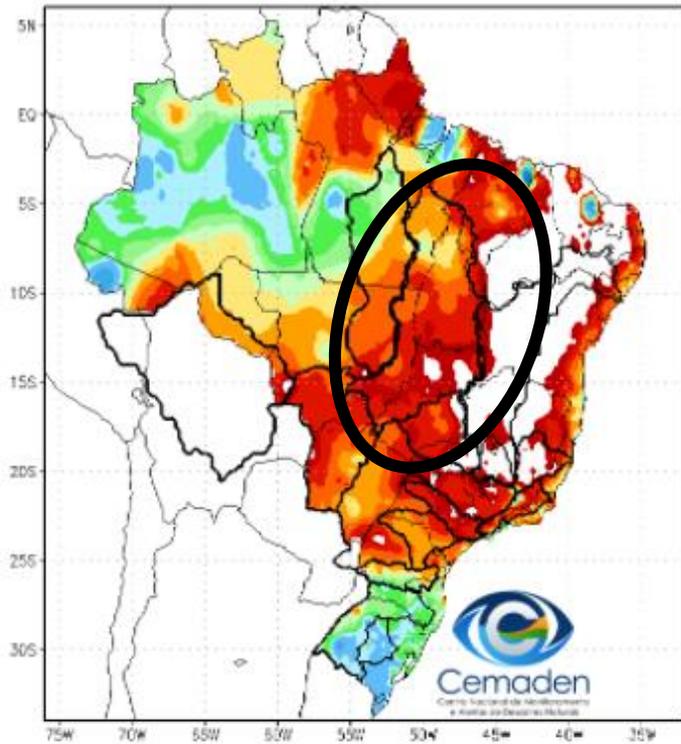


Monitoramento e Previsões para a Bacia do rio Tocantins

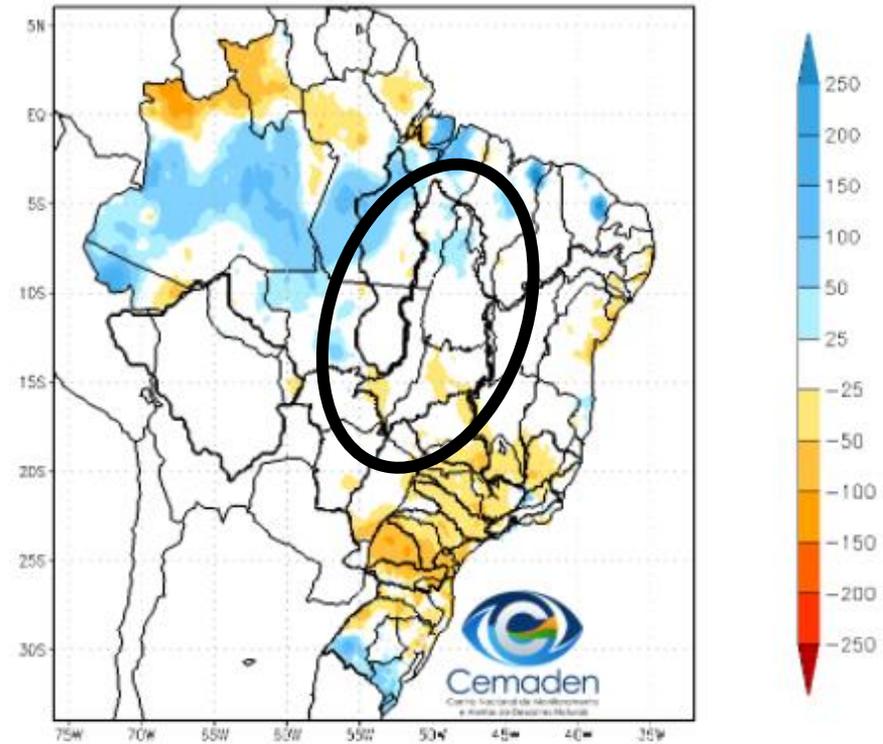


Precipitação acumulada nos últimos 30 dias

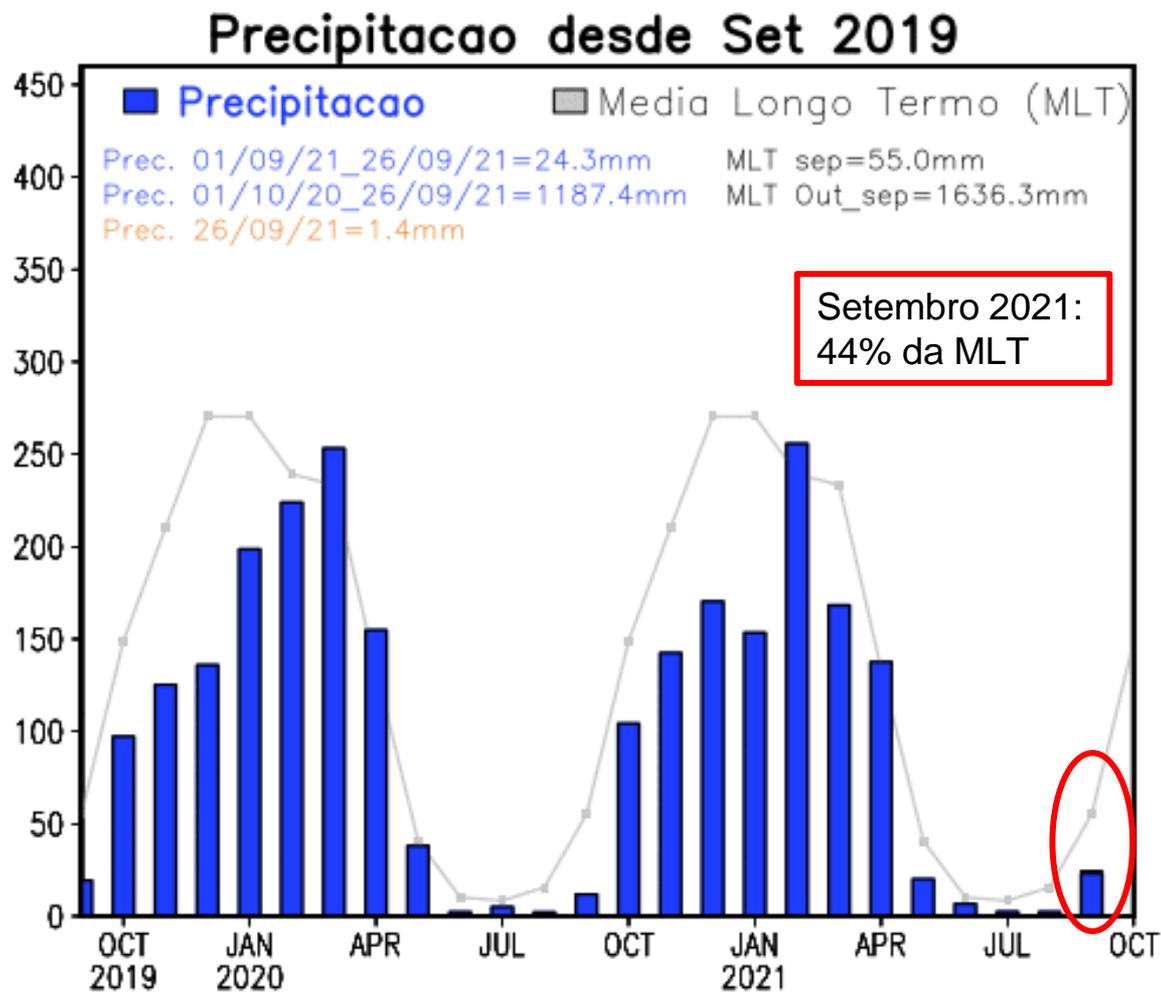
Precipitação Acumulada (mm) A.S.
Período: 28/08/2021 a 27/09/2021



