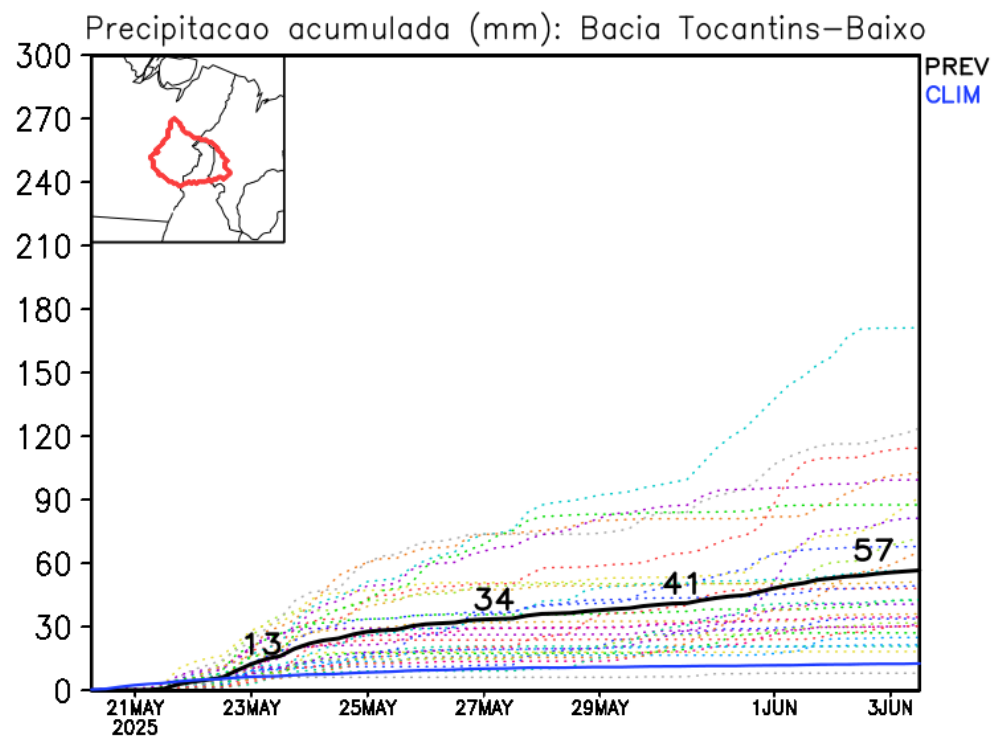
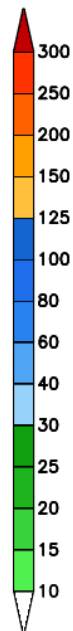
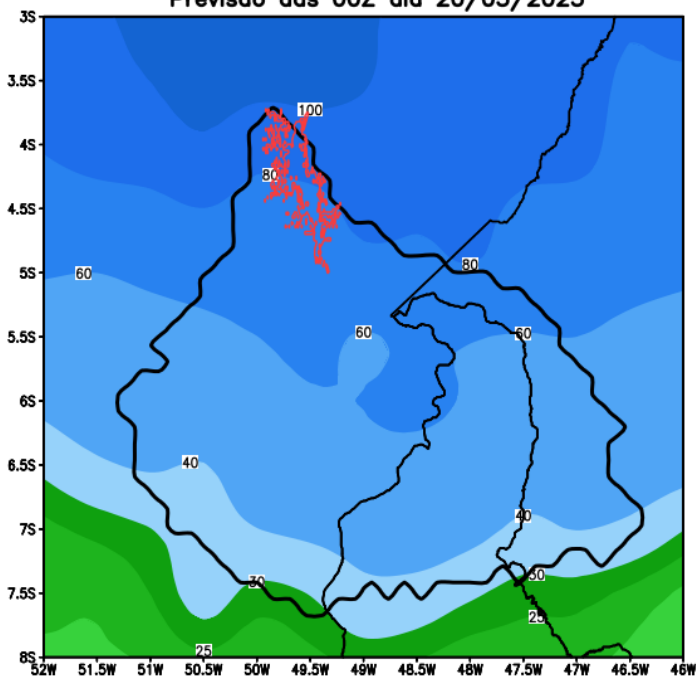
GEFS / Bacia do Rio Araguaia  
Precipitação acumulada em 14 dias (mm)  
Previsão das 00Z dia 20/05/2025



Fonte: GEFS/NOAA

## Previsão Bacia Tocantins (Baixo)

GEFS / Bacia Baixo Tocantins  
Precipitação acumulada em 14 dias (mm)  
Previsão das 00Z dia 20/05/2025

