



CEMADEN

Centro Nacional de Monitoramento e
Alertas de Desastres Naturais

FOCOS DO CEMADEN/MCTI

Conhecimento dos Riscos

Sistemas de Monitoramento e Alerta

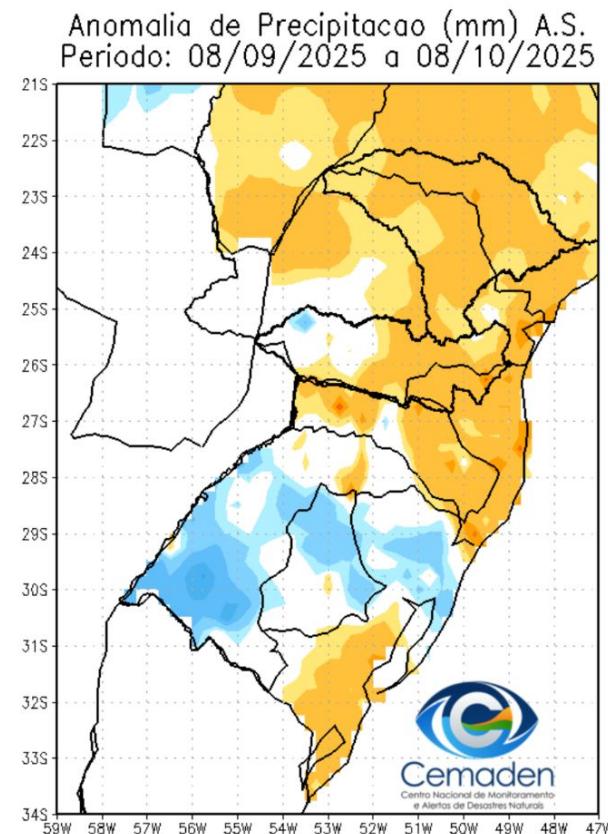
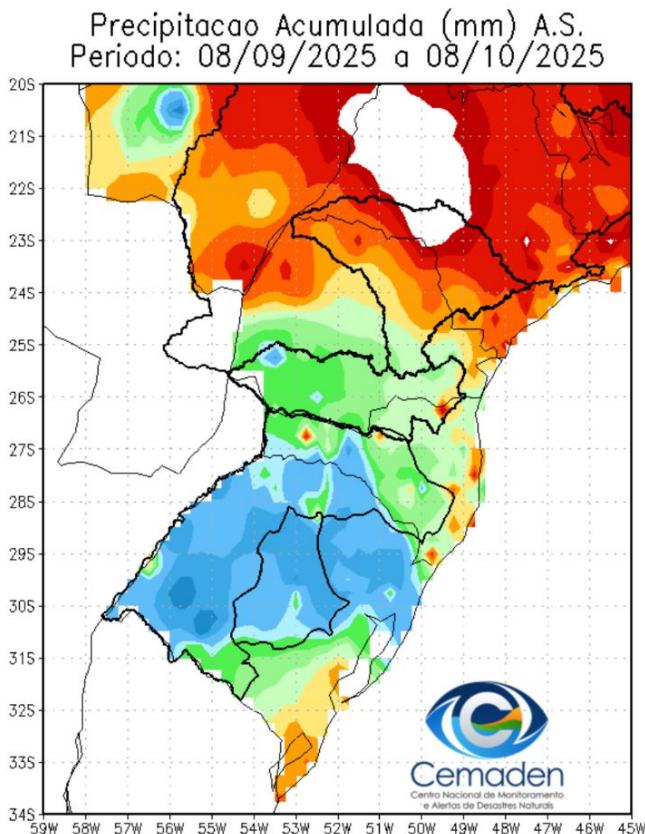
Programa Cemaden Educação

Difusão e Comunicação

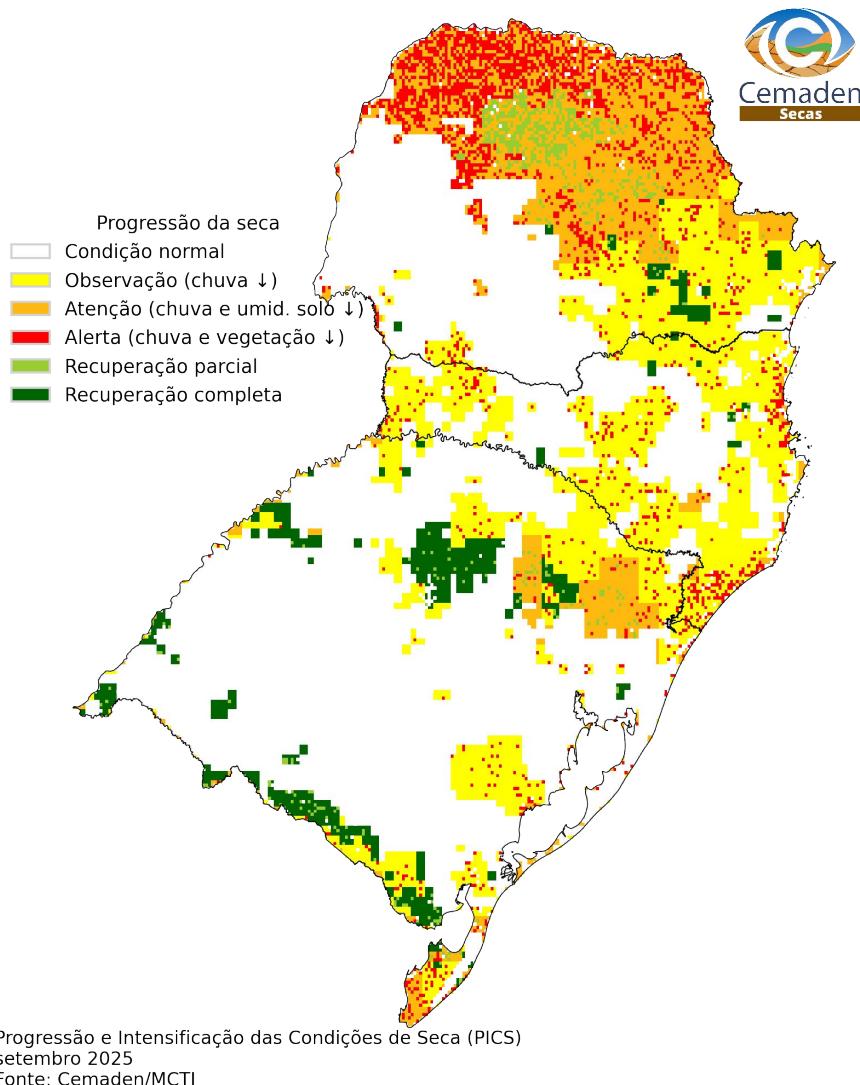
Capacidade de Resposta



Precipitação nos últimos 30 dias

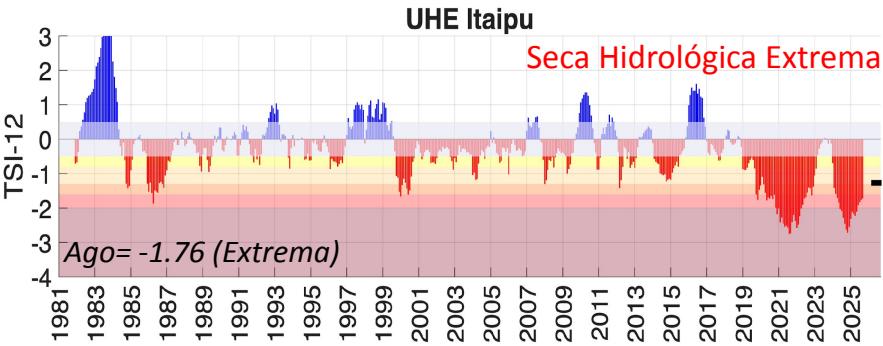
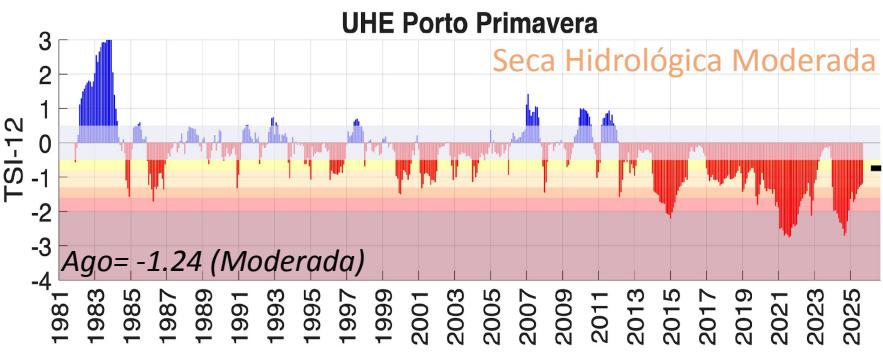


PROPAGAÇÃO INCREMENTAL DAS CONDIÇÕES DE SECA (PICS)

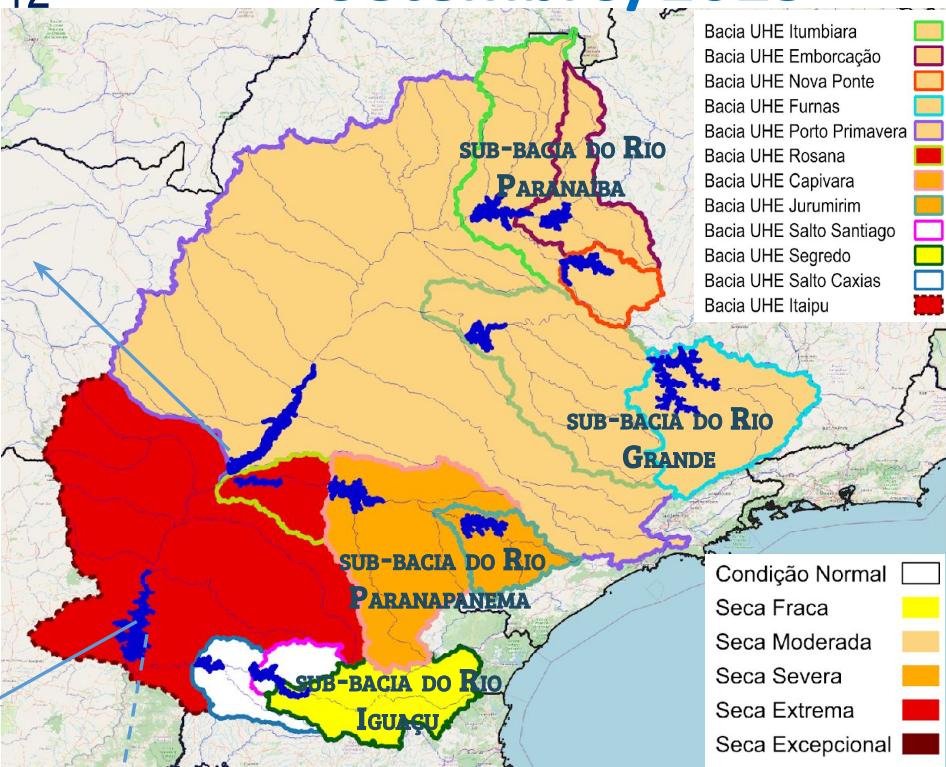


BACIA DO RIO PARANÁ

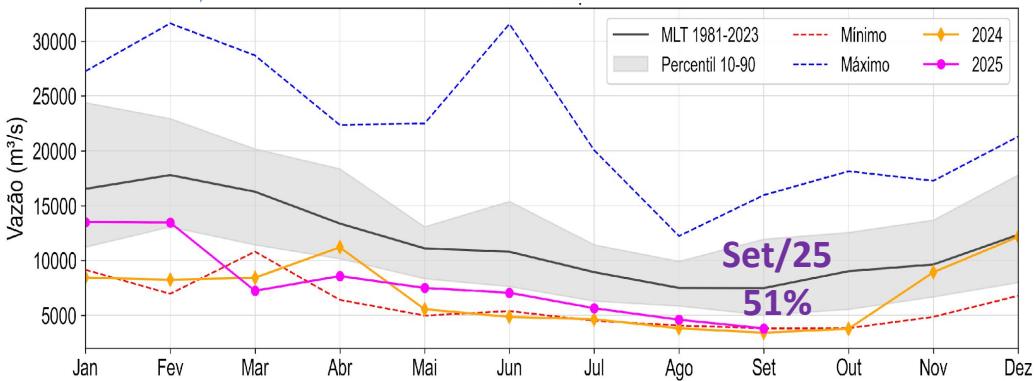
Índice de Seca Bivariado (Chuva-Vazão) – TSI 12