Anomalia de Precipitação (mm) A.S.
Período: 28/08/2021 a 27/09/2021

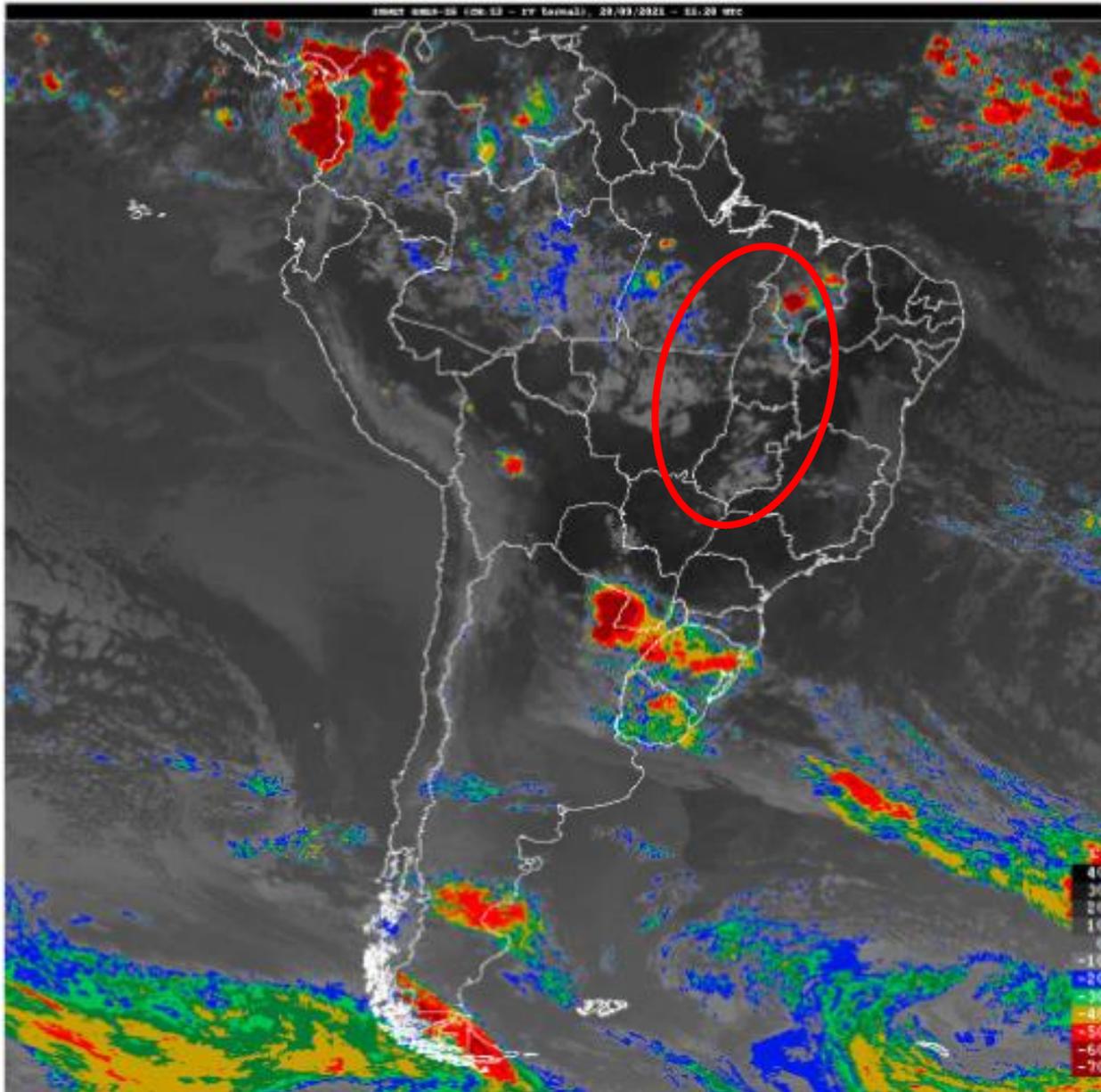


Evolução da Precipitação



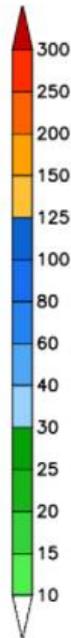
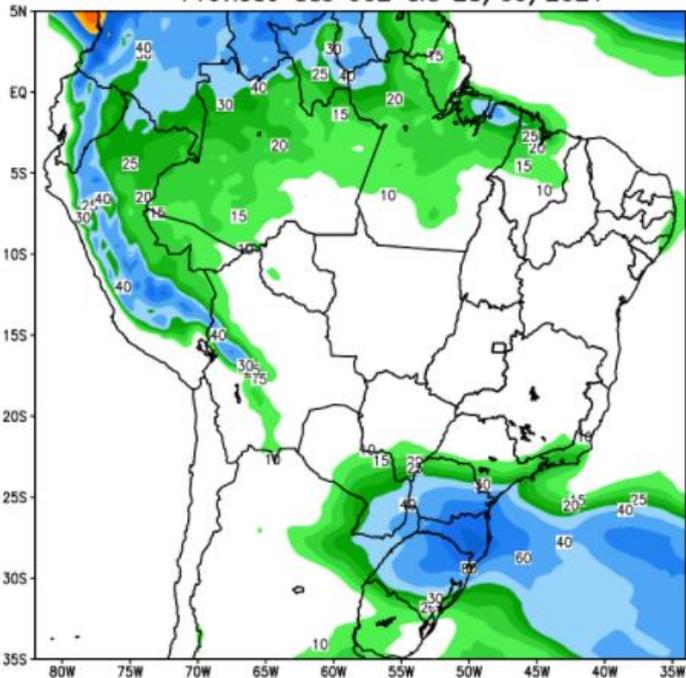
FONTE:
INPE

Situação meteorológica atual

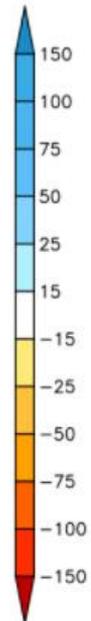
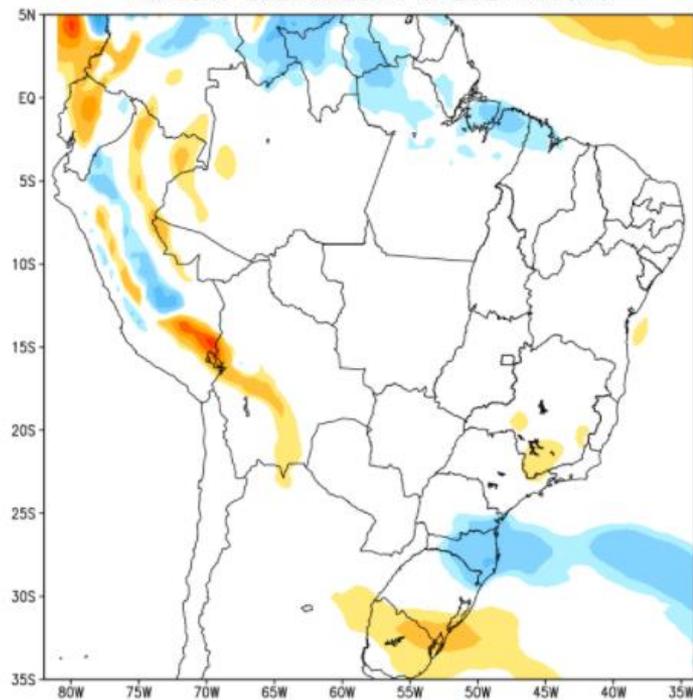


Previsão de chuva próximos 7 dias

GEFS / BRASIL
Precipitacao acumulada 1aSem (mm)
Previsao das 00Z dia 28/09/2021



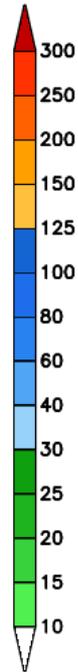
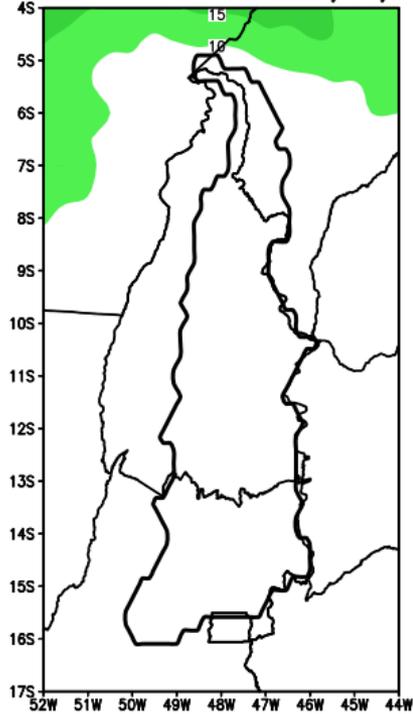
Anomalia de Precipitacao BR (mm)
Periodo: 2021092800 a 2021100500