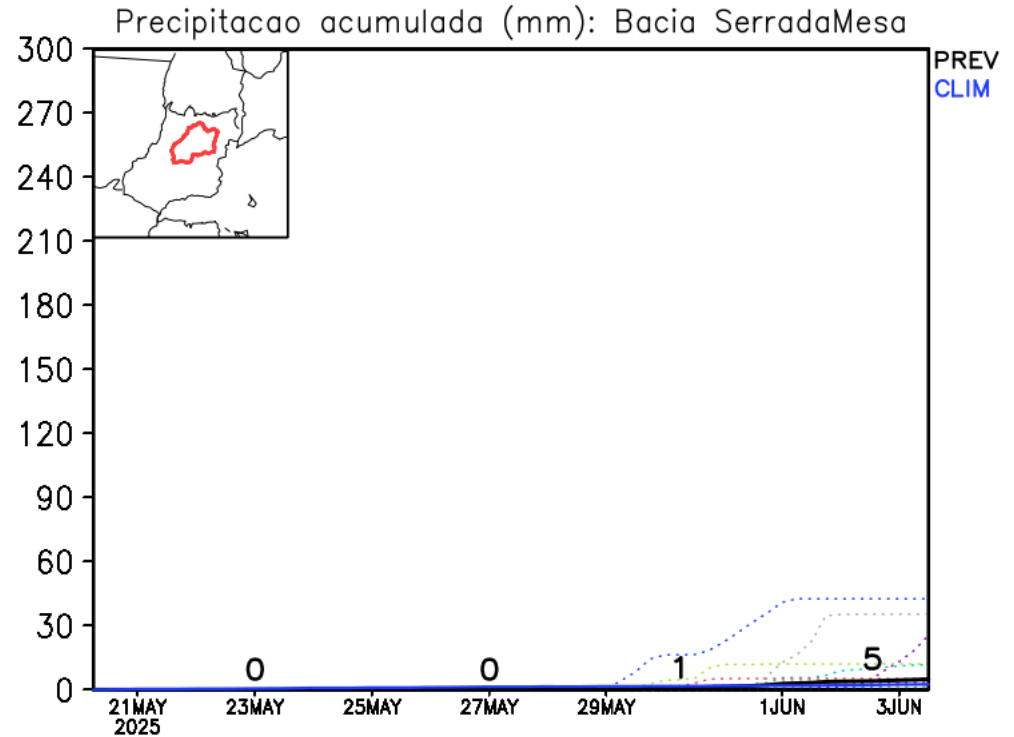
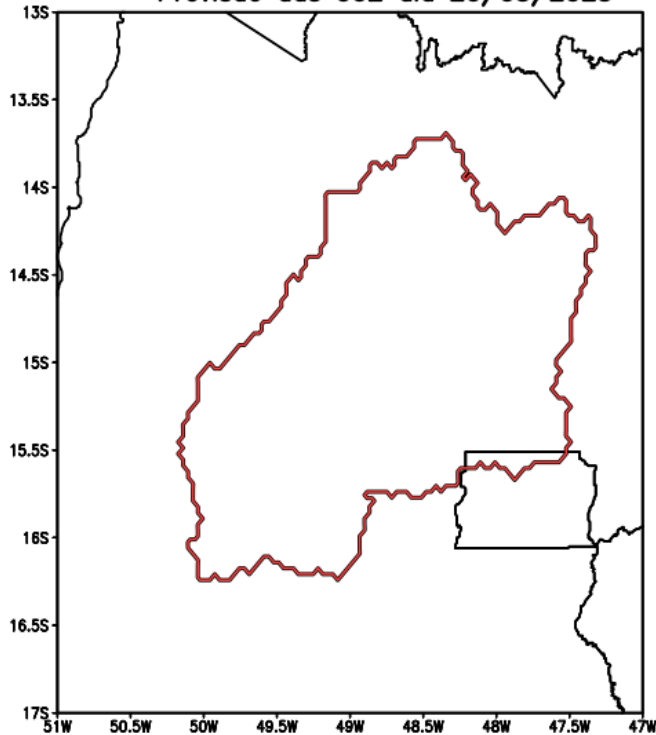