Setembro/2025



VAZÃO NATURAL - ITAIPU



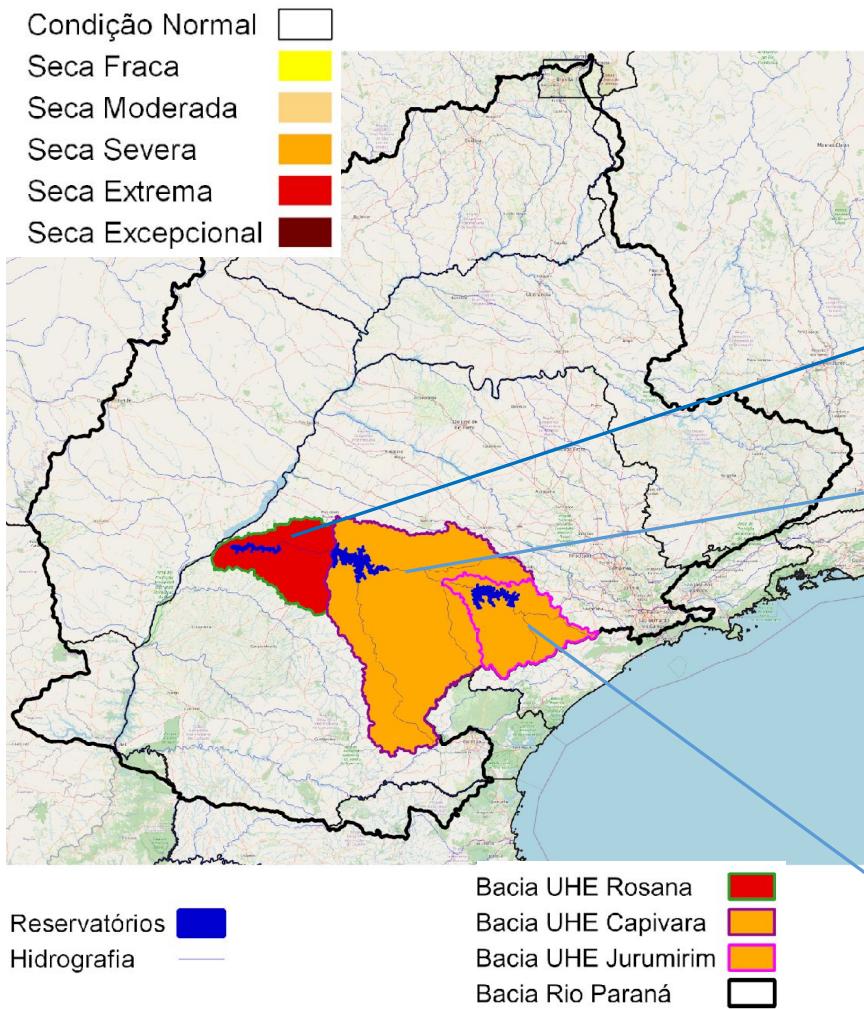
Fonte: CEMADEN/MCTI

Dados: Precipitação (CHIRPS) e Vazão (ONS e ANA)

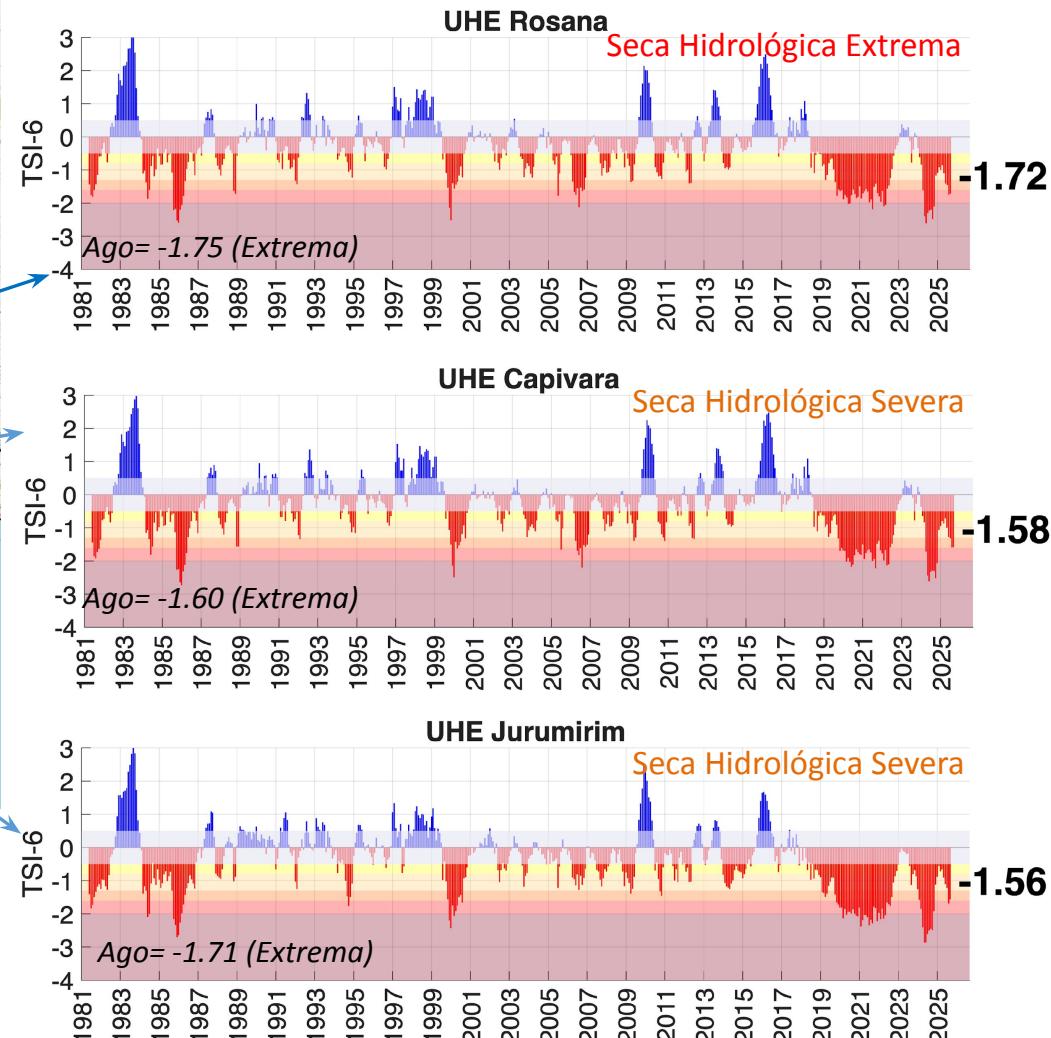
Período: Jan/1981 – Set/2025

BACIA DO RIO PARANAPANEMA

Setembro/2025



Índice de Seca Bivariado (Chuva-Vazão) – TSI 6



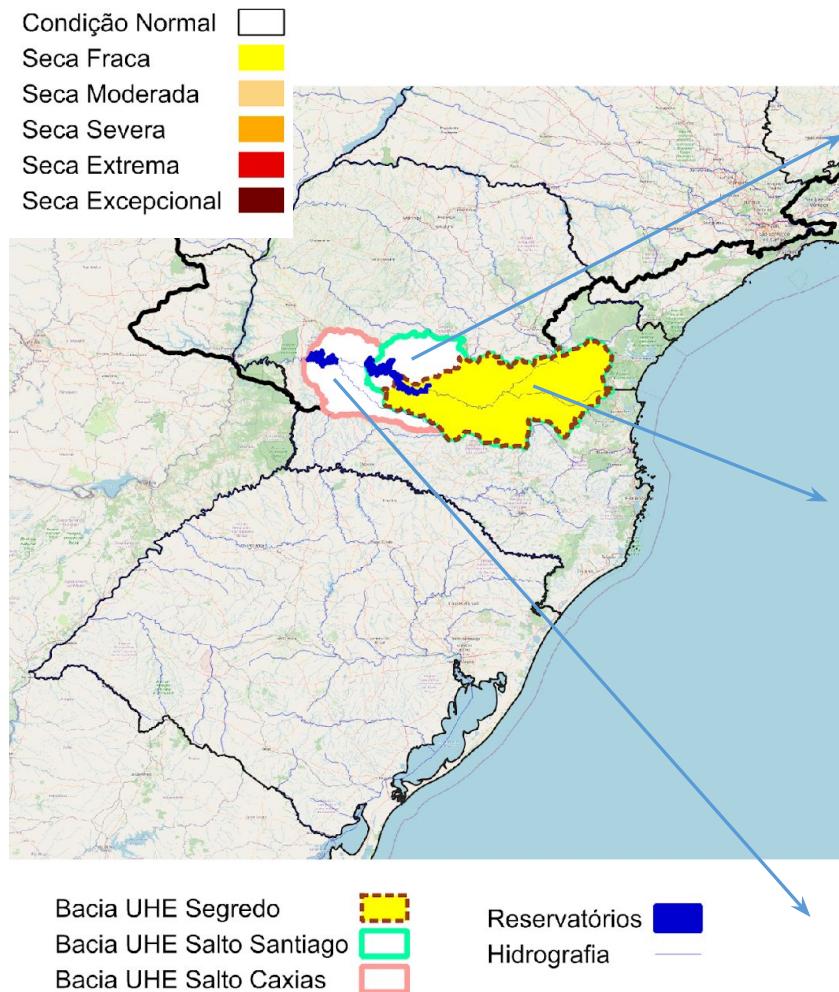
Fonte: CEMADEN/MCTI

Dados: Precipitação (CHIRPS) e Vazão (ONS e ANA)