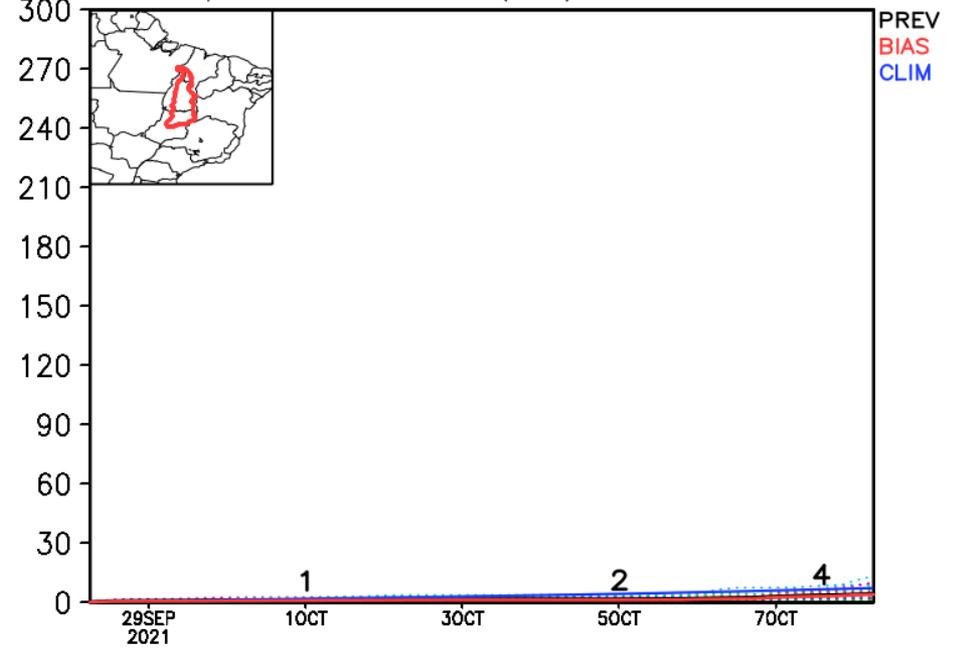
Fonte: GFS/NOAA

Previsão Bacia Rio Tocantins

GEFS / Bacia Tocantins
Precipitacao acumulada em 7 dias (mm)
Previsao das 00Z dia 28/09/2021

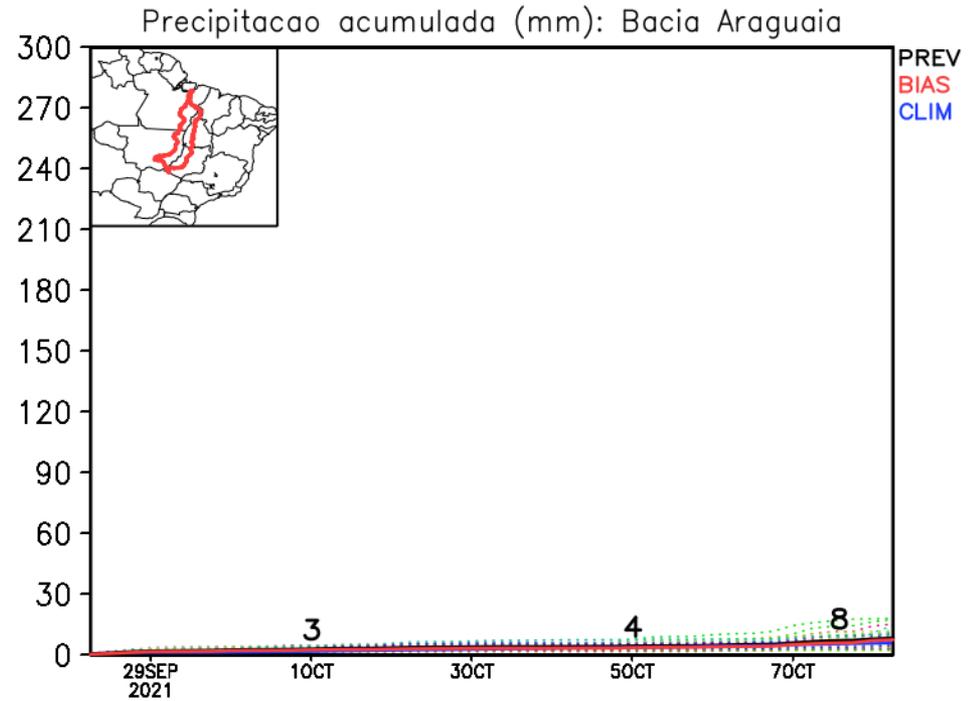
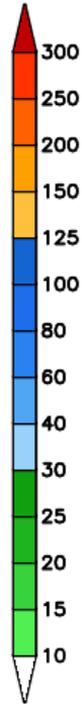
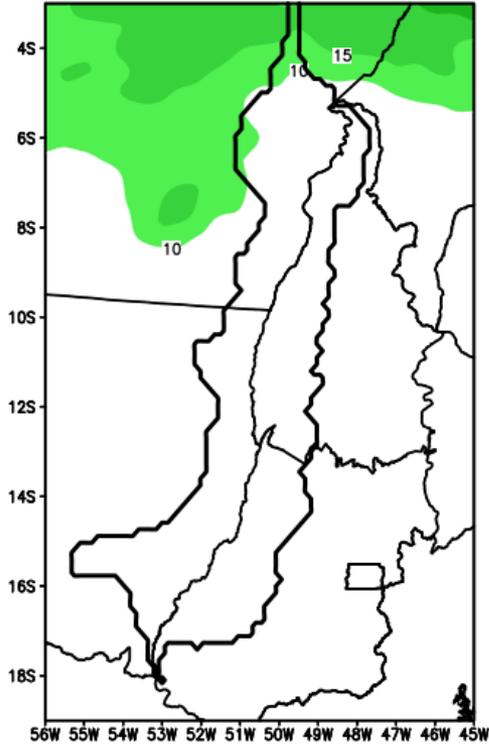


Precipitacao acumulada (mm): Bacia Tocantins



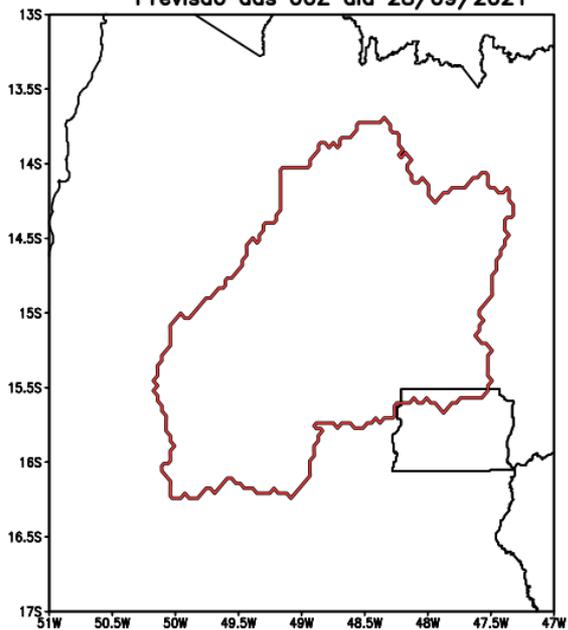
Previsão Bacia Rio Araguaia

GEFS / Bacia do Rio Araguaia
Precipitação acumulada em 7 dias (mm)
Previsão das 00Z dia 28/09/2021