Fonte: GEFS/NOAA



# Previsão Bacia Serra da Mesa

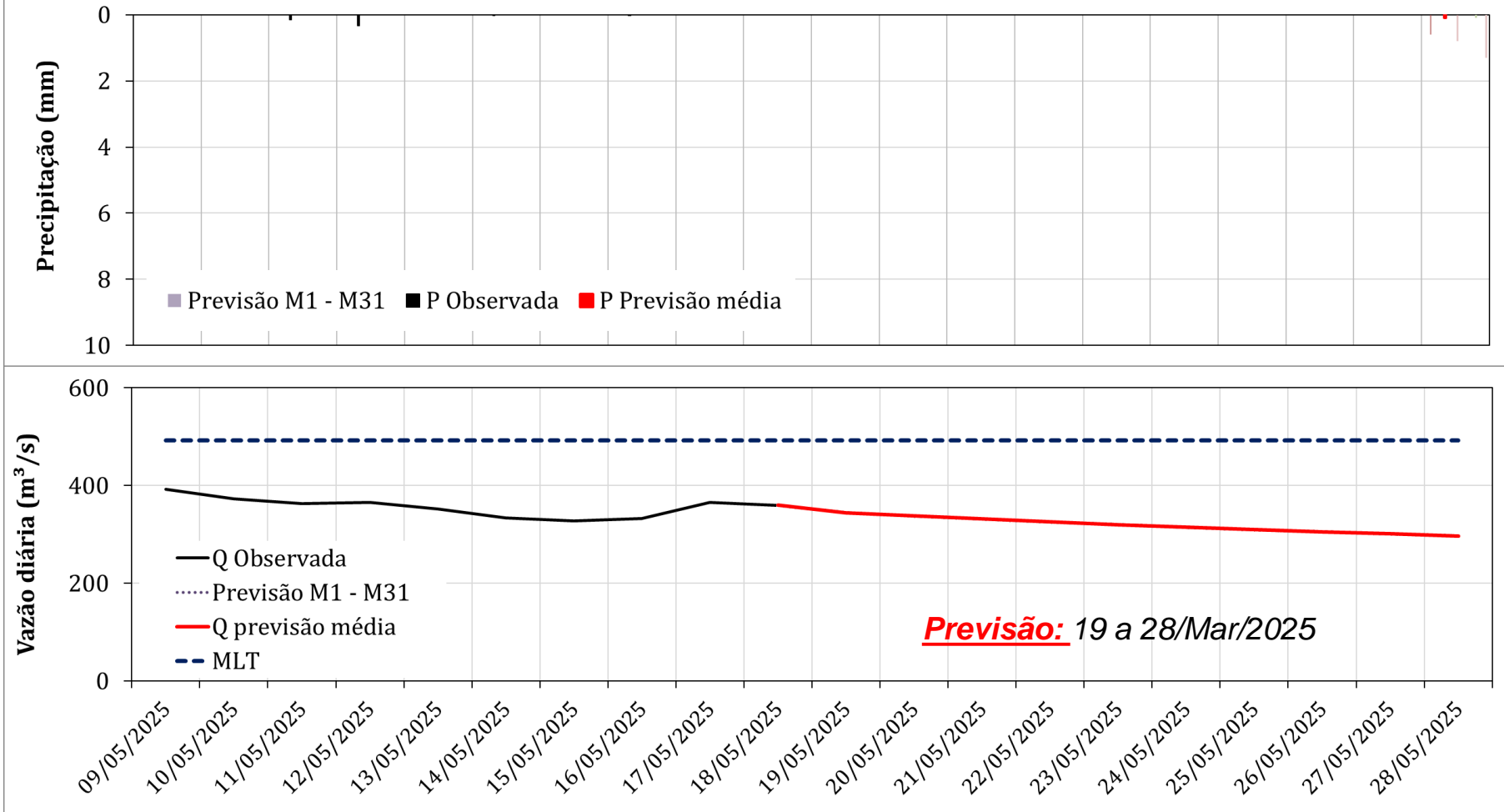
GEFS / Bacia Serra da Mesa  
Precipitação acumulada em 14 dias (mm)  
Previsão das 00Z dia 20/05/2025



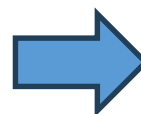
Fonte: GEFS/NOAA

# Serra da Mesa: Previsão de Vazão (modelo hidrológico PDM-CEMADEN)

Vazão Natural e Precipitação Diárias para Serra da Mesa  
09 a 28/Maio/2025



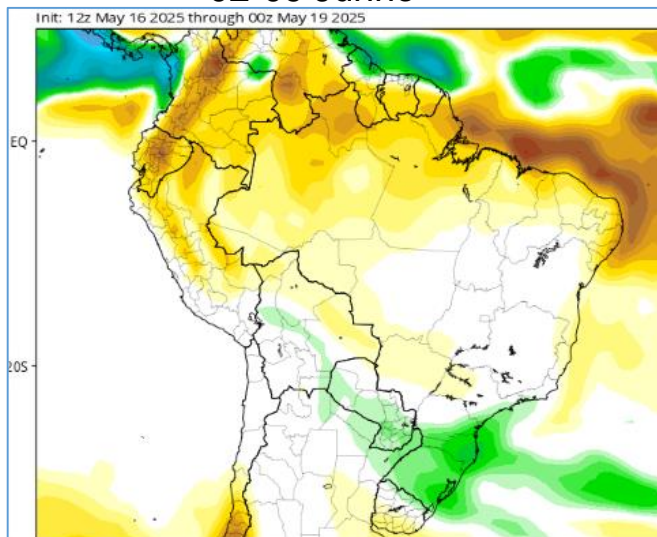
Previsão média para  
os próximos 10 dias: **319 m³/s**



