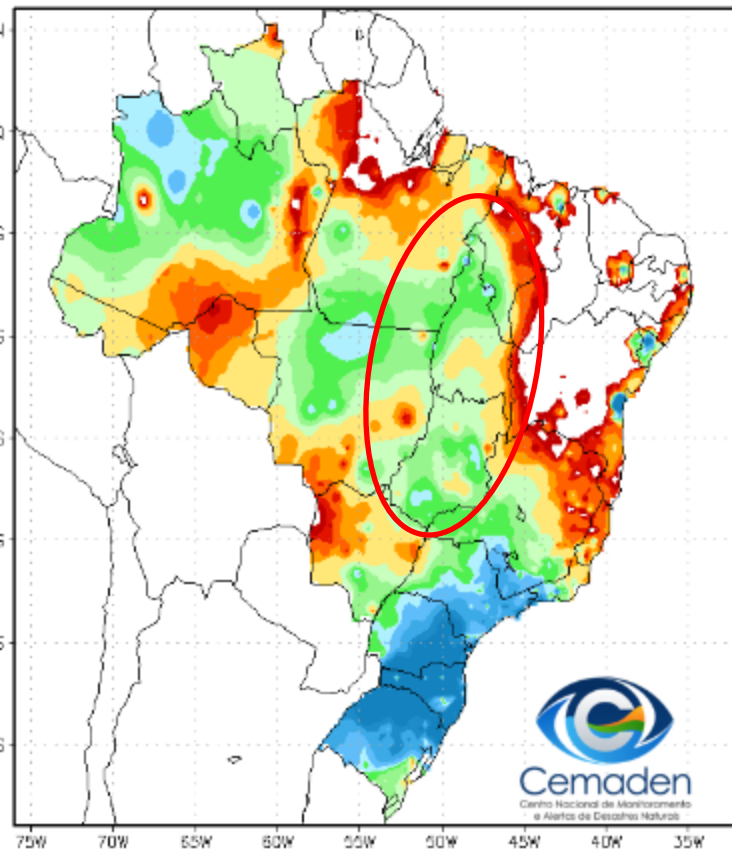


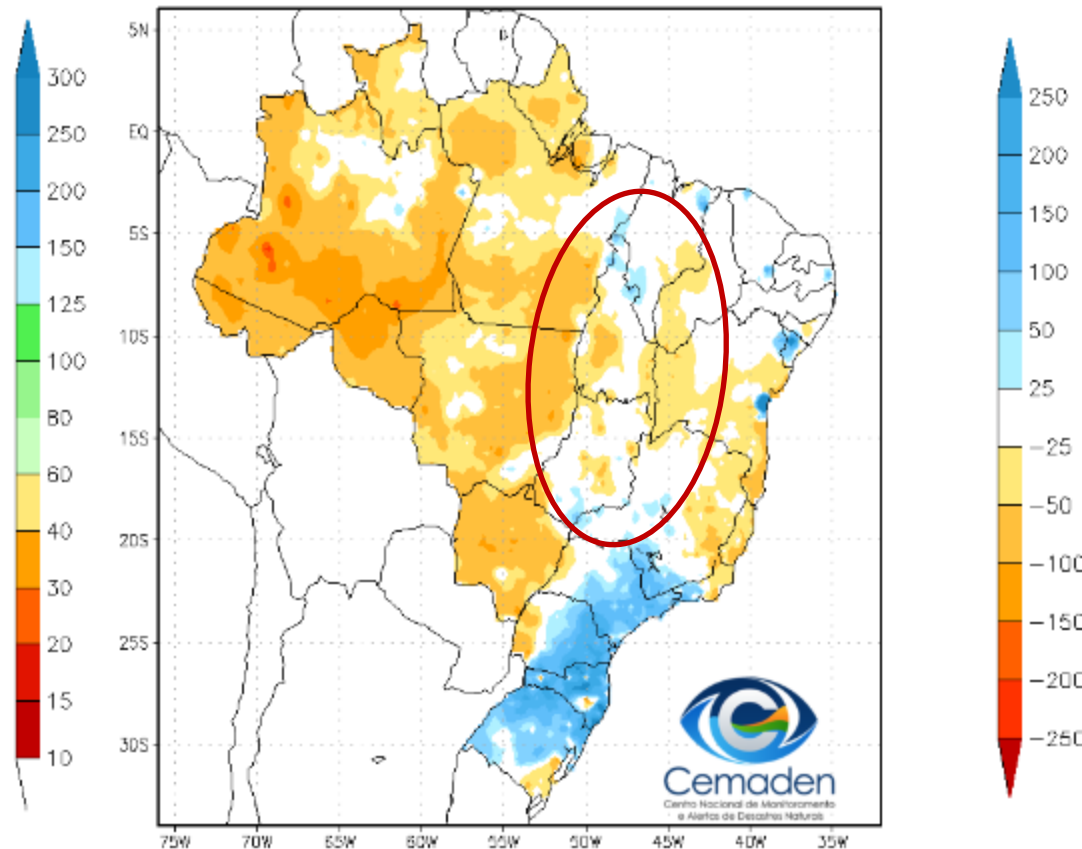
# Monitoramento e Previsões para a Bacia do rio Tocantins

# Precipitação acumulada nos últimos 30 dias

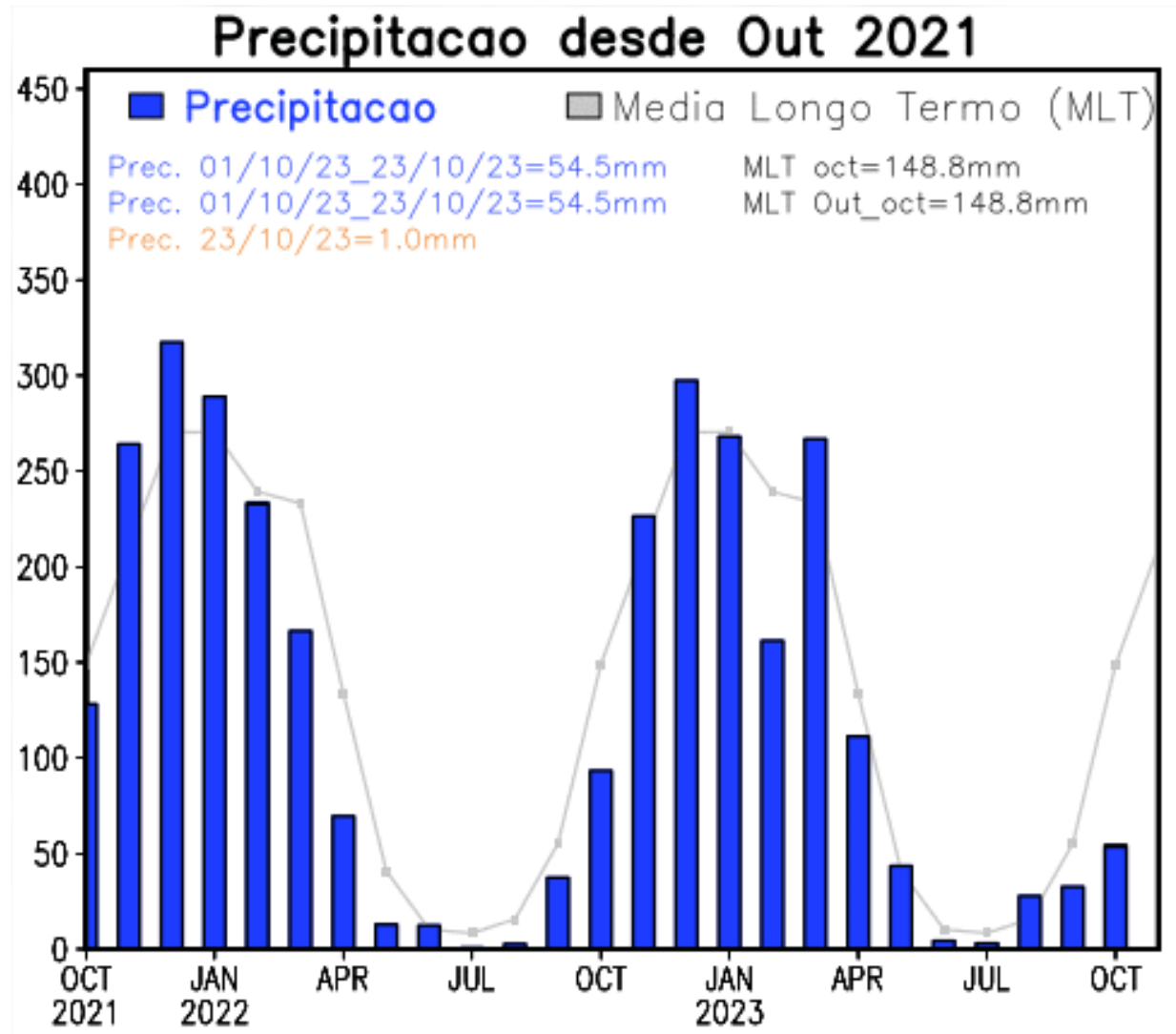
Precipitação Acumulada (mm)  
Período: 24/09/2023 a 24/10/2023



