



CEMADEN

**Centro Nacional de Monitoramento e
Alertas de Desastres Naturais**

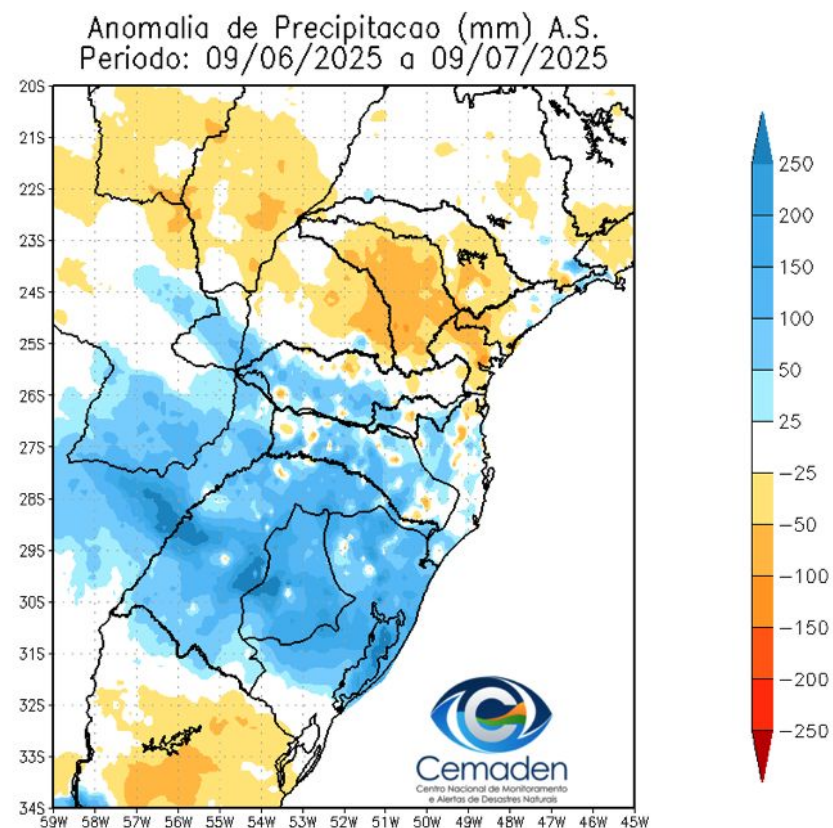
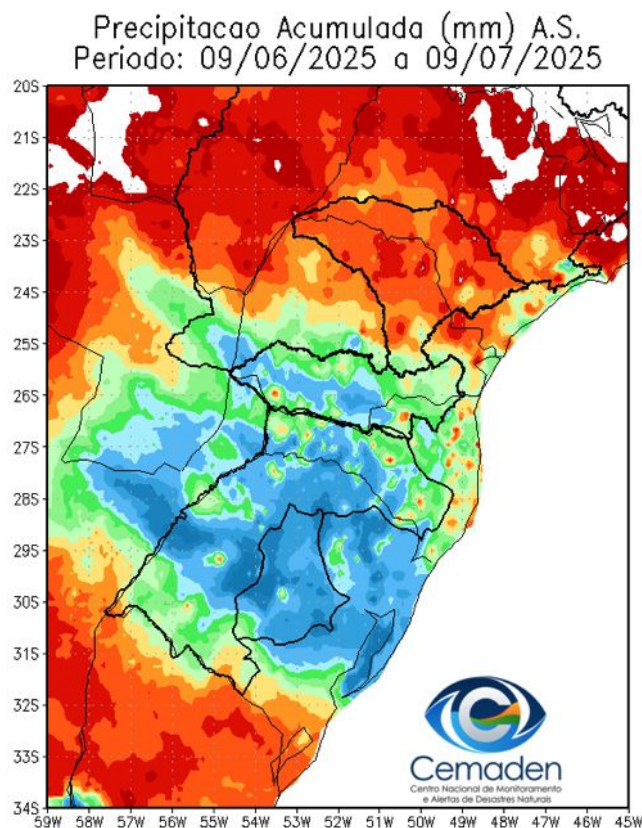
FOCOS DO CEMADEN/MCTI

**Conhecimento dos Riscos
Sistemas de Monitoramento e Alerta
Programa Cemaden Educação
Difusão e Comunicação
Capacidade de Resposta**

Monitoramento e Previsões da situação hidrometeorológica na Região Sul

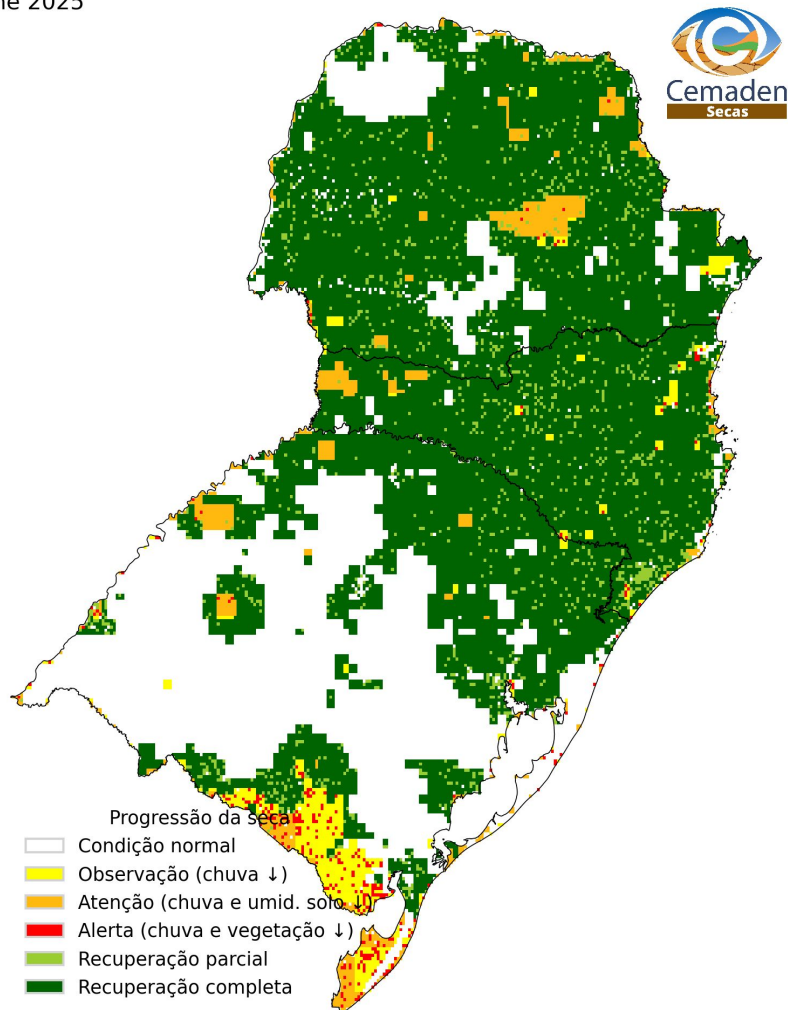
JULHO 2025

Precipitação nos últimos 30 dias



PROPAGAÇÃO INCREMENTAL DAS CONDIÇÕES DE SECA (PICS)

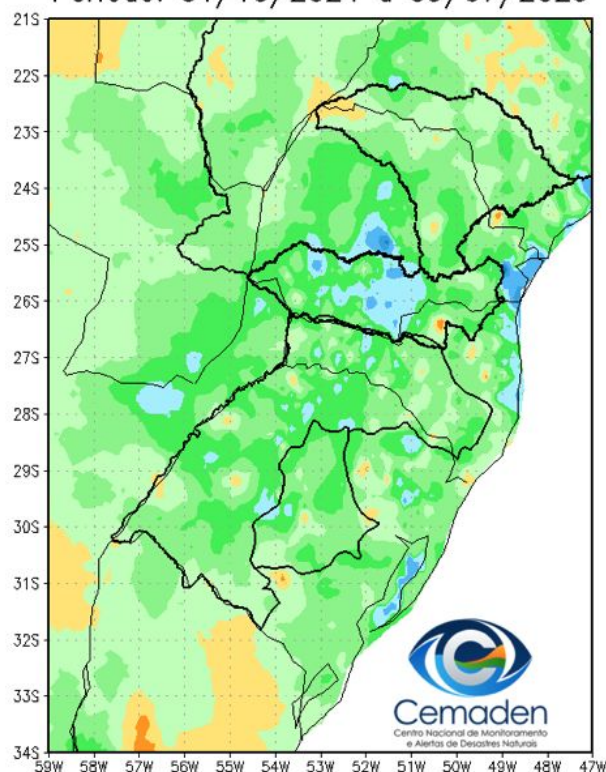
Progressão e Intensificação das Condições de Seca (PICS)
June 2025