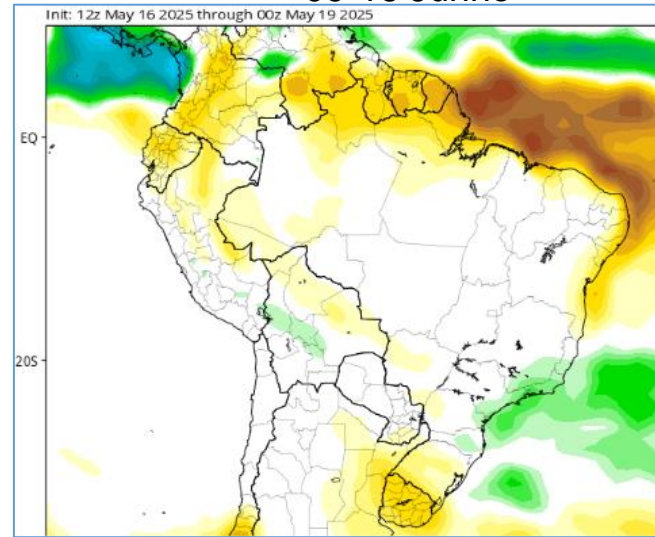
65% da MLT de Maio

# Tendência 3a e 4a semanas

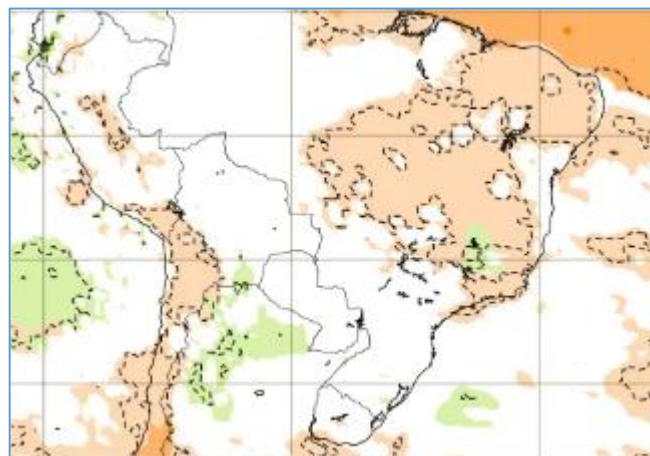
02-09 Junho



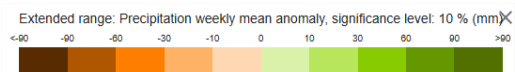
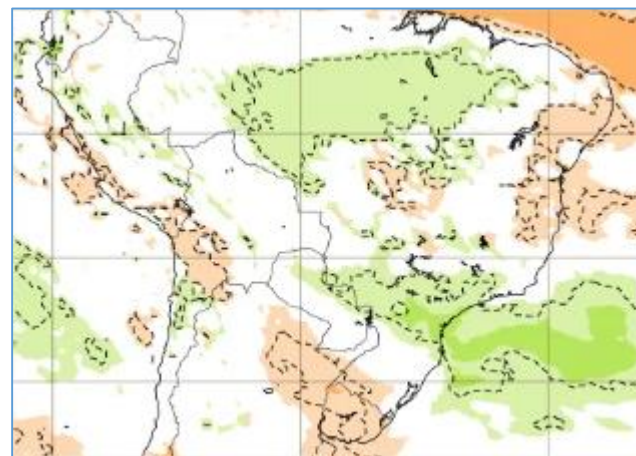
09-16 Junho



02-09 Junho



09-16 Junho



CFS/NOAA

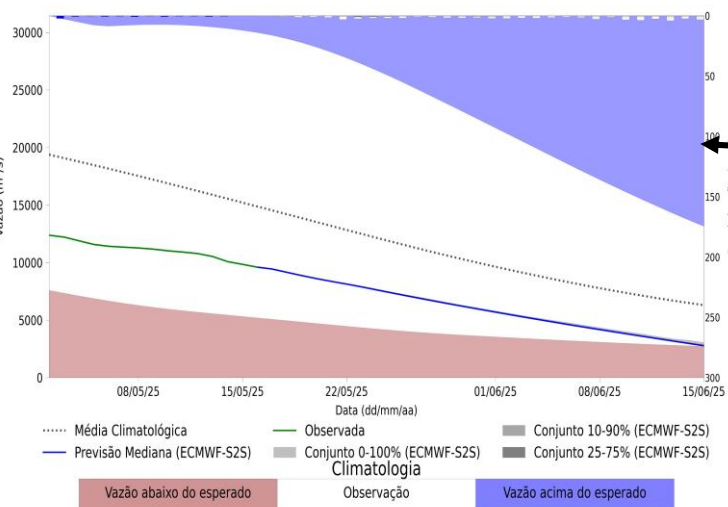
ECMWF



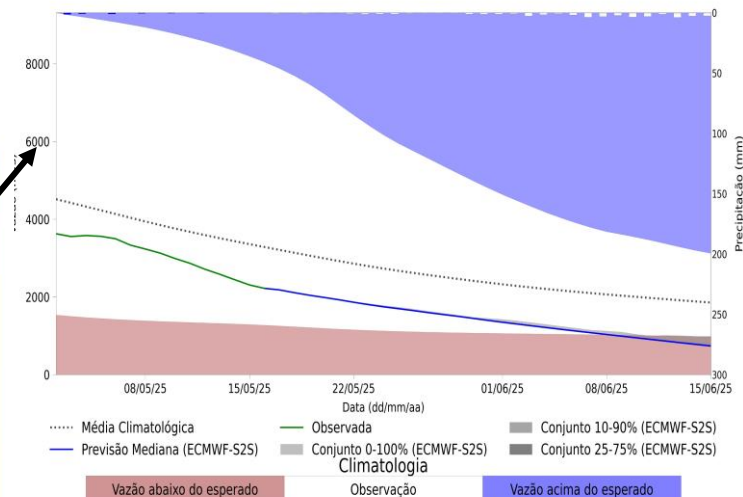
# Previsão de vazão natural na Bacia Rio Tocantins-Araguaia 30 dias (Modelo hidrológico MHD)