Anomalia de Precipitação (mm)  
Período: 24/09/2023 a 24/10/2023



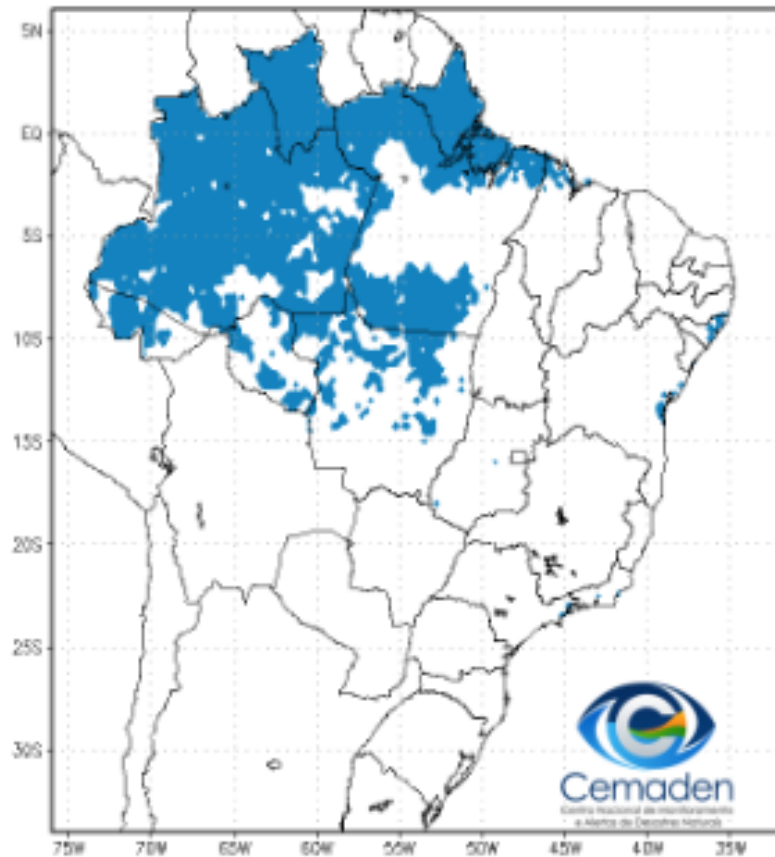
# Evolução da Precipitação



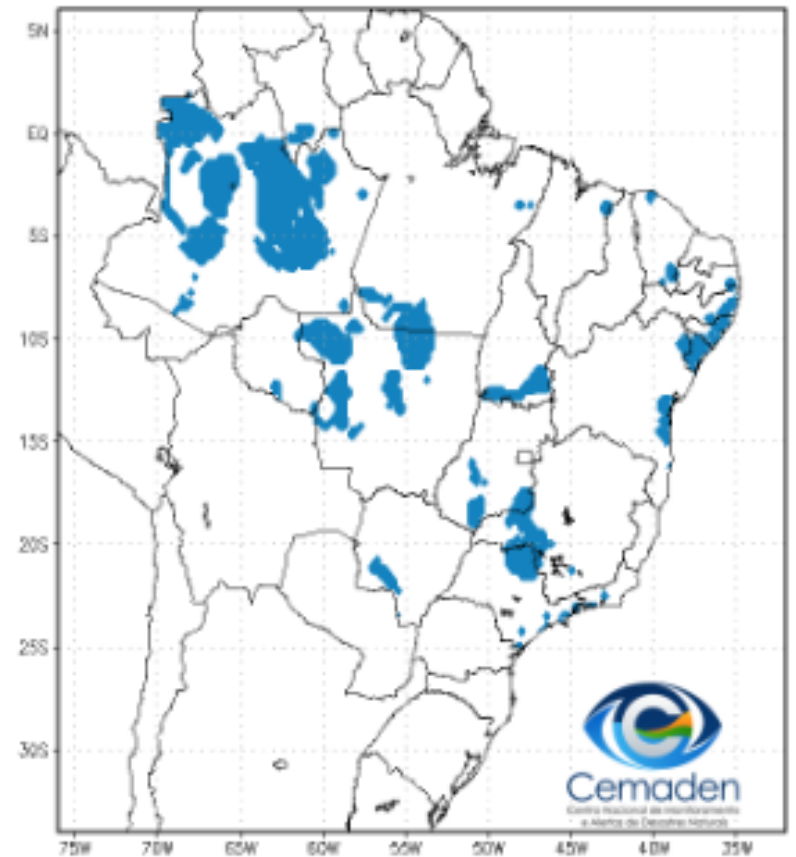
FONTE:  
INPE

# Situação da Estação Chuvosa

Climatologia da Precipitação (1999–2022)  
Superior 3 mm/dia em 4 de 5 dias Período: 24/10



Precipitación Superior 3 mm/día en 4 de 5 días  
Período: 24/10/2023

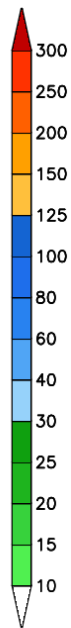
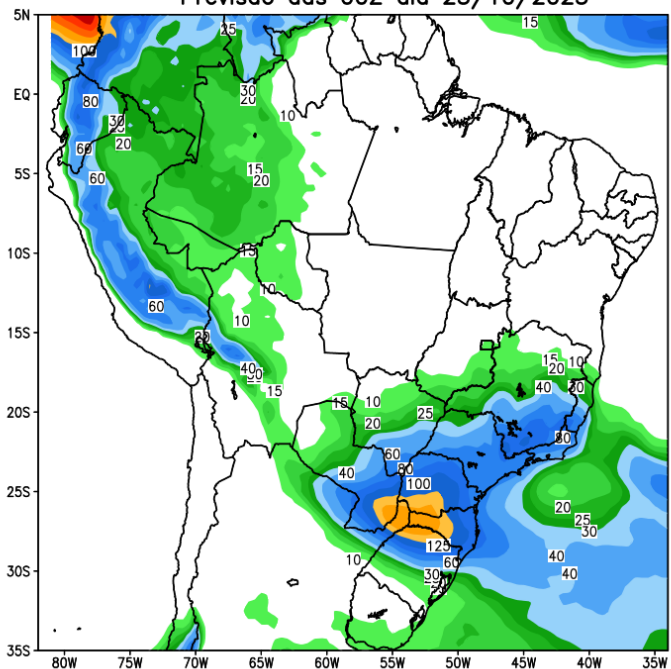


# Situação meteorológica atual

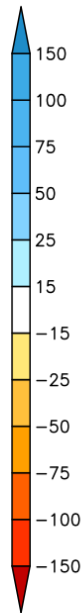
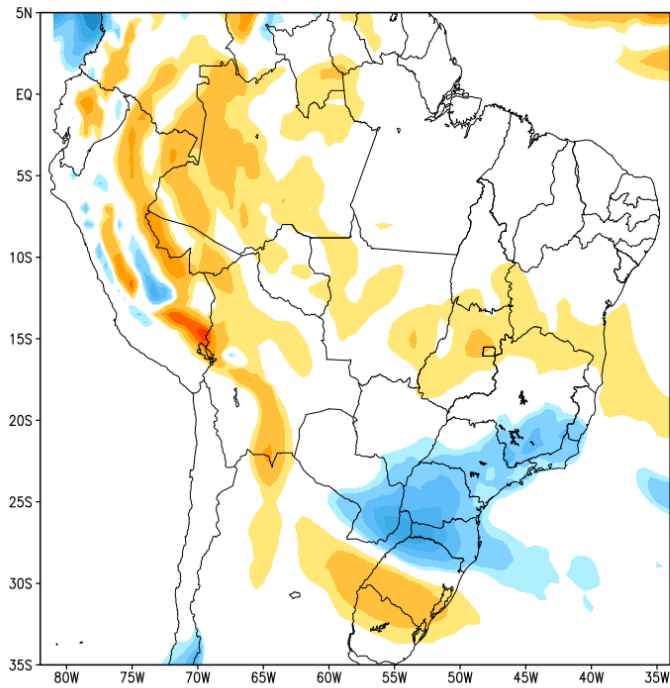


# Previsão de chuva próximos 7 dias

GEFS / BRASIL  
Precipitacao acumulada 1aSem (mm)  
Previsao das 00Z dia 25/10/2023



Anomalia de Precipitacao BR (mm)  
Periodo: 2023102500 a 2023110100



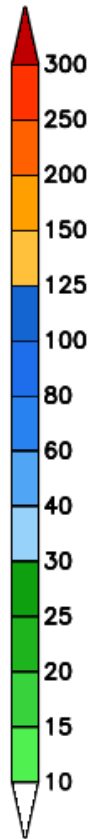
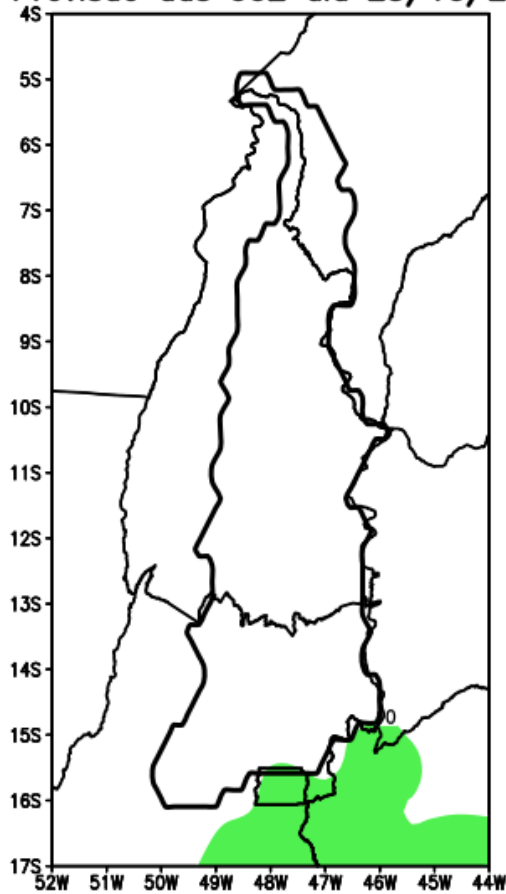
Fonte: GFS/NOAA

# Previsão Bacia Rio Tocantins

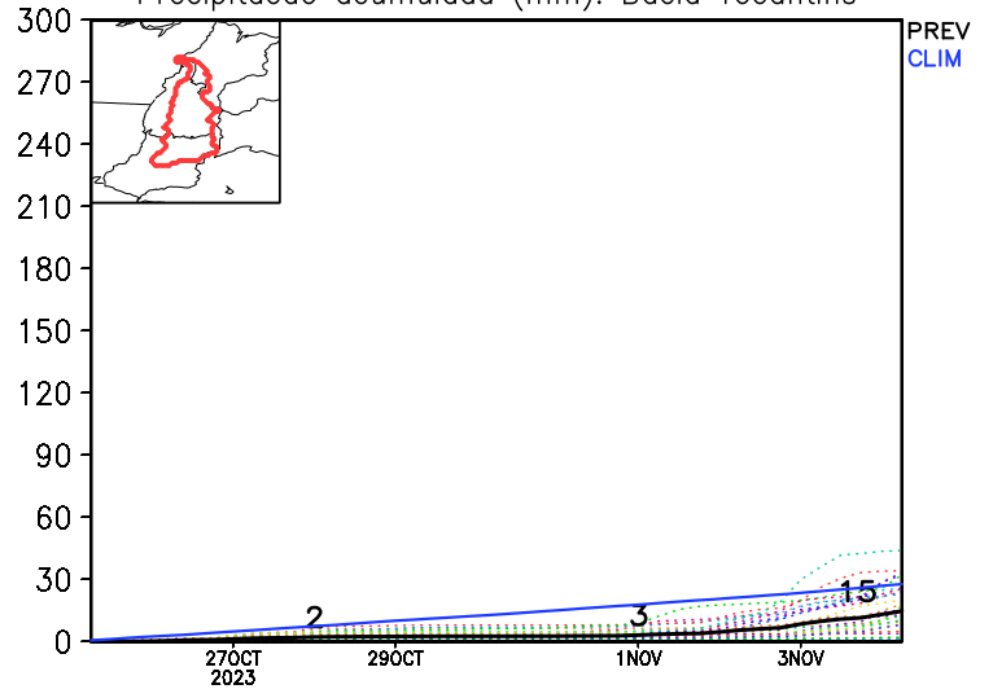
GEFS / Bacia Tocantins

Precipitacao acumulada em 7 dias (mm)