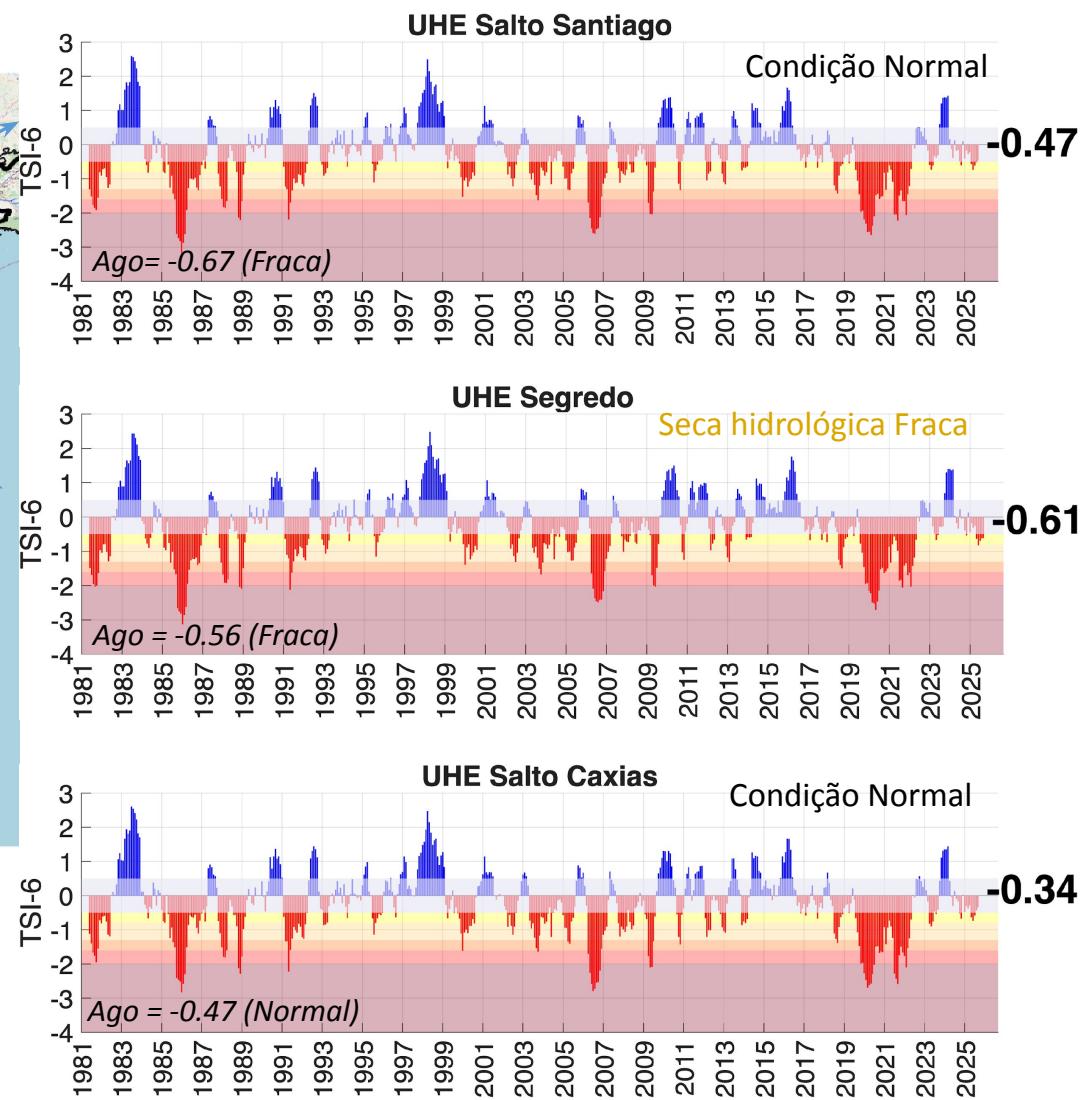
Período: Jan/1981 – Set/2025

BACIA DO RIO IGUAÇU

Setembro/2025



Índice de Seca Bivariado (Chuva-Vazão) – TSI 6



Fonte: CEMADEN/MCTI

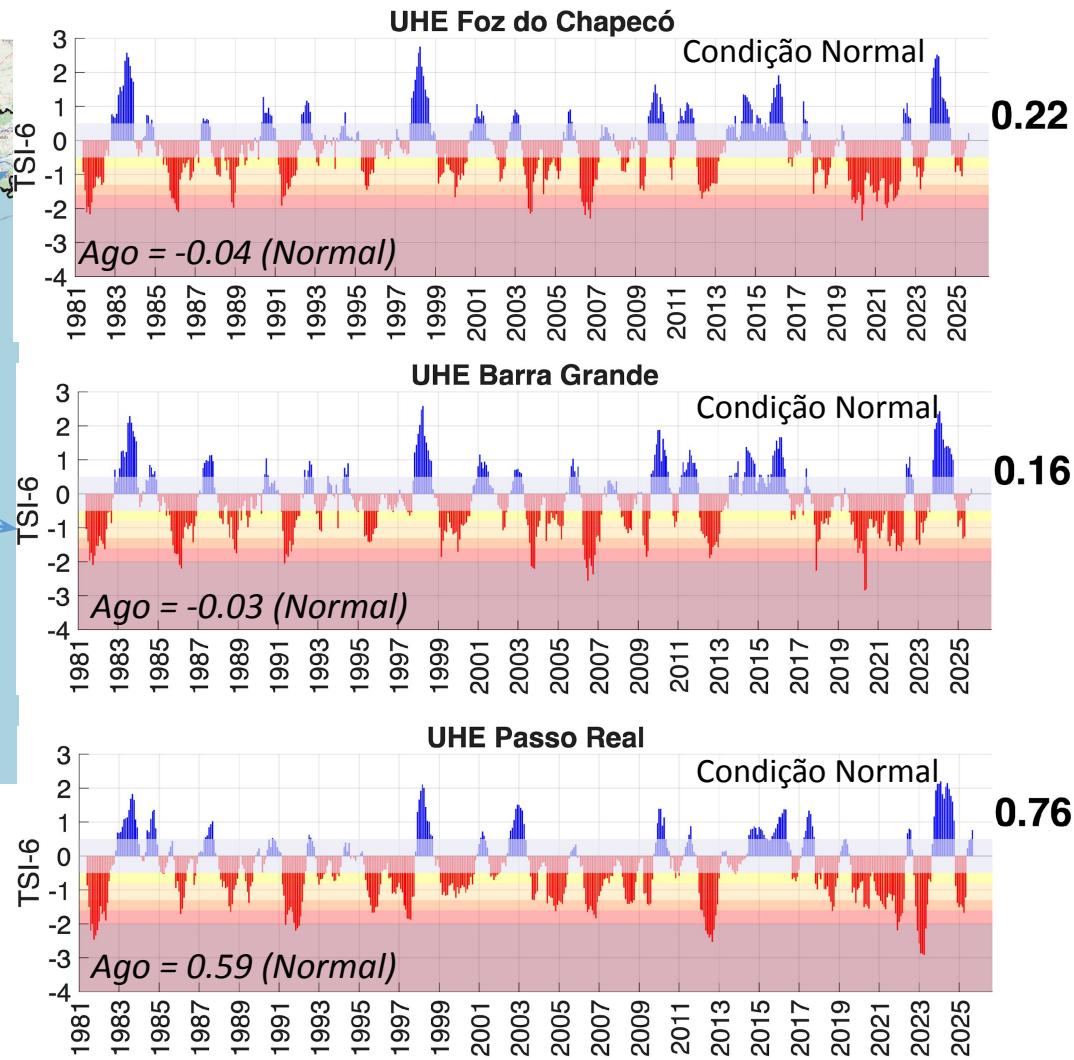
Dados: Precipitação (CHIRPS) e Vazão (ONS e ANA)