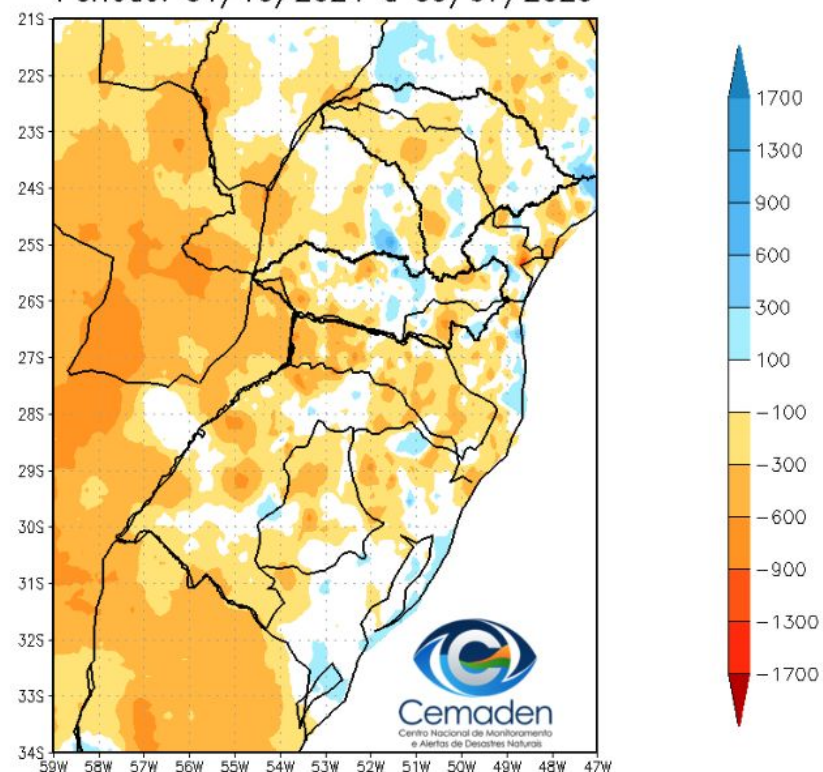
Fonte: Cemaden/MCTI

Precipitação no Ano Hidrológico

Precipitação Acumulada (mm) A.S.
Período: 01/10/2024 a 09/07/2025

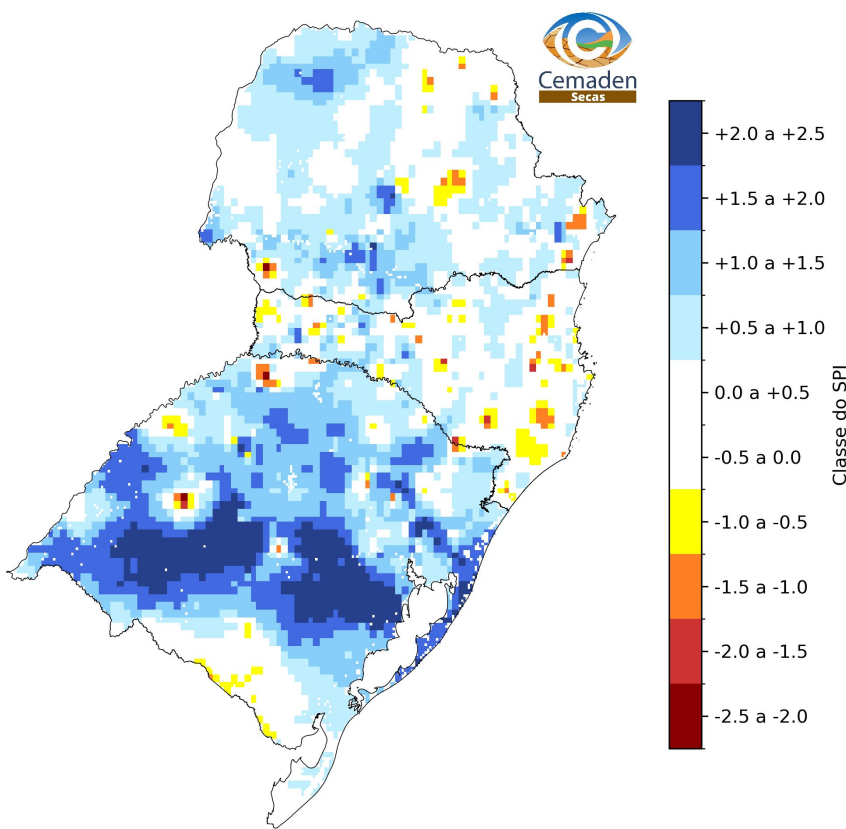


Anomalia de Precipitação (mm) A.S.
Período: 01/10/2024 a 09/07/2025



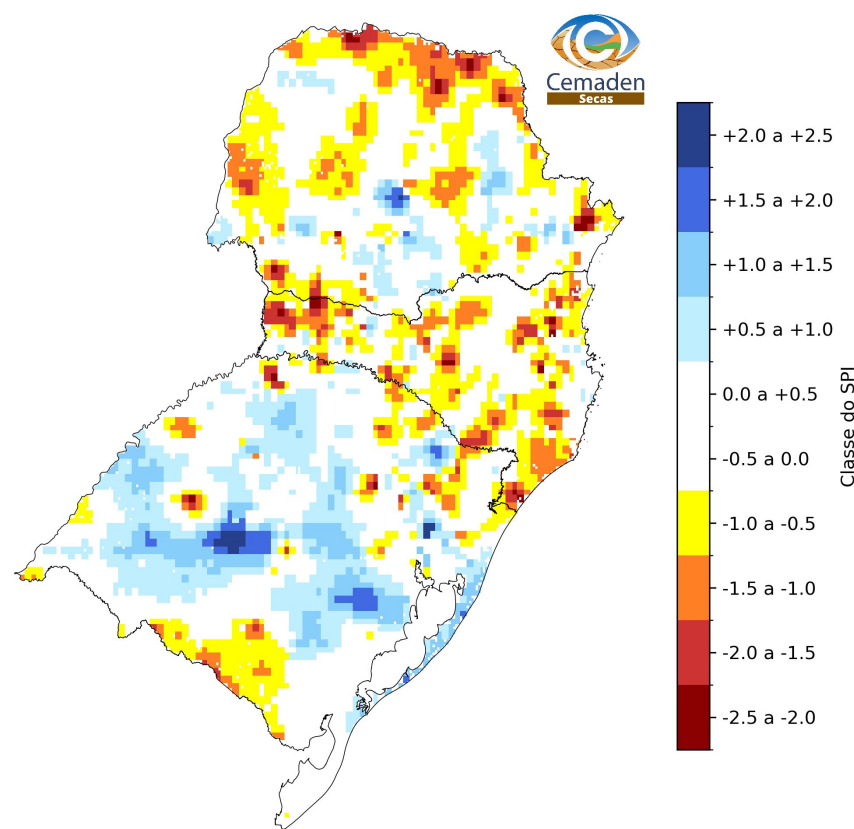
SPI: JUNHO 2025

SPI-03



Índice Padronizado de Precipitação - 3 meses (SPI3)
June 2025

SPI-06

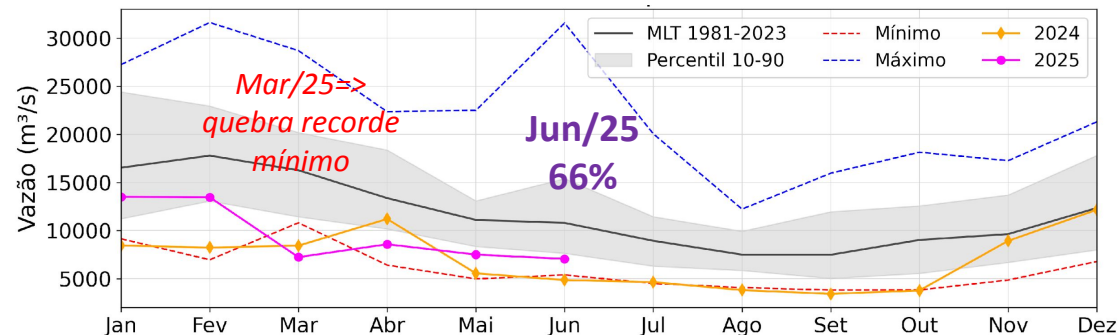
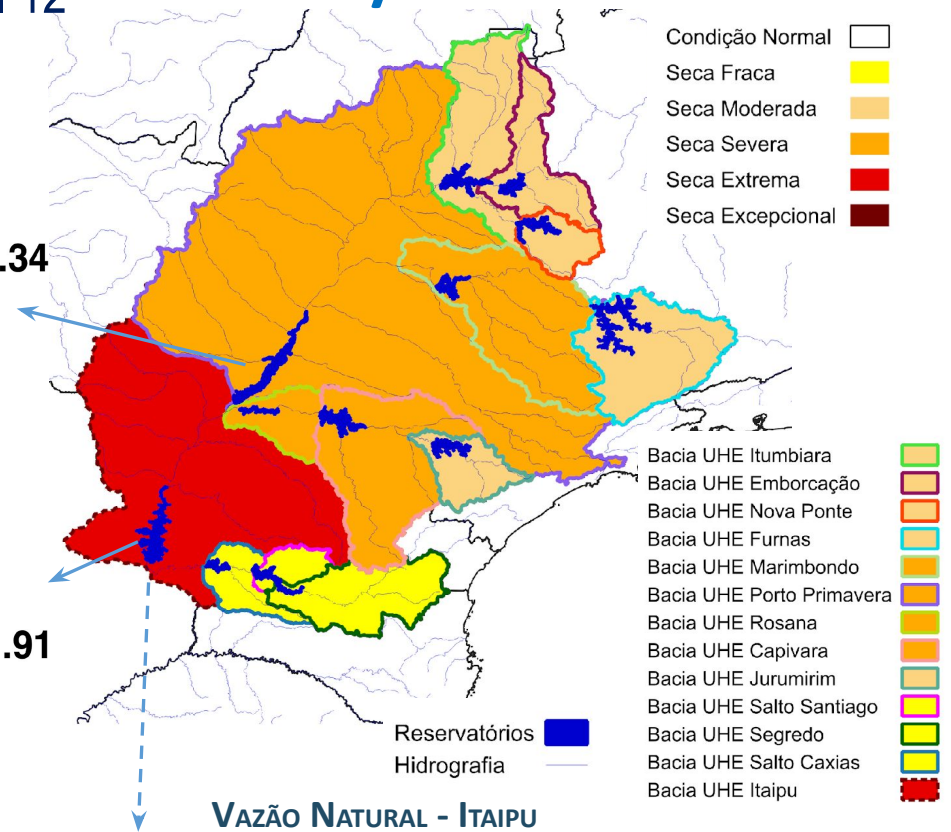
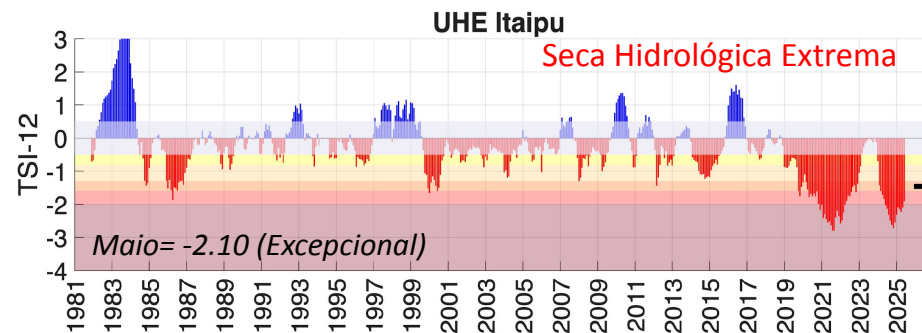
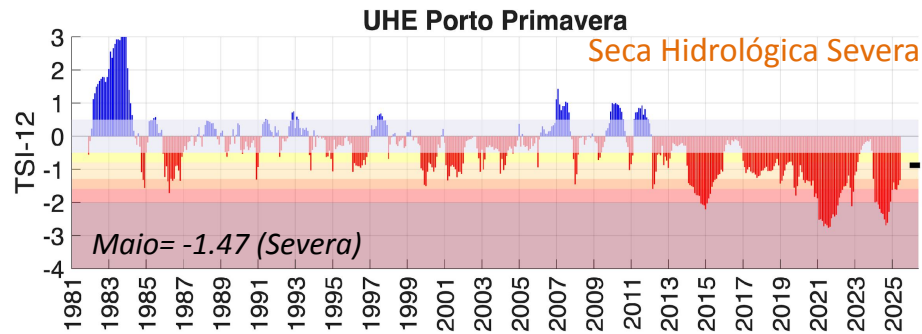