Previsao das 00Z dia 25/10/2023

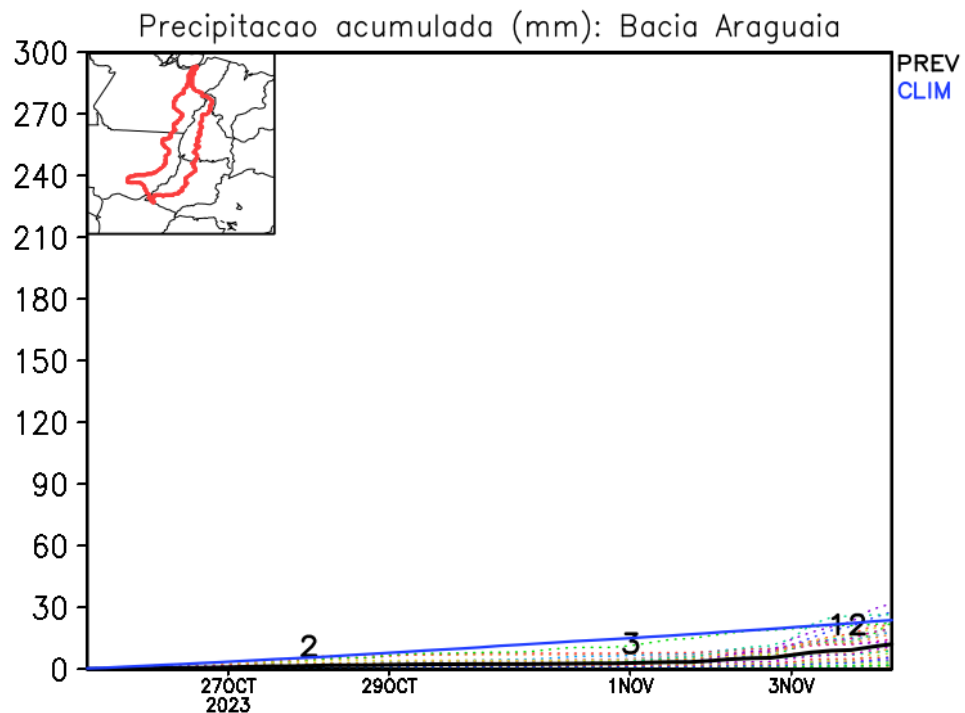
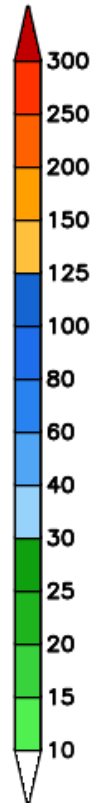
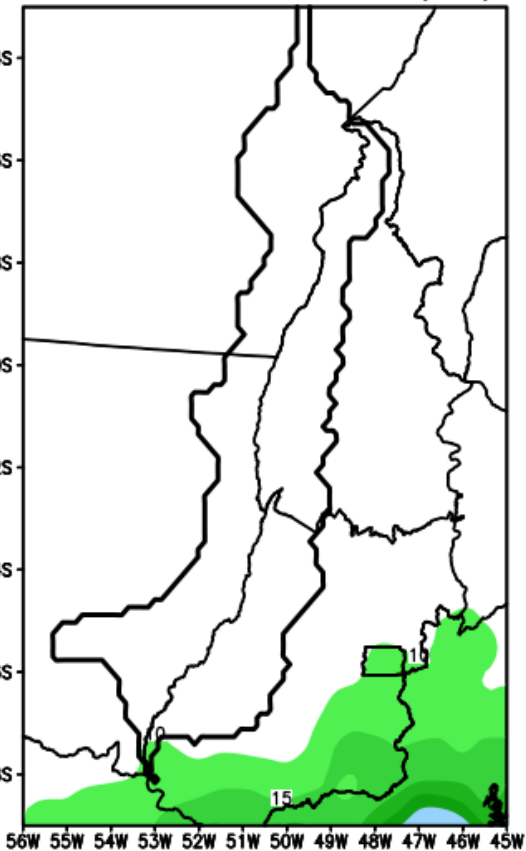


Precipitacao acumulada (mm): Bacia Tocantins



# Previsão Bacia Rio Araguaia

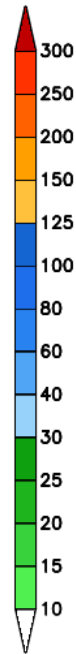
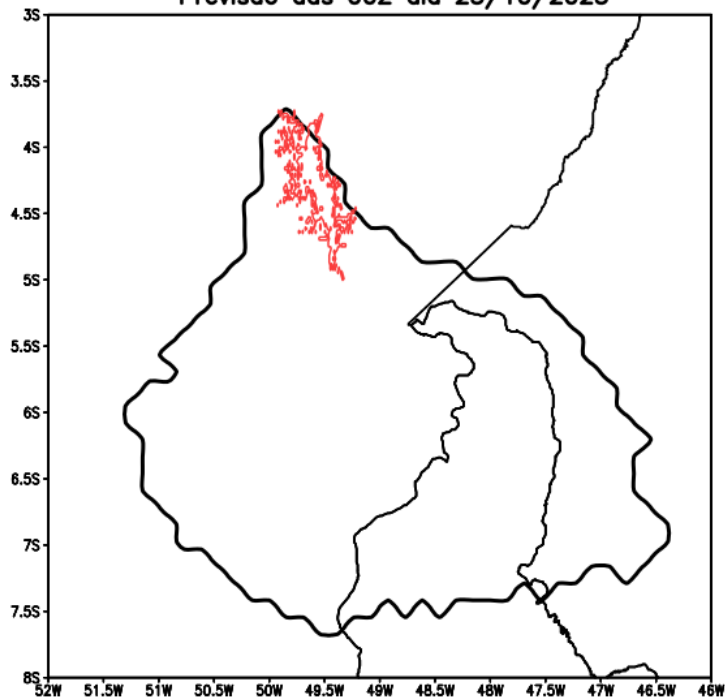
GEFS / Bacia do Rio Araguaia  
Precipitacao acumulada em 7 dias (mm)  
Previsao das 00Z dia 25/10/2023



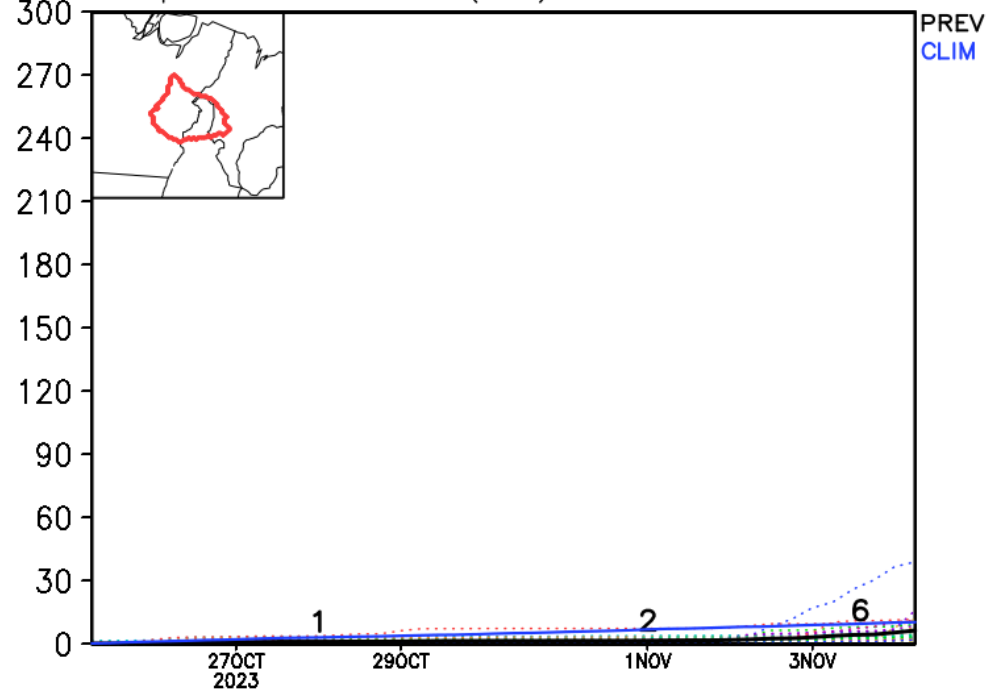


# Previsão Bacia Tocantins (Baixo)

GEFS / Bacia Baixo Tocantins  
Precipitação acumulada em 7 dias (mm)  
Previsão das 00Z dia 25/10/2023