Período: Jan/1981 – Set/2025

BACIAS HIDROGRÁFICAS: ESTADOS SC-RS

Setembro/2025

Índice de Seca Bivariado (Chuva-Vazão) – TSI-6

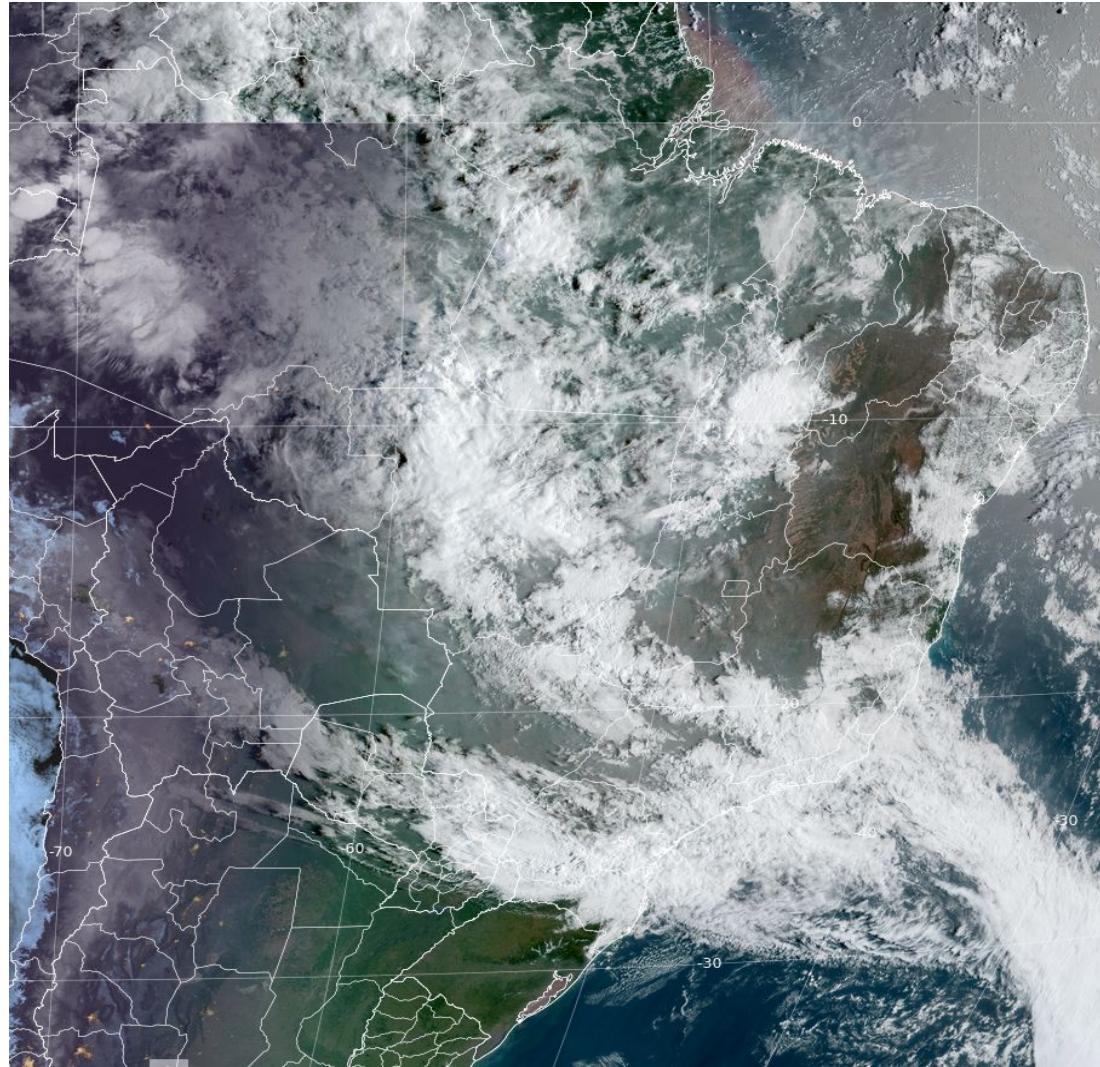


Fonte: CEMADEN/MCTI

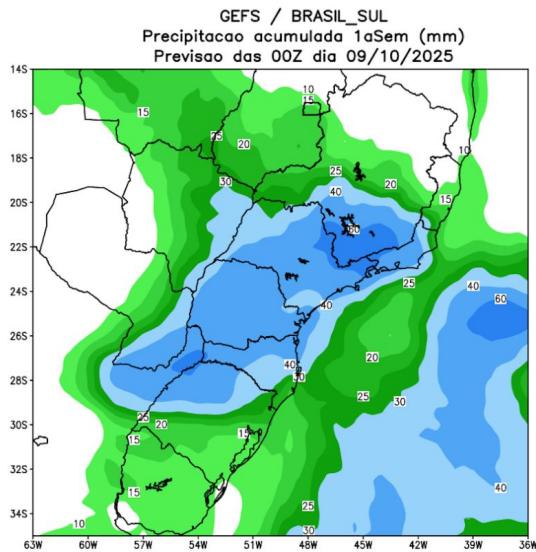
Dados: Precipitação (CHIRPS) e Vazão (ONS e ANA)

Período: Jan/1981 – Set/2025

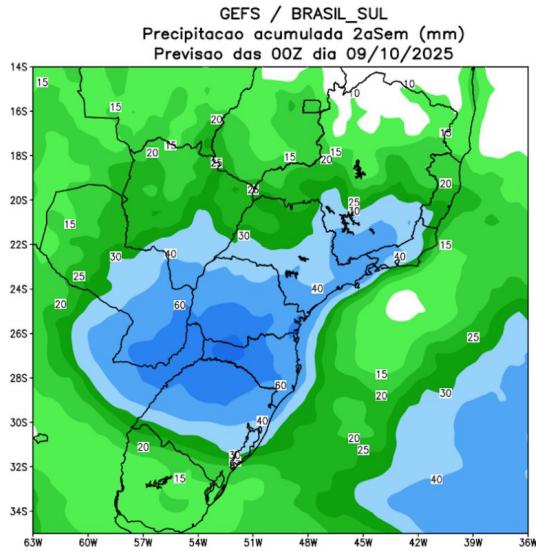
Situação meteorológica atual



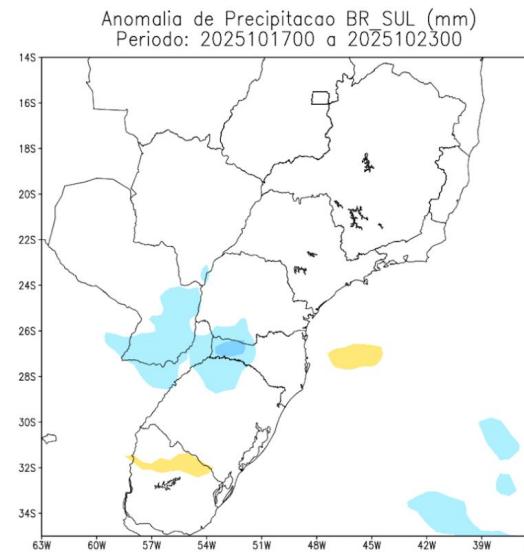
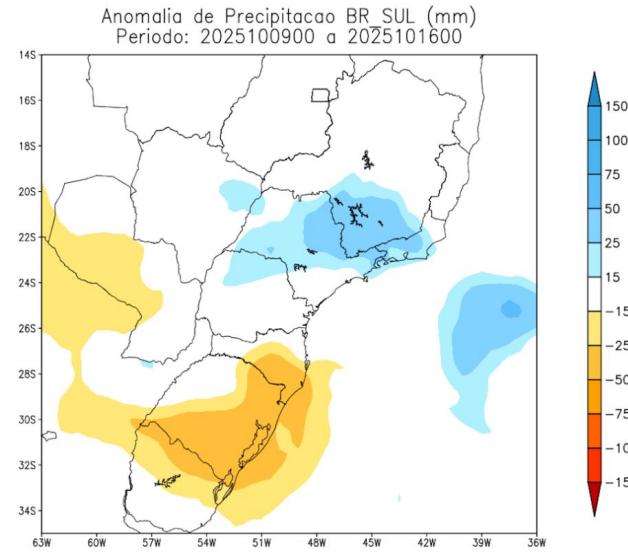
Previsão de chuva: horizonte de 2 semanas



Semana 1

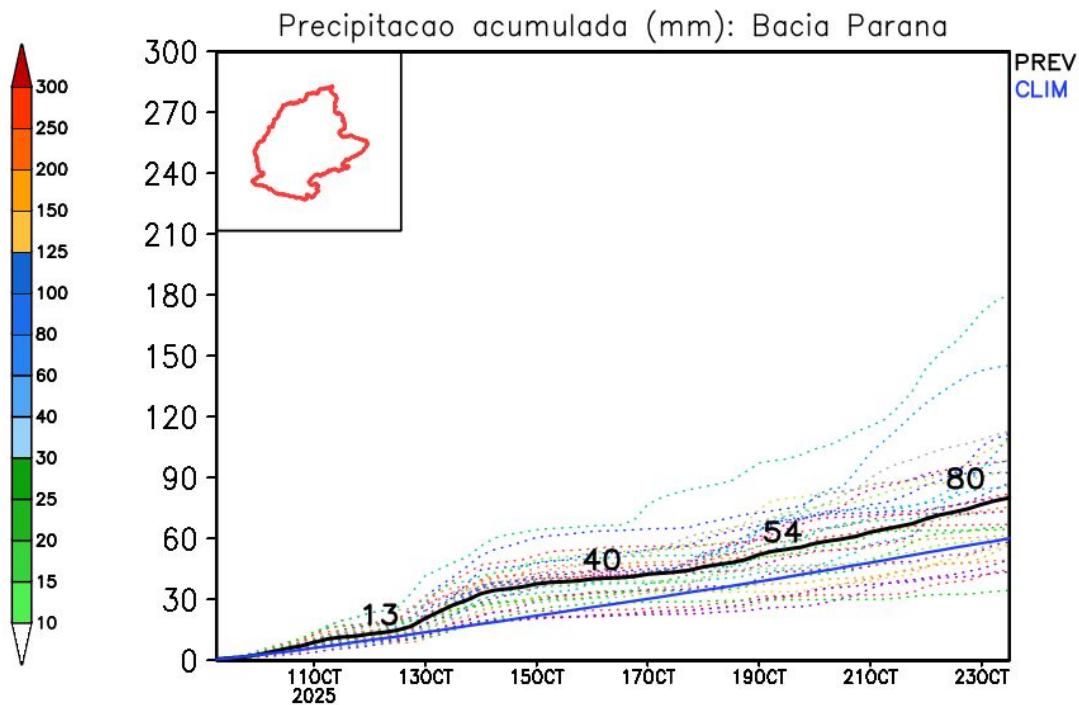
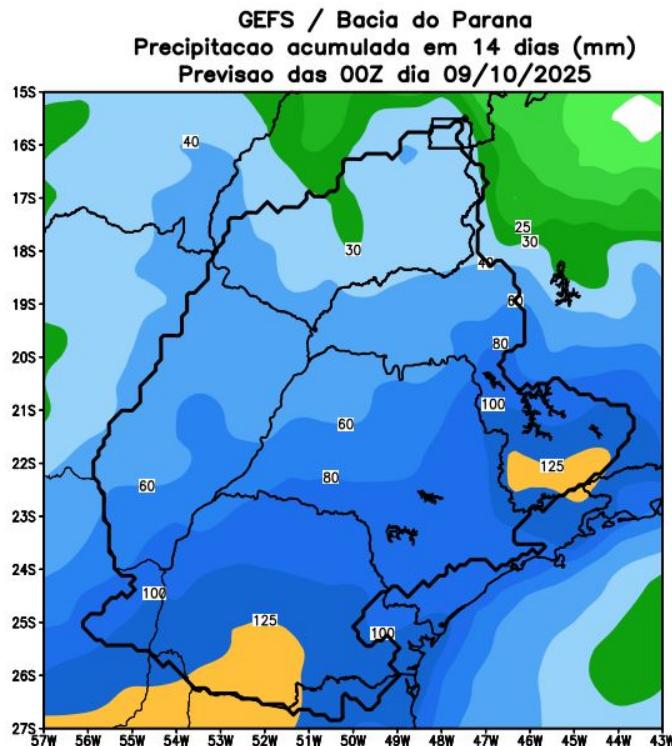