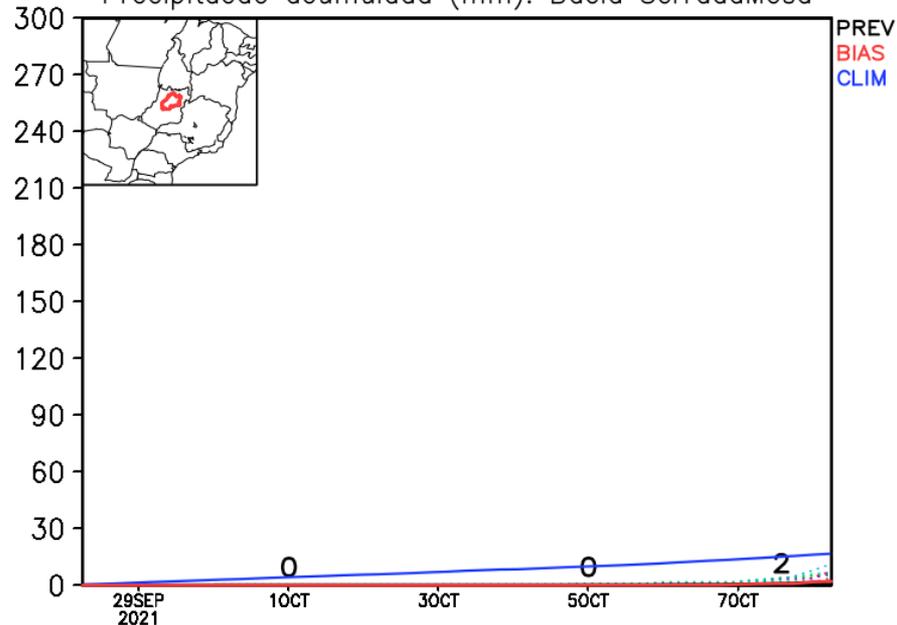


Previsão Bacia Serra da Mesa

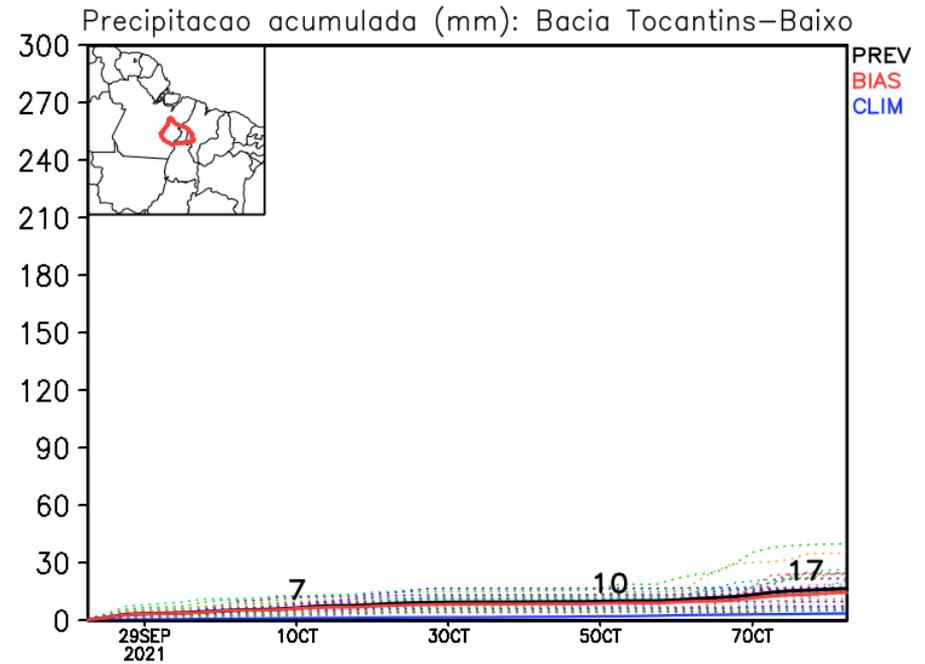
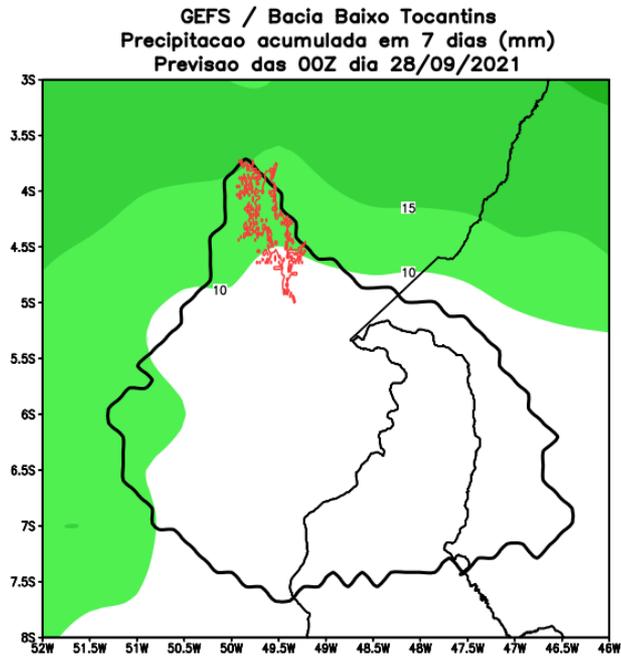
GEFS / Bacia Serra da Mesa
Precipitacao acumulada em 7 dias (mm)
Previsao das 00Z dia 28/09/2021



Precipitacao acumulada (mm): Bacia SerradaMesa

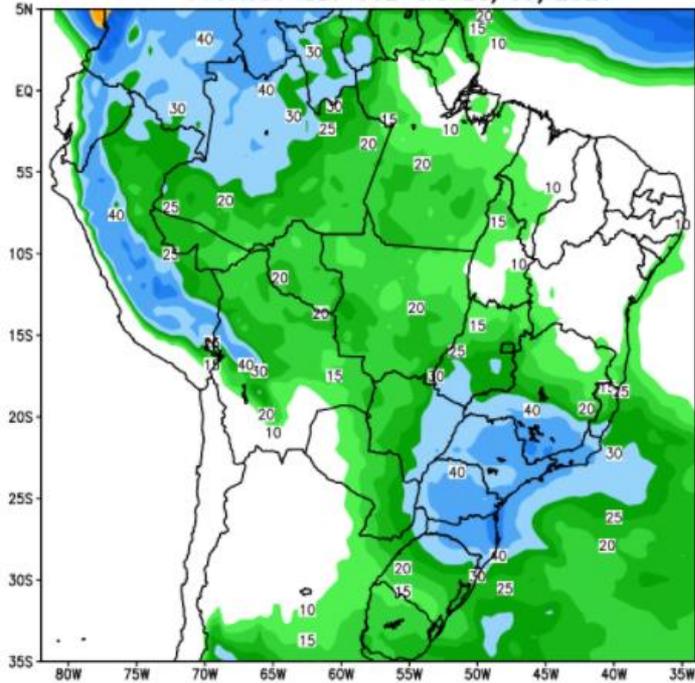


Previsão Bacia Tocantins-Araguaia (Baixo)