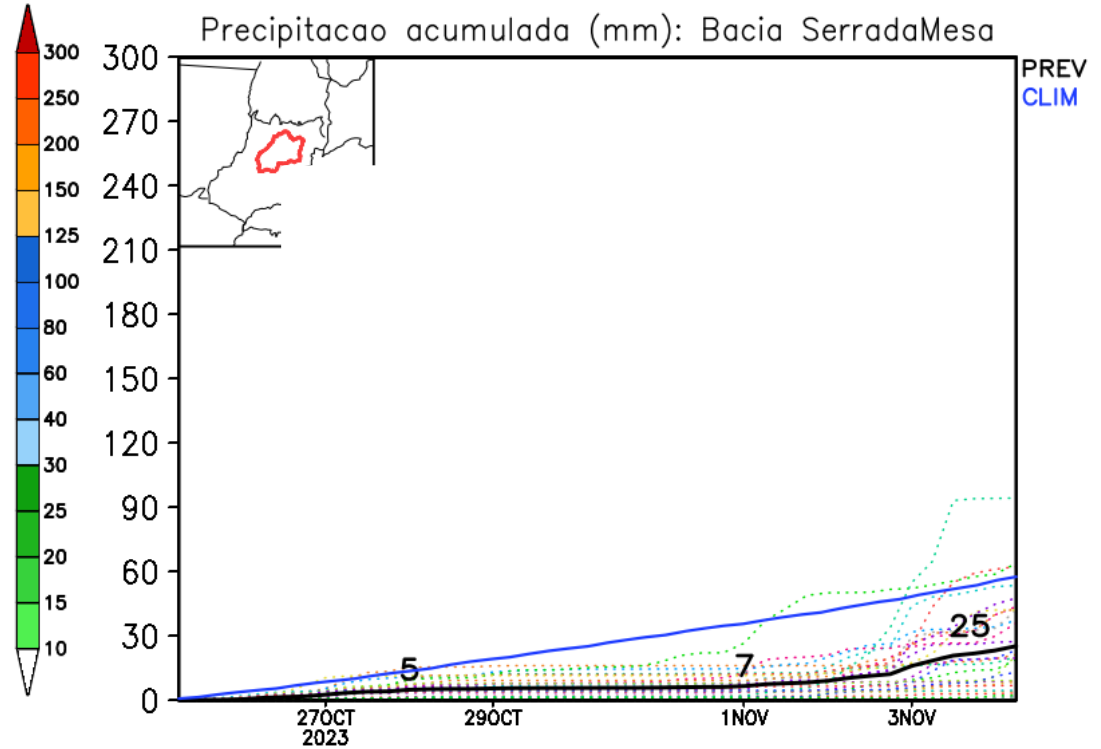
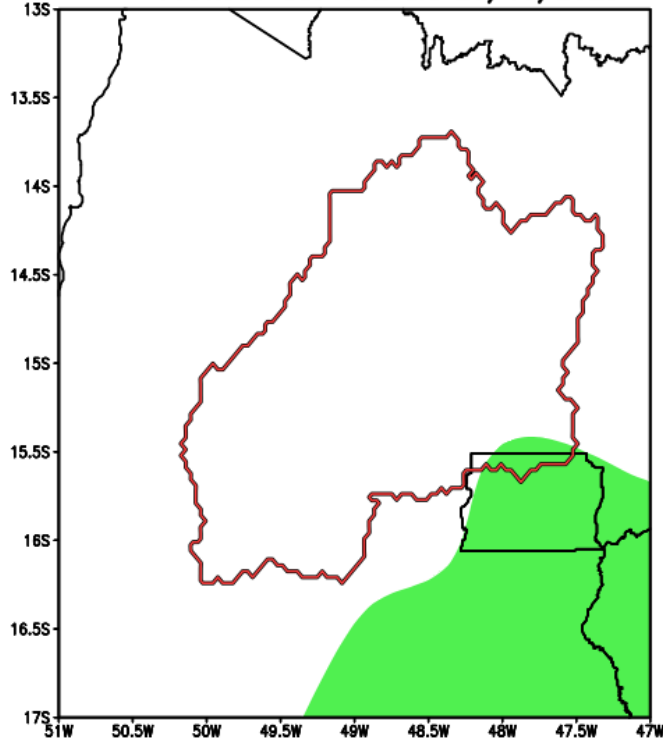


Precipitação acumulada (mm): Bacia Tocantins–Baixo

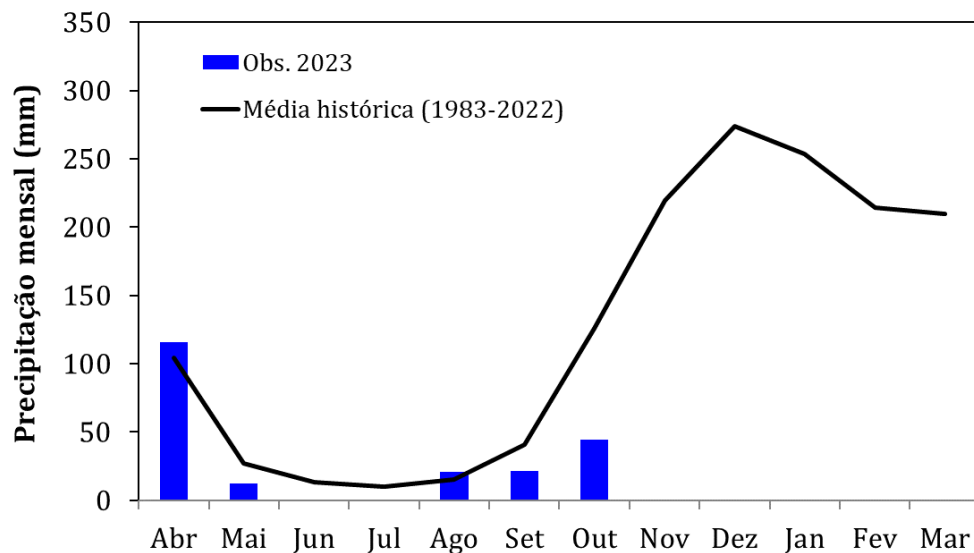


# Previsão Bacia Serra da Mesa

GEFS / Bacia Serra da Mesa  
Precipitacao acumulada em 7 dias (mm)  
Previsao das 00Z dia 25/10/2023



# Monitoramento UHE Serra da Mesa



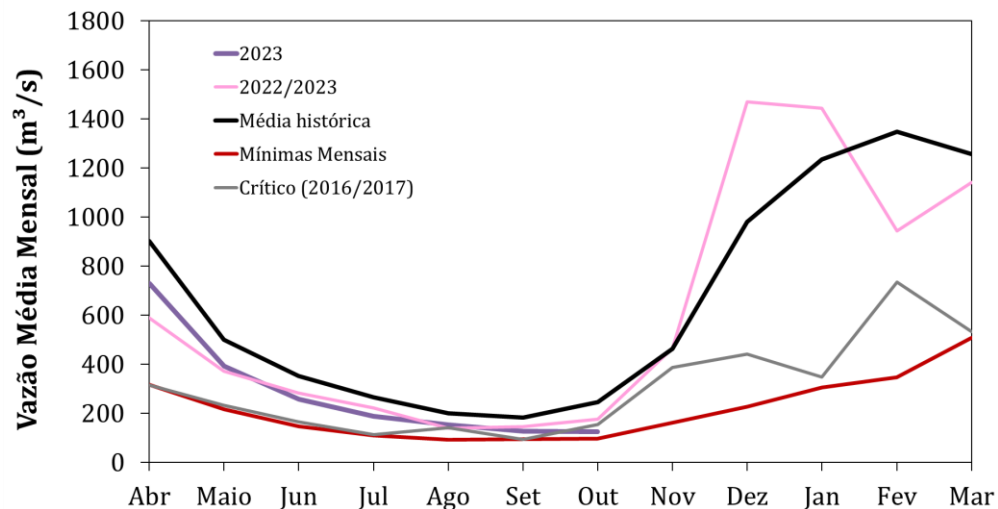
## Precipitação

**Estação Chuvosa - Out a Abr – 1402 mm**  
 2021/2022: 1473 mm (**105% da média histórica**)  
 2022/2023: 1358 mm (**97% da média histórica**)

**Estação Seca - Maio a Set – 106 mm**  
 2022: 54 mm (**51% da média histórica**)  
 2023: 52 mm (**49% da média histórica**)

**Out/2023\*:** 44 mm (**Média histórica = 126 mm**)

\*Até 23/10/2023



## Vazão

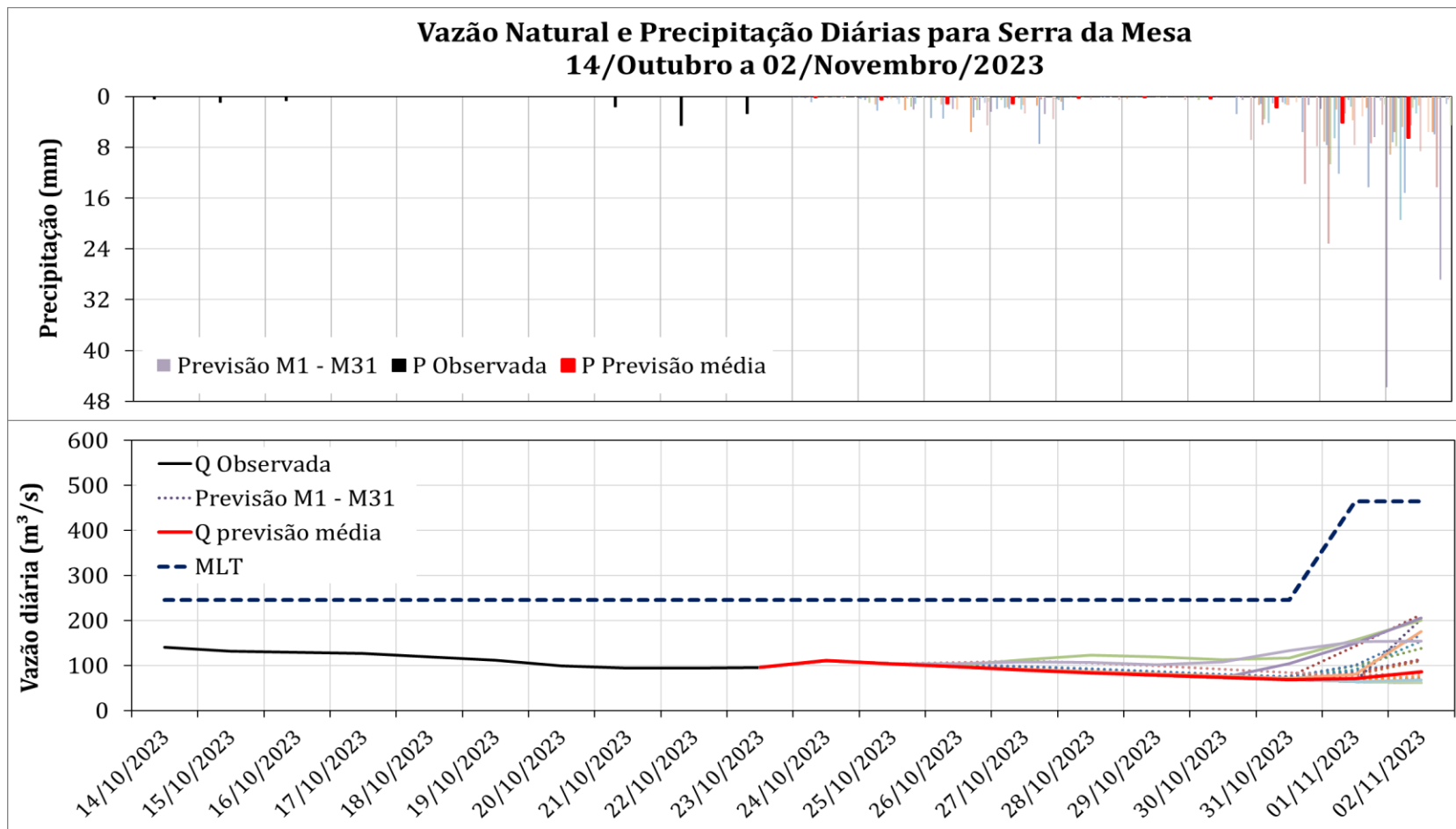
**Estação Chuvosa - Out a Abr – 918 m³/s**  
 2021/2022: 1184 m³/s (**129% da MLT**)  
 2022/2023: 909 m³/s (**99% da MLT**)

