

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

AGOSTO 2024

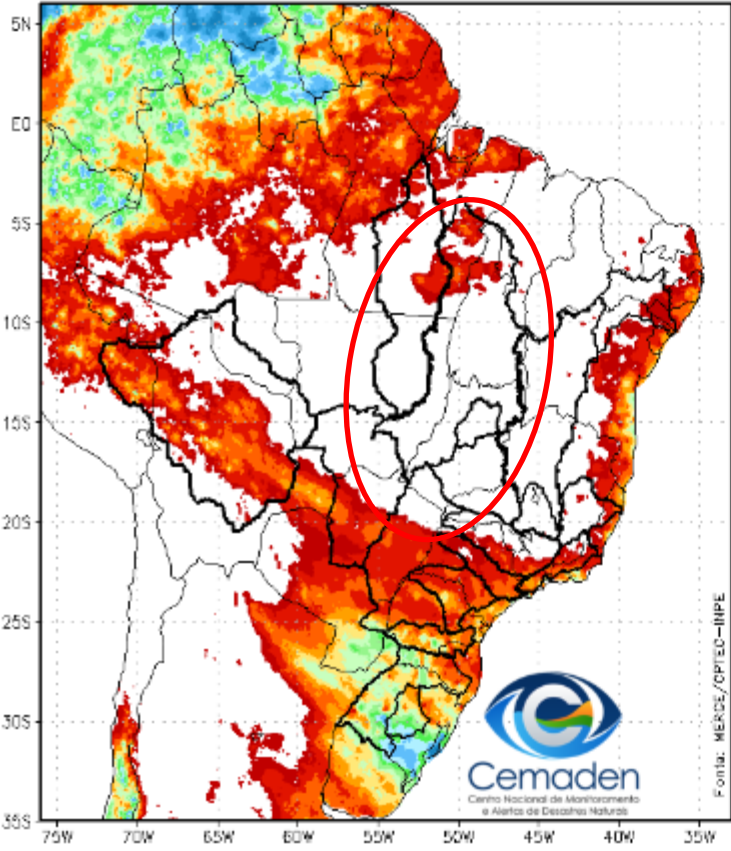


MINISTÉRIO DA  
CIÊNCIA, TECNOLOGIA  
E INOVAÇÃO

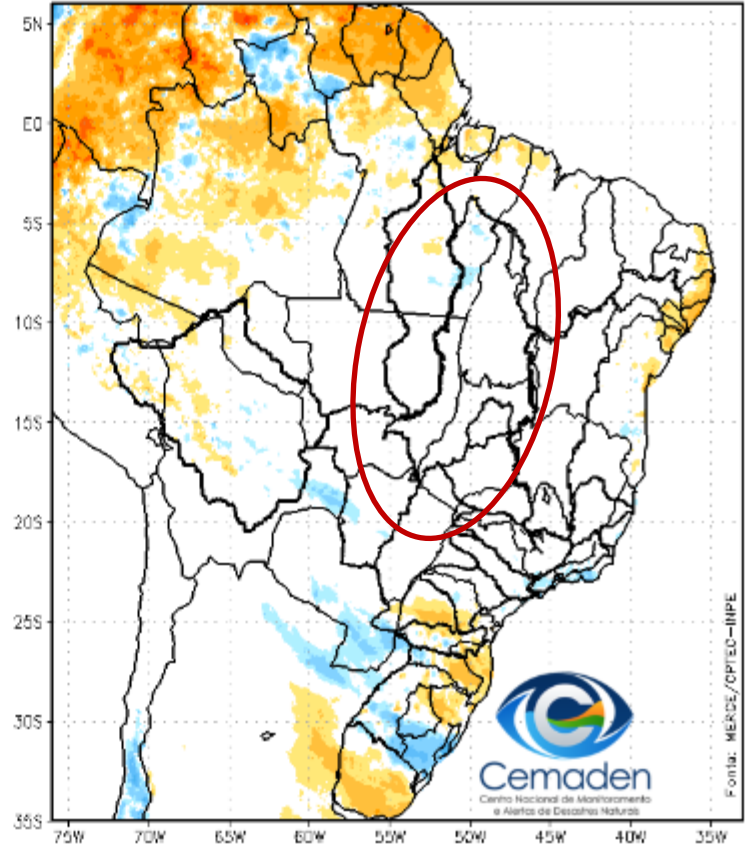


# Precipitação acumulada nos últimos 30 dias

Precipitação Acumulada (mm) A.S.  
Período: 28/07/2024 a 27/08/2024 (30 dias)



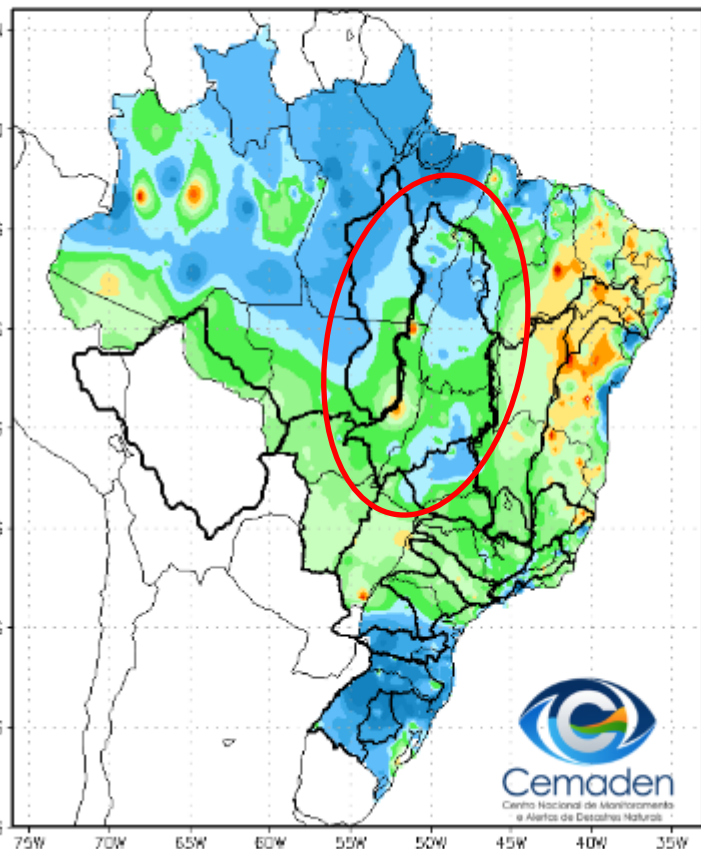
Anomalia de Precipitação (mm) A.S.  
Período: 28/07/2024 a 27/08/2024 (30 dias)



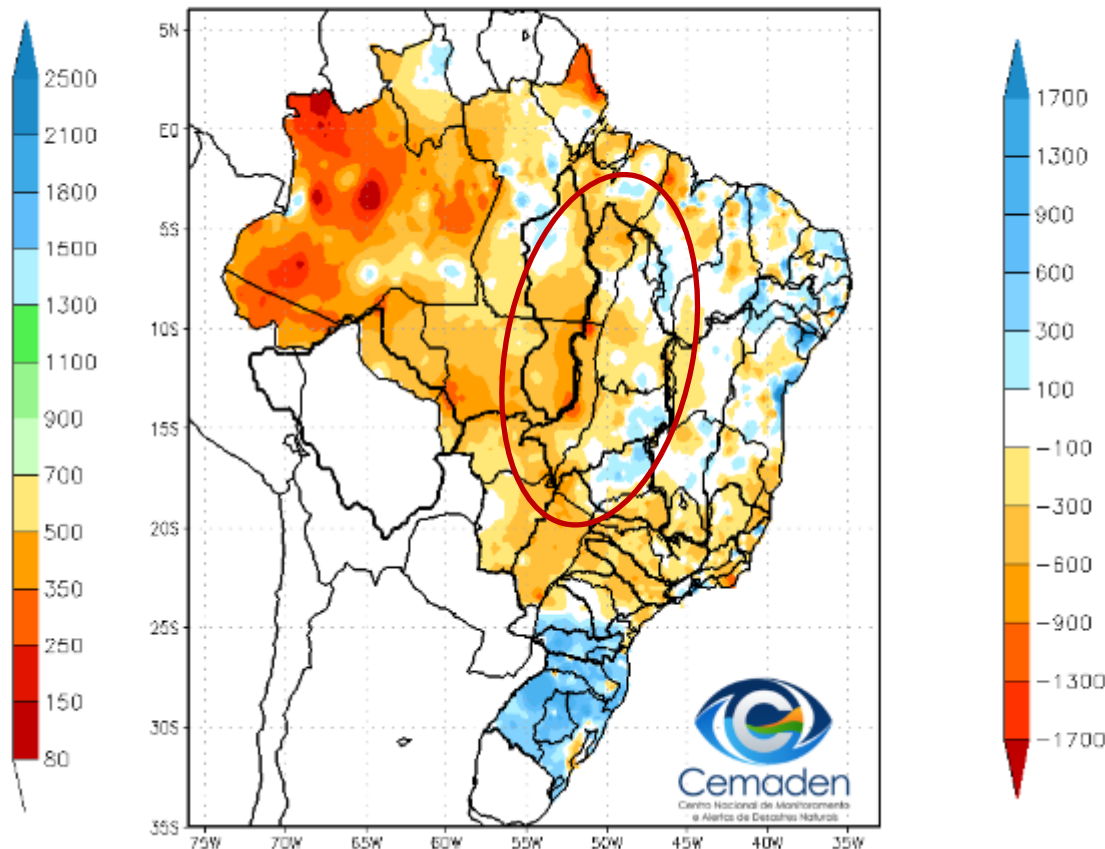
Fonte dos dados: Merge/INPE

# Precipitação acumulada no Ano Hidrológico

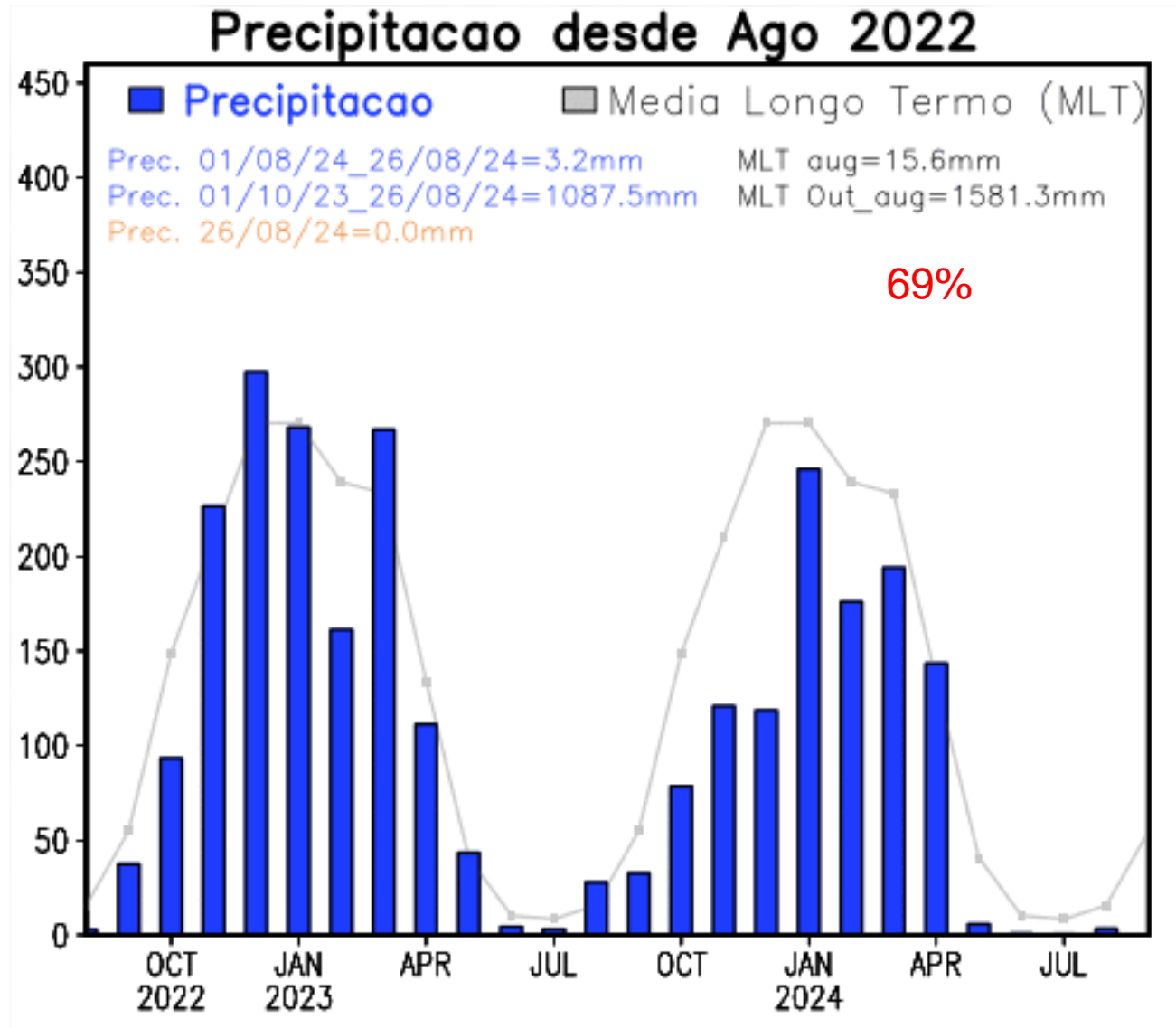
Precipitação Acumulada (mm) A.S.  
Período: 01/10/2023 a 27/08/2024