Índice Padronizado de Precipitação - 6 meses (SPI6)
June 2025

BACIA DO RIO PARANÁ

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

Jun/2025



Fonte: CEMADEN/MCTI

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

Período: Jan/1981 – Jun/2025

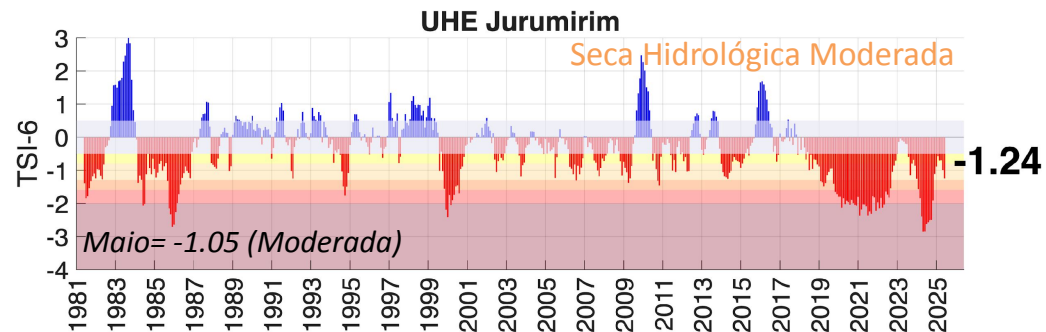
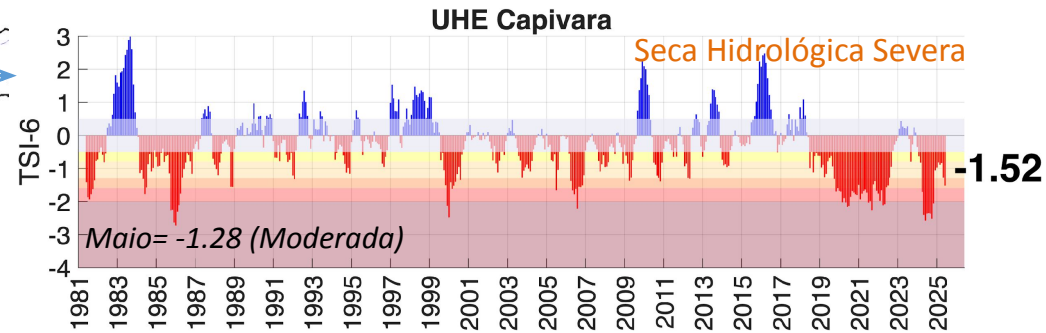
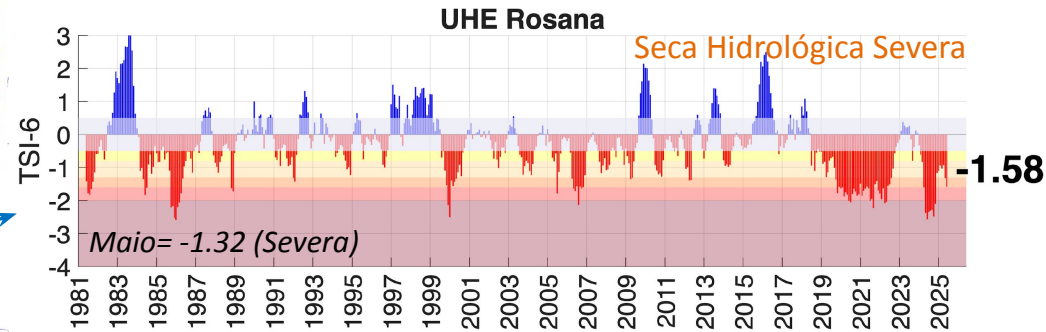
BACIA DO RIO PARANAPANEMA

Jun/2025

Condição Normal
Seca Fraca
Seca Moderada
Seca Severa
Seca Extrema
Seca Excepcional



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



Reservatórios
Hidrografia

Bacia UHE Rosana
Bacia UHE Capivara
Bacia UHE Jurumirim
Bacia Rio Paraná

BACIA DO RIO IGUAÇU

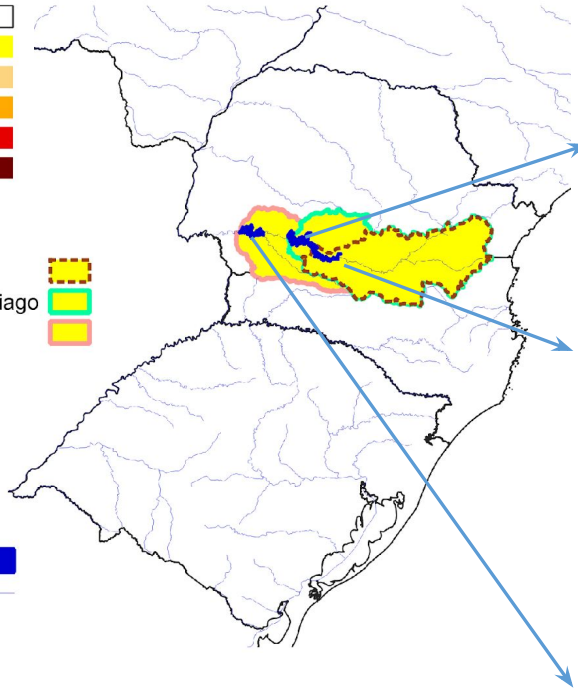
Jun/2025

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

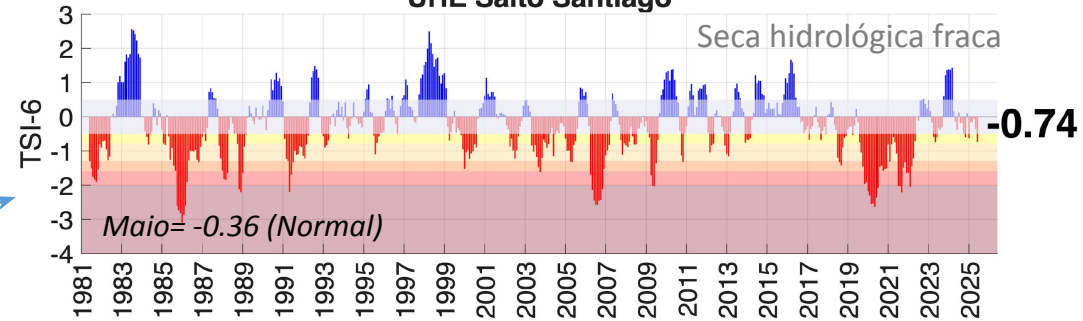
Condição Normal
Seca Fraca
Seca Moderada
Seca Severa
Seca Extrema
Seca Excepcional