**Estação Seca - Maio a Set – 300 m³/s**  
 2022: 231 m³/s (**77% da MLT**)  
 2023: 224 m³/s (**75% da MLT**)

**Outubro/2023\*:** 126 m³/s (**51% da MLT**)  
**23/Out/2023:** 100 m³/s (**39% da MLT**)

\*Até 23/10/2023

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



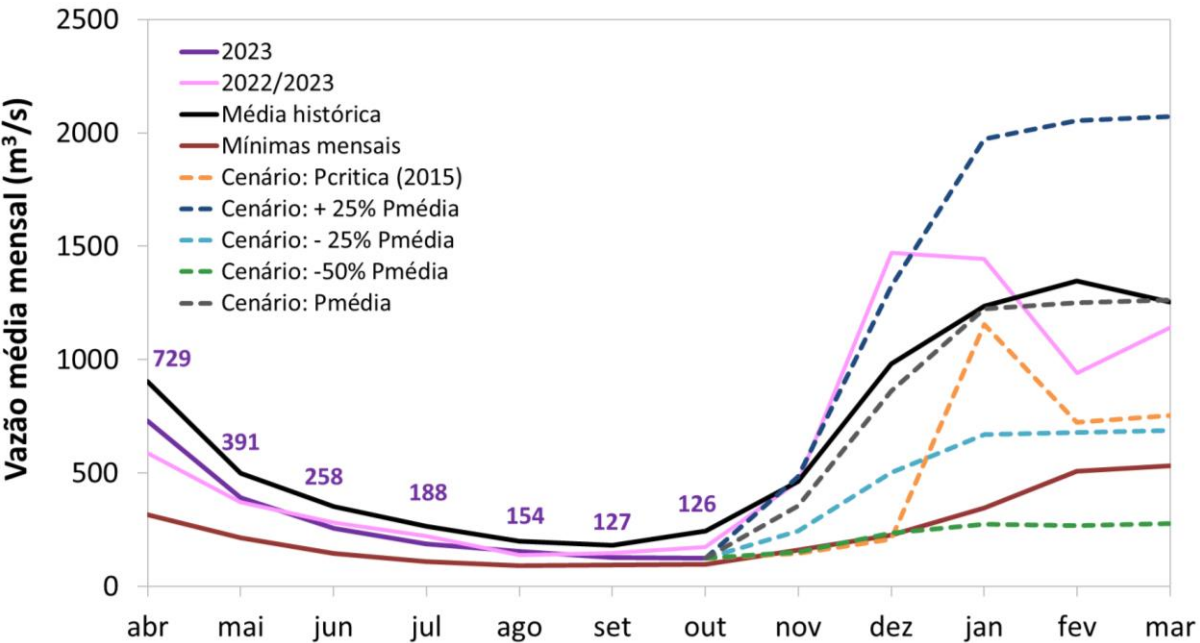
Dados **observados de precipitação** (barras pretas) para o período 14 a 23/10/23 e **previsão** para o período de 24/10 a 02/11/23.  
Dados **observados de vazão** (linha preta) para o período 14 a 23/10/23 e **previsão** para o período de 24/10 a 02/11/23.

As barras coloridas correspondem às previsões da chuva para os 31 membros GEFS/NOAA e à média destes membros.

As linhas coloridas representam os membros de previsão de vazão.

**Previsão média para os próximos 10 dias: 86 m<sup>3</sup>/s**

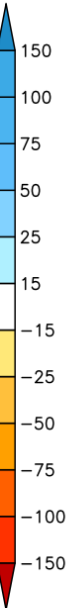
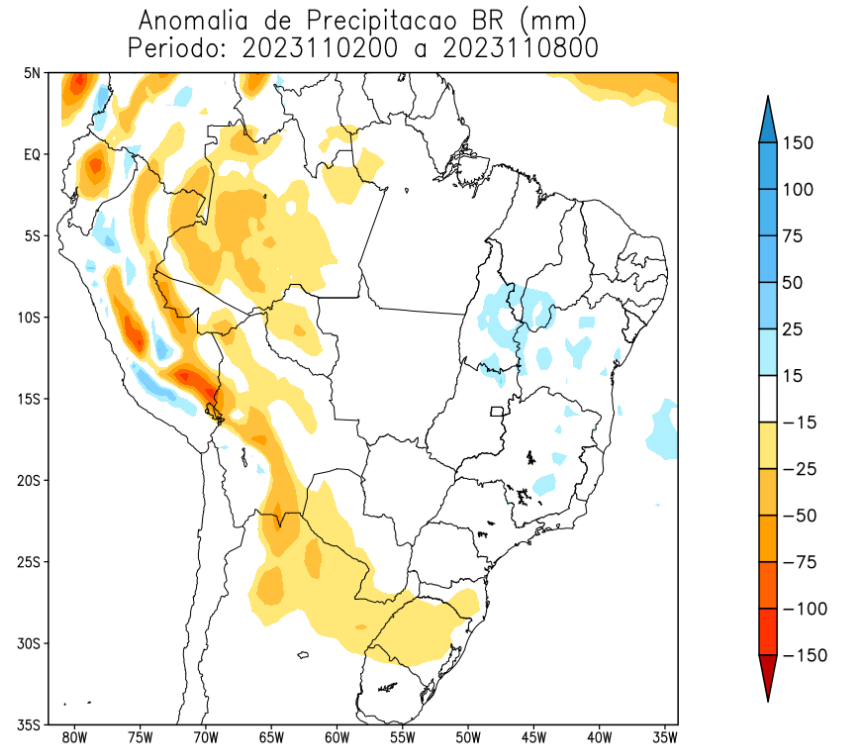
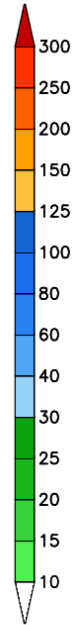
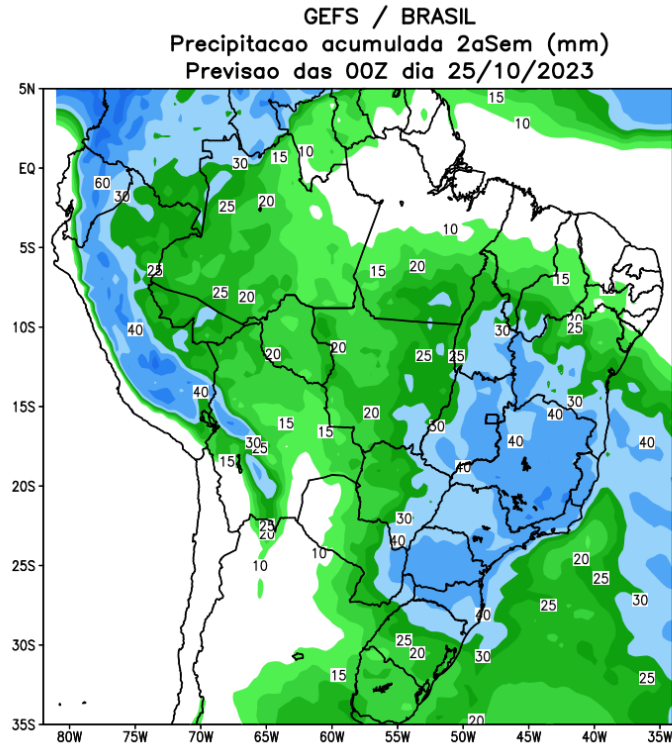
# Serra da Mesa: Projeção de Vazão (modelo hidrológico PDM-CEMADEN)



**Novembro - Março**  
**MLT: 1056 m³/s**

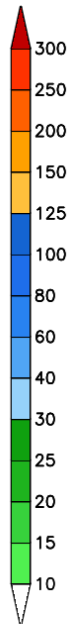
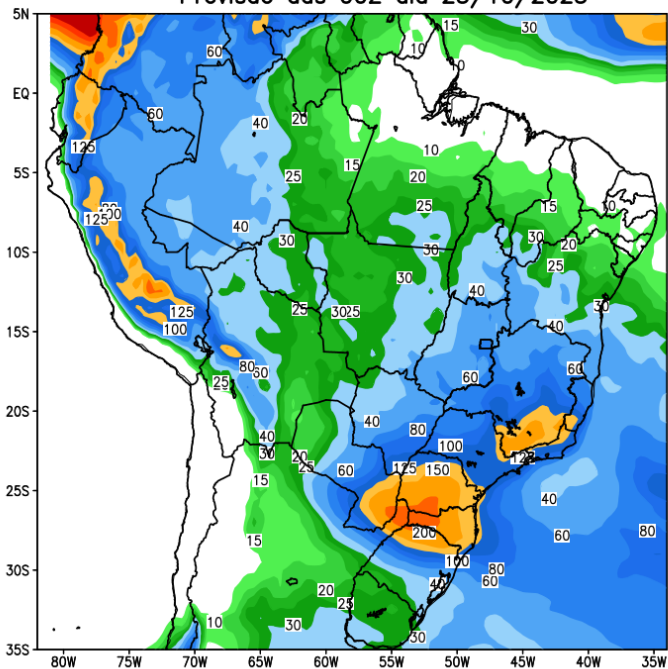
Vazão	% MLT
1582 m³/s	150%
991 m³/s	94%
557 m³/s	53%
242 m³/s	23%
597 m³/s	57%