Anomalia de Precipitação (mm) A.S.  
Período: 01/10/2023 a 27/08/2024



# Evolução da Precipitação

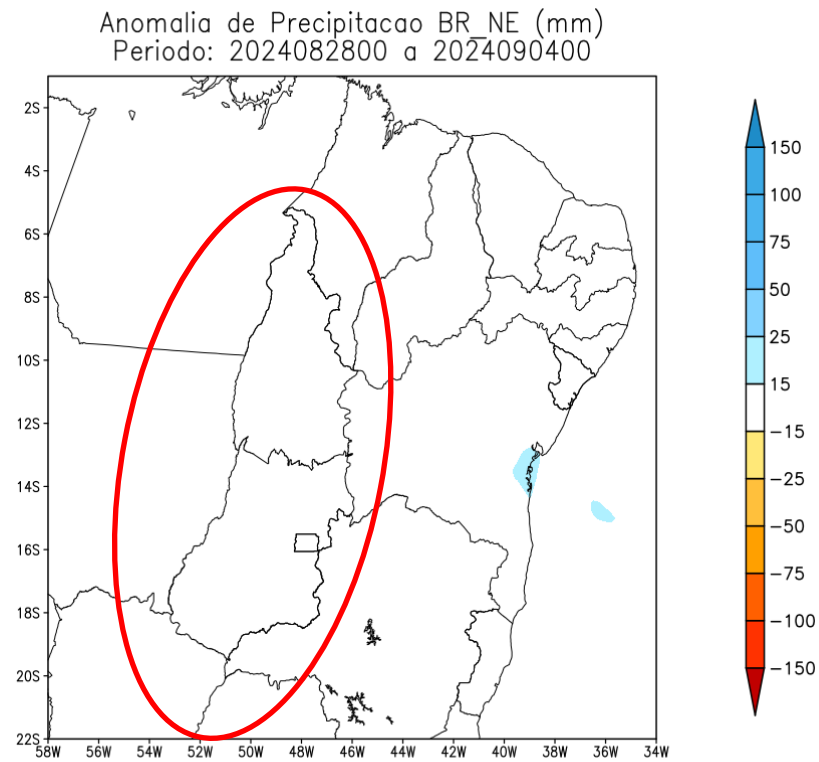
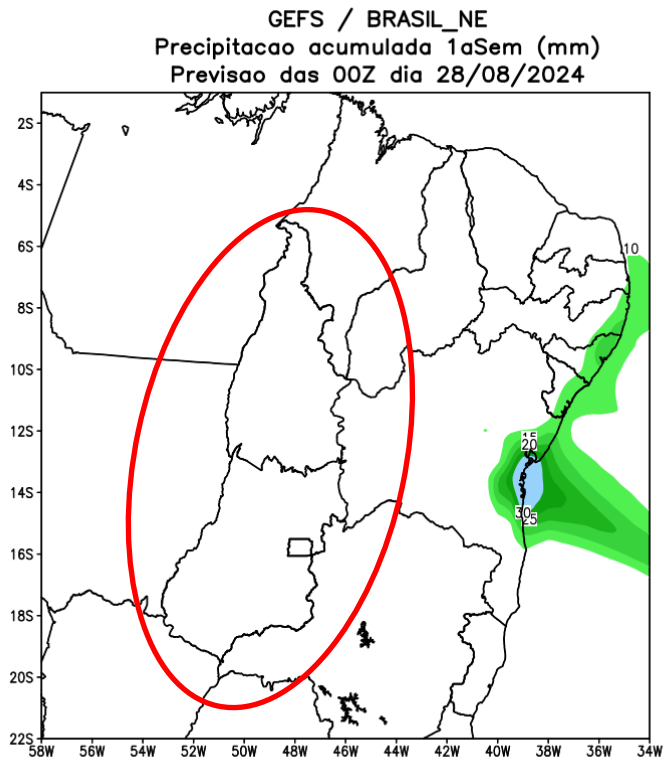




# Situação meteorológica atual



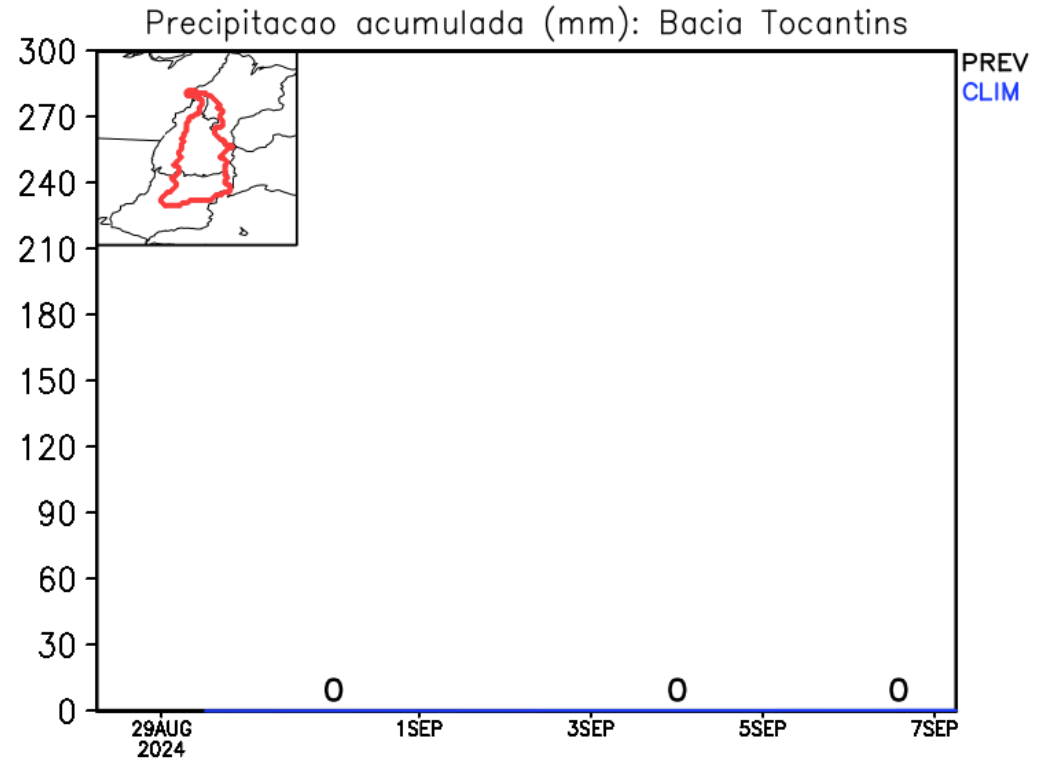
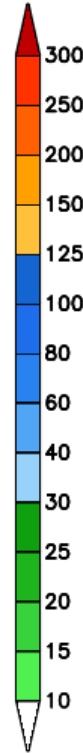
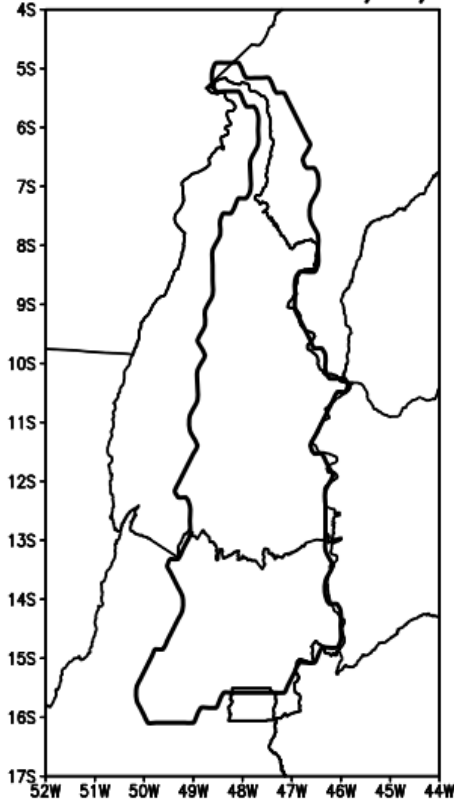
# Previsão de chuva próximos 7 dias



Fonte: GEFS/NOAA

# Previsão Bacia Rio Tocantins

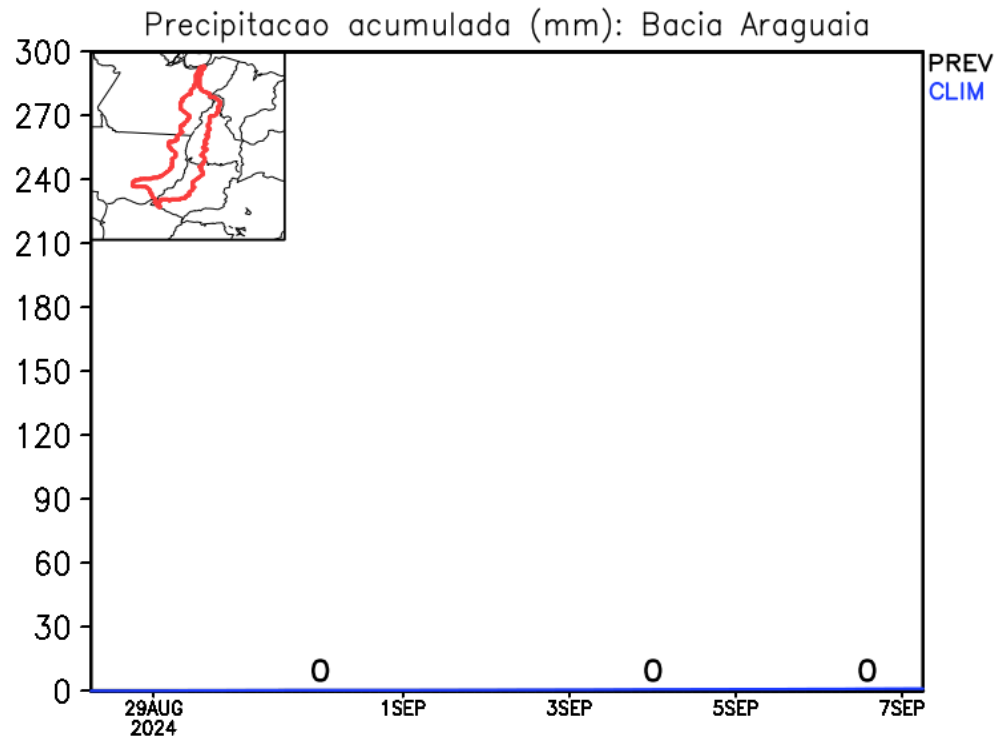
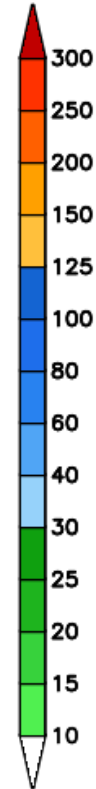
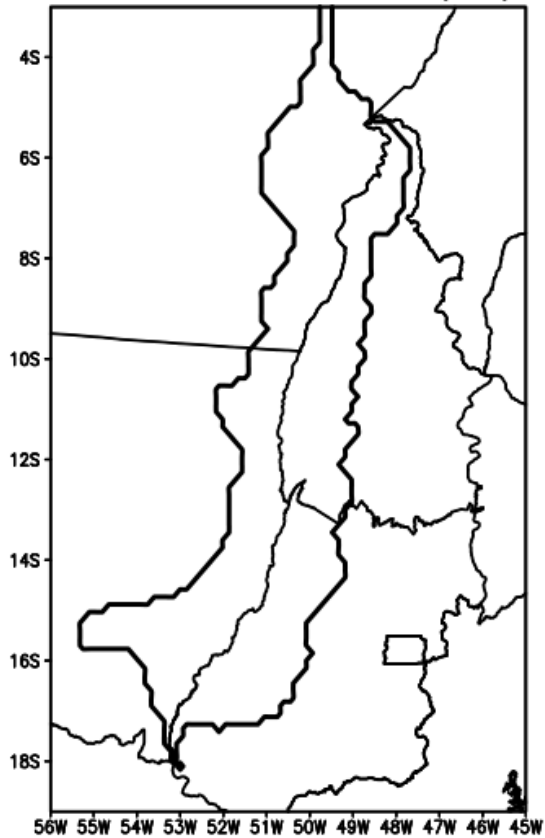
GEFS / Bacia Tocantins  
Precipitação acumulada em 7 dias (mm)  
Previsão das 00Z dia 28/08/2024