Previsão: 16/05/2025 a 15/06/2025

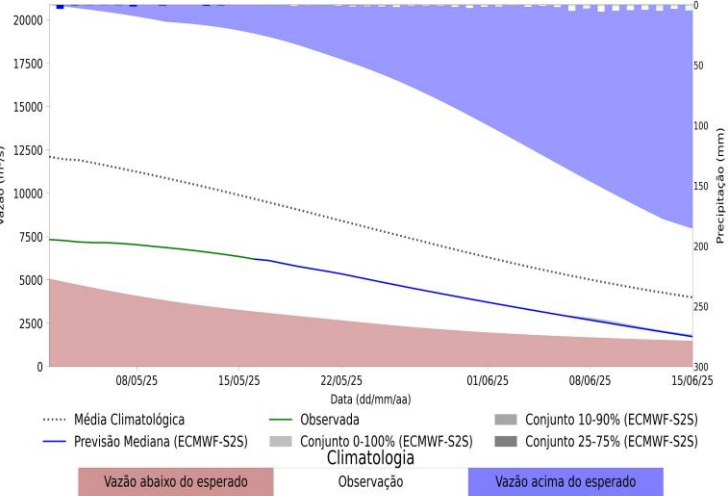
UHE Tucuruí



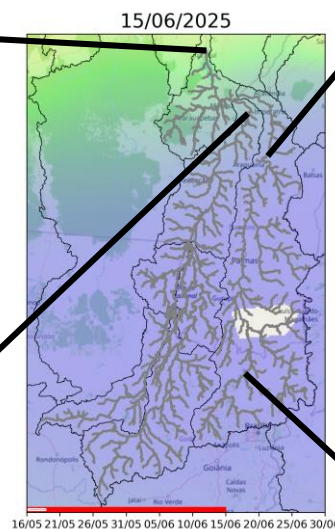
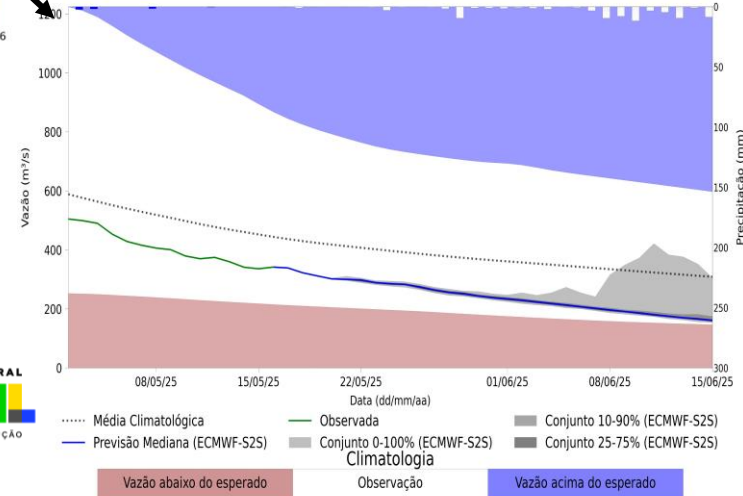
UHE Estreito