# Tendência para a 2a Semana

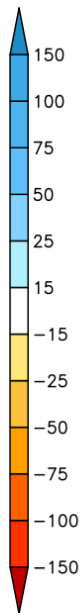
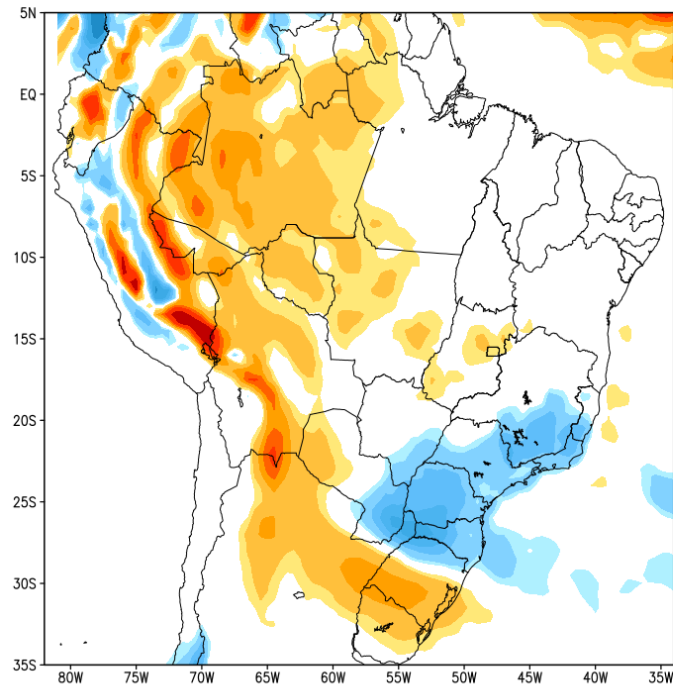


# Tendência para as próximas duas semanas

GEFS / BRASIL  
Precipitação acumulada 14 dias (mm)  
Previsão das 00Z dia 25/10/2023



Anomalia de Precipitação BR (mm)  
Período: 2023102500 a 2023110800

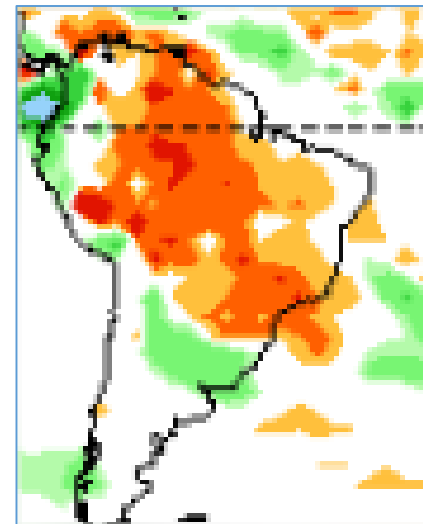
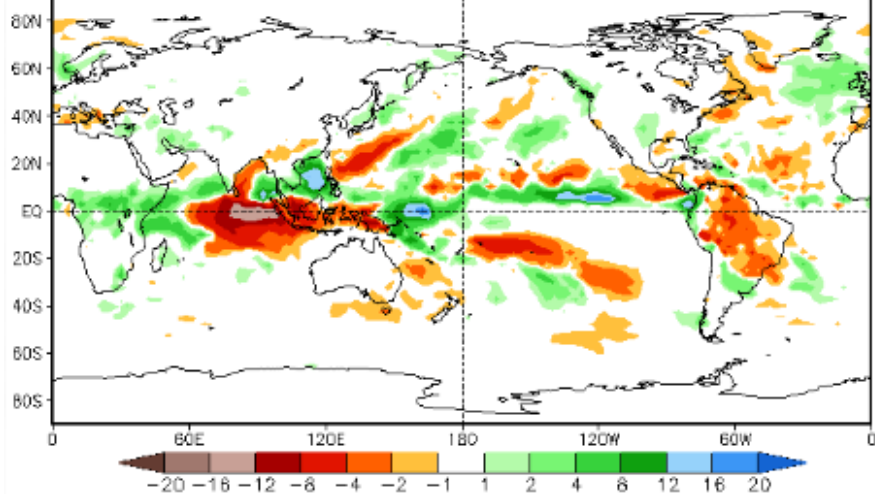


# Tendência 3a e 4a semanas

16 Member Ensemble Mean Forecast from 24Oct2023

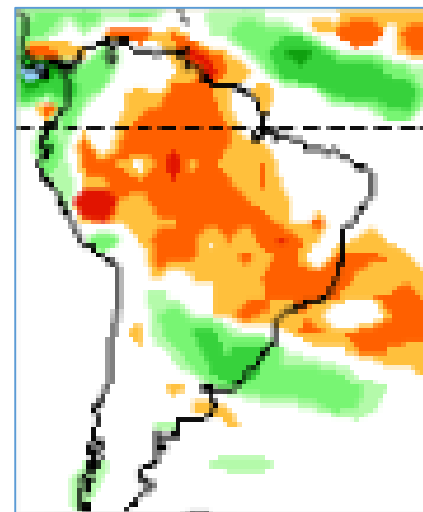
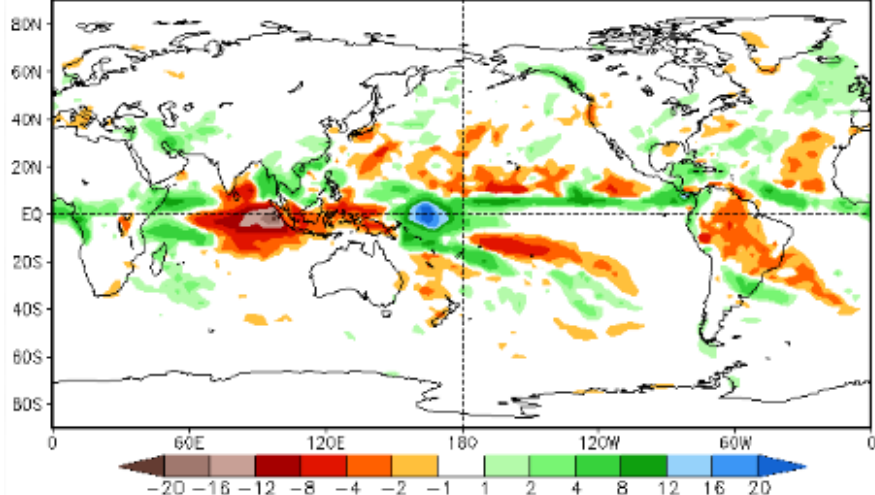
Week 3 Anomalies (mm/day)

8Nov2023-14Nov2023



Week 4 Anomalies (mm/day)