Fonte: GEFS/NOAA

# Previsão Bacia Rio Araguaia

GEFS / Bacia do Rio Araguaia  
Precipitacao acumulada em 7 dias (mm)  
Previsao das 00Z dia 28/08/2024

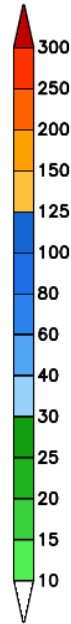
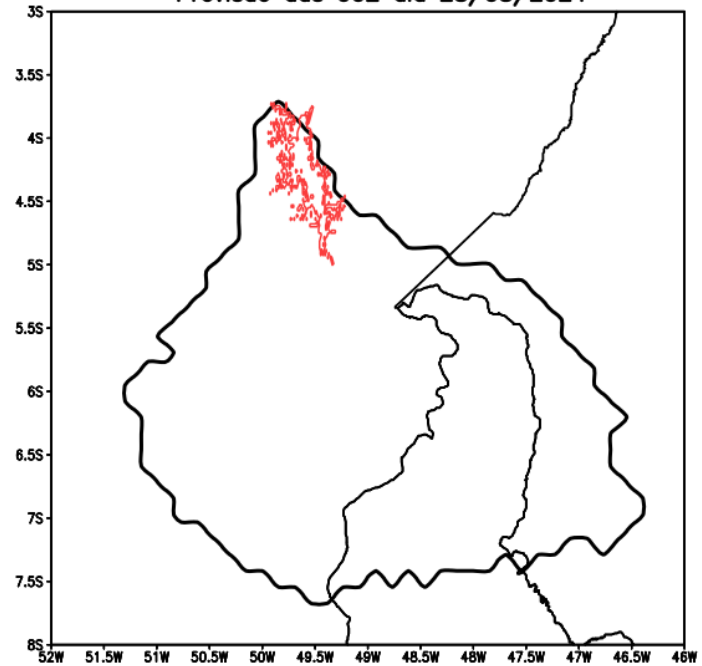


Fonte: GEFS/NOAA

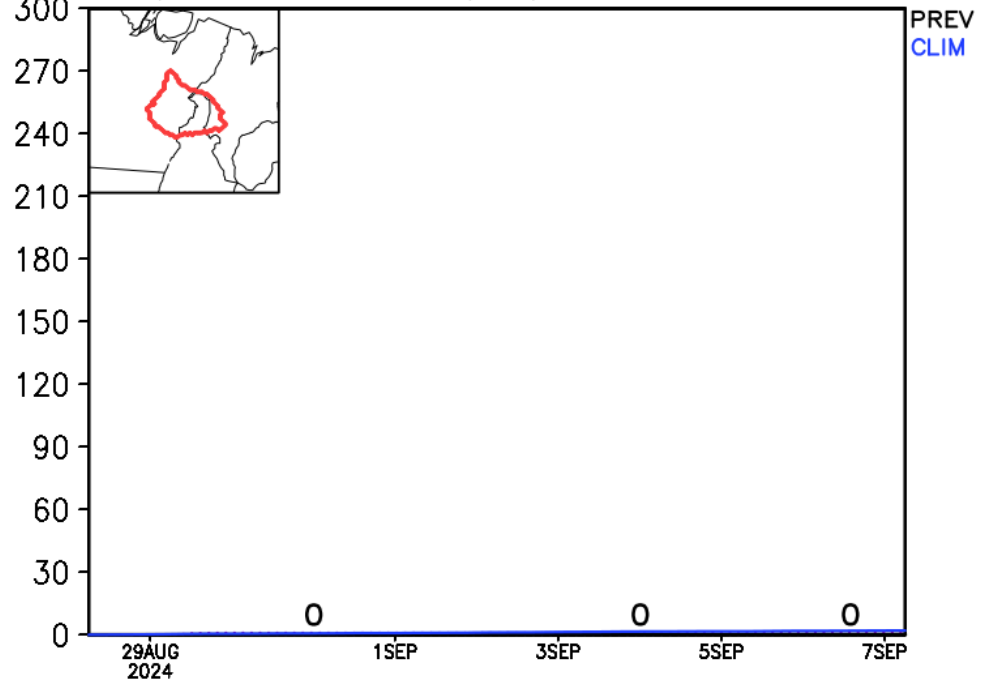


# Previsão Bacia Tocantins (Baixo)

GEFS / Bacia Baixo Tocantins  
Precipitacao acumulada em 7 dias (mm)  
Previsao das 00Z dia 28/08/2024



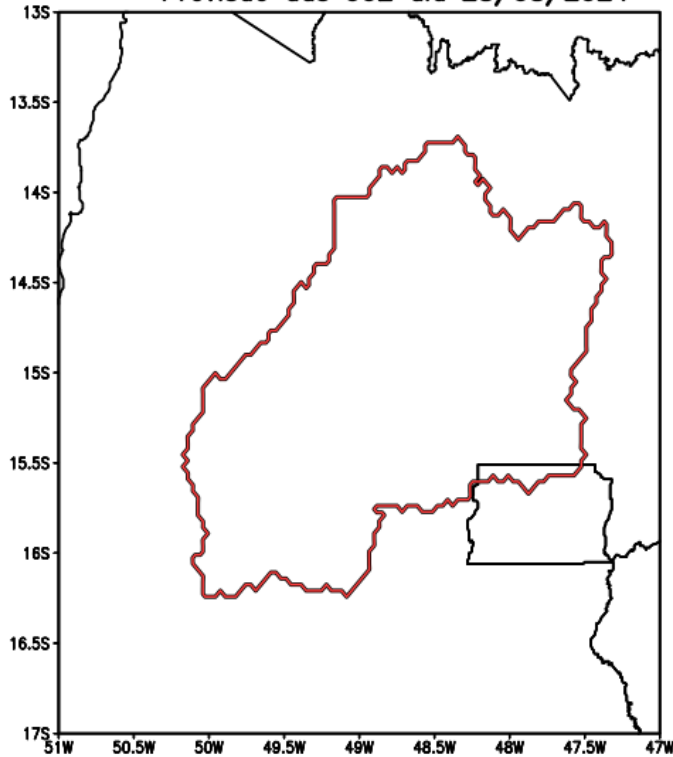
Precipitacao acumulada (mm): Bacia Tocantins–Baixo



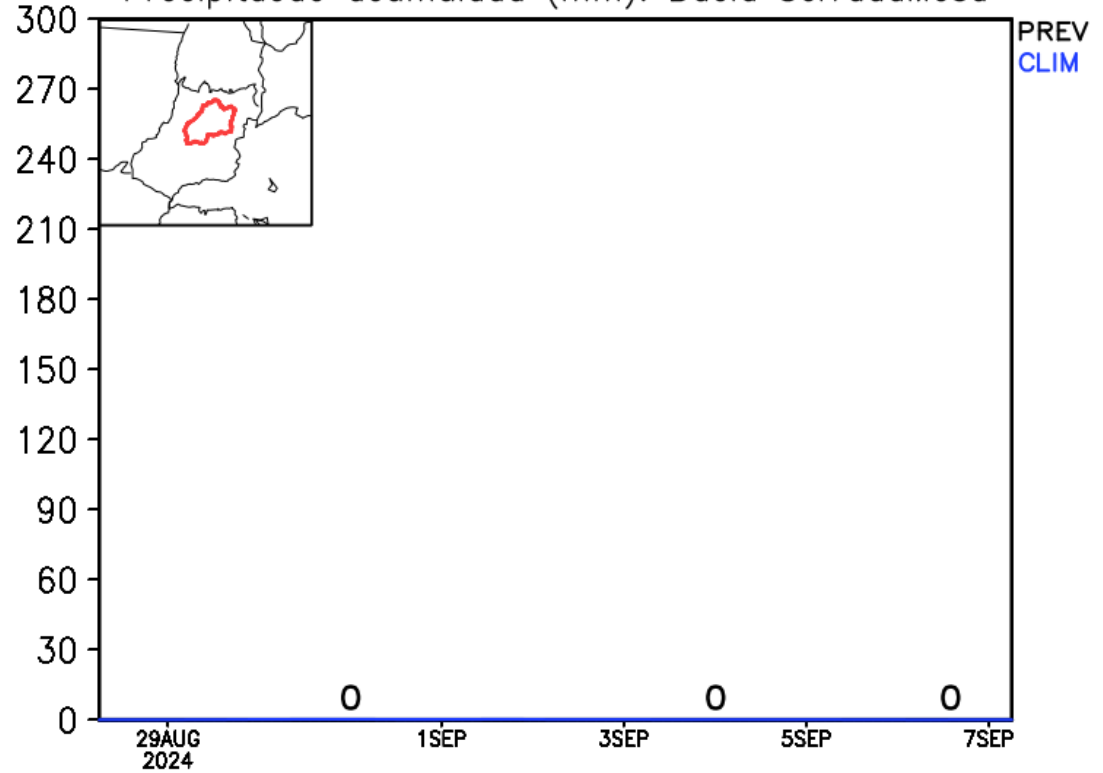
Fonte: GEFS/NOAA

# Previsão Bacia Serra da Mesa

GEFS / Bacia Serra da Mesa  
Precipitacao acumulada em 7 dias (mm)  
Previsao das 00Z dia 28/08/2024



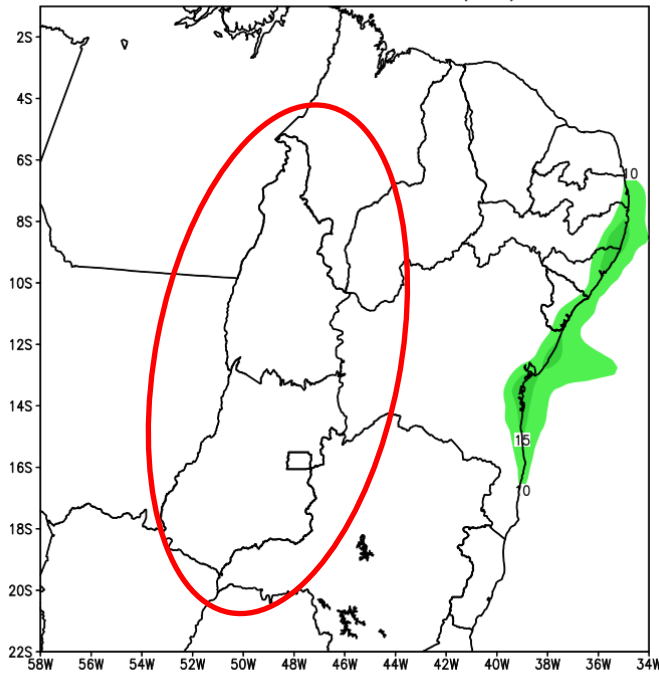
Precipitacao acumulada (mm): Bacia SerradaMesa



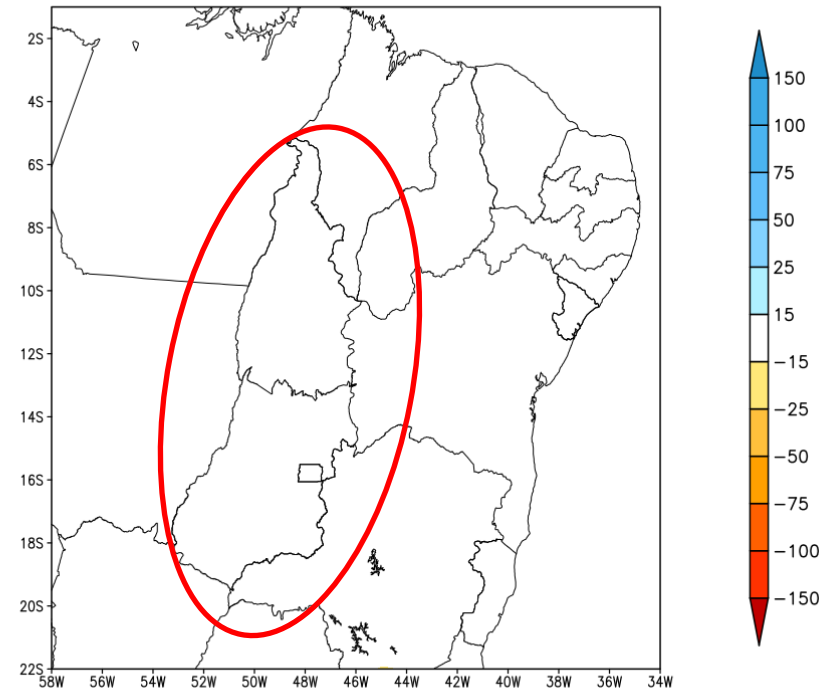
Fonte: GEFS/NOAA

# Tendência para a 2a Semana

GEFS / BRASIL\_NE  
Precipitacao acumulada 2aSem (mm)  
Previsao das 00Z dia 28/08/2024