Araguatins - TO



UHE Serra da Mesa



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

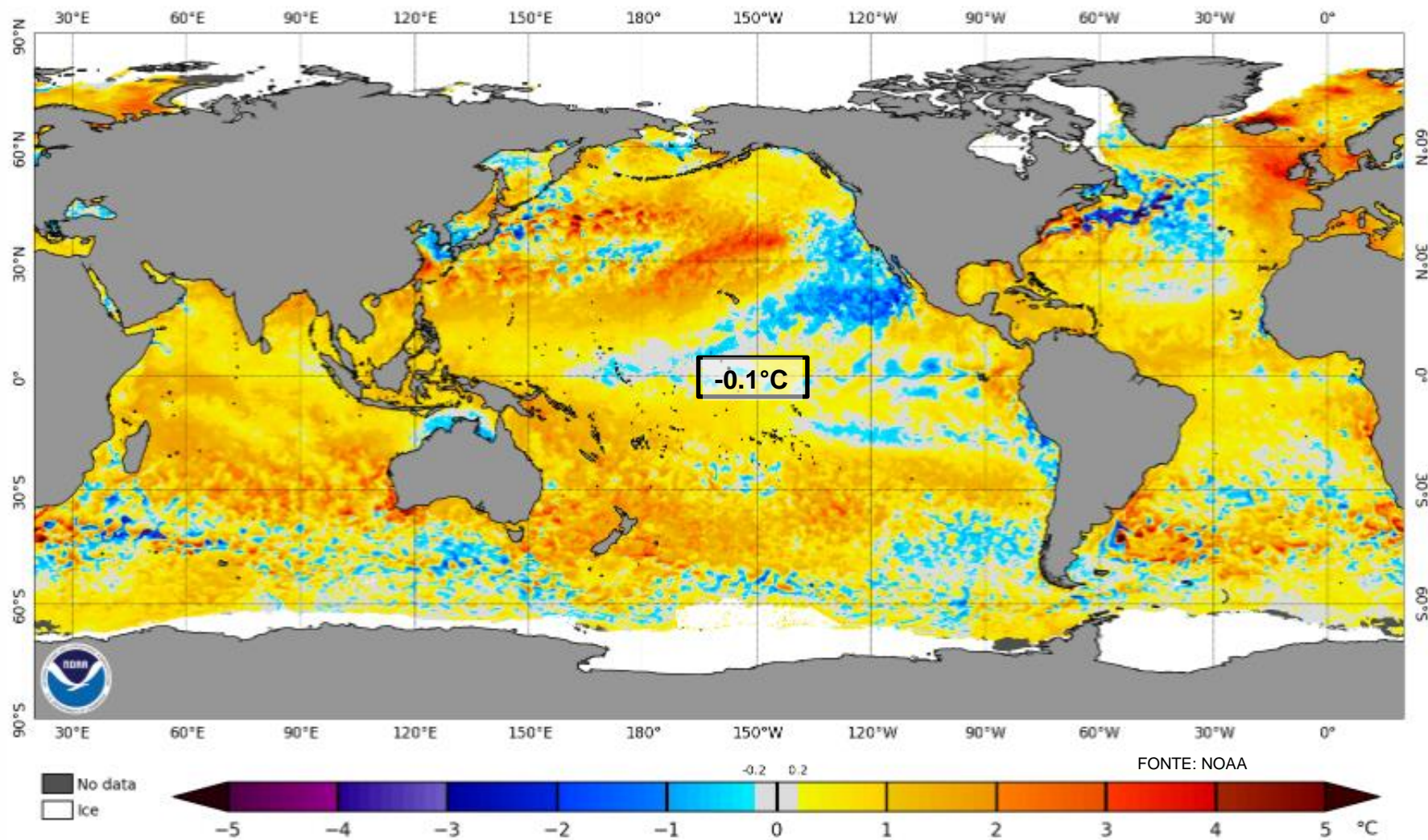


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## Status Atual: Neutralidade

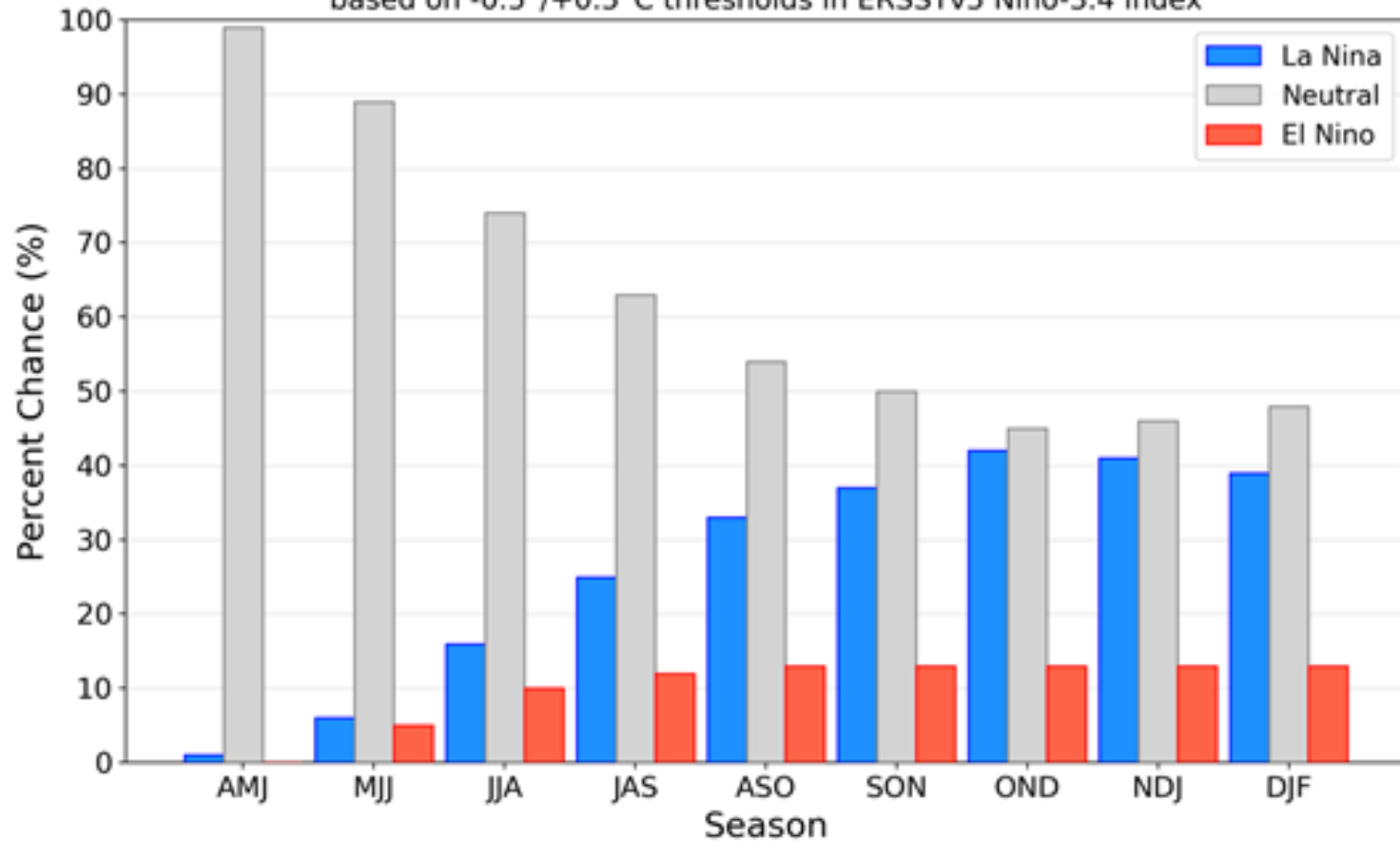
NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 18 May 2025