Bacia UHE Segredo
Bacia UHE Salto Santiago
SaltoCaxias

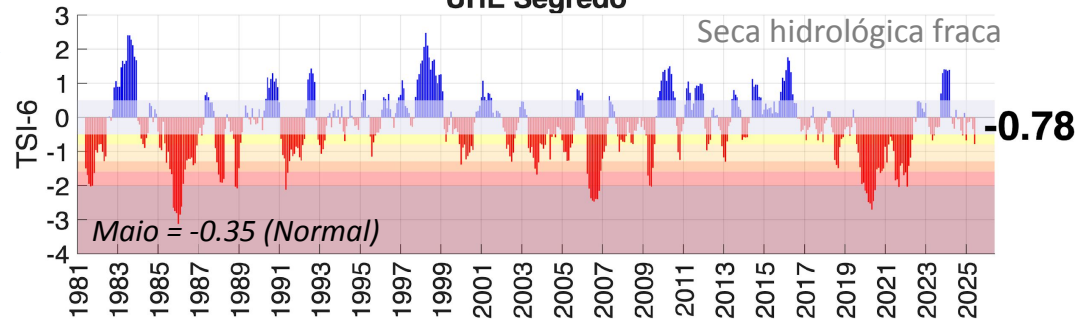
Reservatórios
Hidrografia



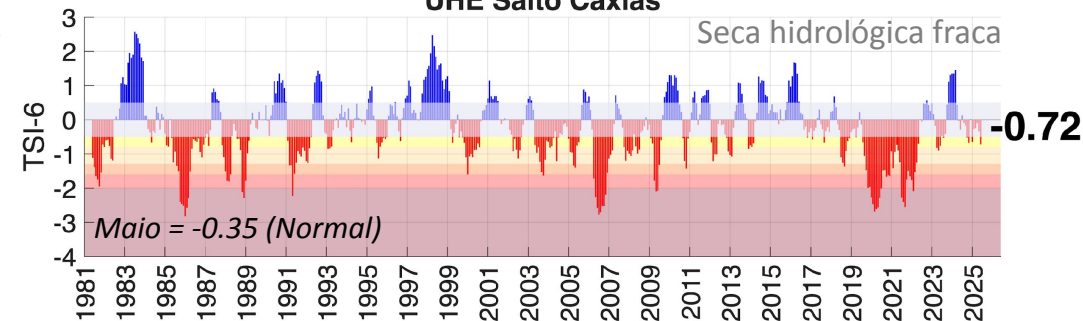
UHE Salto Santiago



UHE Segredo



UHE Salto Caxias



Fonte: CEMADEN/MCTI

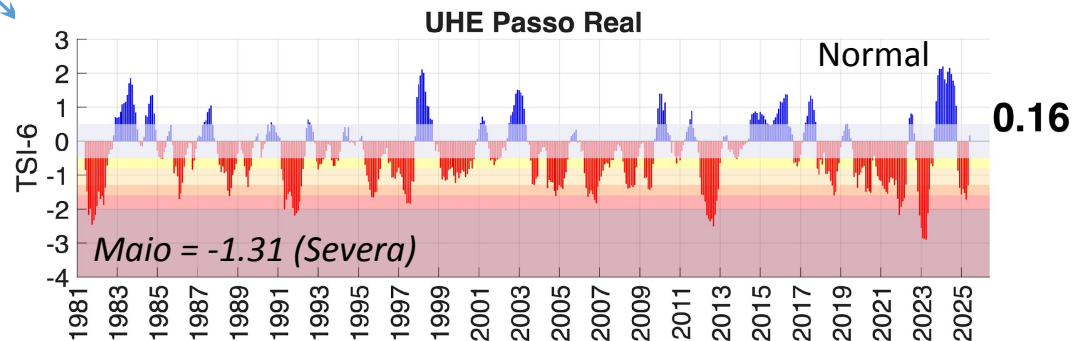
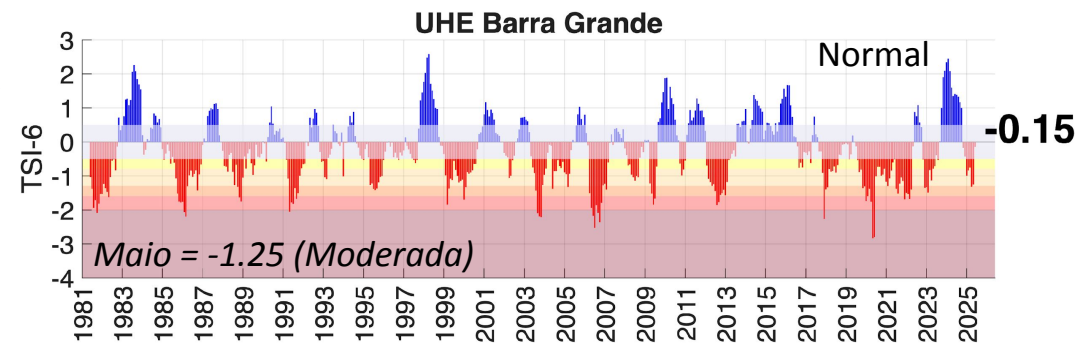
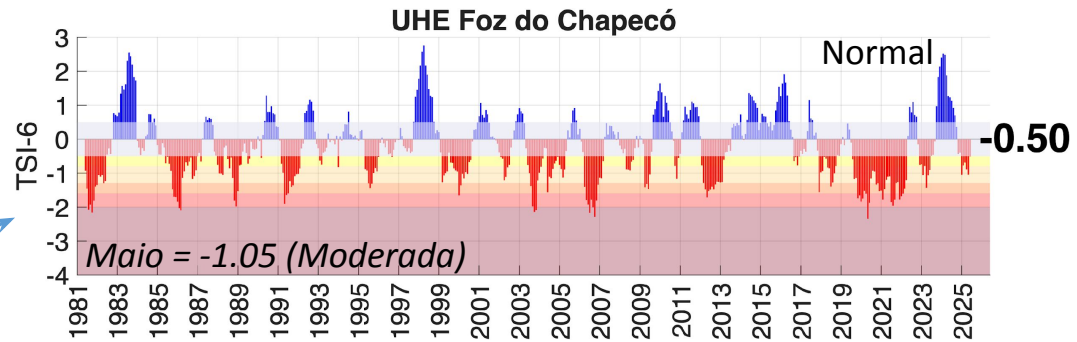
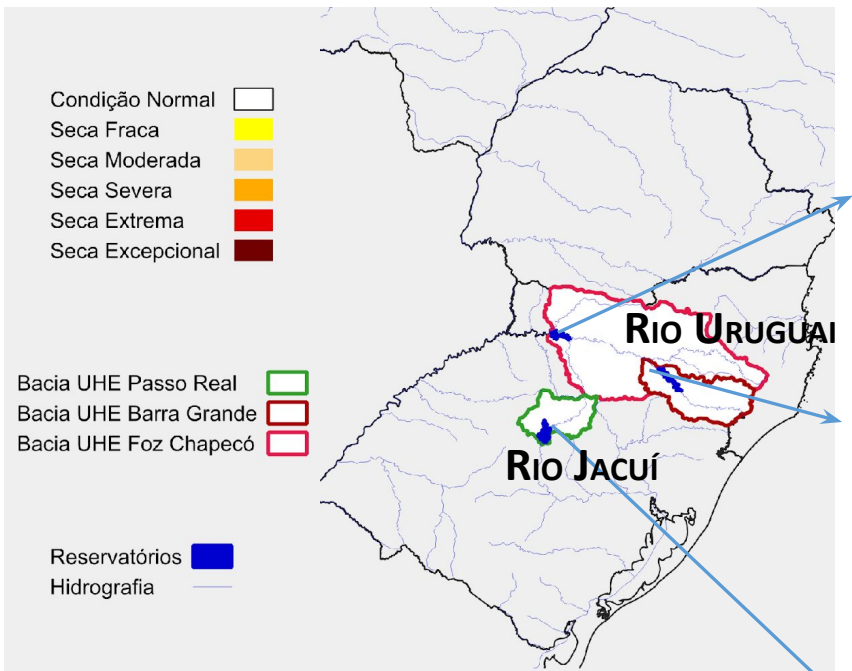
Dados: Precipitação (CHIRPS) e Vazão (ONS e ANA)

Período: Jan/1981 – Jun/2025

BACIAS HIDROGRÁFICAS: ESTADOS SC-RS

Jun/2025

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



Fonte: CEMADEN/MCTI

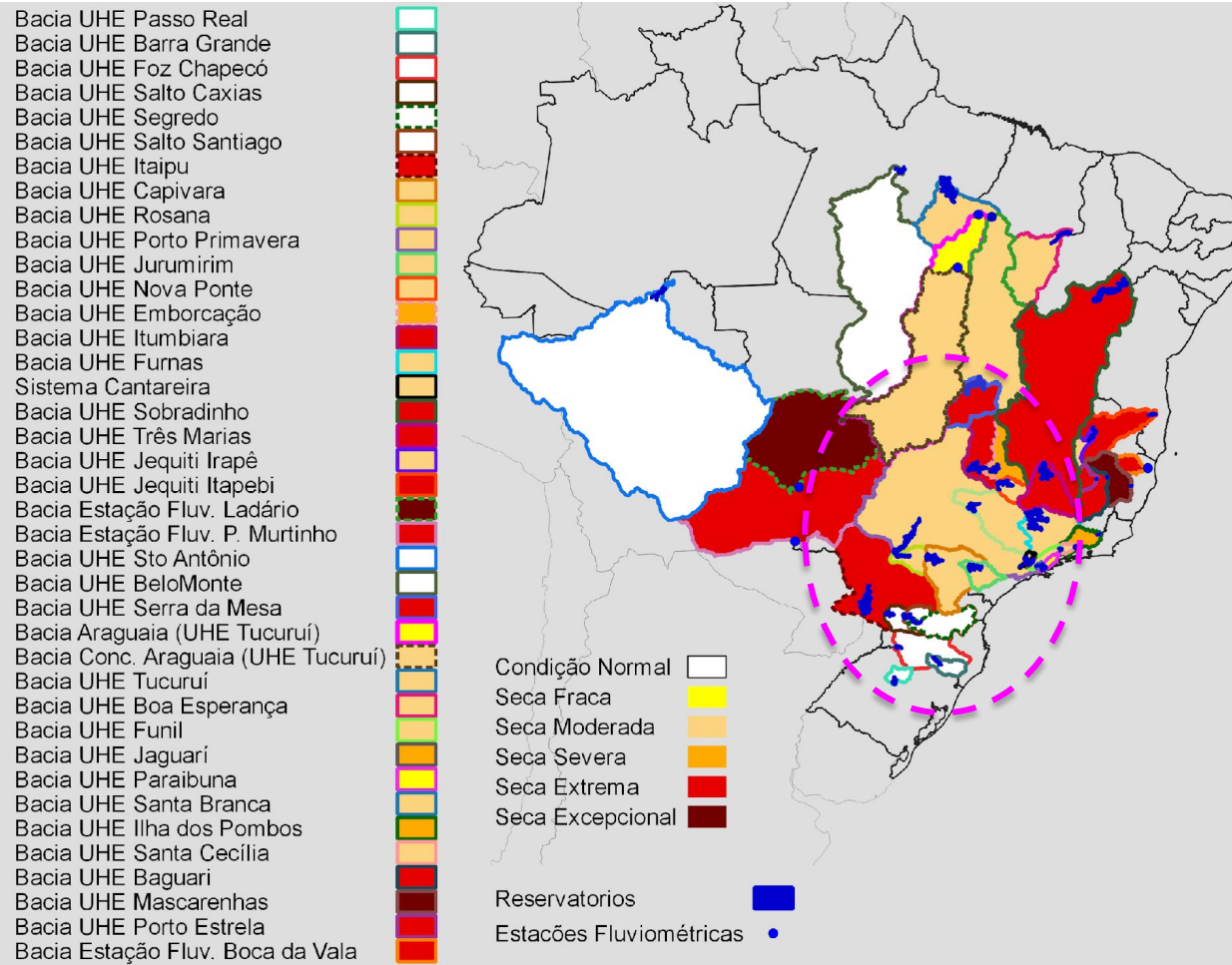
Dados: Precipitação (CHIRPS) e Vazão (ONS e ANA)

Período: Jan/1981 – Jun/2025

Índice de Seca Bivariado (Chuva-Vazão) – TSI

(Two-variate Standardized Index – Escala de 6 meses)

Previsão Próximos 30 dias



Desintensificação da seca:

- P. Primavera (Sev.-> Mod.)
- Capivara (Sev.-> Mod.)
- Rosana (Sev.-> Mod.)
- Segredo (Frac-> Normal)
- S. Santiago (Frac-> Normal)
- S. Caxias (Frac-> Normal)