Anomalia de Precipitacao BR NE (mm)  
Periodo: 2024090500 a 2024091100

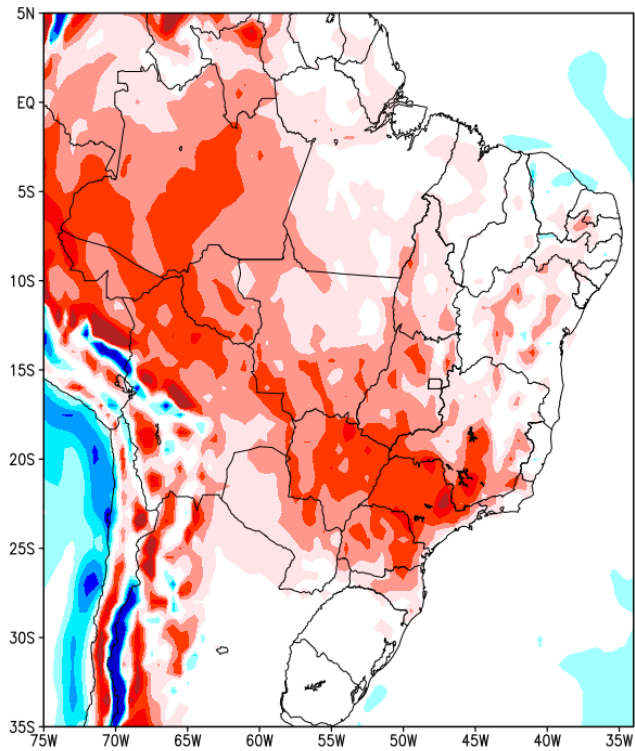


# Previsão de Temperatura

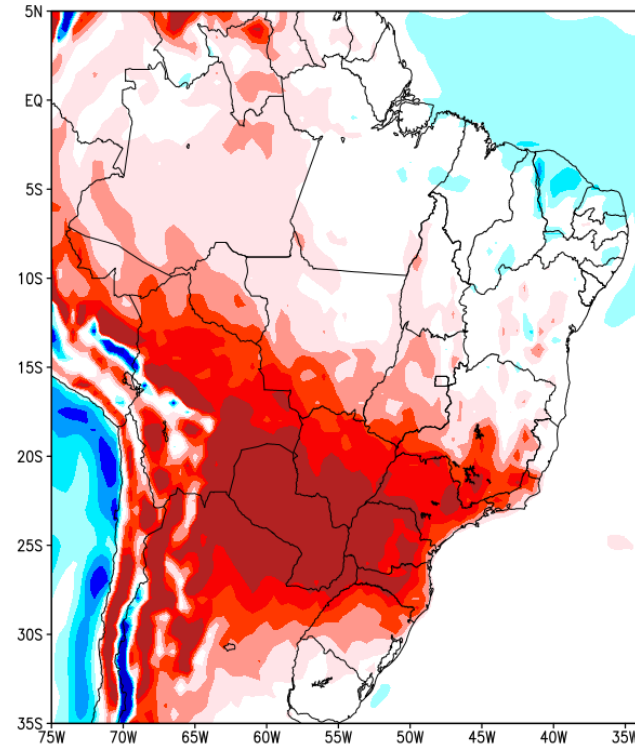
1ª Semana

2ª Semana

Anomalia de Temperatura BR (C)  
Período: 2024082800 a 2024090400



Anomalia de Temperatura BR (C)  
Período: 2024090500 a 2024091100

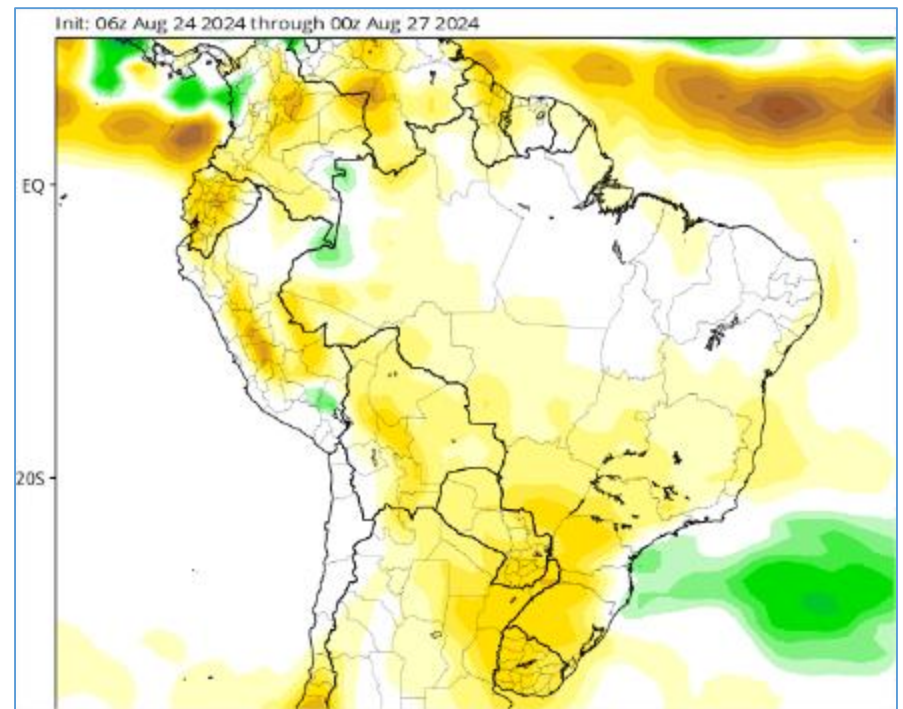
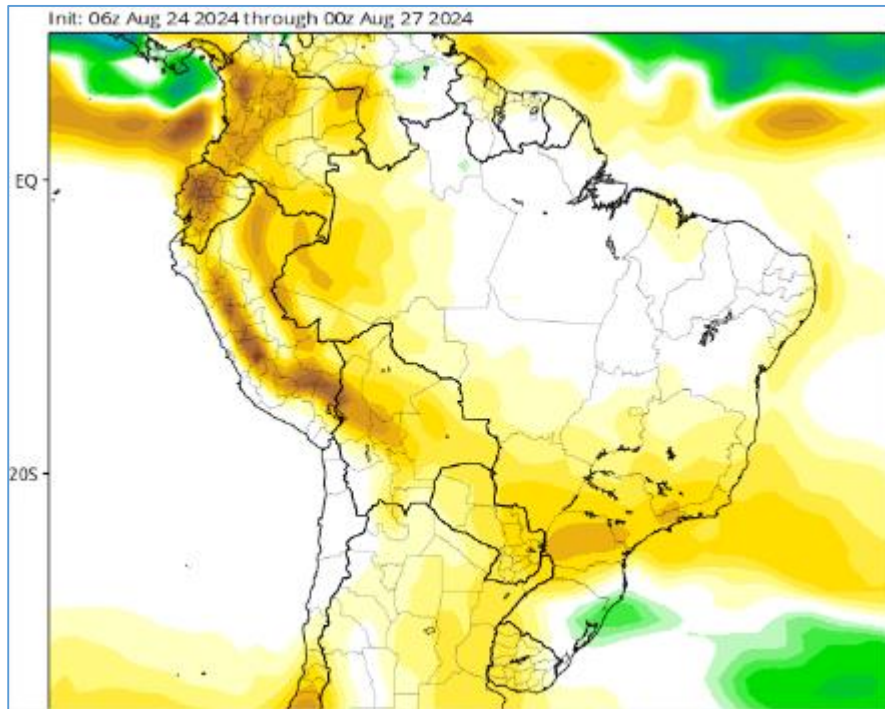




# Tendência 3a e 4a semanas

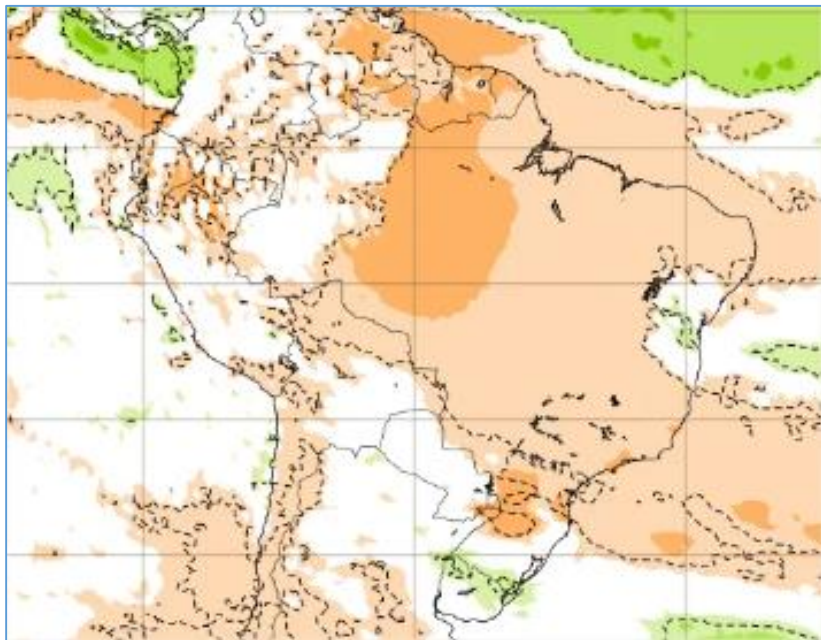
10-17 SETEMBRO

17-23 SETEMBRO

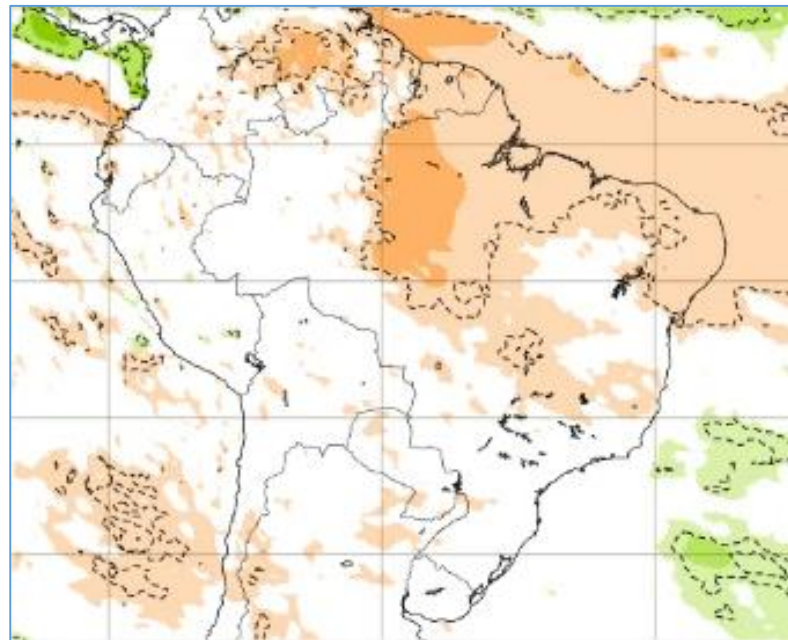


# Tendência para 3ª e 4ª semanas

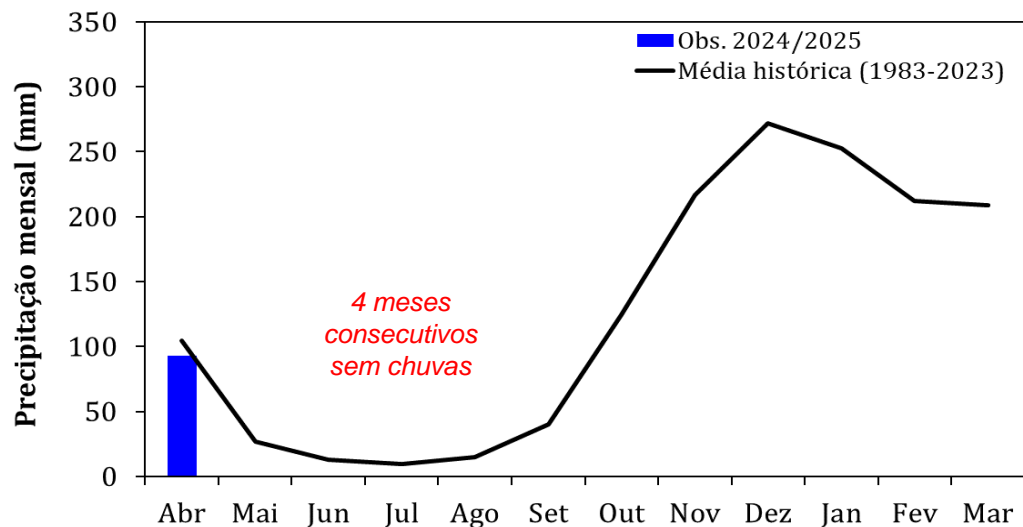
09-15 SETEMBRO



16-23 SETEMBRO



# Monitoramento UHE Serra da Mesa



## Precipitação

### Estação Chuvosa - Out a Abr – 1392 mm

2022/2023: 1358 mm (98% da MLT)