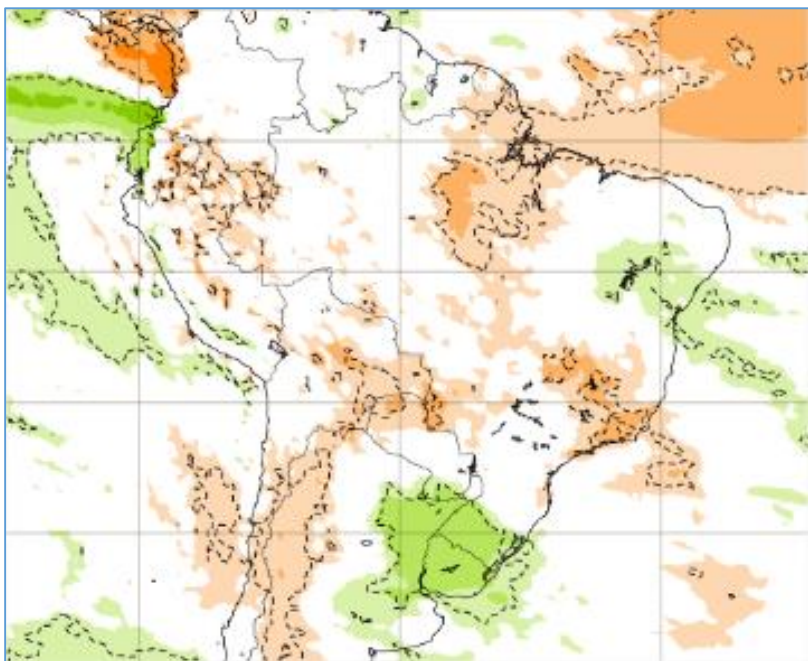
15Nov2023-21Nov2023



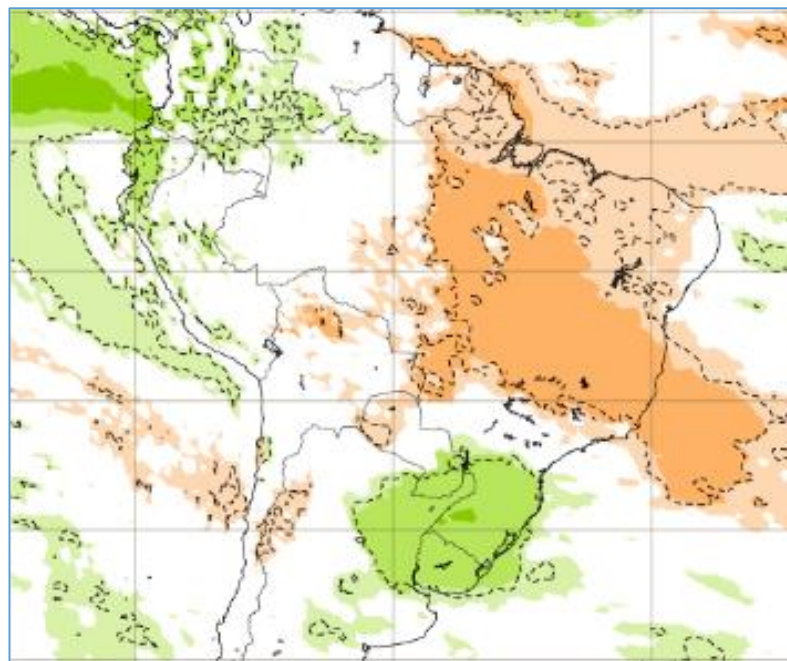


# Tendência para 3ª e 4ª semanas

06-13 NOVEMBRO

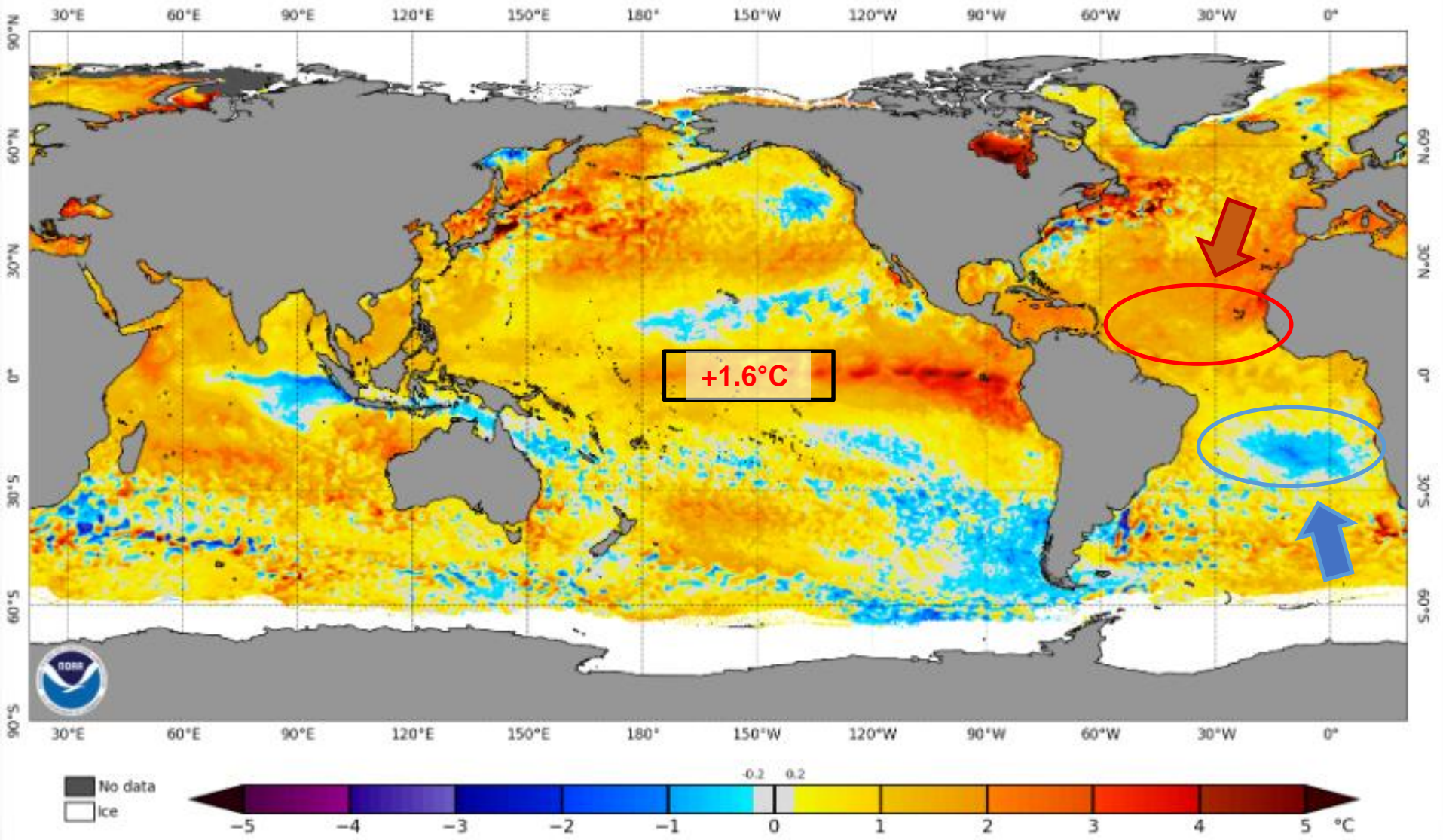


13-20 NOVEMBRO



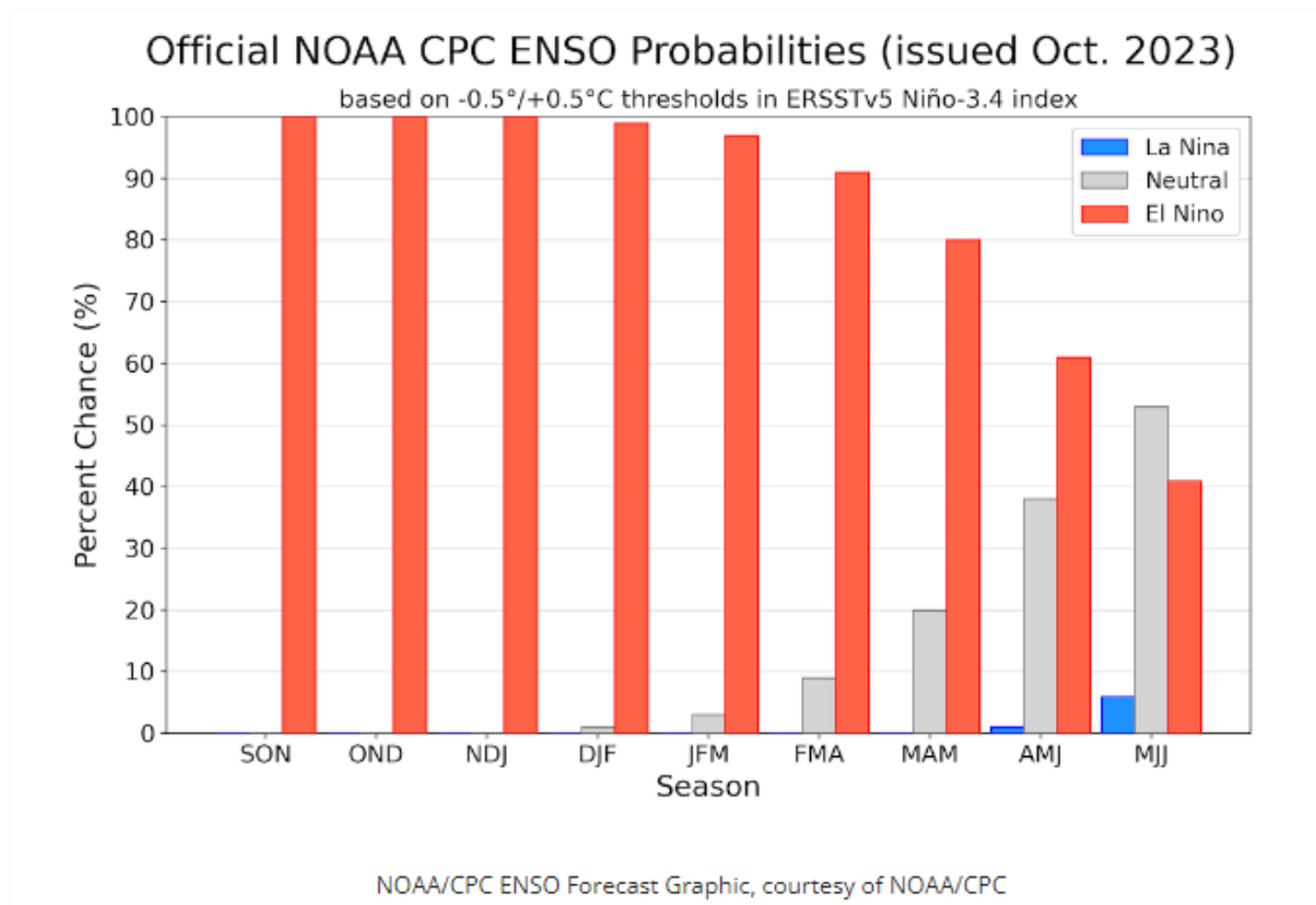
# Status Atual: El Niño

NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 22 Oct 2023



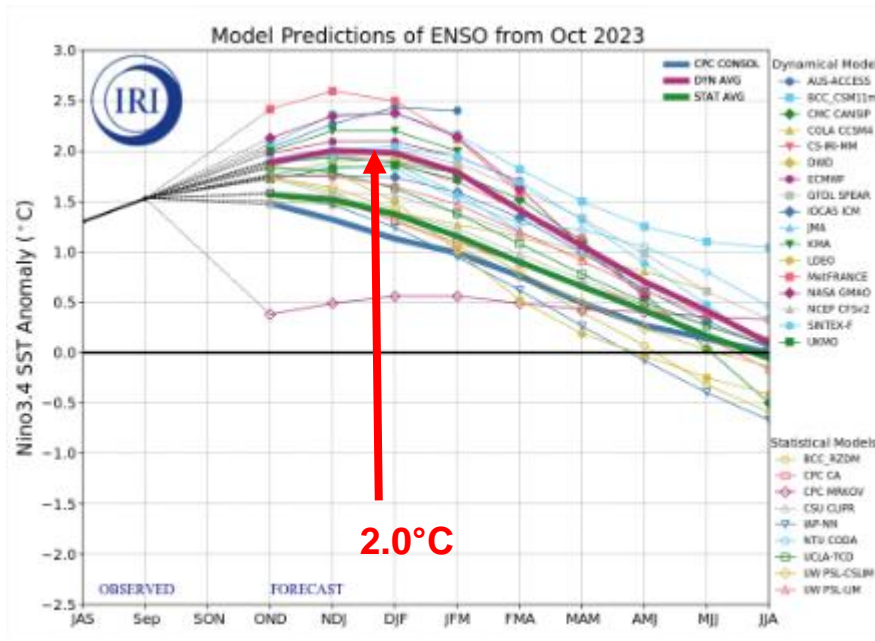


## Previsão do “ENSO”

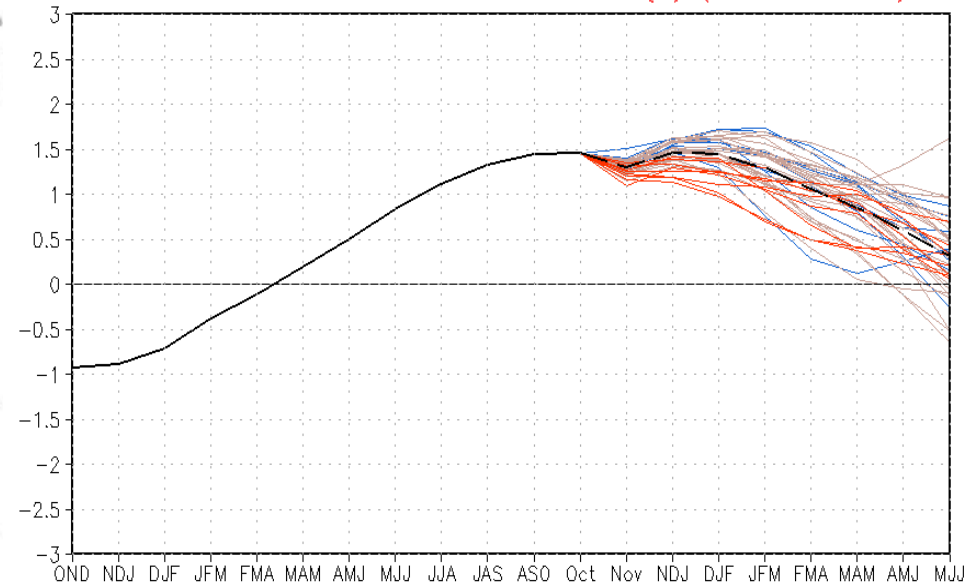




## Previsão do “ENSO”

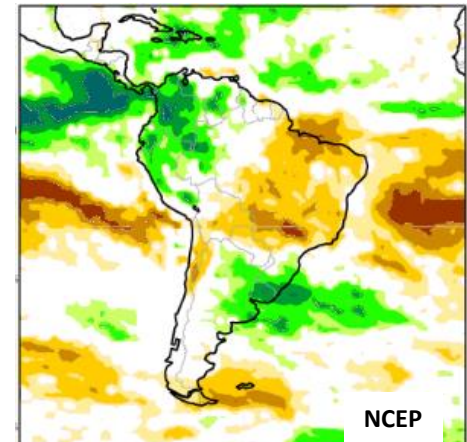
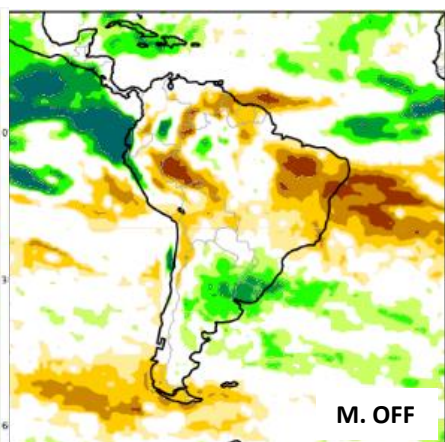
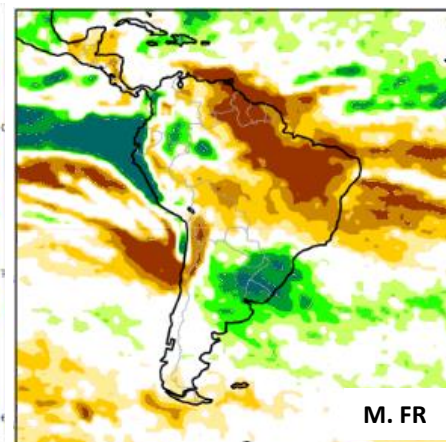
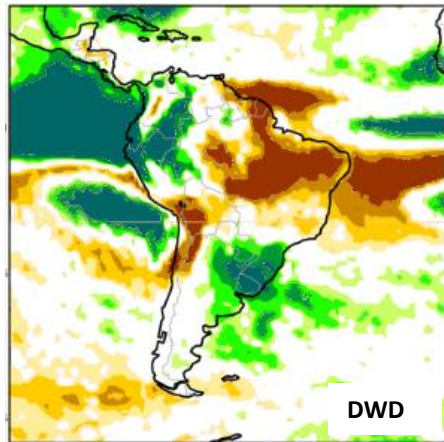