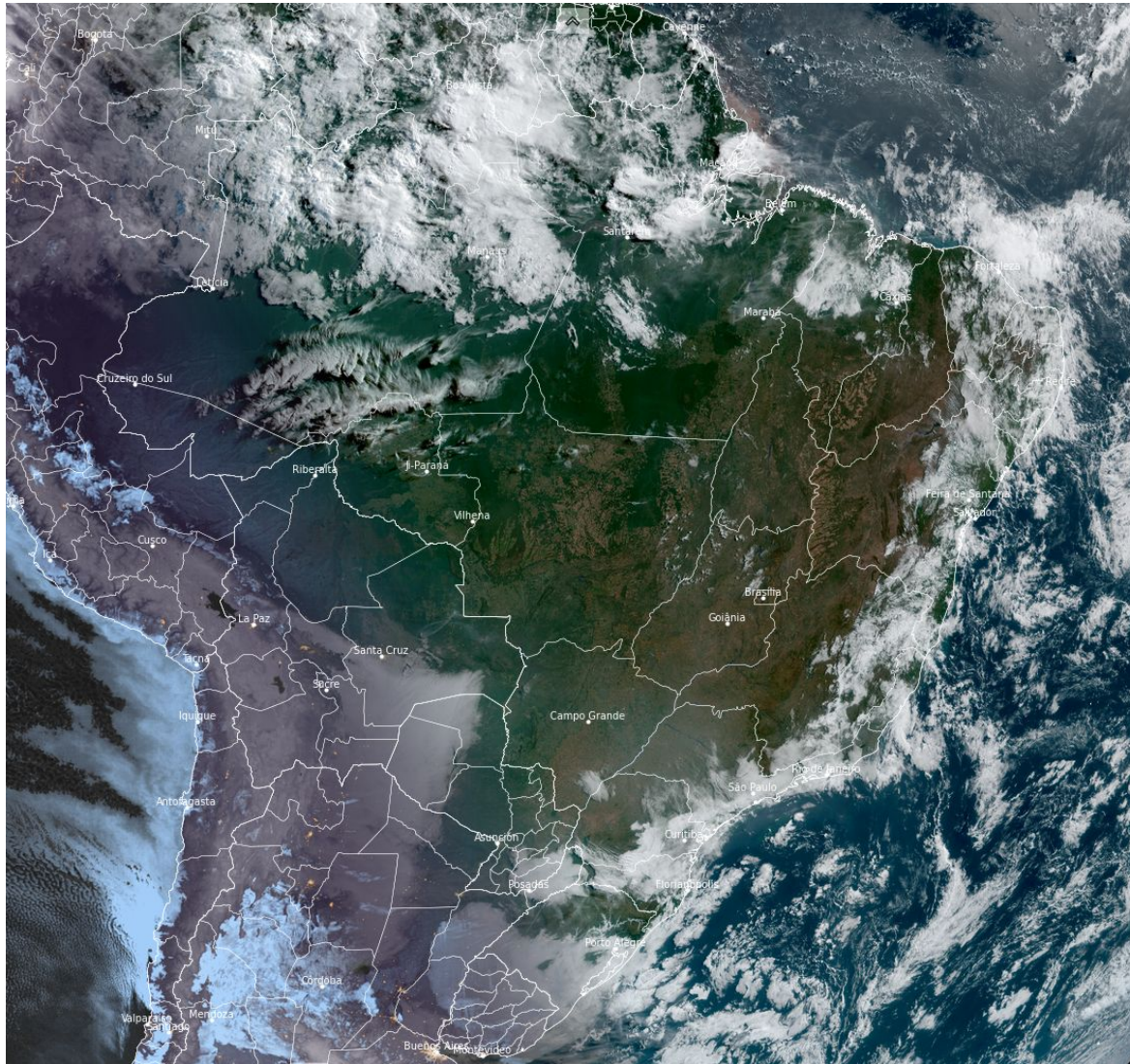
Estabilidade da seca:

- Itaipu (Extrema)
- Jurumirim (Severa)
- B. Grande (Normal)
- F. Chapecó (Normal)
- Passo Real (Normal)

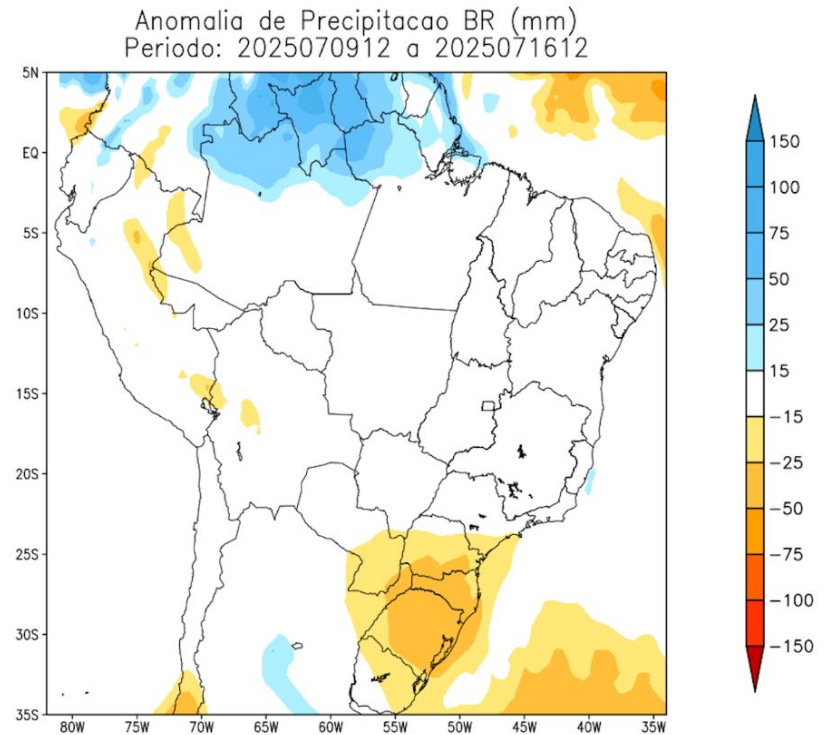
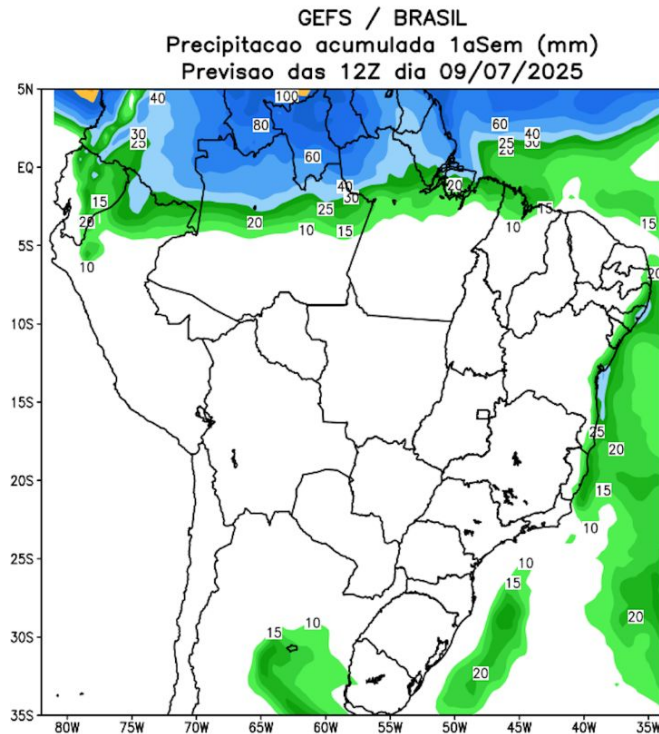
Fonte: CEMADEN/MCTI

Previsão de Precipitação: Climate Forecast System (CFS)