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

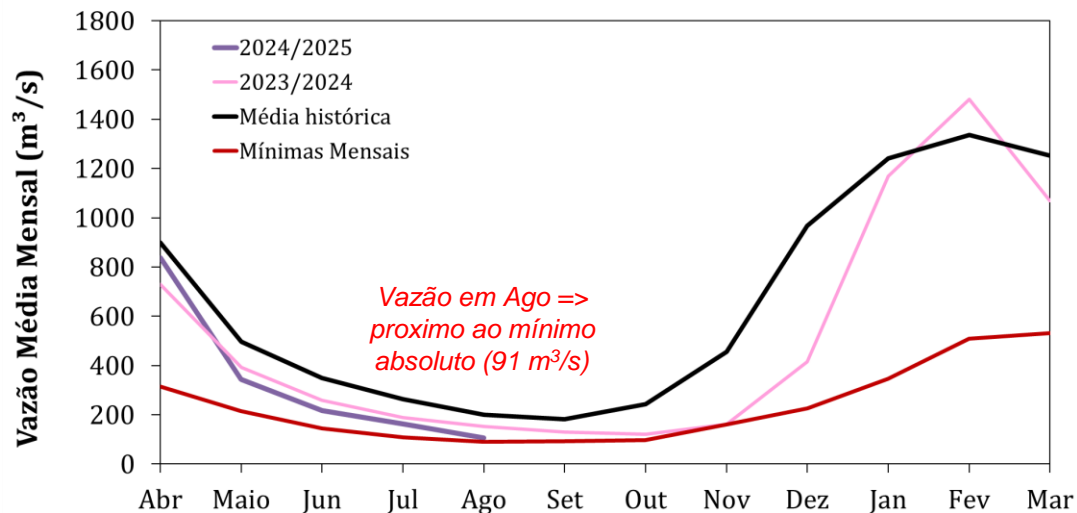
### Estação Seca - Maio a Set – 105 mm

2023: 57 mm (54% da MLT)

2024\*: 0 mm (MLT PARCIAL = 81 mm)

Agosto/2024\*: 0 mm (MLT = 15 mm)

\*Até 26/08/2024



## Vazão

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

2022/2023: 909 m³/s (100% da MLT)

2023/2024: 751 m³/s (82% da MLT)

### Estação Seca - Maio a Set – 298 m³/s

2023: 224 m³/s (75% da MLT)

2024\*: 279 m³/s (94% da MLT)

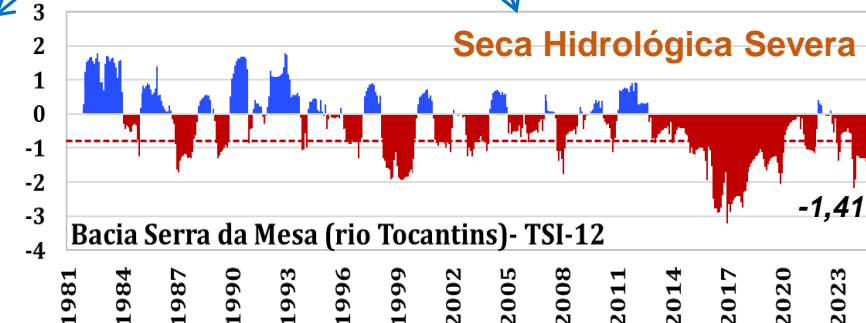
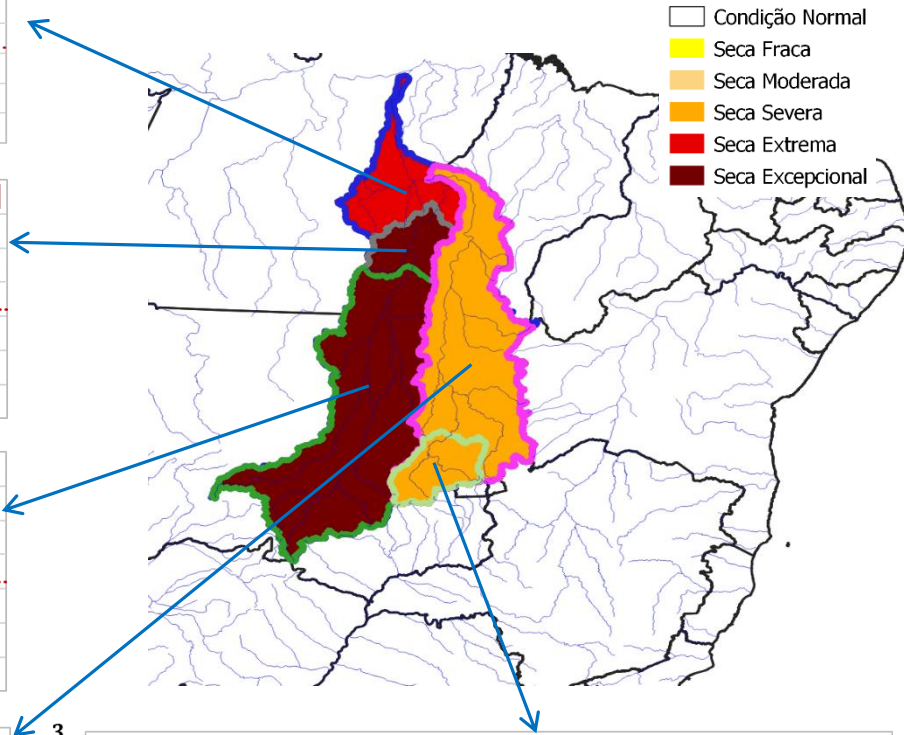
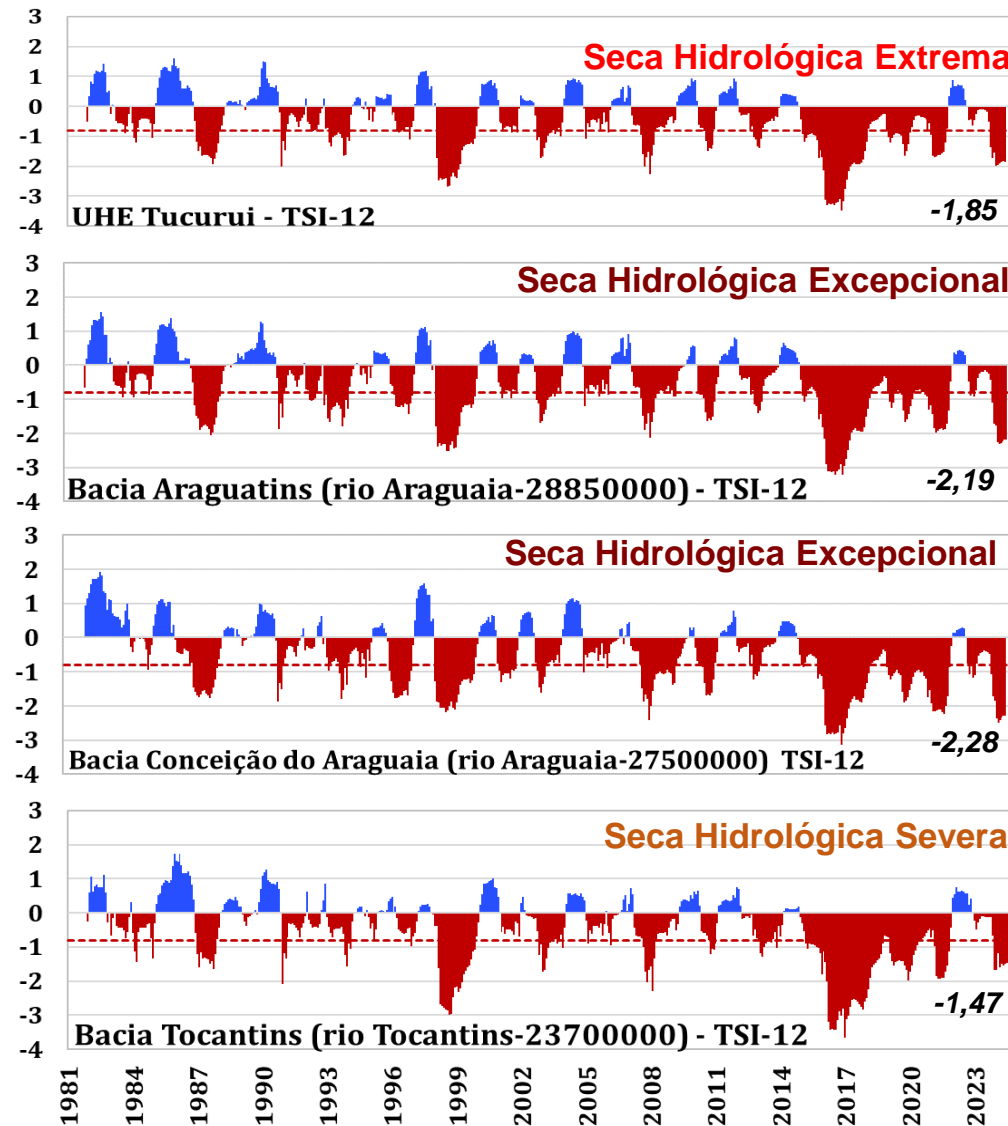
Agosto/2024\*: 107 m³/s (54% da MLT)

26/Agosto/24: 101 m³/s (51% da MLT)

\*Até 28/08/2024

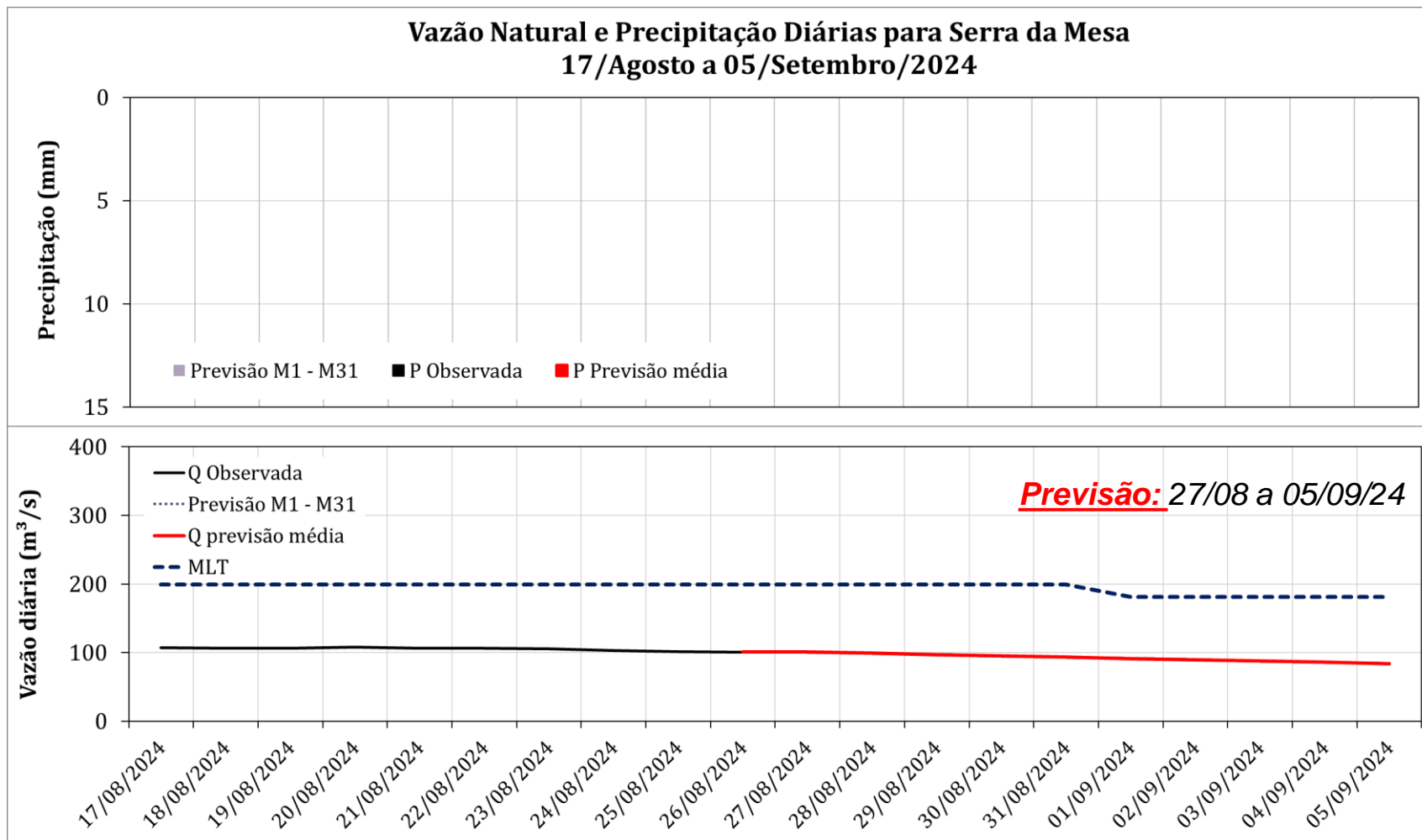
# Índice Padronizado Bivariado (Chuva-Cota) - TSI (Two-variate Standardized Index – Escala de 12 meses)