Semana 2



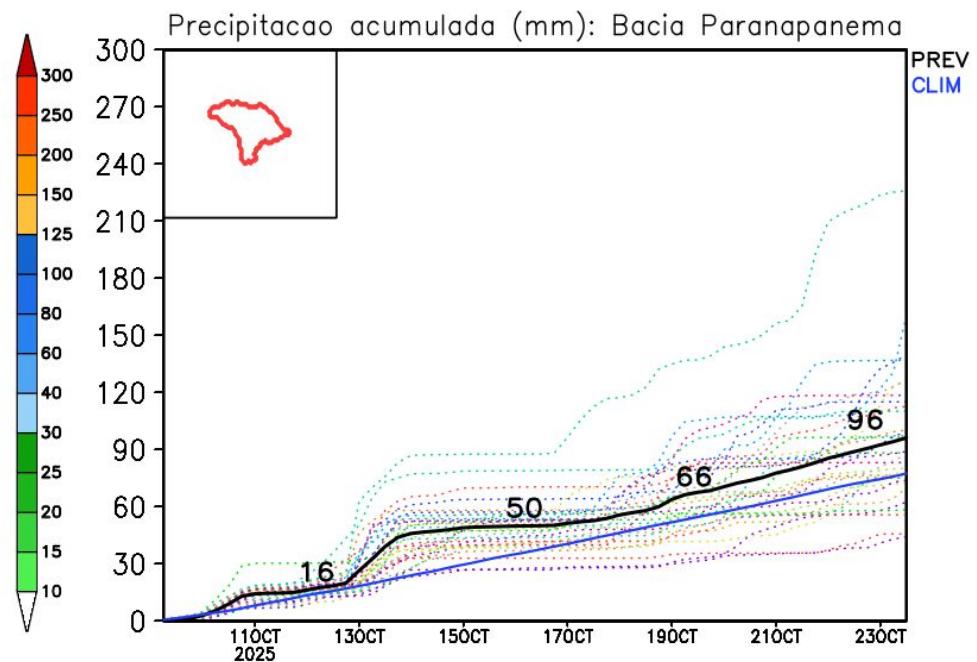
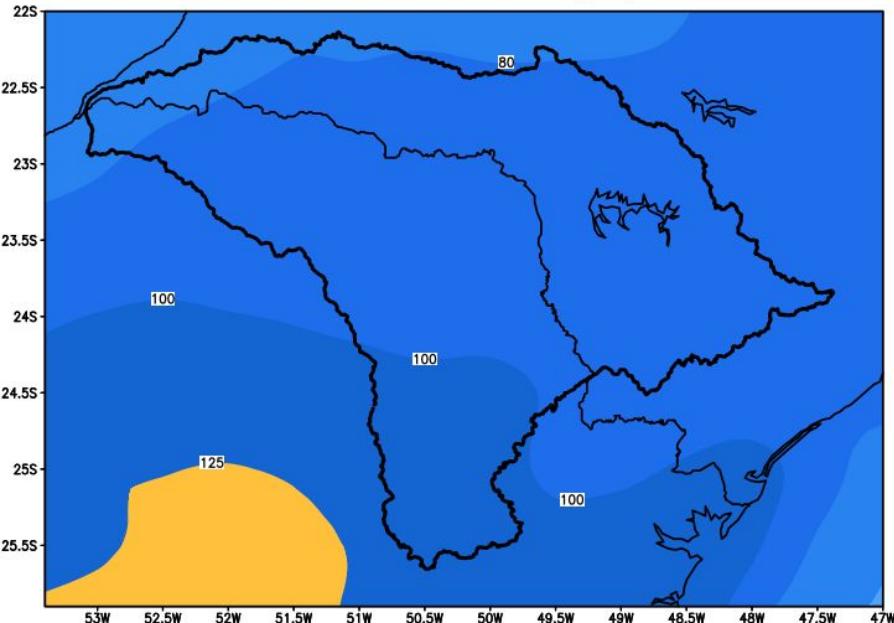
Fonte: GEFS/NOAA

Previsão para a bacia do Paraná

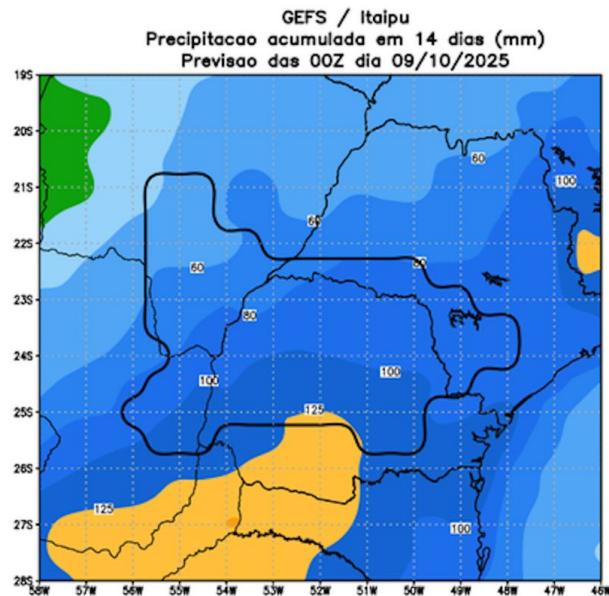


Previsão para a bacia do Paranapanema

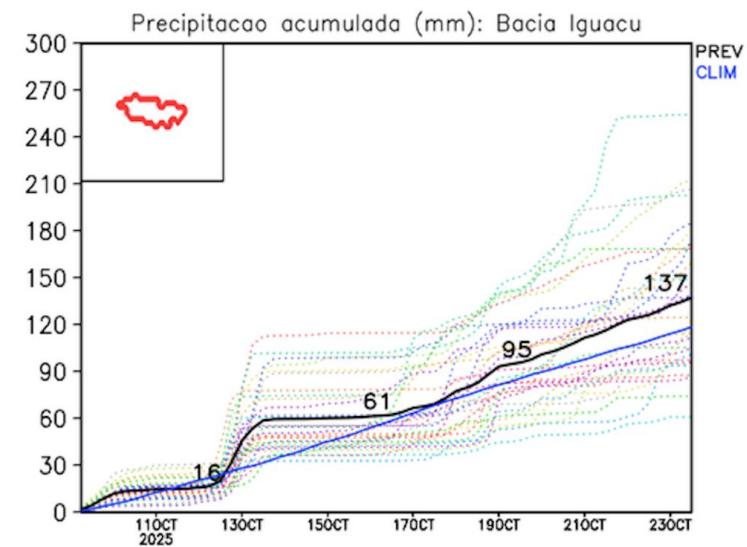
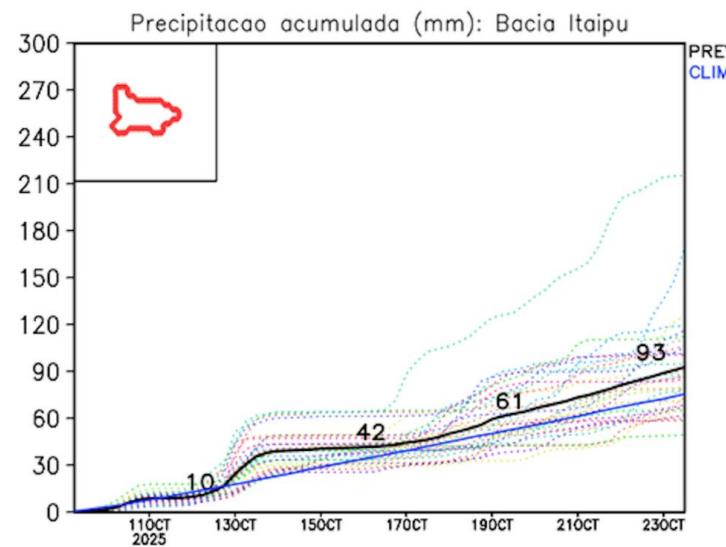
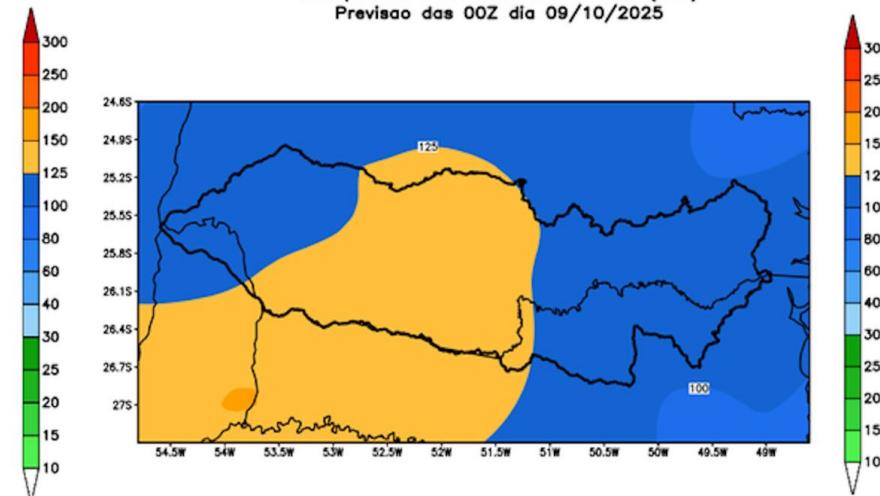
GEFS / Bacia do Rio Paranapanema
Precipitacao acumulada em 14 dias (mm)
Previsao das 00Z dia 09/10/2025



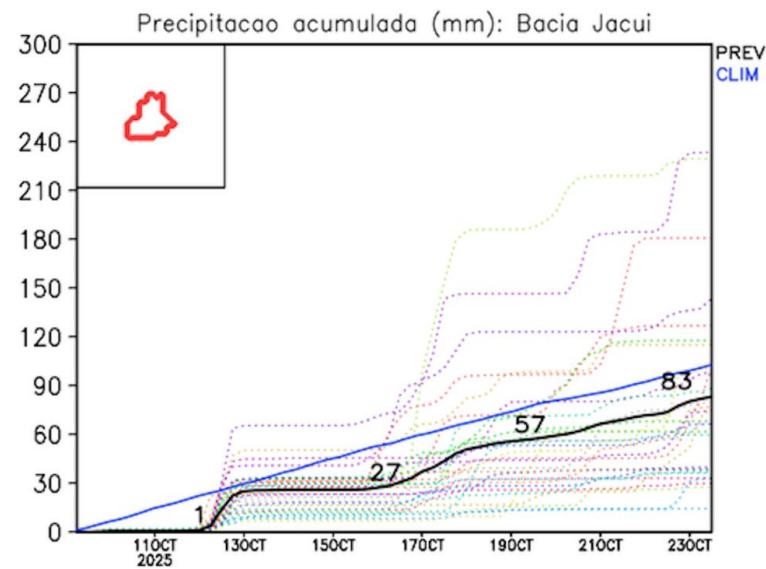
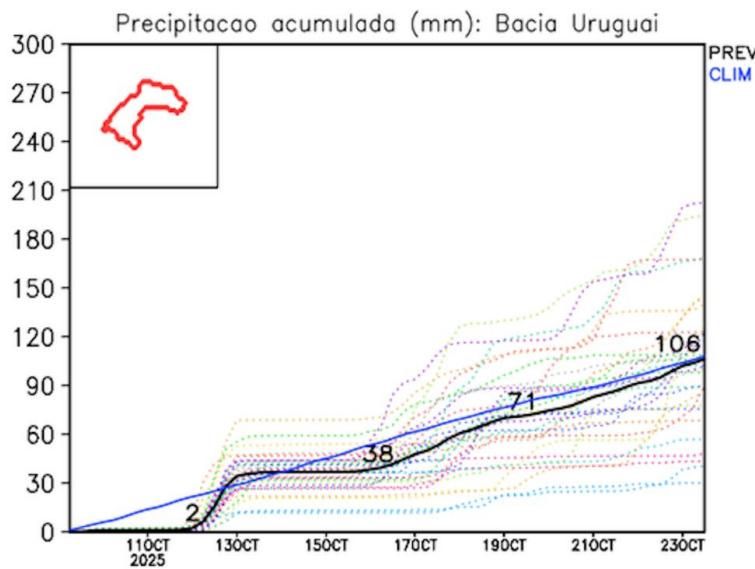
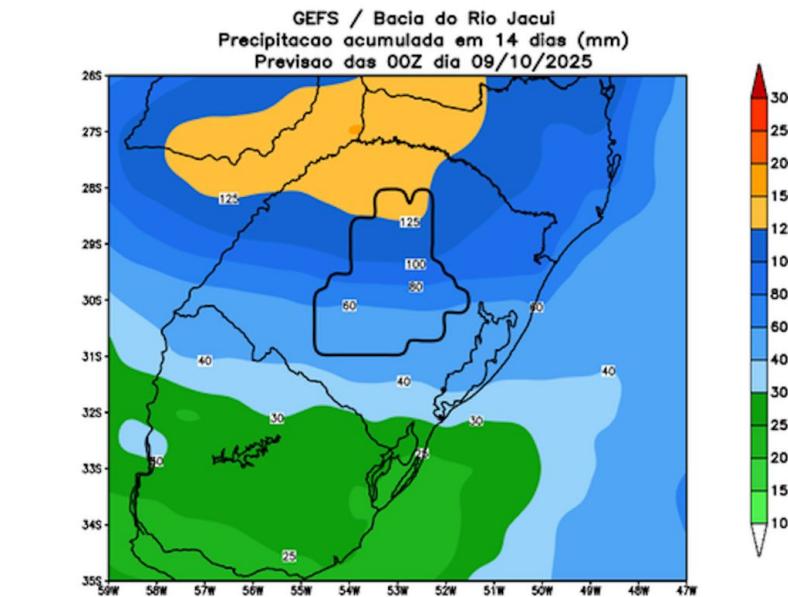
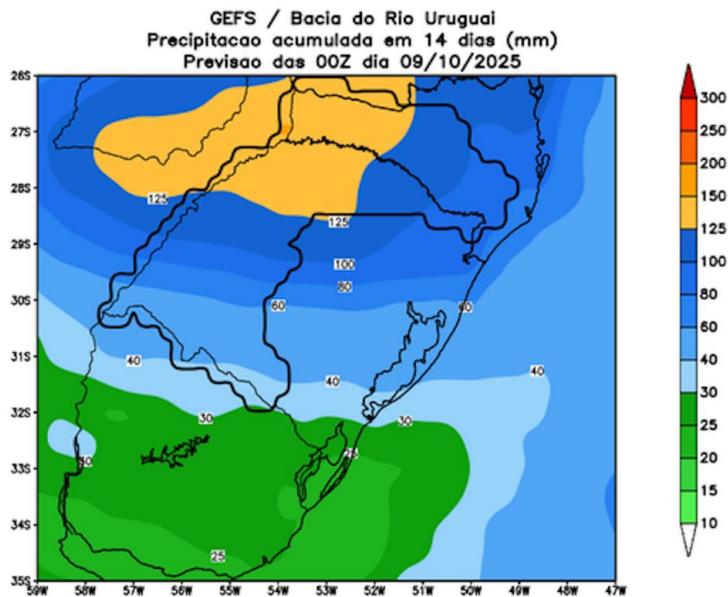
Previsão para as principais bacias