Situação meteorológica atual



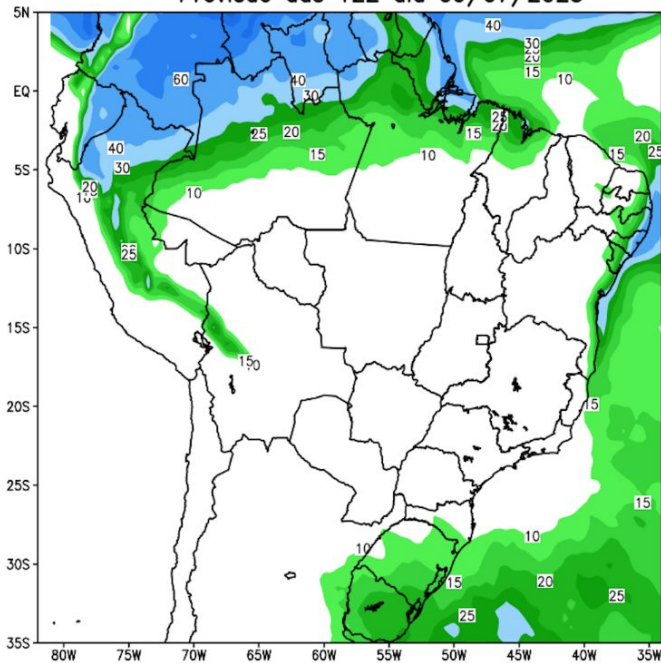
Previsão de chuva próximos 7 dias



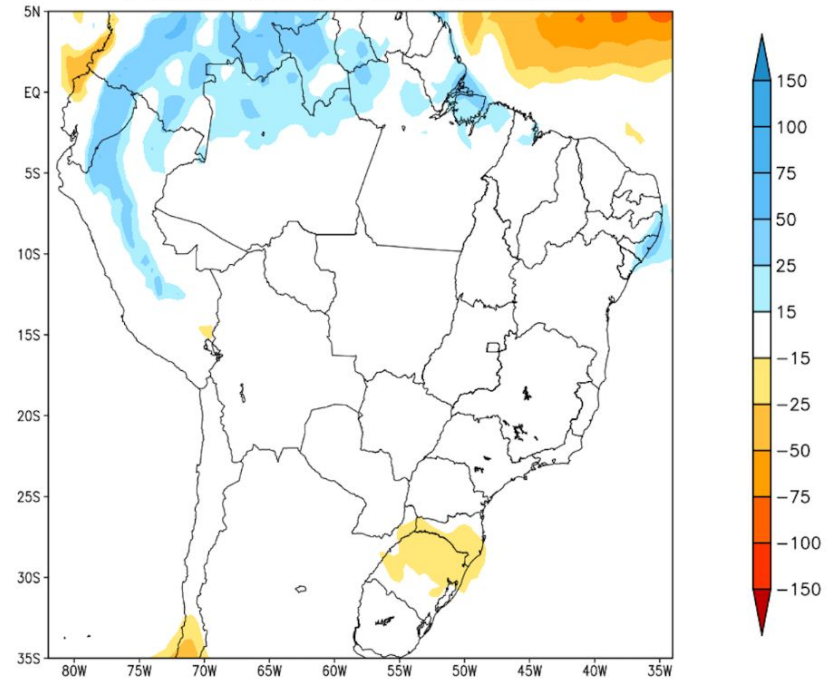
MODELO GEFS

Tendência para a segunda semana

GEFS / BRASIL
Precipitacao acumulada 2aSem (mm)
Previsao das 12Z dia 09/07/2025

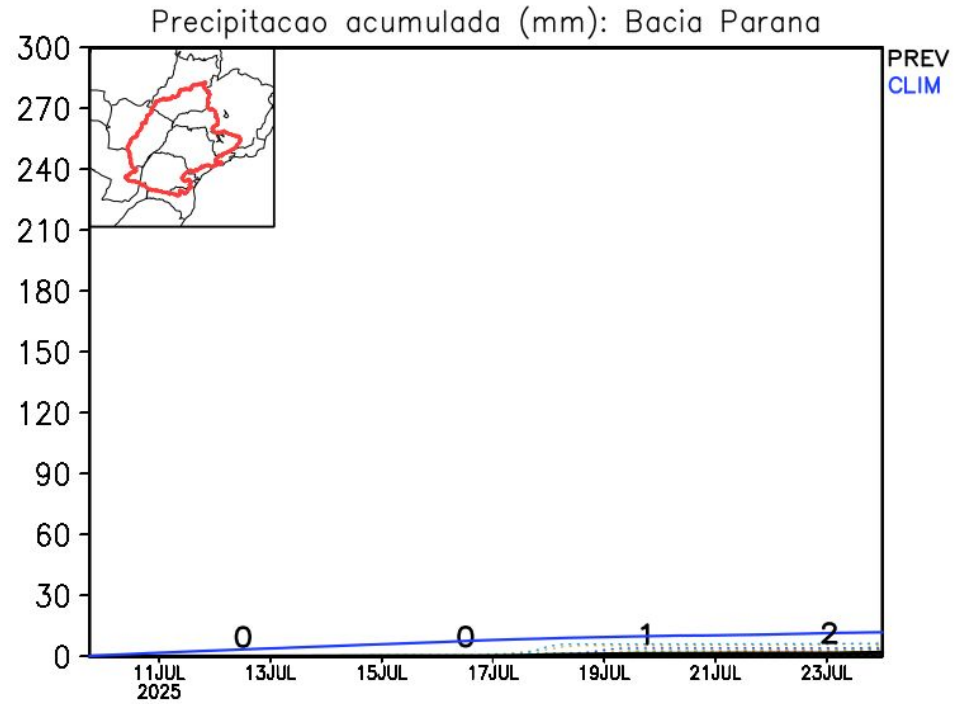
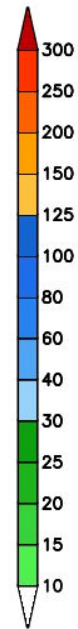
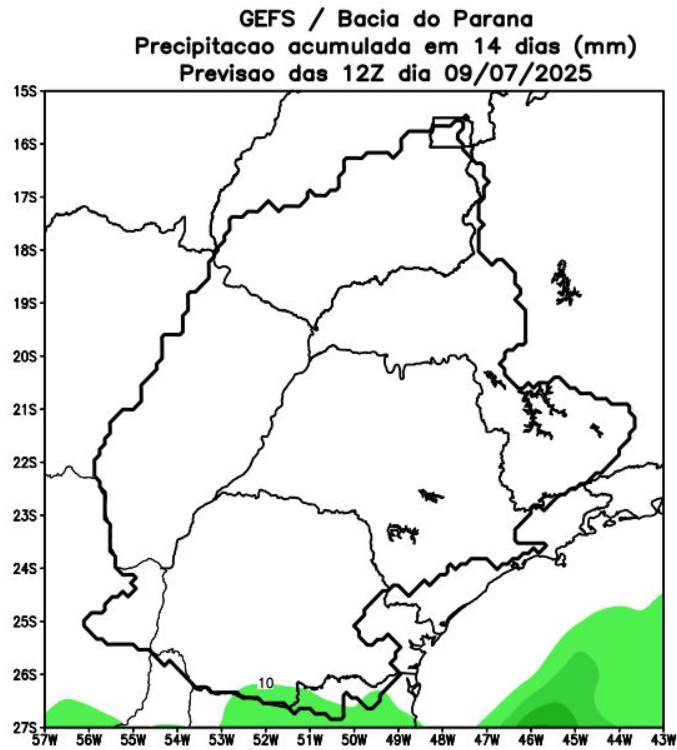


Anomalia de Precipitacao BR (mm)
Periodo: 2025071712 a 2025072312



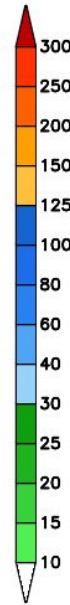
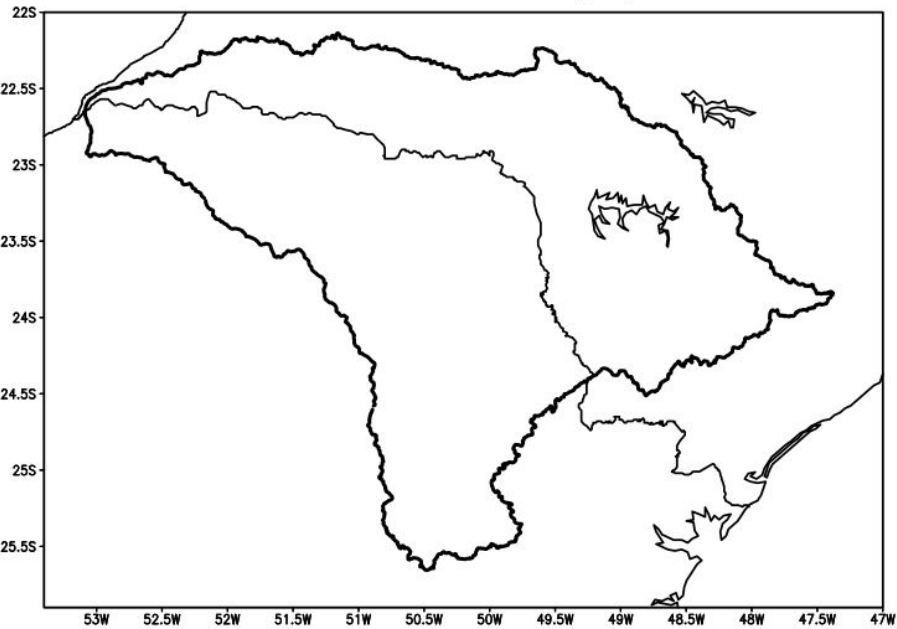
MODELO GEFS

Previsão para bacia do Paraná

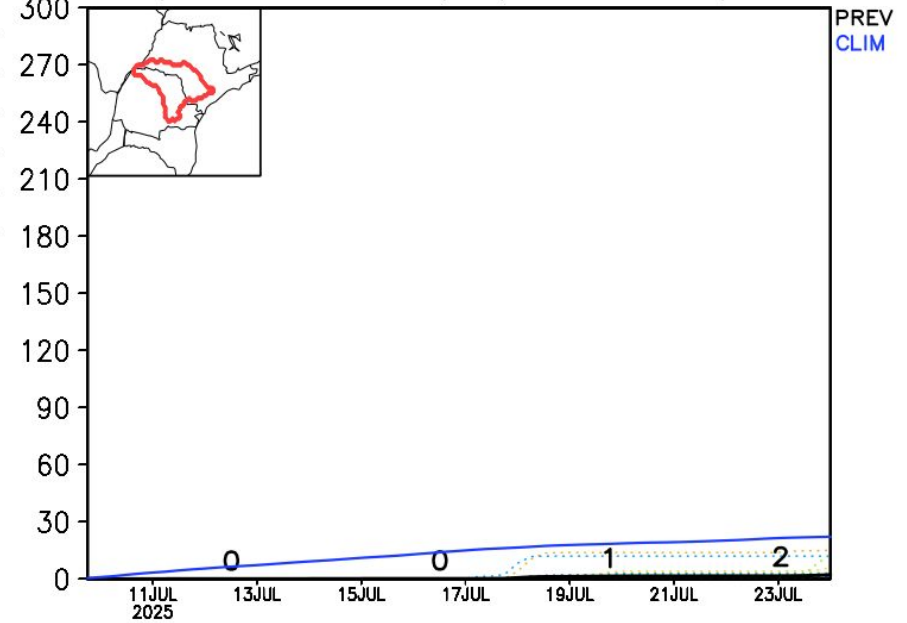


Previsão para as principais bacias

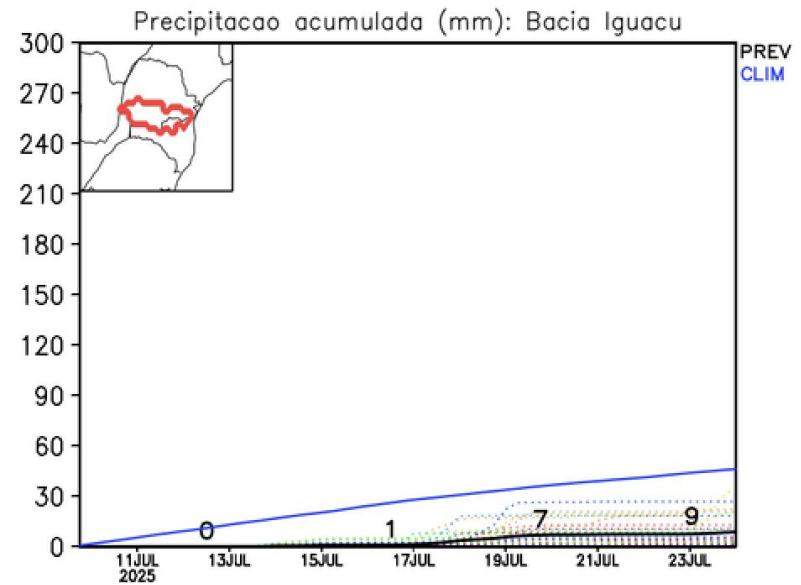
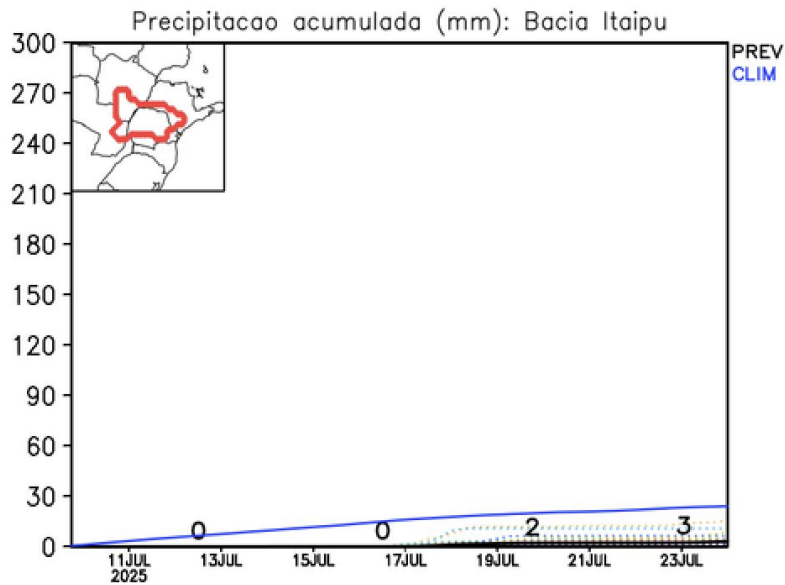
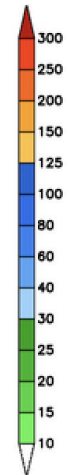
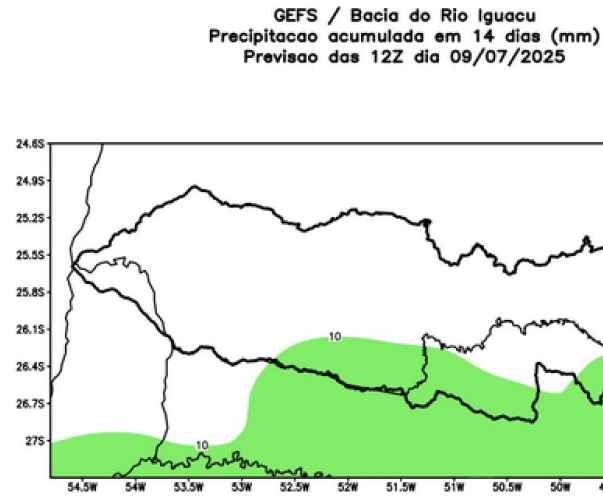
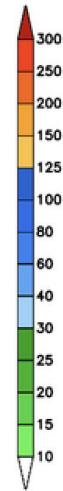
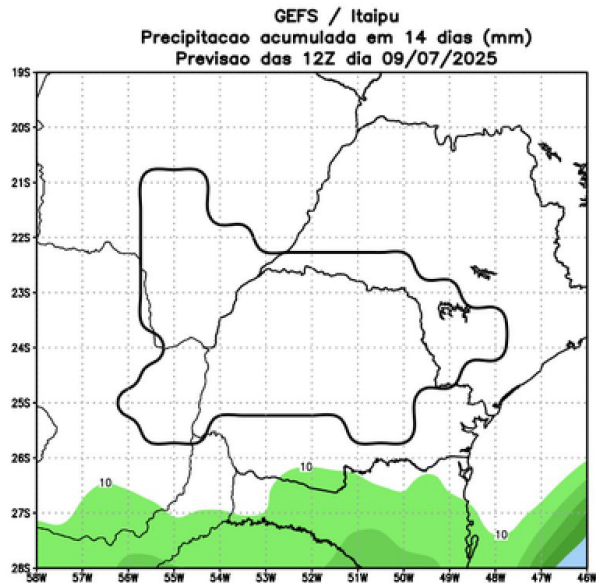
GEFS / Bacia do Rio Paranapanema
Precipitacao acumulada em 14 dias (mm)
Previsao das 12Z dia 09/07/2025