Agosto/2024

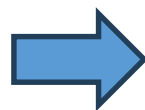




# Serra da Mesa: Previsão de Vazão (modelo hidrológico PDM-CEMADEN)

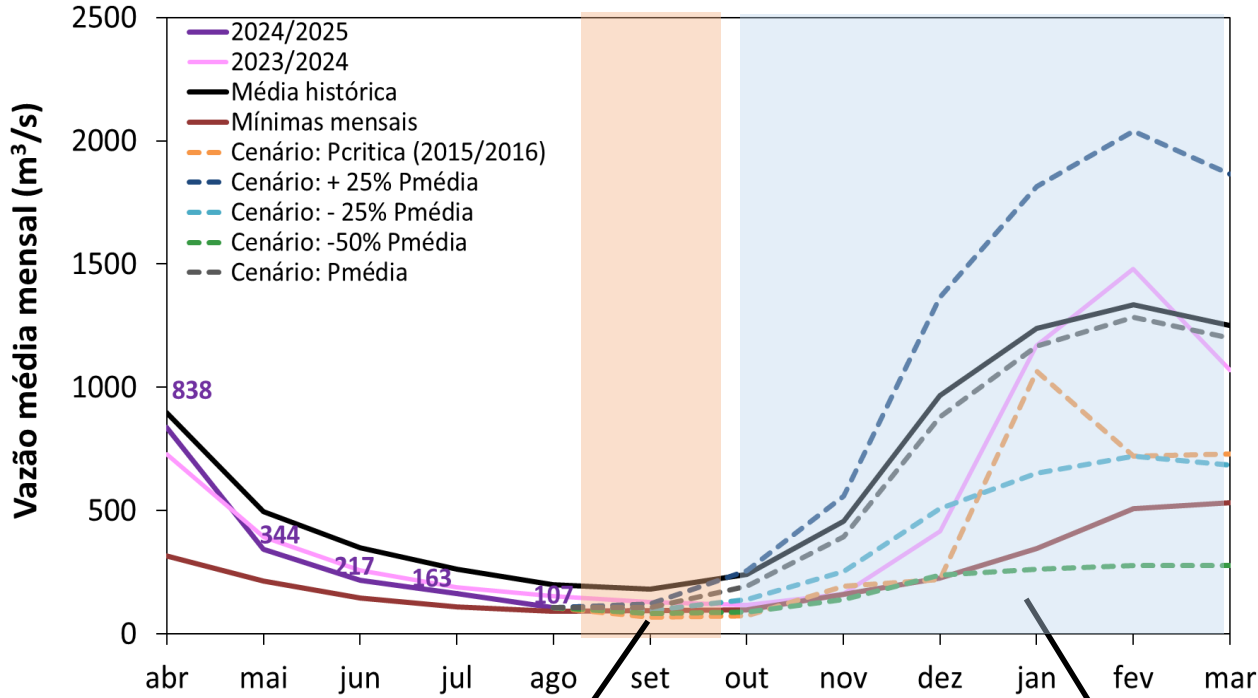


Previsão média para  
os próximos 10 dias: **92 m³/s**



46% da MLT de Agosto  
51% da MLT de Setembro

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



**Set (Mes seco)**  
**MLT: 181 m³/s**

Vazão	% MLT
<b>121 m³/s</b>	<b>67%</b>
107 m³/s	59%
94 m³/s	52%
68 m³/s	38%

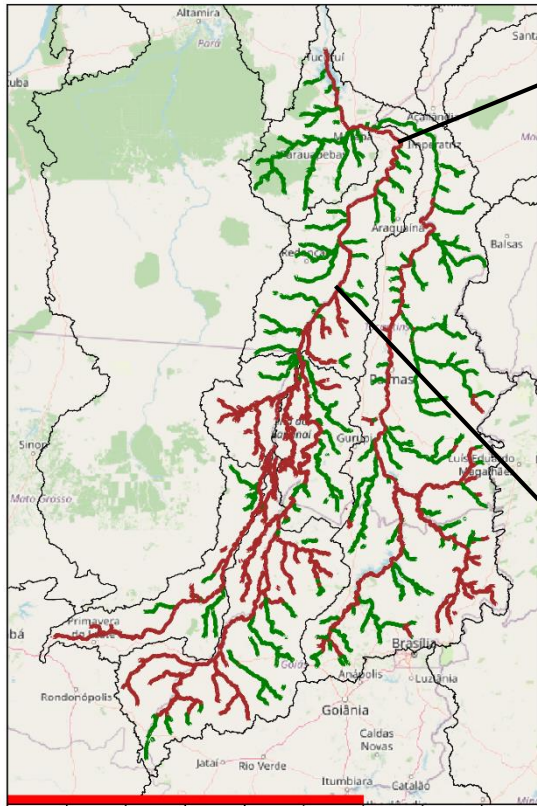
**Out-Mar (Meses chuvosos)**  
**MLT: 916 m³/s**

Vazão	% MLT
<b>1316 m³/s</b>	<b>144%</b>
853 m³/s	93%
493 m³/s	54%
500 m³/s	55%

# Previsão de vazão bacia rio Tocantins/Araguaia: 45 dias (modelo hidrológico MHD)

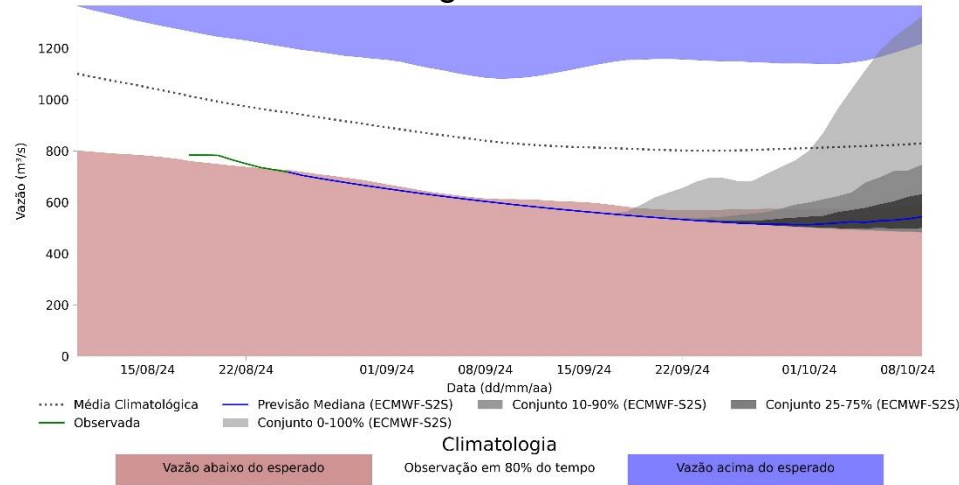
Previsão: 26/Ago a 09/Out/24

24/09/2024

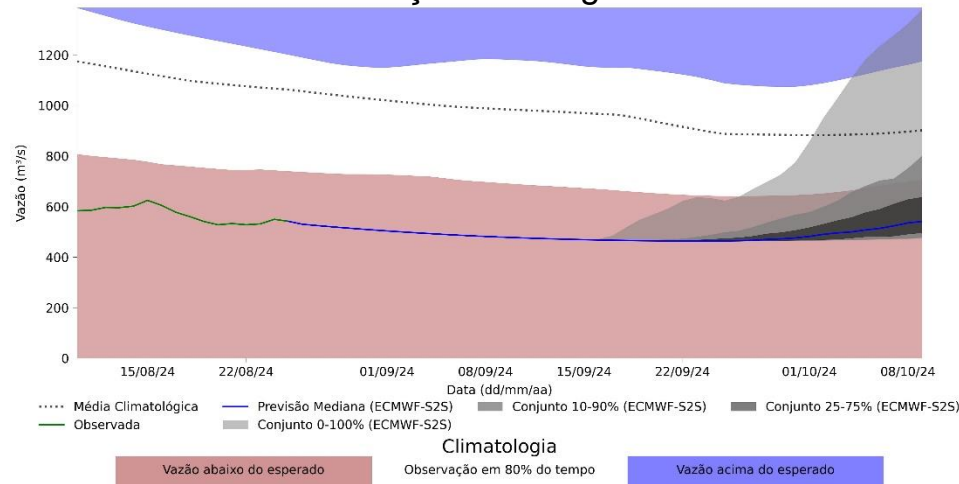


25/08 30/08 04/09 09/09 14/09 19/09 24/09 29/09 04/10 09/10

Araguatins - TO



Conceição do Araguaia - PA

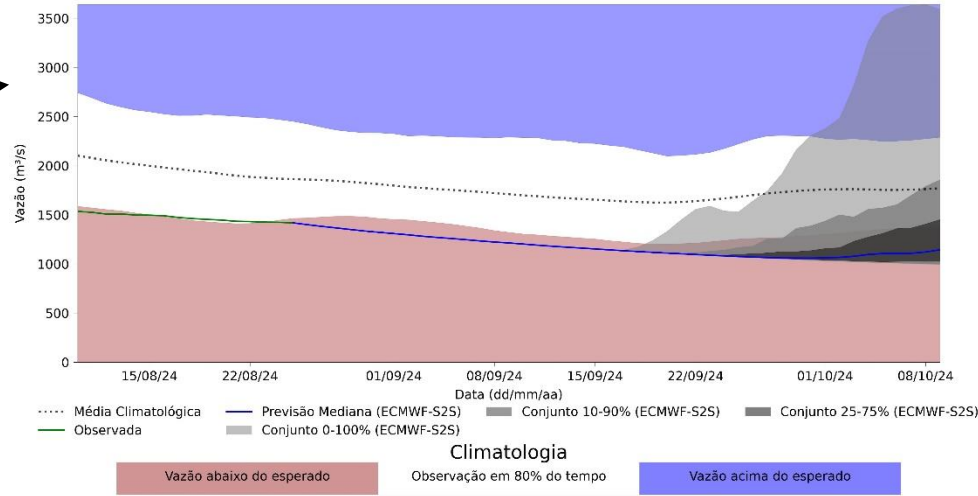


Fonte: Precipitação (INMET/MERGE); Vazão (ANA/ONS)  
MLT: 2000-2023  
Previsão Precipitação = ECMWF-S2S

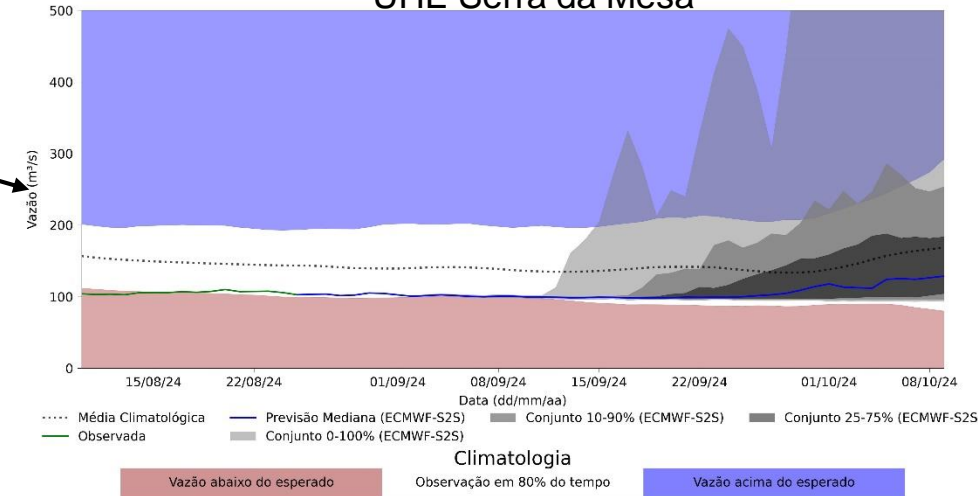
# Previsão de vazão bacia rio Tocantins/Araguaia: 45 dias (modelo hidrológico MHD)