# Previsão do “ENSO”

## Official NOAA CPC ENSO Probabilities (issued May 2025)

based on  $-0.5^{\circ}/+0.5^{\circ}\text{C}$  thresholds in ERSSTv5 Niño-3.4 index

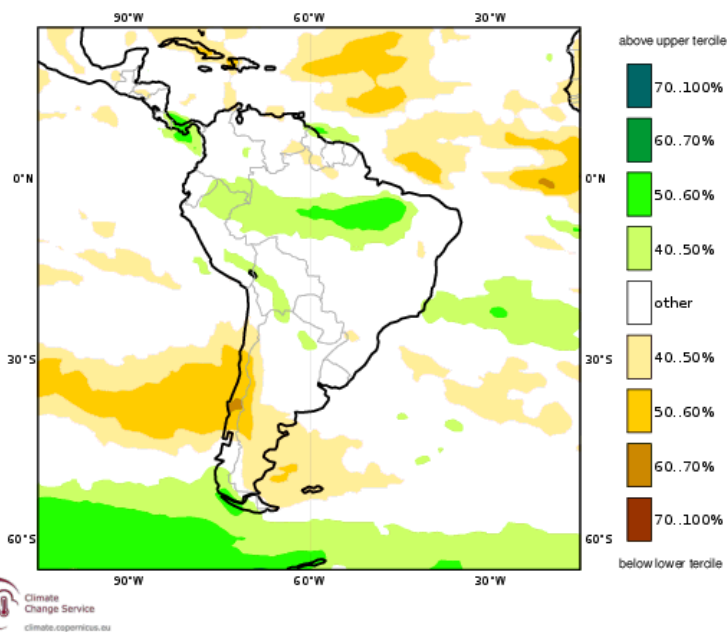




# Previsão Sazonal de Chuva Multi-Modelo

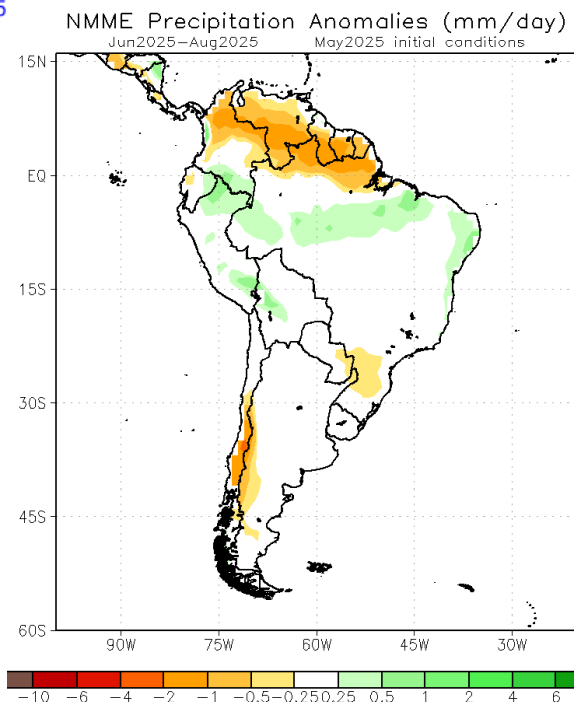
## Junho-Julho-Agosto

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



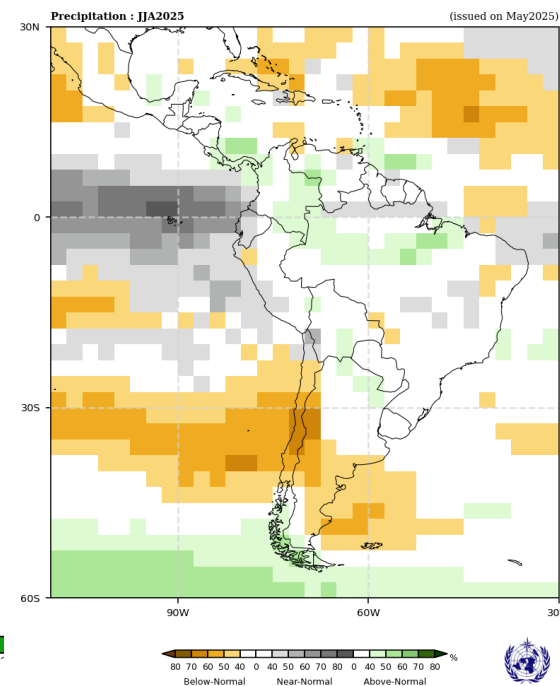
Modelos Europeus