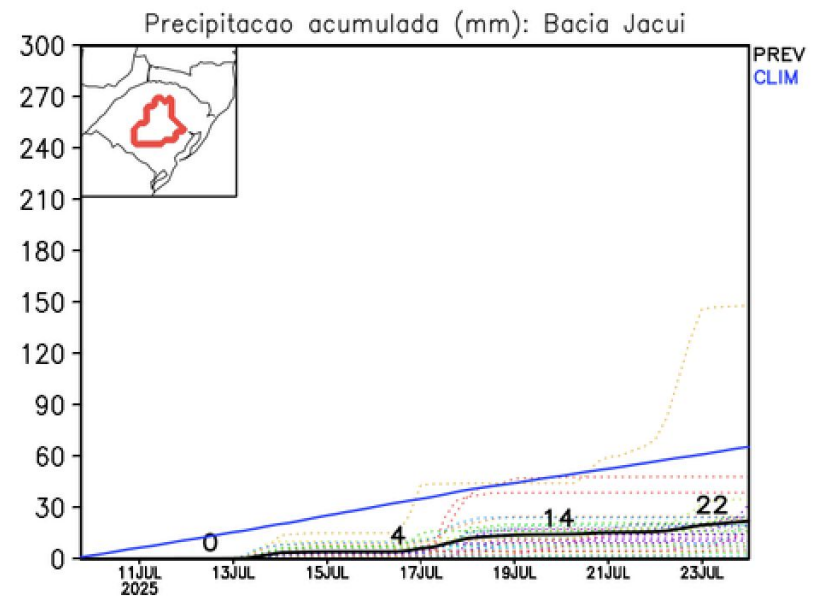
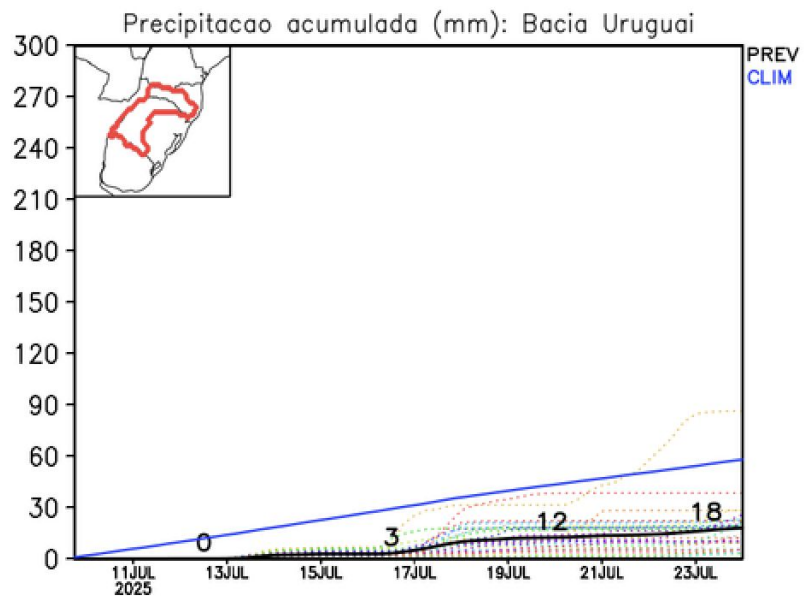
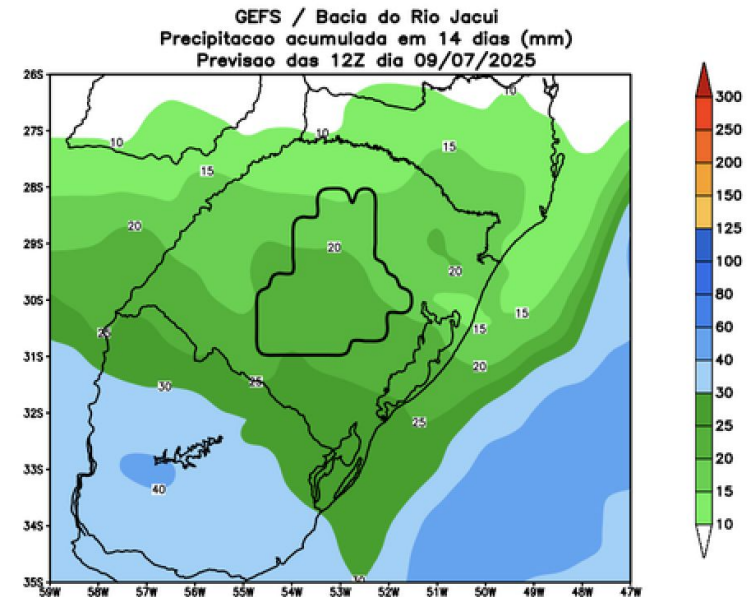
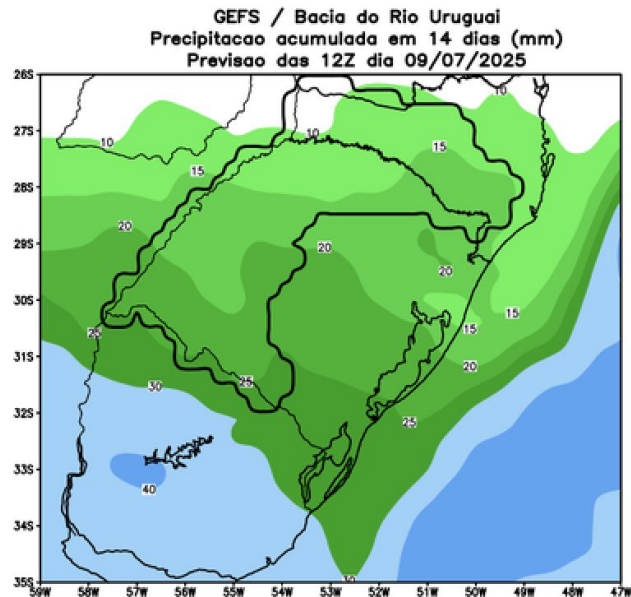
Precipitacao acumulada (mm): Bacia Paranapanema



Previsão para as principais bacias

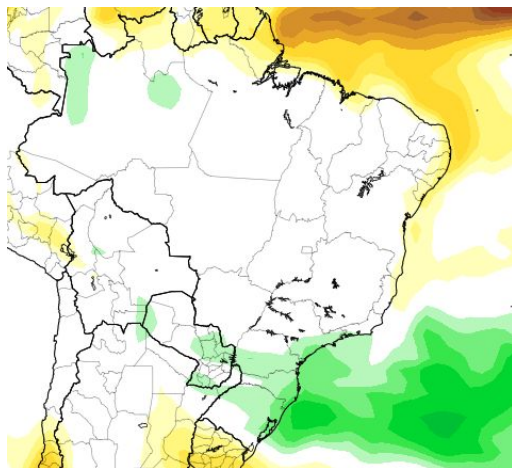


Previsão para as principais bacias



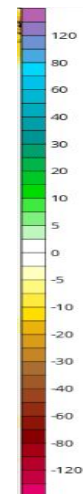
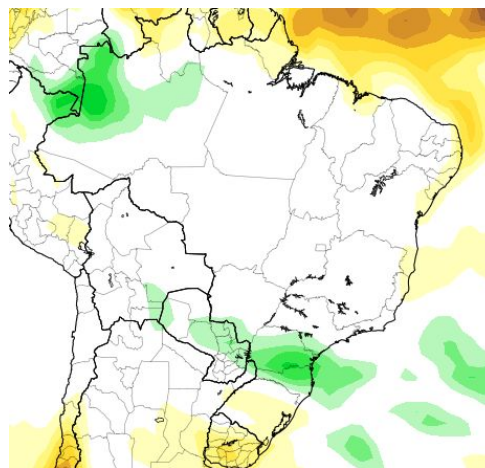
Anomalia de Chuva 3a e 4a semanas