Previsão: 26/Ago a 09/Out/24

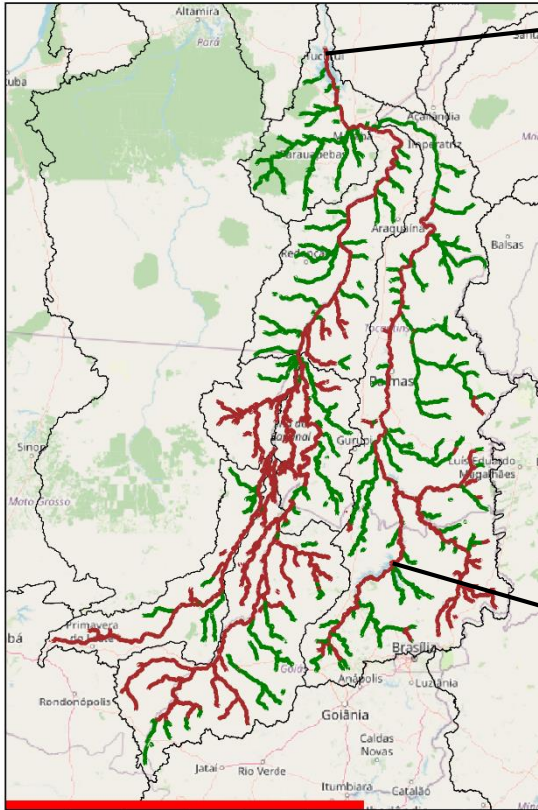
UHE Tucuruí



UHE Serra da Mesa



24/09/2024



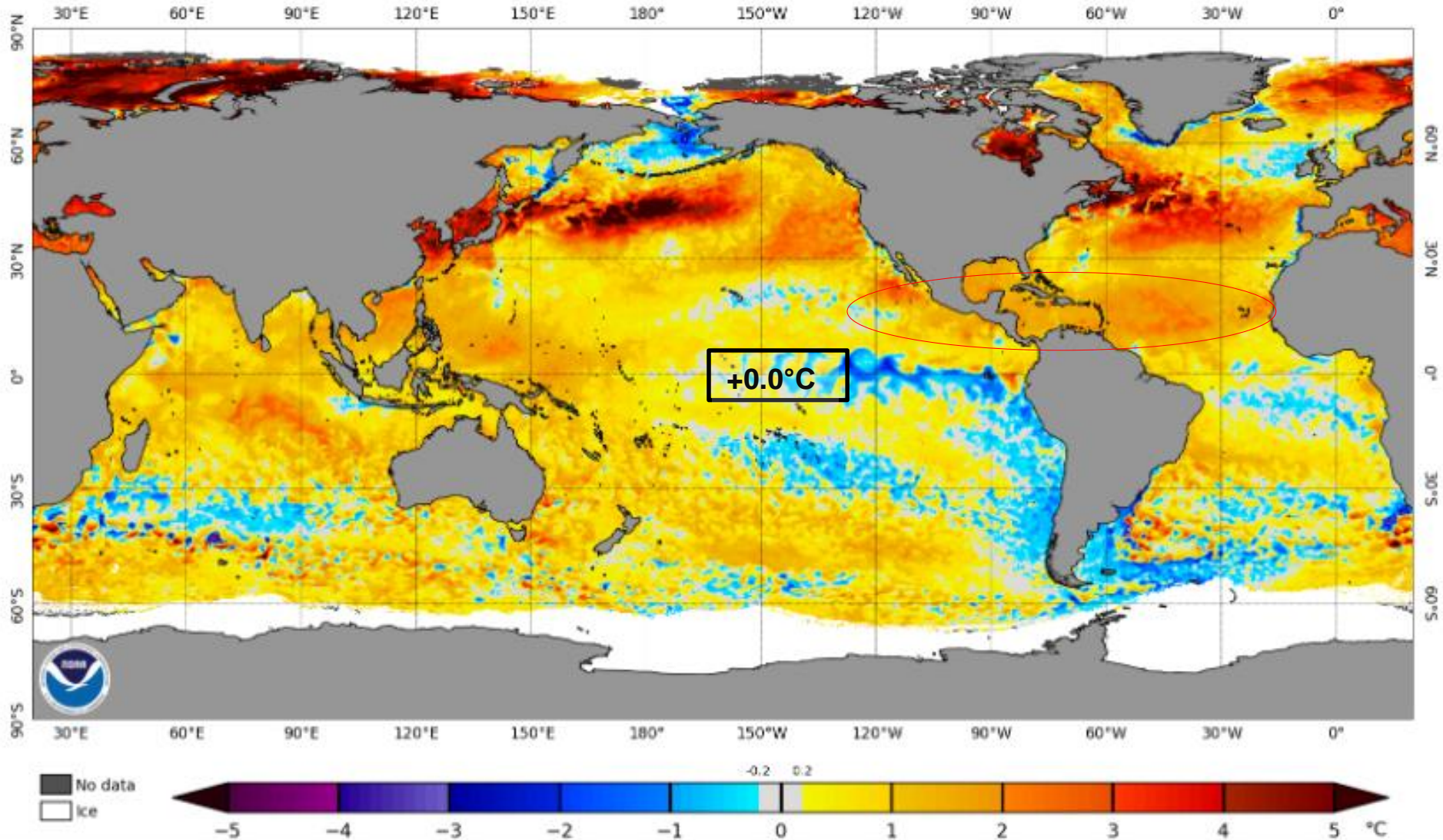
25/08 30/08 04/09 09/09 14/09 19/09 24/09 29/09 04/10 09/10

Fonte: Precipitação (INMET/MERGE); Vazão (ANA/ONS)  
MLT: 2000-2023  
Previsão Precipitação = ECMWF-S2S



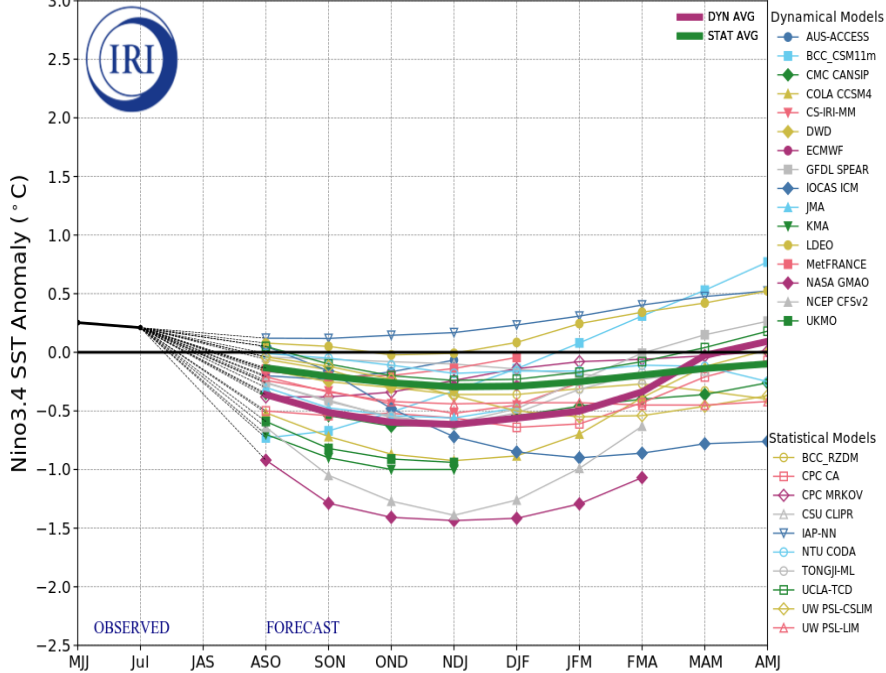
# Status Atual: **La Niña Watch**

NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 26 Aug 2024

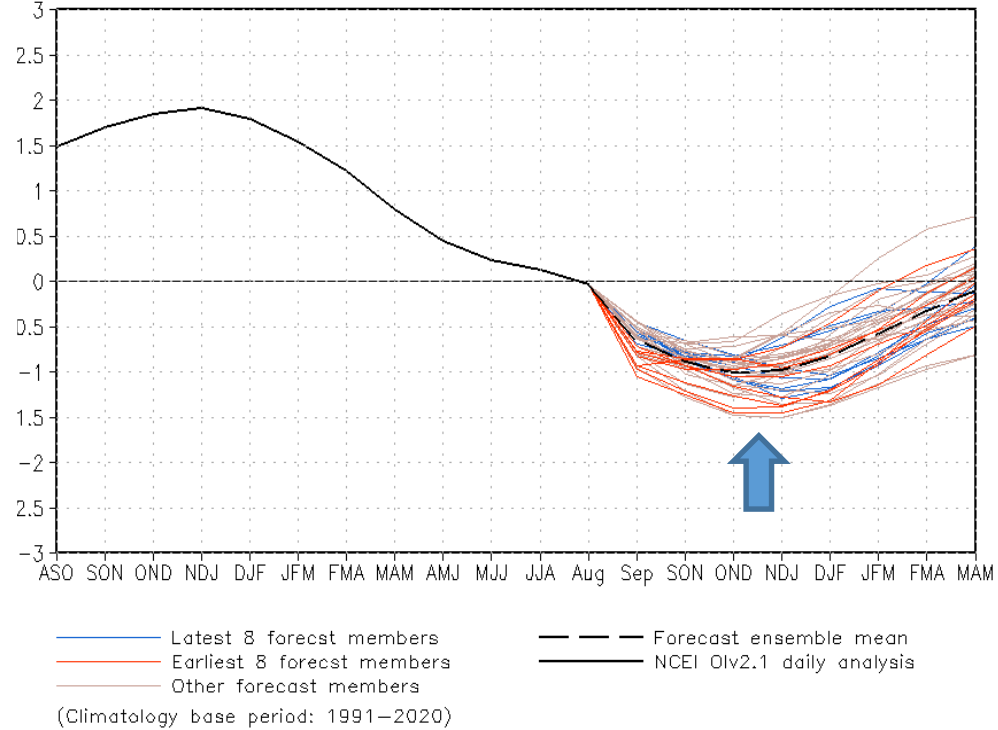


# Previsão do “ENSO”

Model Predictions of ENSO from Aug 2024



CFSv2 forecast Nino3.4 SST anomalies (K) (PDF corrected)