JJA 2025



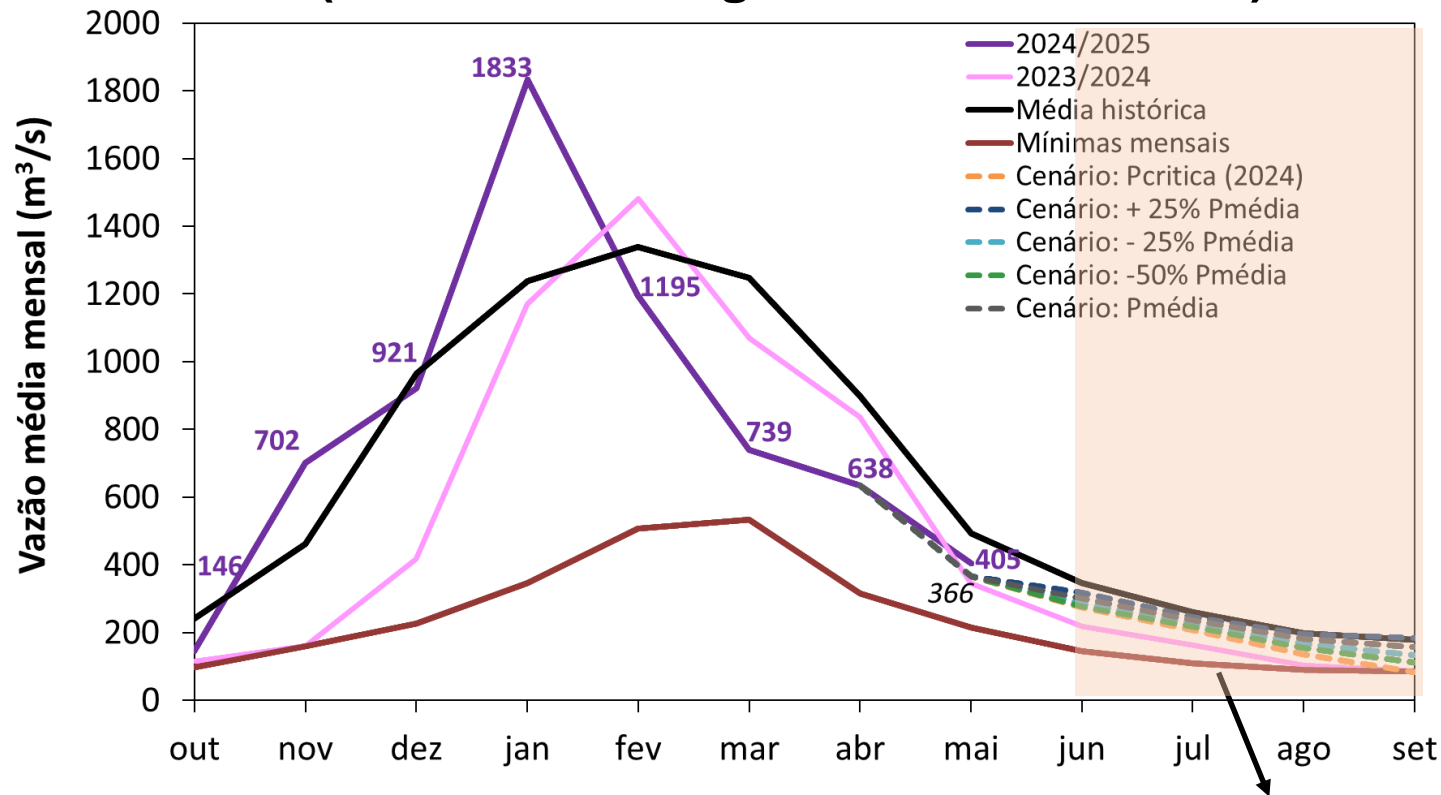
Modelos Norte Americanos

Probabilistic Multi-Model Ensemble Forecast  
CMCC, CITEC, ECMWF, Exeter, Melbourne, Montreal, Moscow, Offenbach, Seoul, Tokyo, Washington



Modelos da WMO

# Serra da Mesa: Projeção de Vazão (modelo hidrológico PDM-CEMADEN)



**Jun-Set (Meses secos)**

**MLT: 246 m³/s**

Vazão	% MLT
235 m³/s	96 %
219 m³/s	89%
204 m³/s	83%
175 m³/s	71%