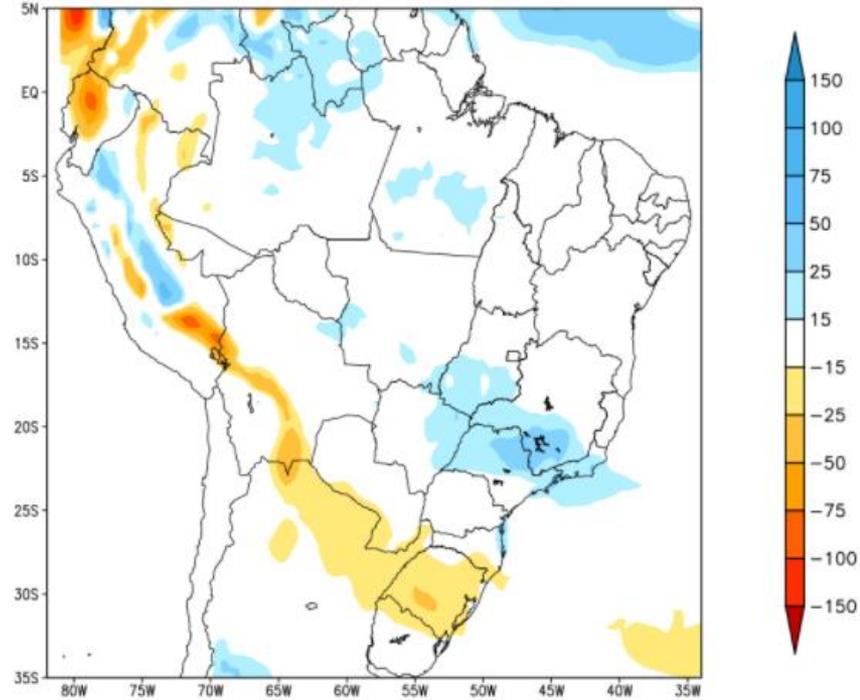


Tendência para a 2a Semana

GEFS / BRASIL
Precipitacao acumulada 2aSem (mm)
Previsao das 00Z dia 28/09/2021

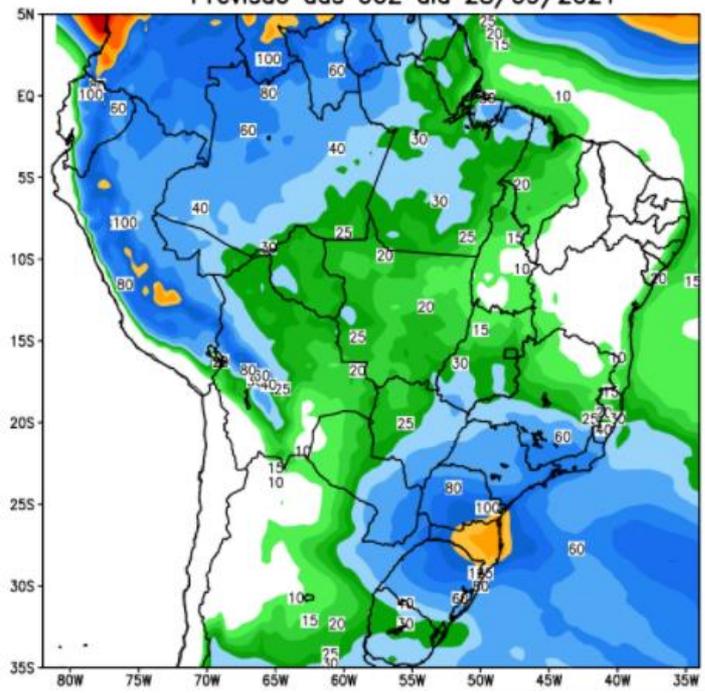


Anomalia de Precipitacao BR (mm)
Periodo: 2021100600 a 2021101200

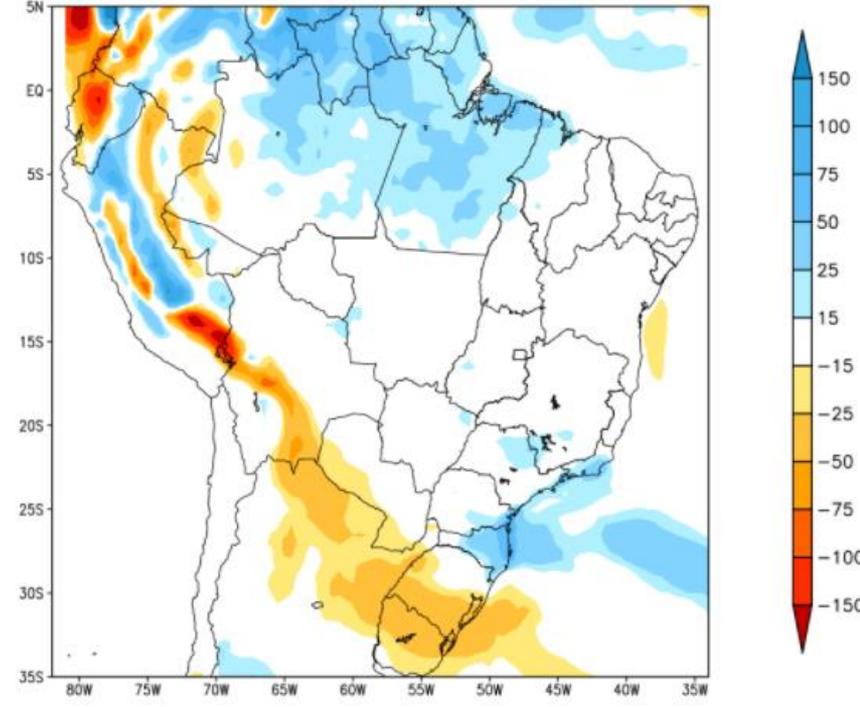


Tendência para as próximas duas semanas

GEFS / BRASIL
Precipitacao acumulada 14 dias (mm)
Previsao das 00Z dia 28/09/2021



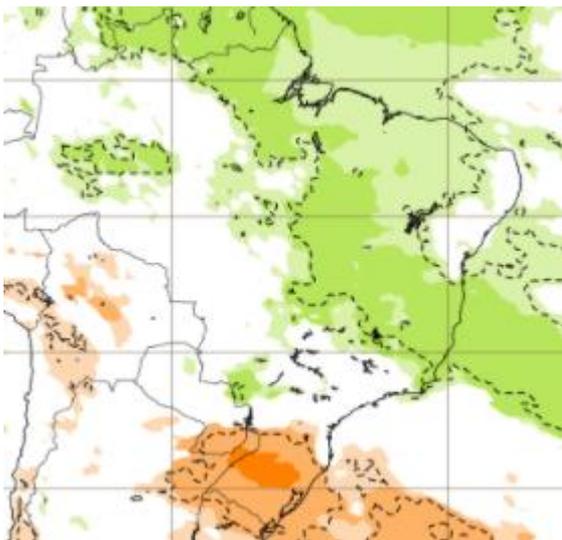
Anomalia de Precipitacao BR (mm)
Periodo: 2021092800 a 2021101200