GEFS / Bacia do Rio Iguacu
Precipitacao acumulada em 14 dias (mm)
Previsao das 00Z dia 09/10/2025



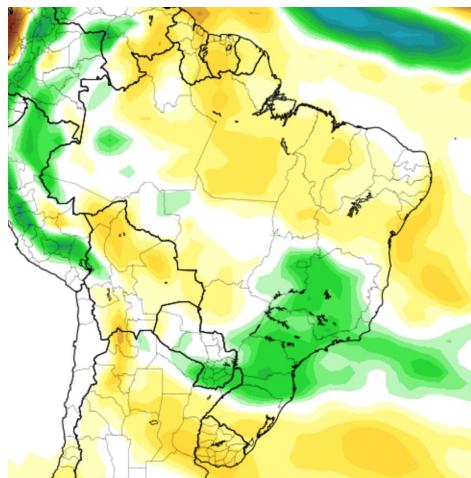
Previsão para as principais bacias



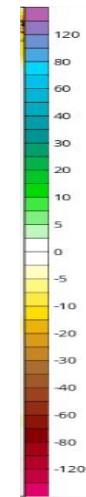
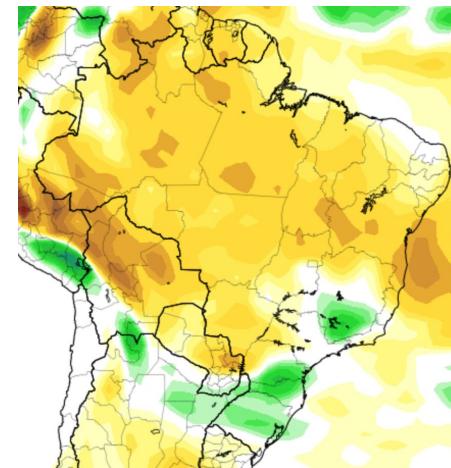
Anomalia de Chuva 3a e 4a semanas

Modelo
Americano
CFS/NOAA

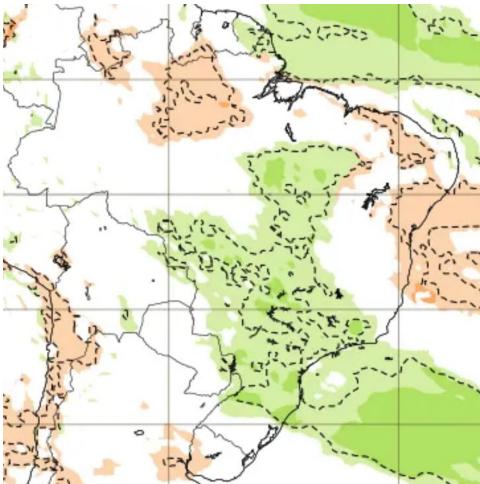
23-29 Outubro



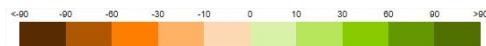
30–05 Novembro



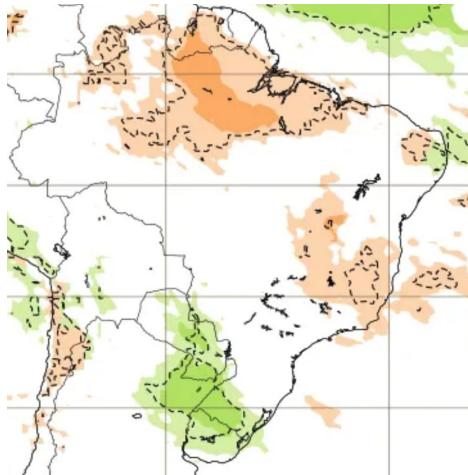
Modelo Europeu
ECMWF



20-26 Outubro



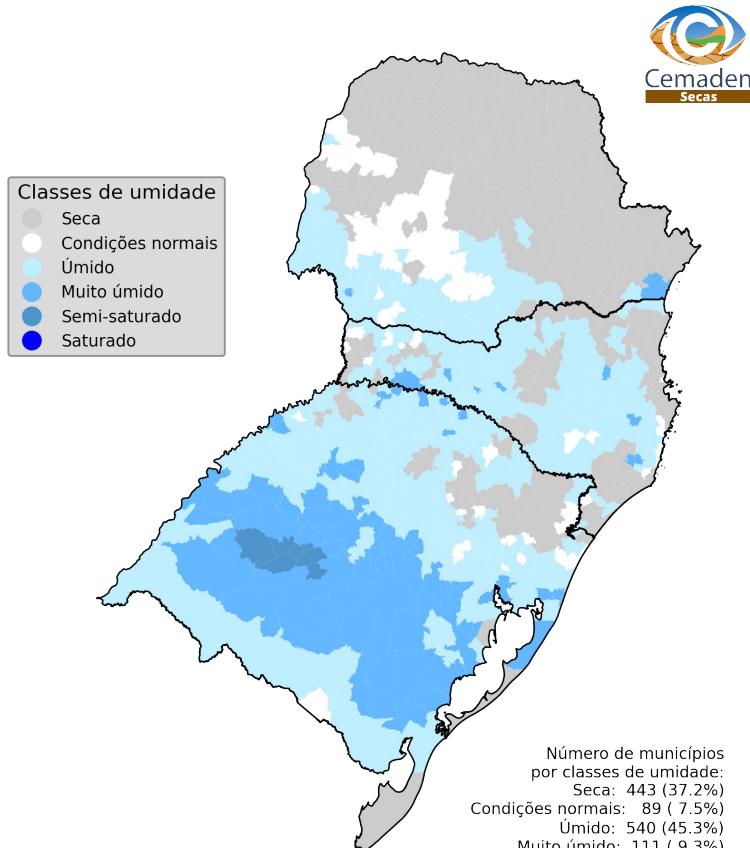
27 –02 Novembro



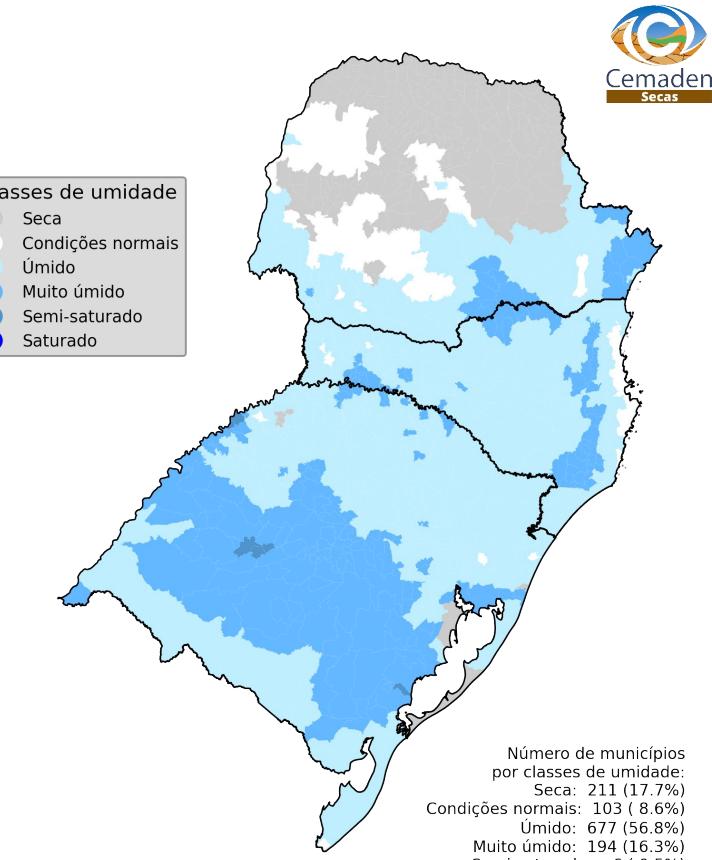
ÍNDICE AGREGADO DE RECURSOS DE ÁGUA (IARA)