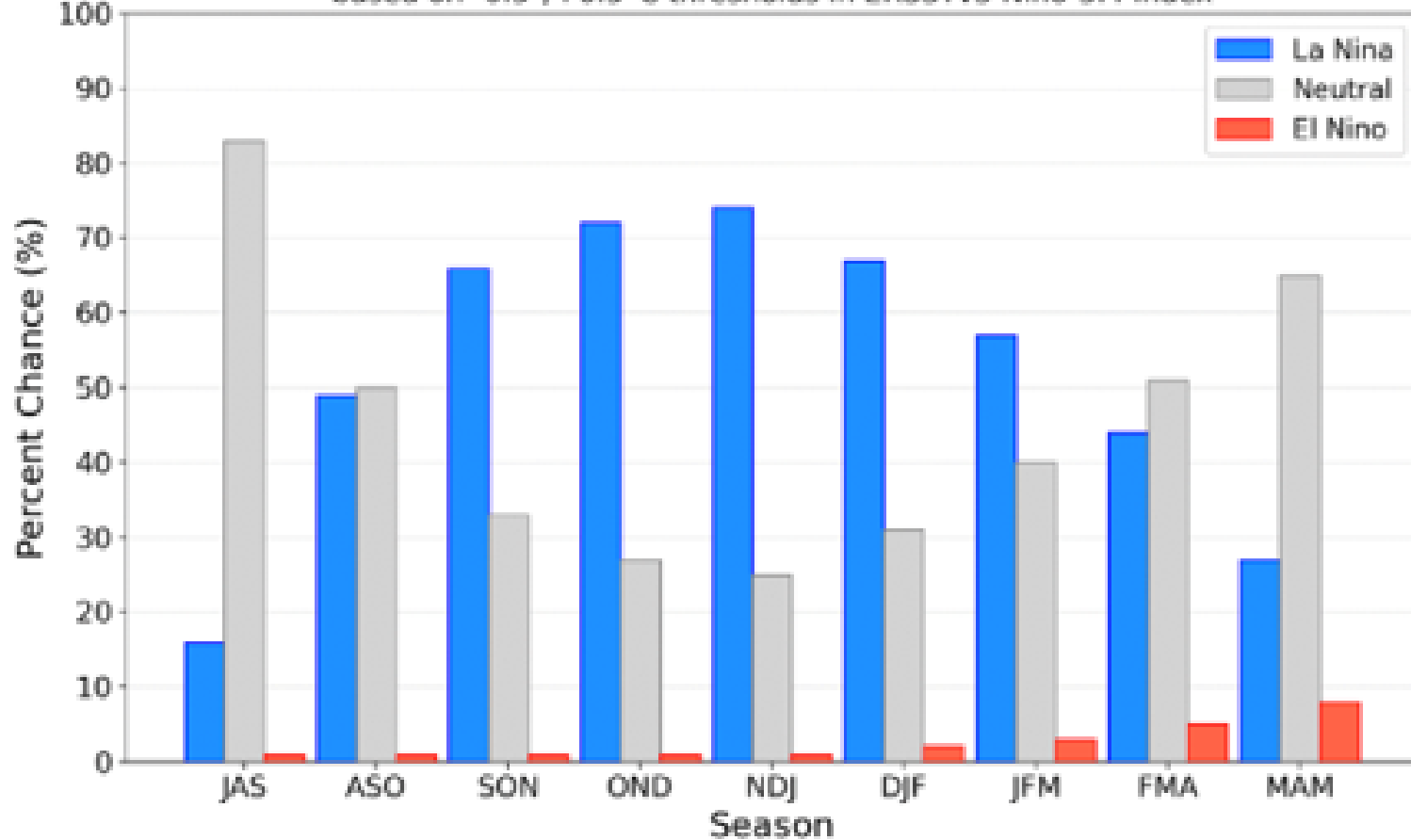


Atualizado 26 de Agosto

# Previsão do “ENSO”

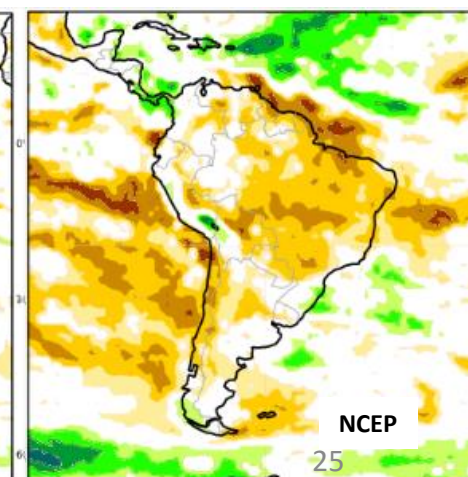
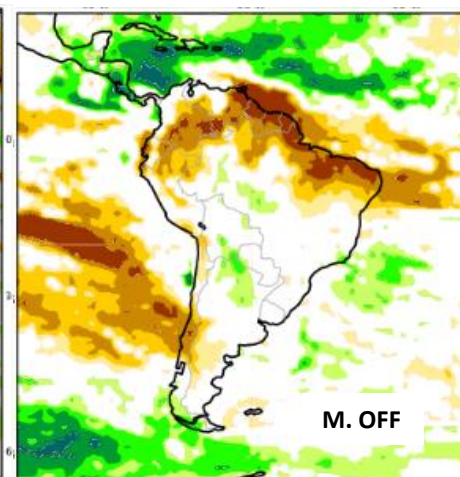
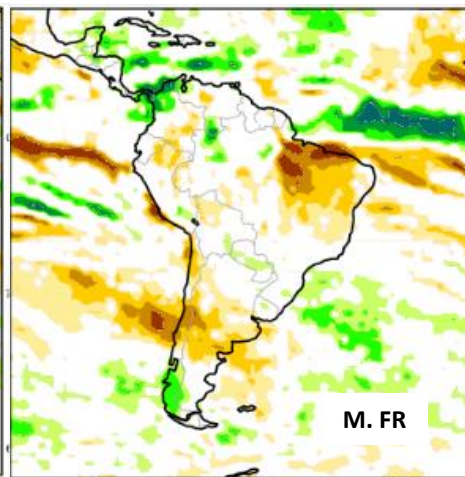
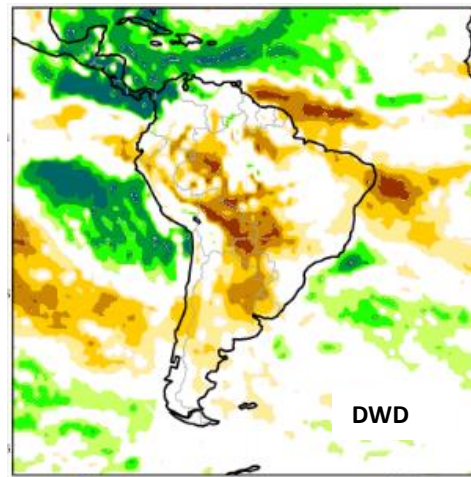
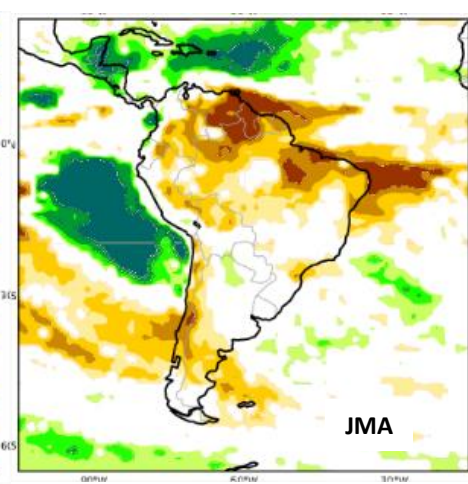
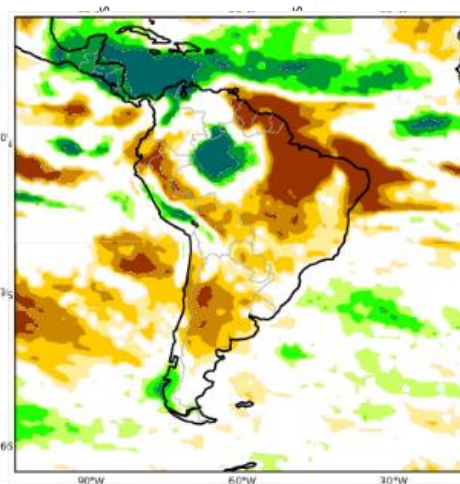
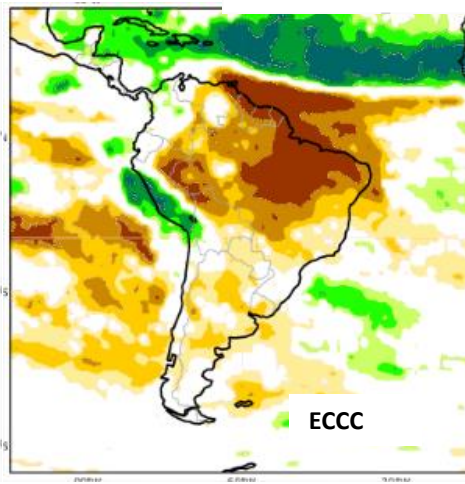
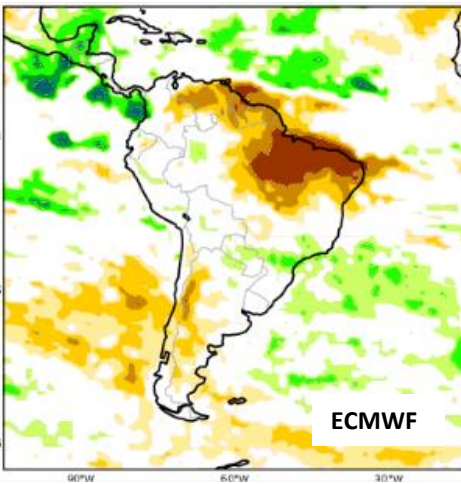
## Official NOAA CPC ENSO Probabilities (issued August 2024)

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

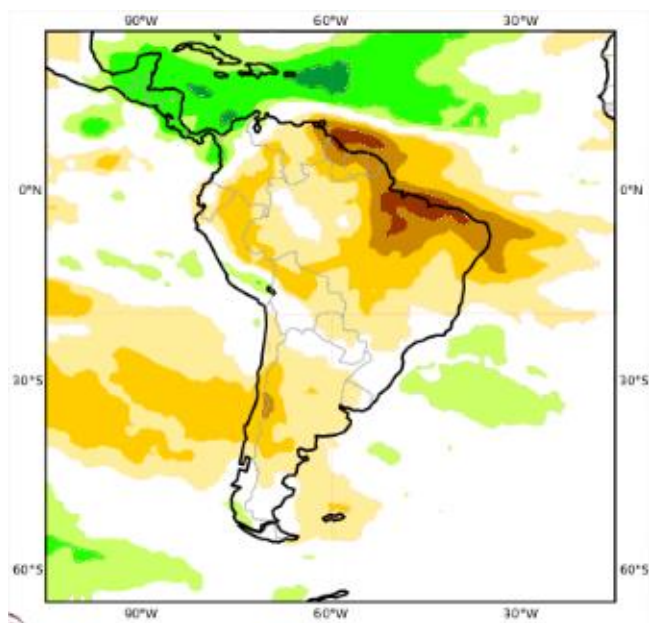




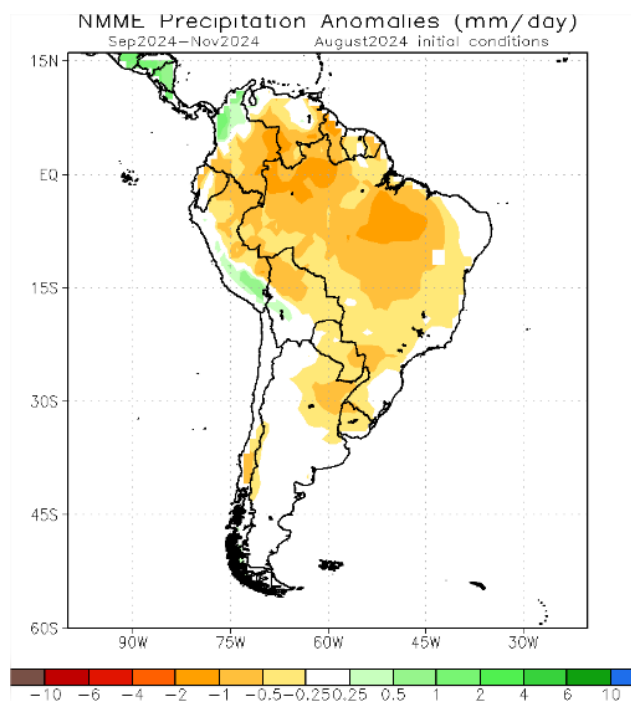
# Previsão Sazonal de Chuva SON



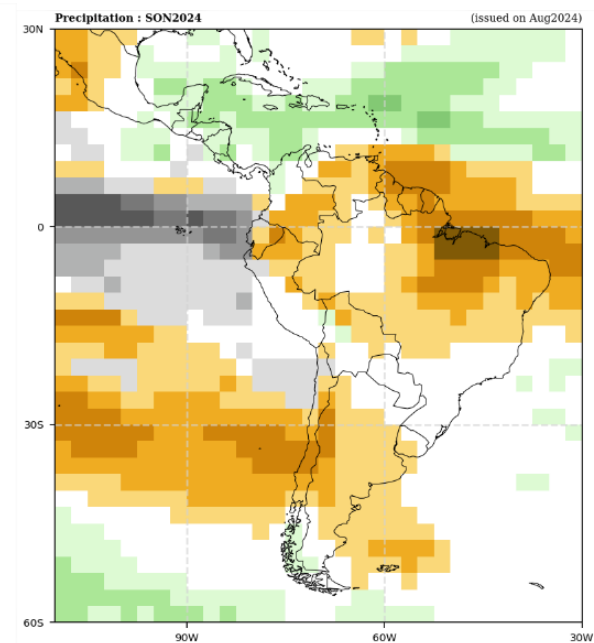
# Previsão Sazonal de Chuva Multi-Modelo para SON



Modelos Europeus



Modelos Americanos



Modelos da Organização Meteorológica Mundial