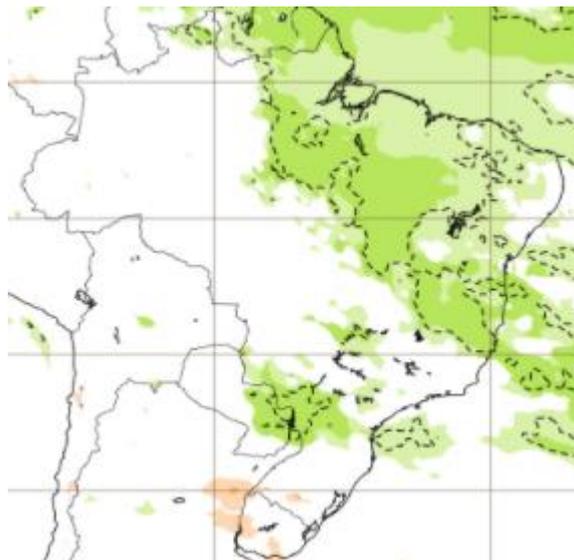
Fonte: GFS/NOAA

Tendência para 3ª e 4ª semanas

11-18/10

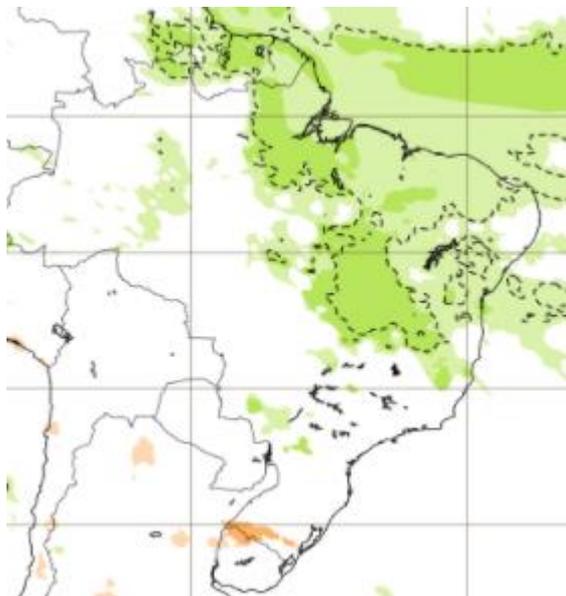


18-25/10

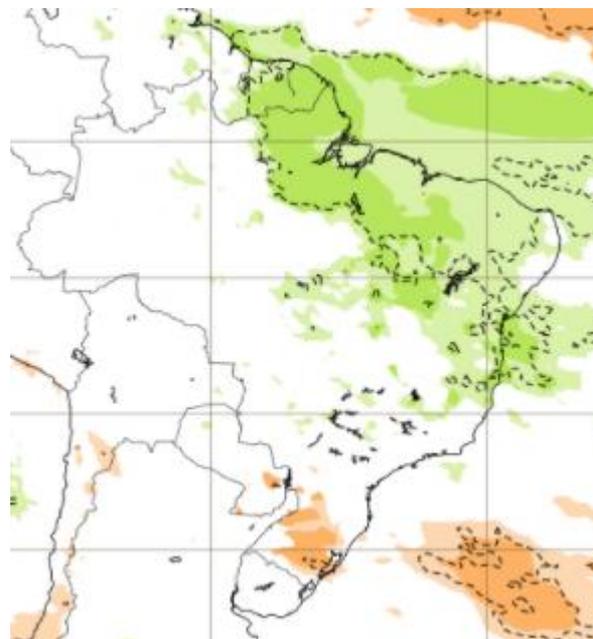


Tendência para 5ª e 6ª semanas

25/10-01/11



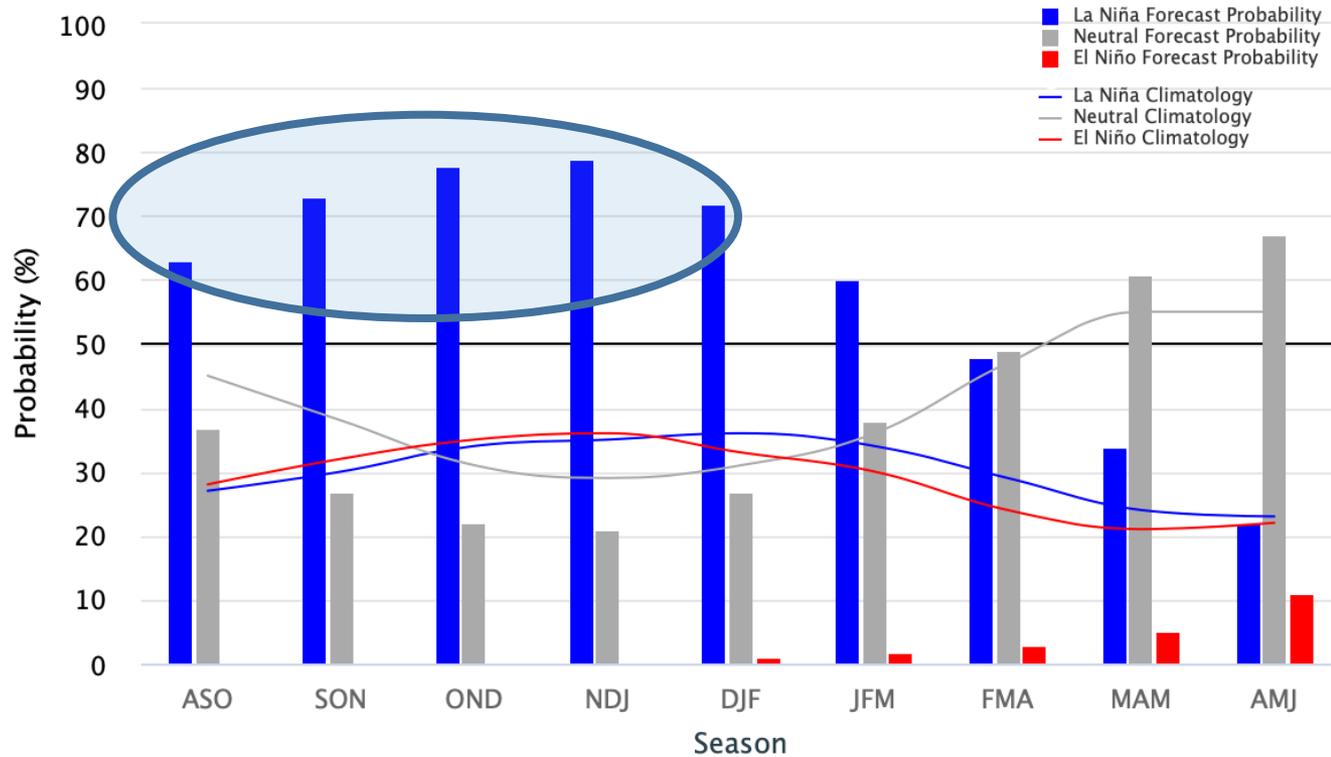
01-08/11



Previsão do “La Niña”

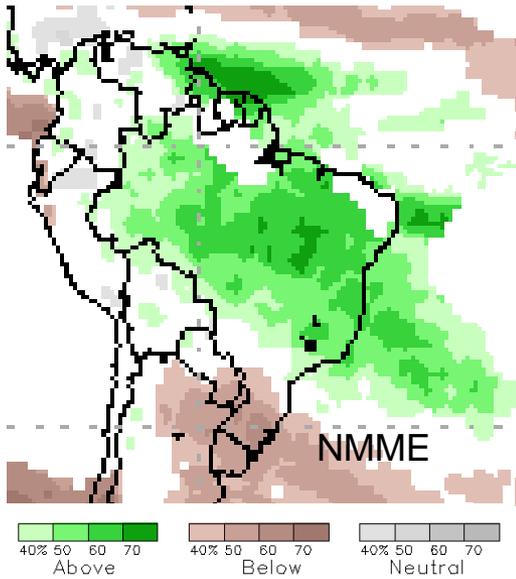
Early-September 2021 CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: $-0.5\text{ }^{\circ}\text{C}$ to $0.5\text{ }^{\circ}\text{C}$

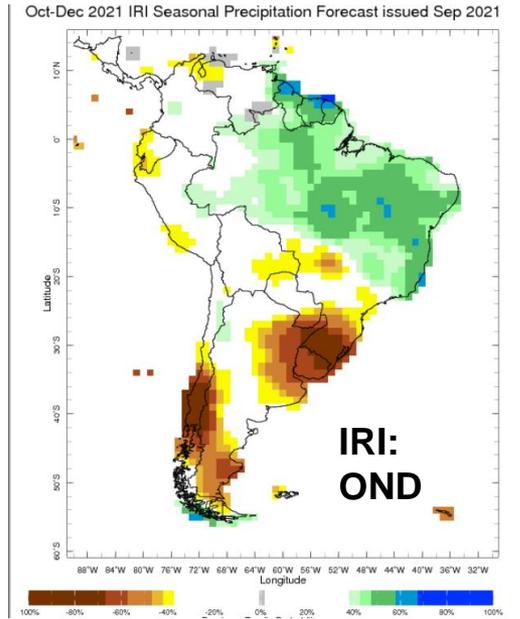
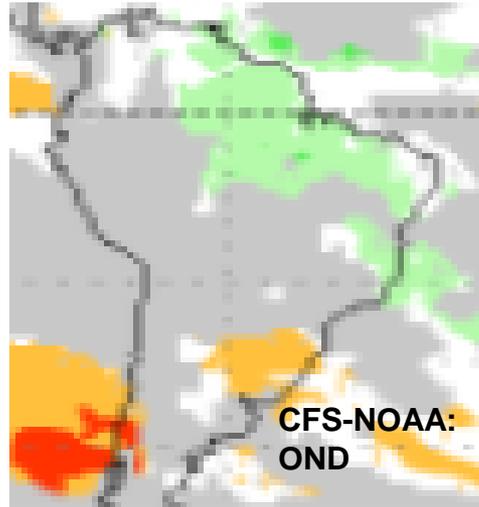


ENSO Alert System Status: **La Niña Watch**

Previsão Sazonal de chuva (SON)

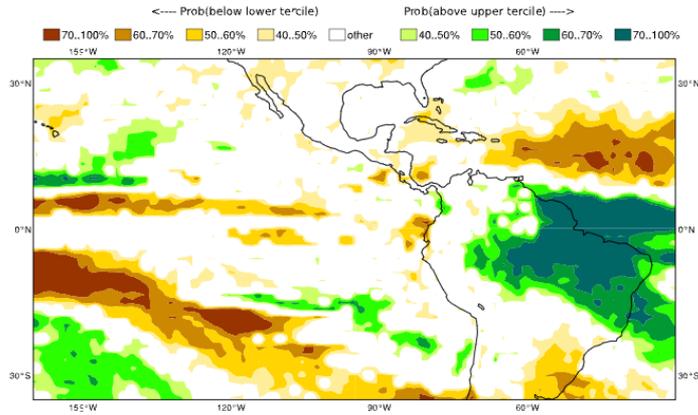


CFS/NOAA



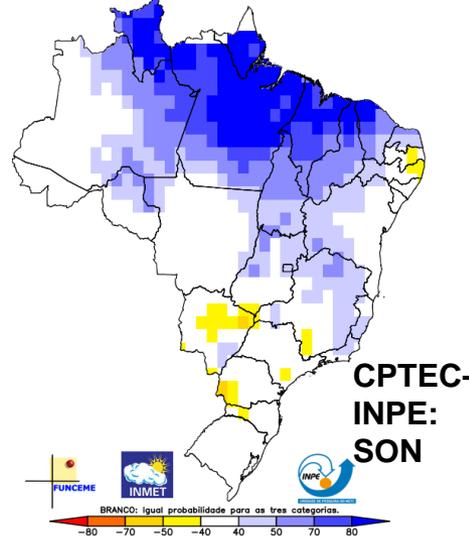
ECMWF Seasonal Forecast
Prob(most likely category of precipitation)
Forecast start is 01/09/21, climate period is 1993-2016
Ensemble size = 51, climate size = 600

System 5
OND 2021



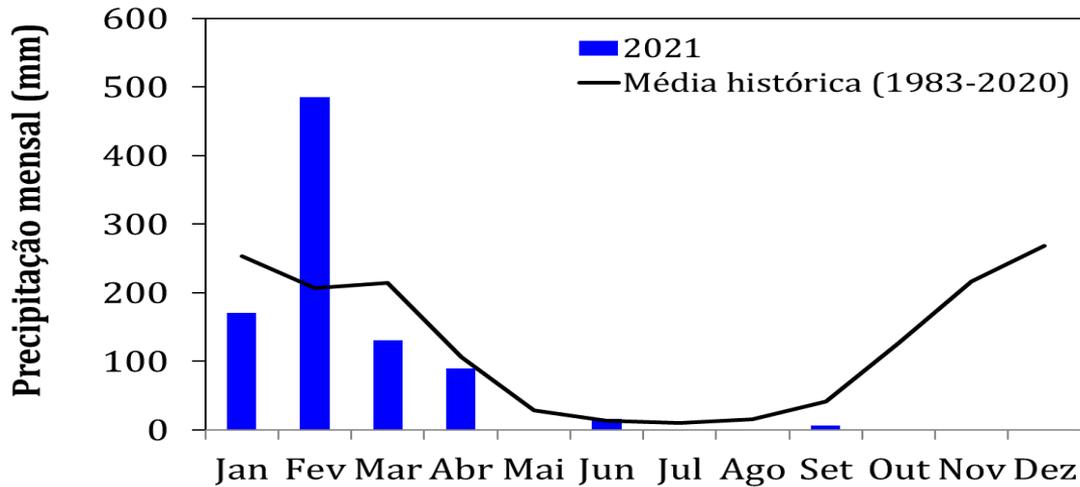
ECMWF: - OND

Multi-modelo CPTEC/INMET/FUNCEME
Probab. tercil mais provavel: Precip. (%)
Produzida: Ago 2021 Valida para SON 2021