SETEMBRO /25

OUTUBRO /25



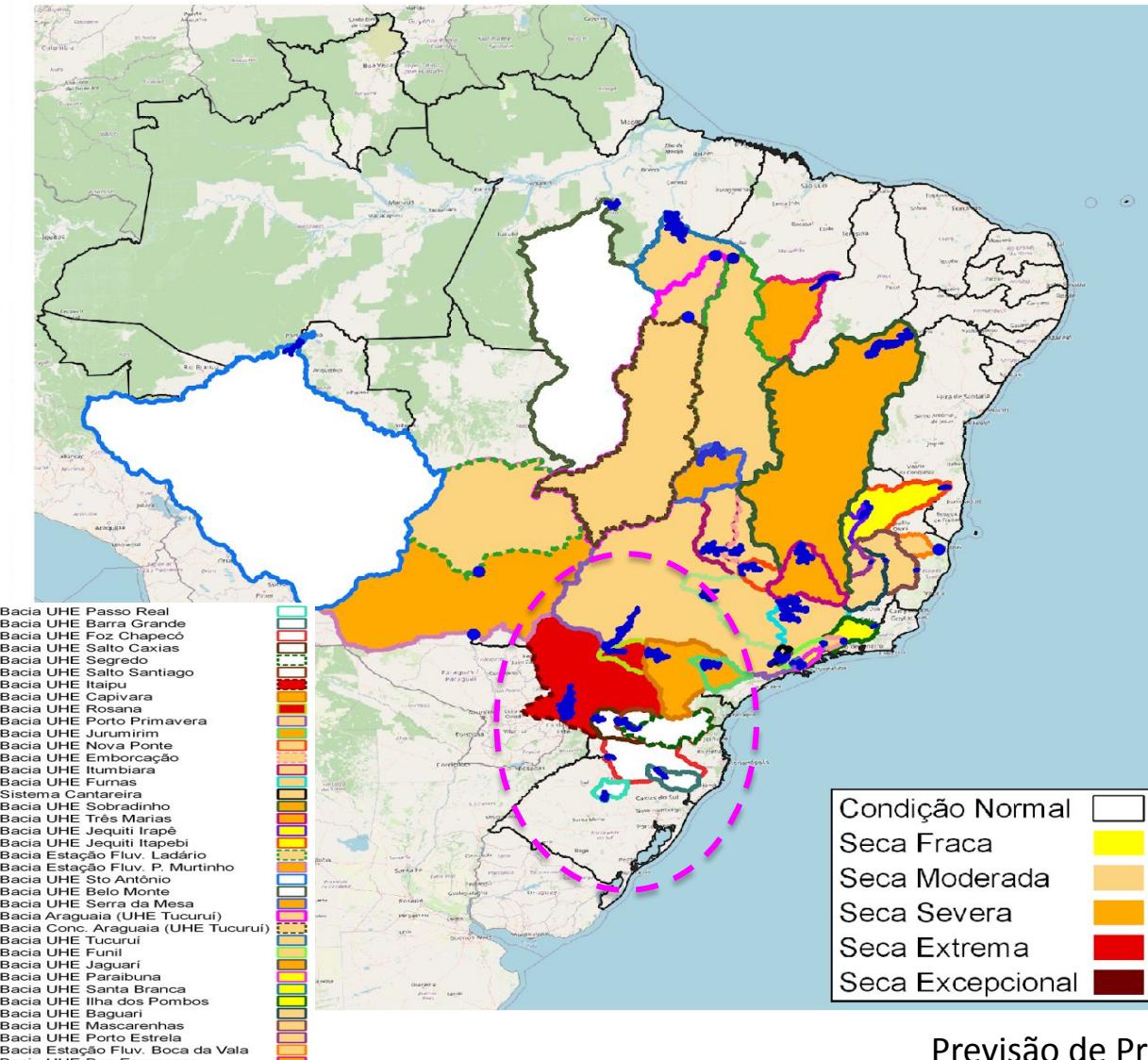
Índice Agregado de Recursos de Água (IARA)
setembro 2025
Fonte: Cemaden/MCTI



Previsão do Índice Agregado de Recursos de Água (IARAp)
outubro 2025
Fonte: Cemaden/MCTI

Índice Bivariado de Seca (Chuva-Vazão) – TSI (Two-variate Standardized Index)

Previsão Próximos 30 dias



Estabilidade Hidrológica:

- S. Santiago (Normalidade)
- S. Caxias (Normalidade)
- B. Grande (Normalidade)
- F. Chapecó (Normalidade)
- Passo Real (Normalidade)
- Jurumirim (Seca Severa)
- Capivara (Seca Severa)
- Rosana (Seca Extrema)
- Itaipu (Seca Extrema)
- P. Primavera (Seca Moderada)

Desintensificação da Seca:

- Segredo (Fraca-> Normal)

Fonte: CEMADEN/MCTI

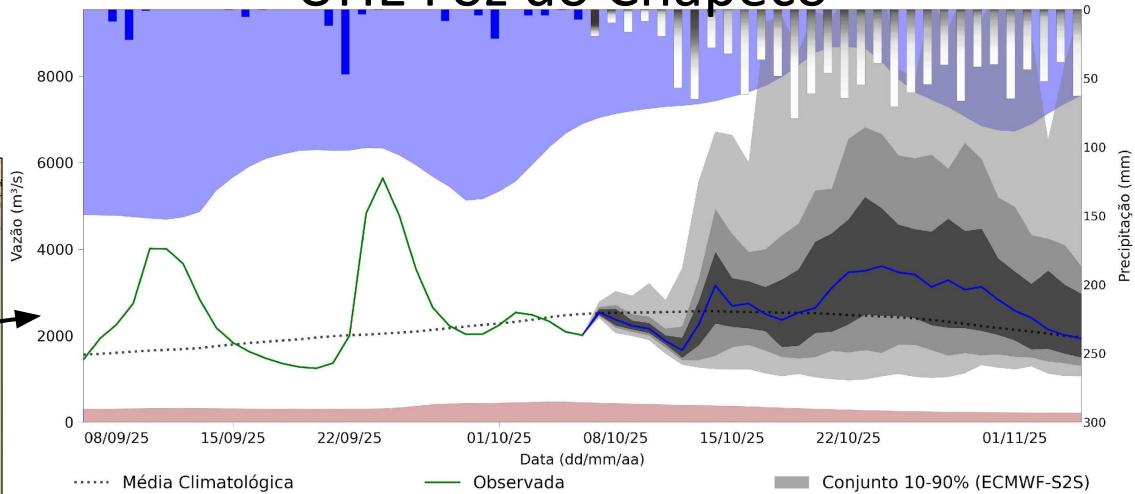
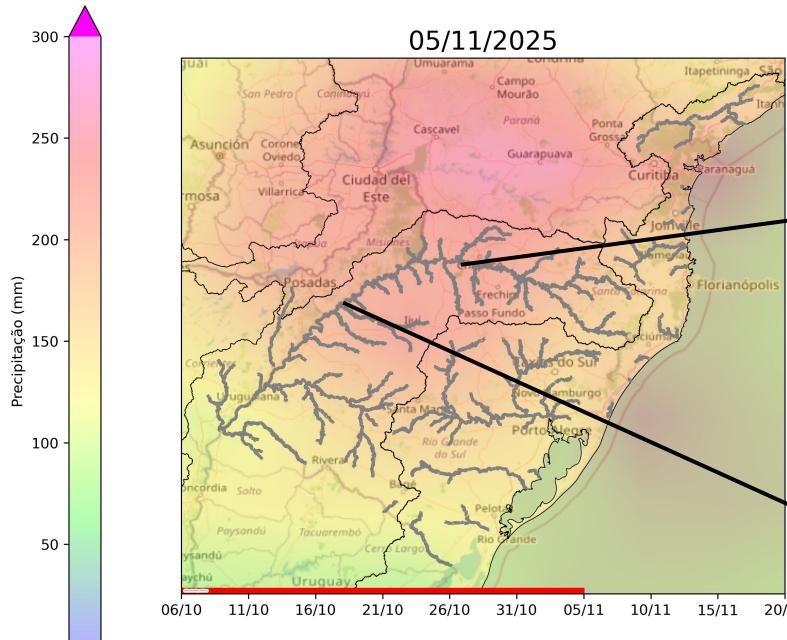
Previsão de Precipitação: Climate Forecast System (CFS)

Previsão de vazão natural na Região Sul

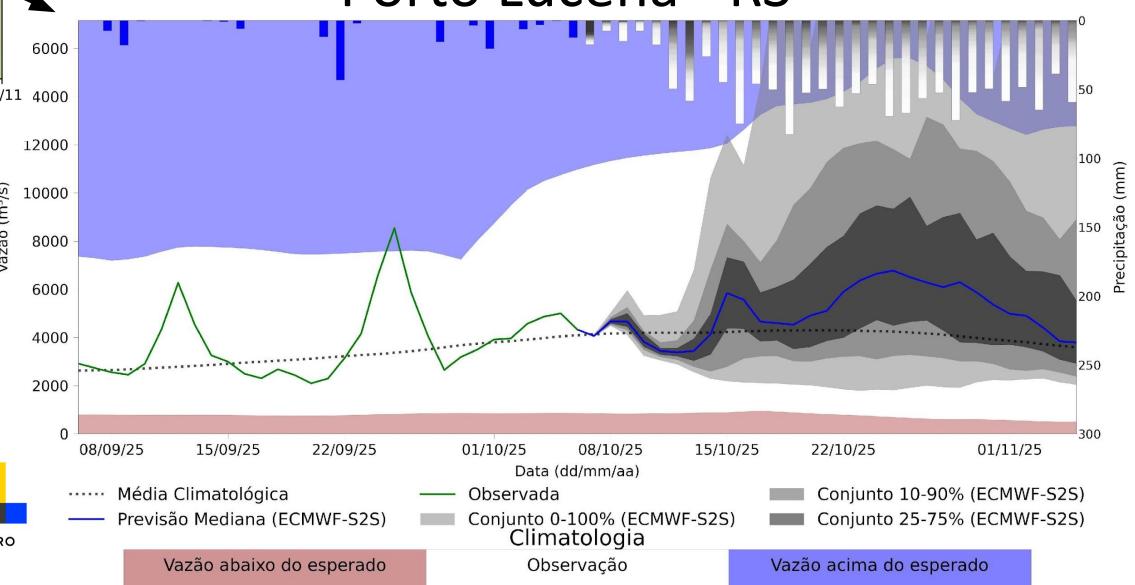
30 dias (Modelo hidrológico MHD)