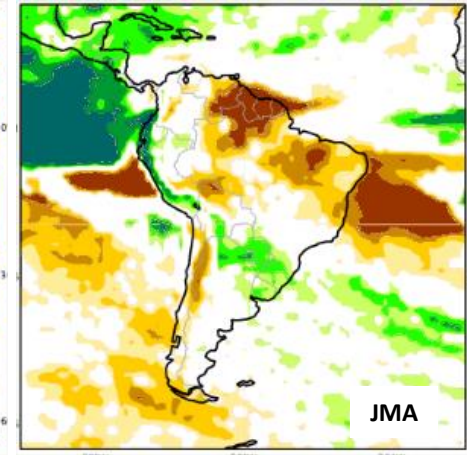
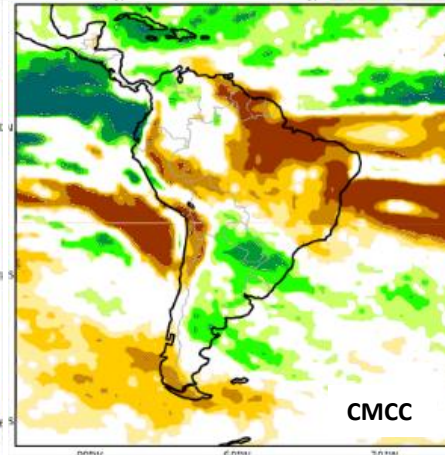
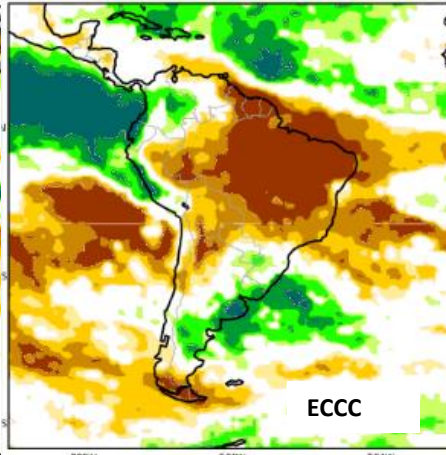
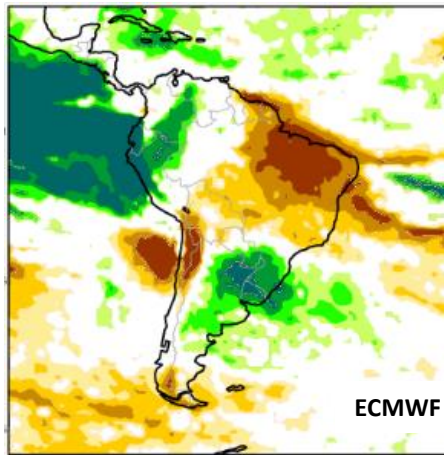


CFSv2 forecast Nino3.4 SST anomalies (K) (PDF corrected)



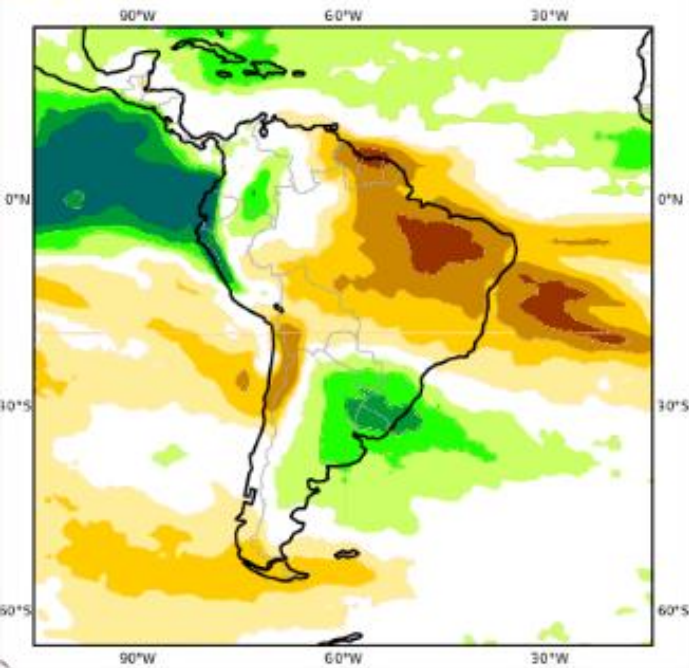
(Climatology base period: 1991–2020)

## Previsão Sazonal de Chuva NDJ

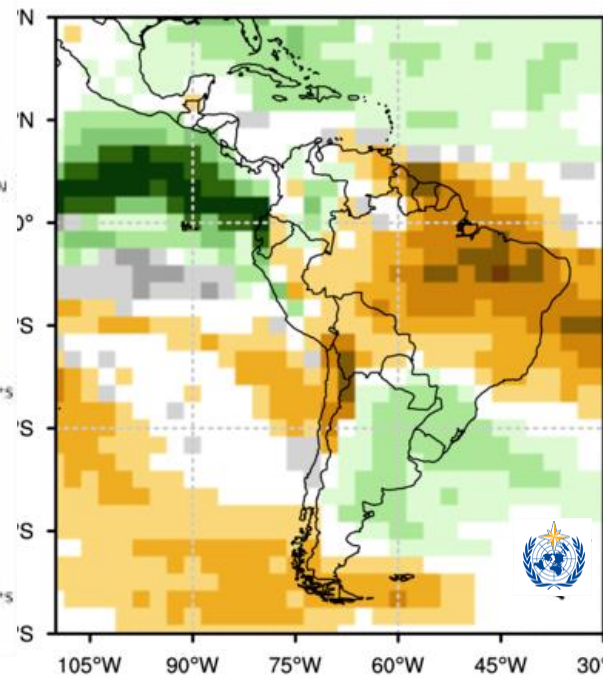


## Previsão Sazonal de Chuva Multi-Modelo NDJ

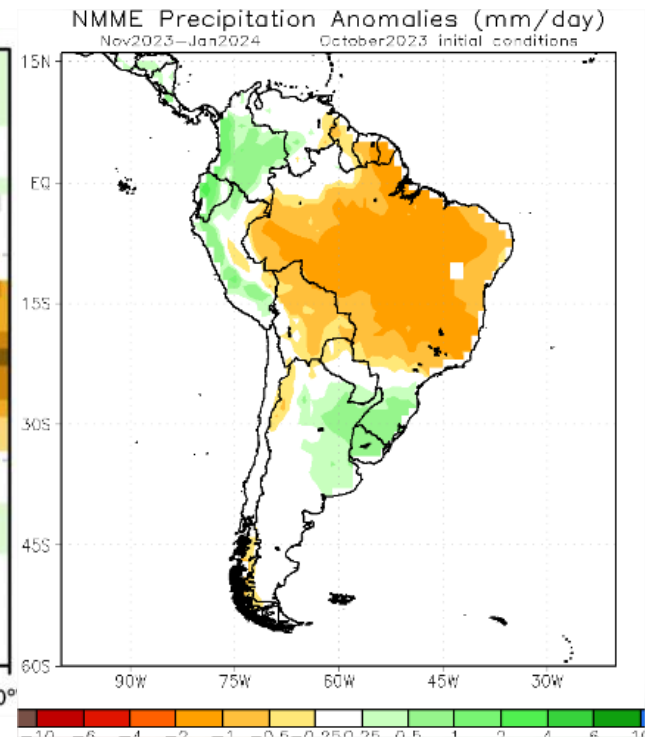
C3S multi-system seasonal forecast  
Prob(most likely category of precipitation)  
Nominal forecast start: 01/10/23  
Unweighted mean



Modelos Europeus



Modelos da Organização Meteorológica Mundial



Modelos Americanos