Monitoramento UHE Serra da Mesa

Precipitação



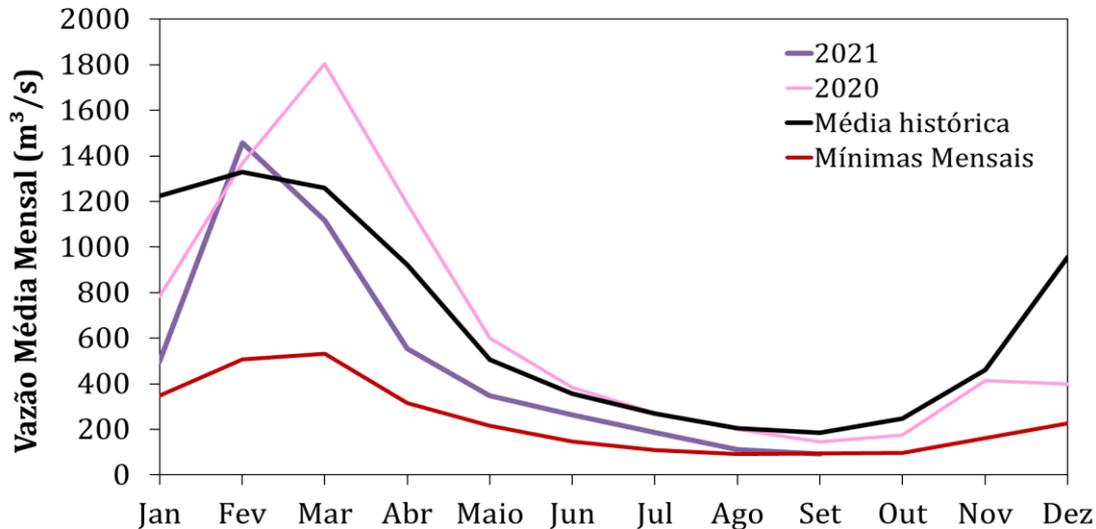
Estação Chuvosa - Out a Abr – 1395 mm
 2019/2020: 1550 mm (**111% da média histórica**)
 2020/2021: 1378 mm (**99% da média histórica**)

Estação Seca - Maio a Set – 109 mm
 2020: 34 mm (**31% da média histórica**)
 2021*: 24 mm (**22% da média histórica**)

Setembro/2021*: 6 mm (**MLT: 41 mm**)

*Até 26/09/2021

Vazão



Estação Chuvosa - Out a Abr – 914 m³/s
 2019/2020: 818 m³/s (**90% da MLT**)
 2020/2021: 659 m³/s (**72% da MLT**)

Estação Seca - Maio a Set – 304 m³/s
 2020: 320 m³/s (**105% da MLT**)
 2021**: 200 m³/s (**66% da MLT**)

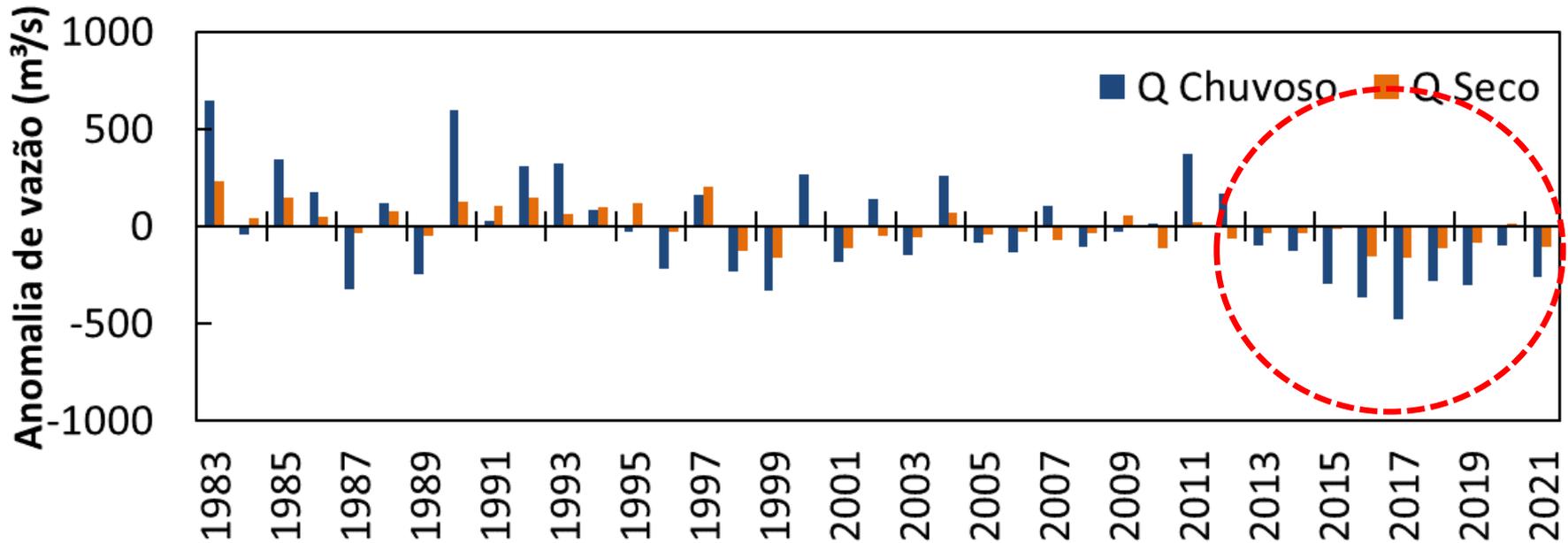
Setembro/2021:** 93 m³/s (**50% da MLT**)

**Até 26/09/2021

Mín mensal/Set => 2016

Monitoramento UHE Serra da Mesa

Anomalia de Vazão - UHE Serra da Mesa



Estação seca/2021 = déficit de 34%

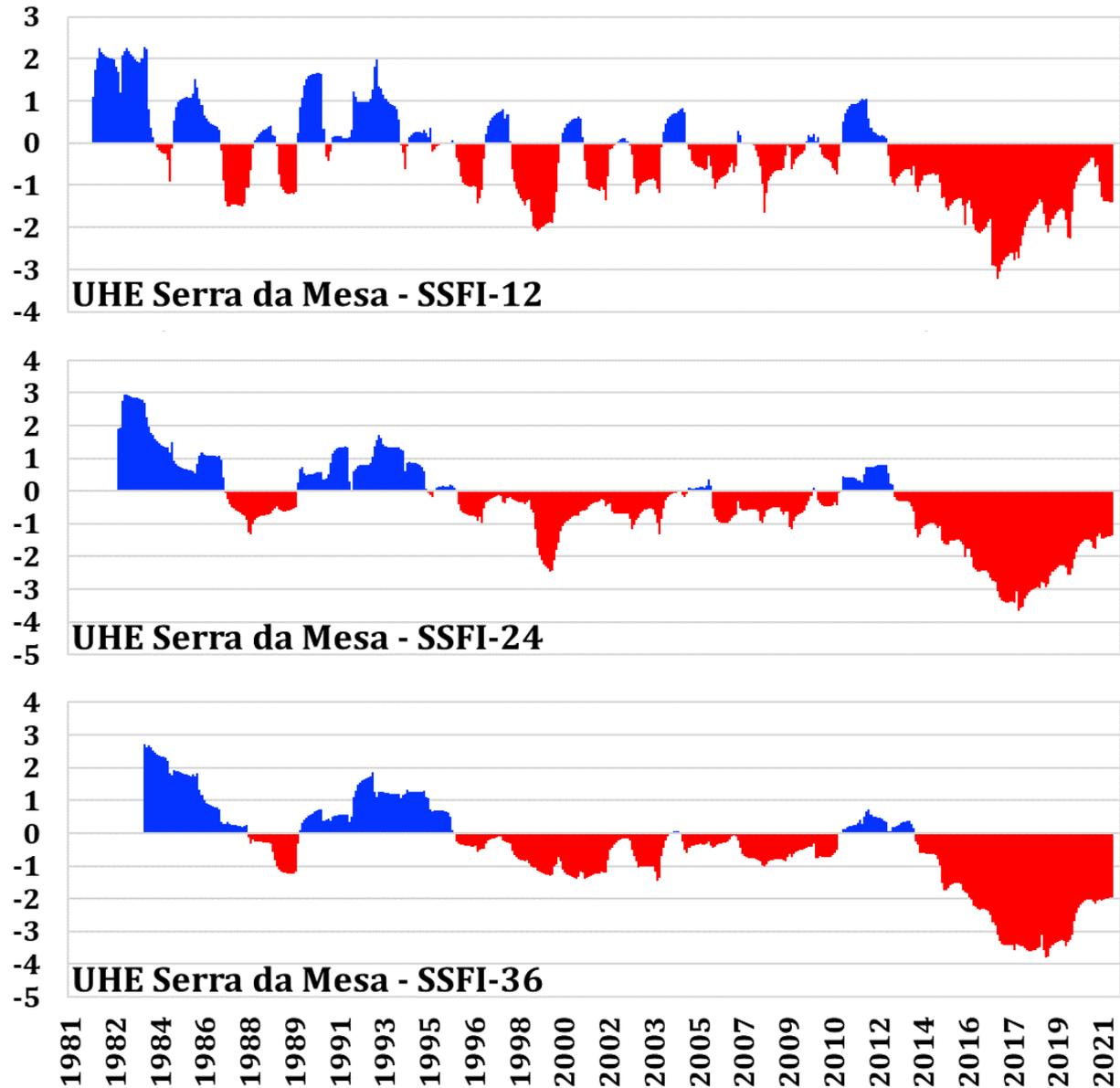
Dados de vazão: ONS e ANA
Gráfico: CEMADEN