UHE Foz do Chapecó

PREVISÃO: 06/10/25 a 05/11/25



Porto Lucena - RS



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

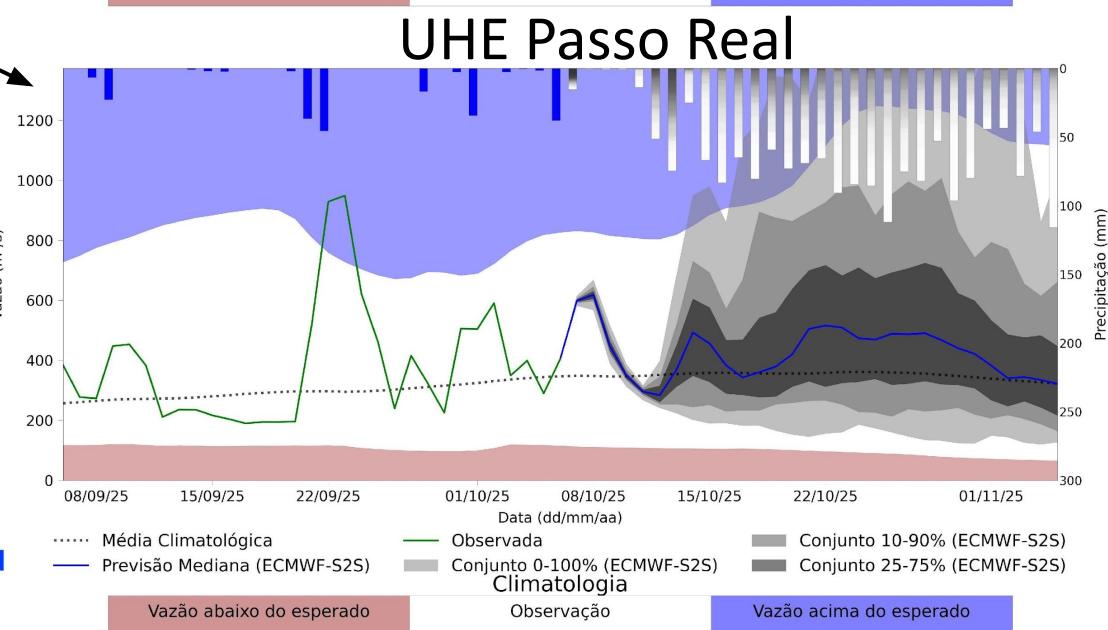
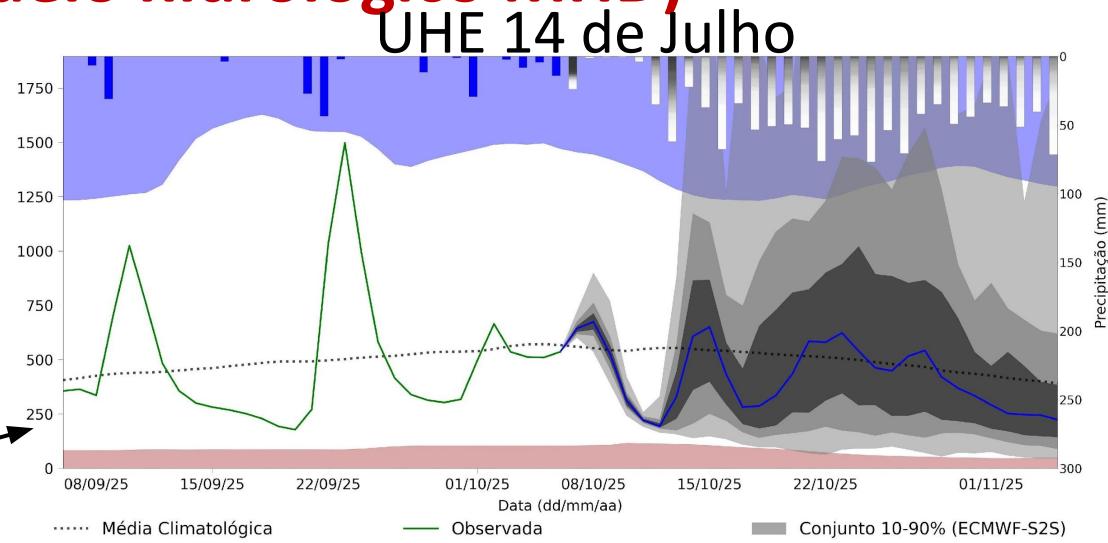
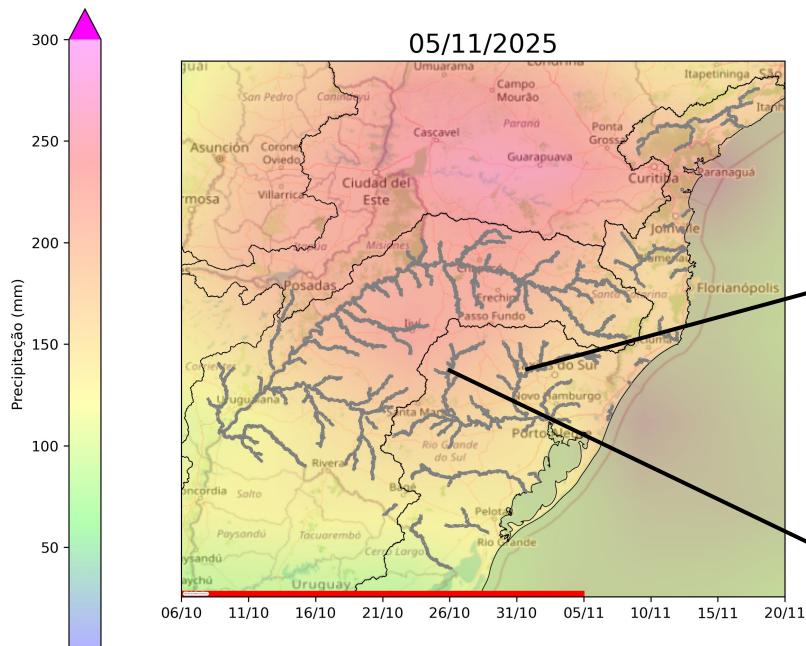
MLT: 2003-2024

Previsão Meteorológica: ECMWF

Previsão de vazão natural na Região Sul

30 dias (Modelo hidrológico MHD)

PREVISÃO: 06/10/25 a 05/11/25

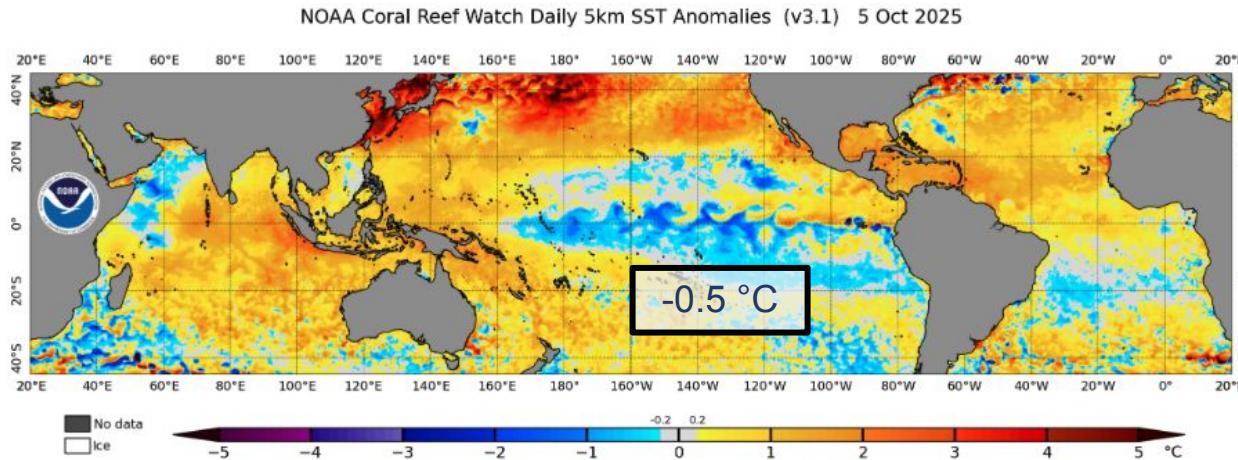


Fonte: Meteorologia (INMET/MERGE); Vazão (ANA/ONS)

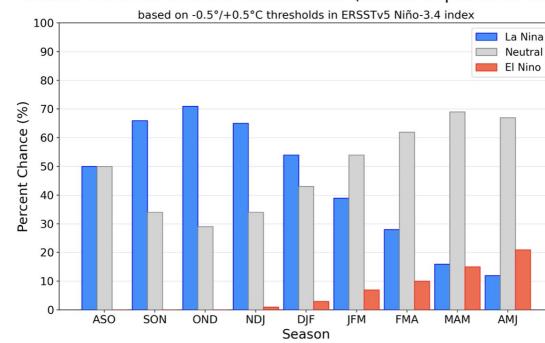
MLT: 2003-2024

Previsão Meteorológico: ECMWF

Status Atual: Neutro - La Niña Watch



Official NOAA CPC ENSO Probabilities (issued September 2025)

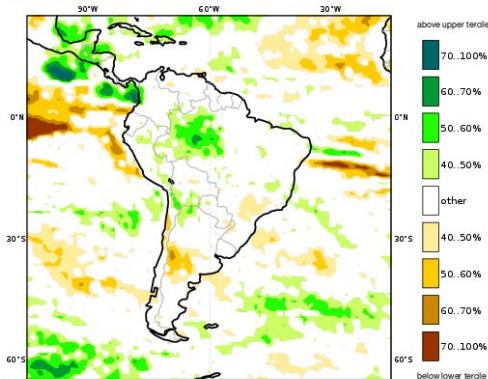


Previsão Sazonal

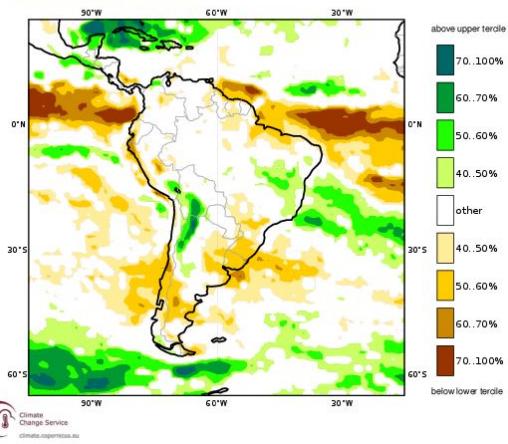
Anomalia de Chuva

outubro-novembro-dezembro

C3S: ECMWF contribution
 Prob(most likely category of precipitation)
 Nominal forecast start: 01/09/25
 Ensemble size = 51, climate size = 600

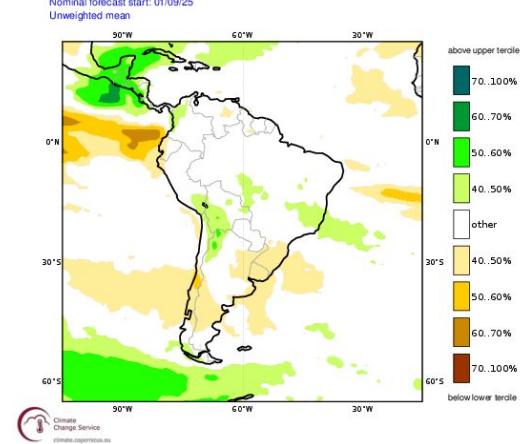


C3S: NCEP contribution
 Prob(most likely category of precipitation)
 Nominal forecast start: 01/09/25
 Ensemble size = 52, climate size = 384



OND 2025

C3S multi-system seasonal forecast
 Prob(most likely category of precipitation)
 Nominal forecast start: 01/09/25
 Unweighted mean



Modelo do Centro Europeu

Modelo dos EUA

Combinação de vários países