Até 26/09/2021

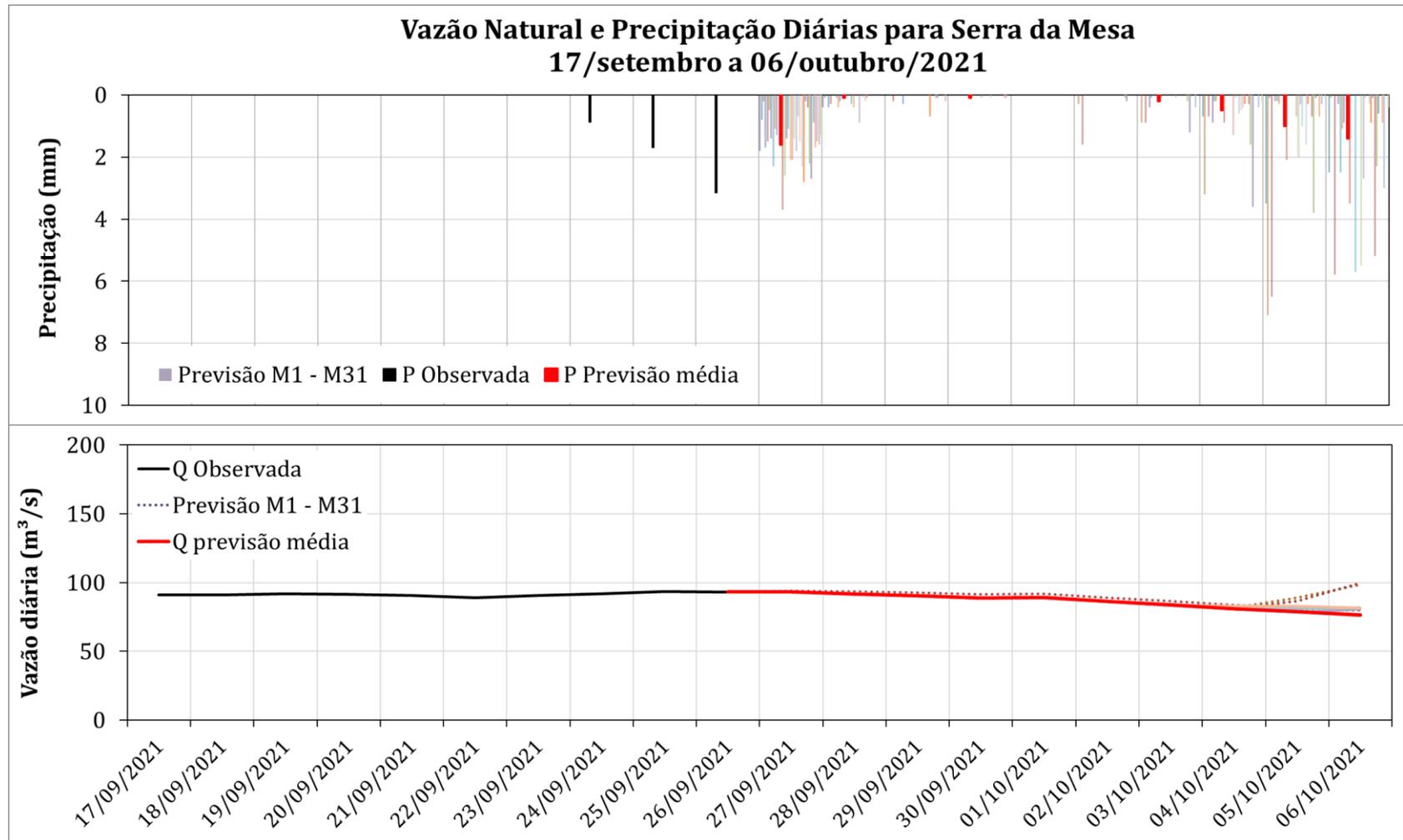
Monitoramento UHE Serra da Mesa

Índice
Padronizado
de Vazão
(SSFI)

Seca hidrológica
Severa a Extrema



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



Dados observados de precipitação (barras pretas) para o período de 17 a 26/09 e previsão para o período de 27/09 a 06/10/21.

Dados observados de vazão (linha preta) para o período de 17 a 26/09 e previsão para o período de 27/09 a 06/10/21.

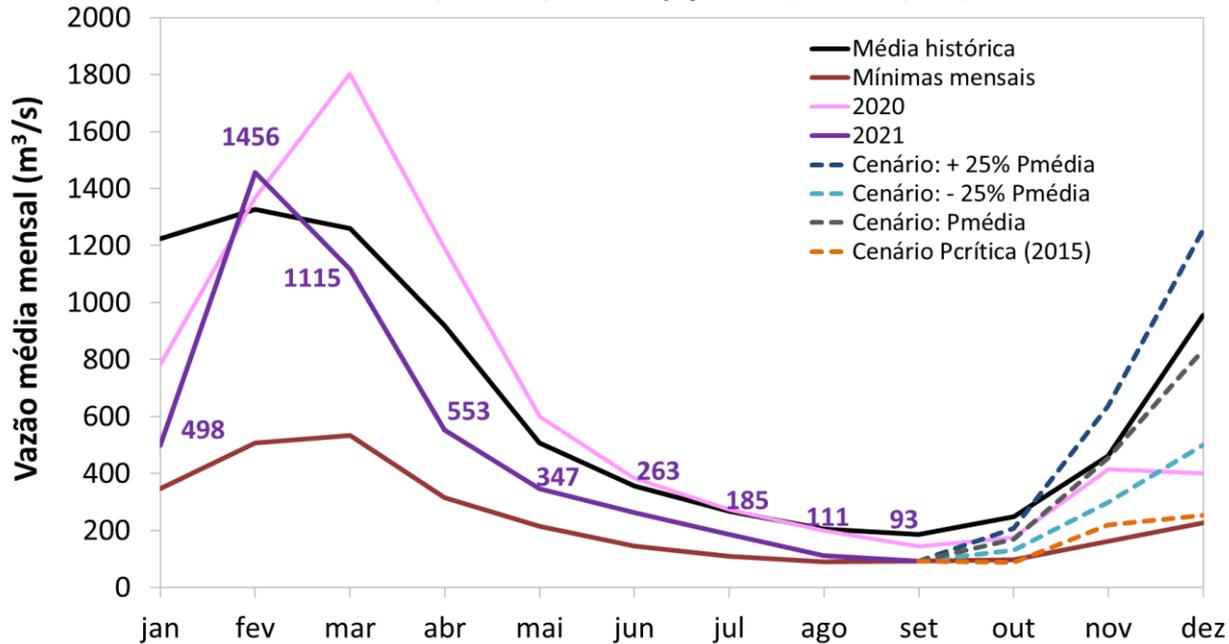
As barras coloridas correspondem às previsões da chuva para os 31 membros GEFS/NOAA e à média destes membros.

As linhas coloridas representam os membros de previsão de vazão do modelo PDM-CEMADEN

A média de vazão diária prevista para os próximos 10 dias: 86 m³/s

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

UHE Serra da Mesa - Rio Tocantins
 Histórico e simulação de vazão natural média mensal
 Previsão: 27/Set a 06/Out - Projeções: 07/Out a 31/Dez/2021



MLT Out a Dez = 555 m³/s

700 m³/s:	126% da MLT*
486 m³/s:	88%
310 m³/s:	56%
187 m³/s:	34%

MLT*: 1983-2020