30-05 Agosto

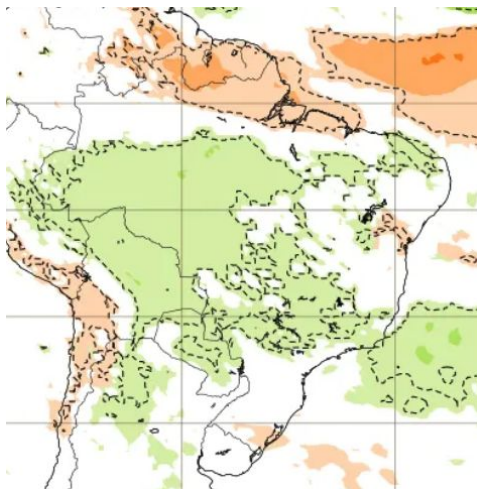


Modelo
Americano
CFS/NOAA

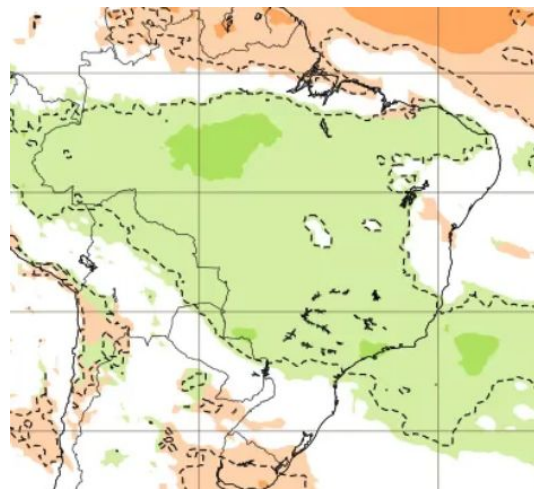
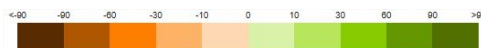
06 –12 Agosto



Modelo Europeu
ECMWF



28-03 Agosto



04 –10 Agosto

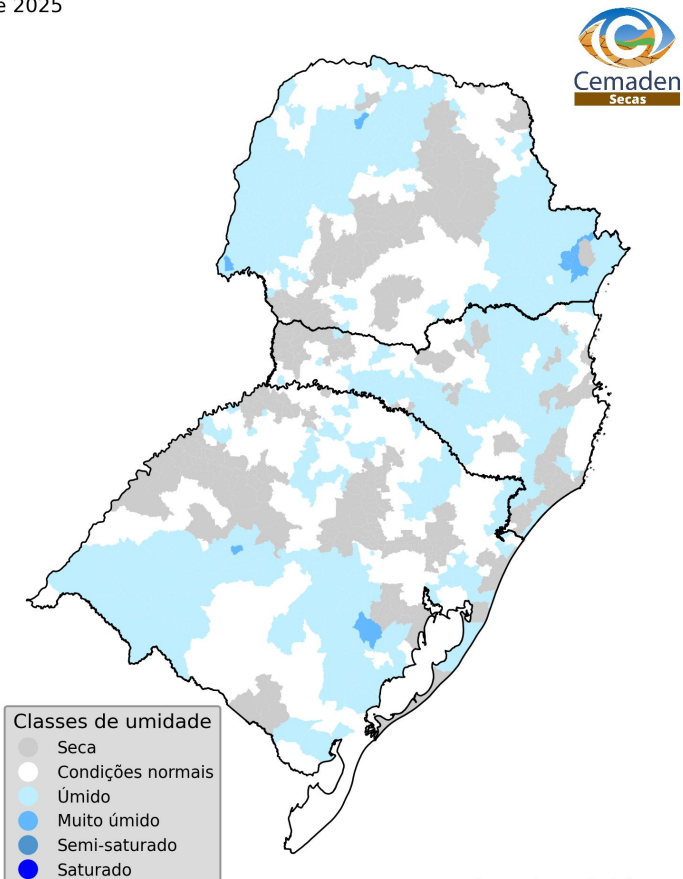
ÍNDICE AGREGADO DE RECURSOS DE ÁGUA (IARA)

JUNHO/25

JULHO/25

Índice Agregado de Recursos de Água (IARA)
June 2025

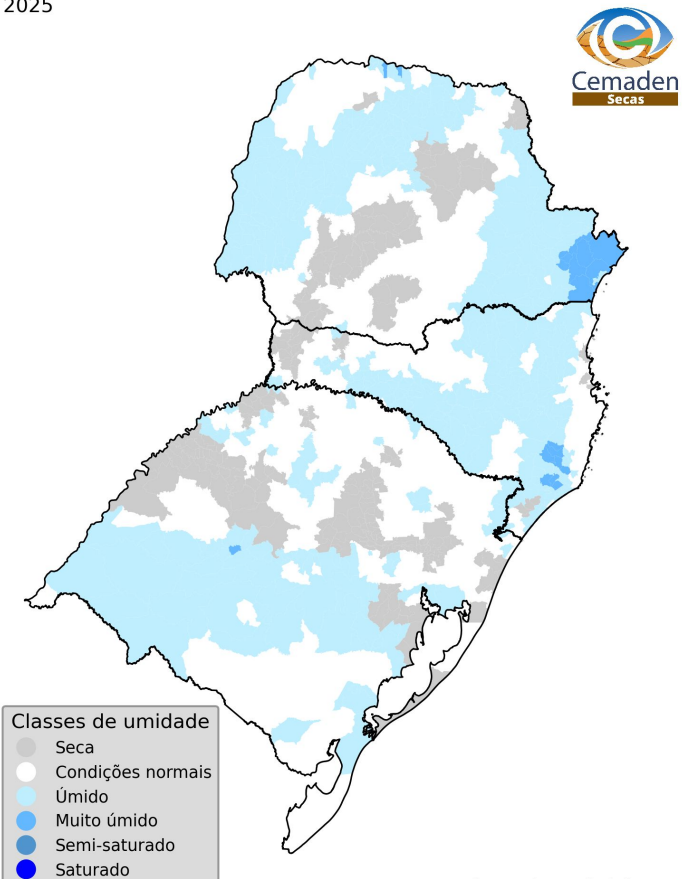
Previsão do Índice Agregado de Recursos de Água (IARAp)
July 2025



- Classes de umidade
- Seca
 - Condições normais
 - Úmido
 - Muito úmido
 - Semi-saturado
 - Saturado

Número de municípios por classes de umidade:	
Seca:	338 (28.4%)
Condições normais:	419 (35.2%)
Úmido:	426 (35.8%)
Muito úmido:	8 (0.7%)
Semi-saturado:	0 (0.0%)
Saturado:	0 (0.0%)

Fonte: Cemaden/MCTI



- Classes de umidade
- Seca
 - Condições normais
 - Úmido
 - Muito úmido
 - Semi-saturado
 - Saturado

Número de municípios por classes de umidade:	
Seca:	239 (20.1%)
Condições normais:	485 (40.7%)
Úmido:	447 (37.5%)
Muito úmido:	20 (1.7%)
Semi-saturado:	0 (0.0%)
Saturado:	0 (0.0%)

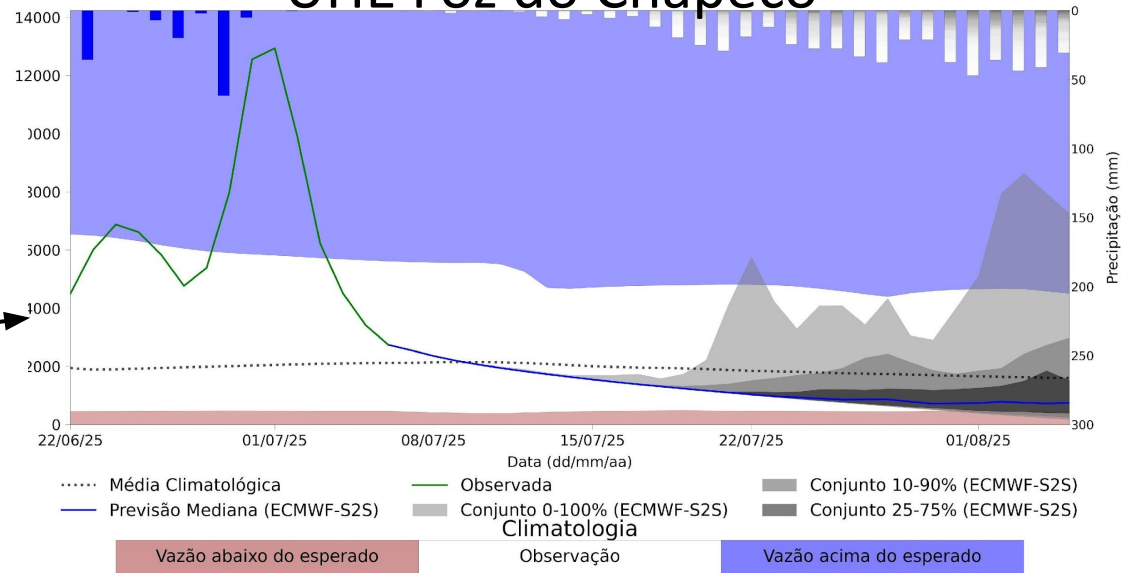
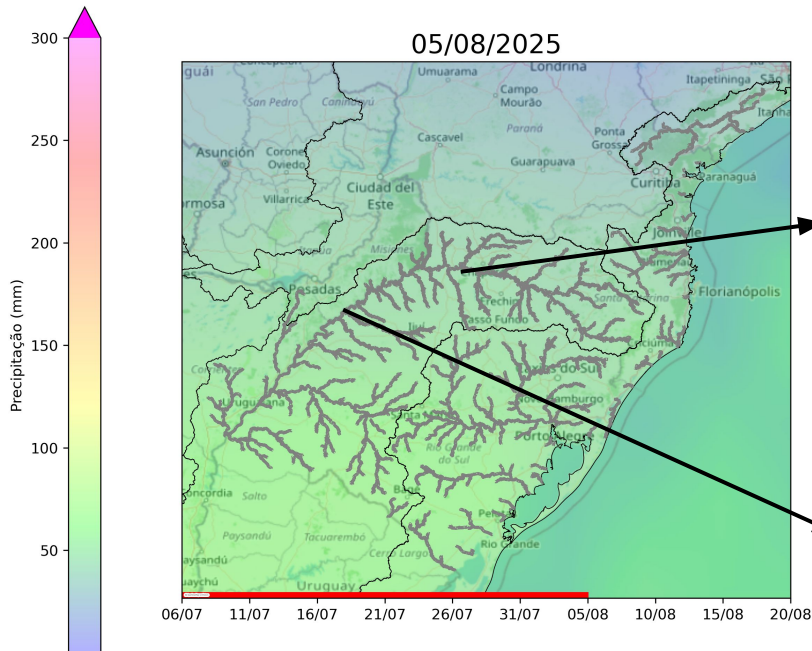
Fonte: Cemaden/MCTI

Previsão de vazão natural na Região Sul

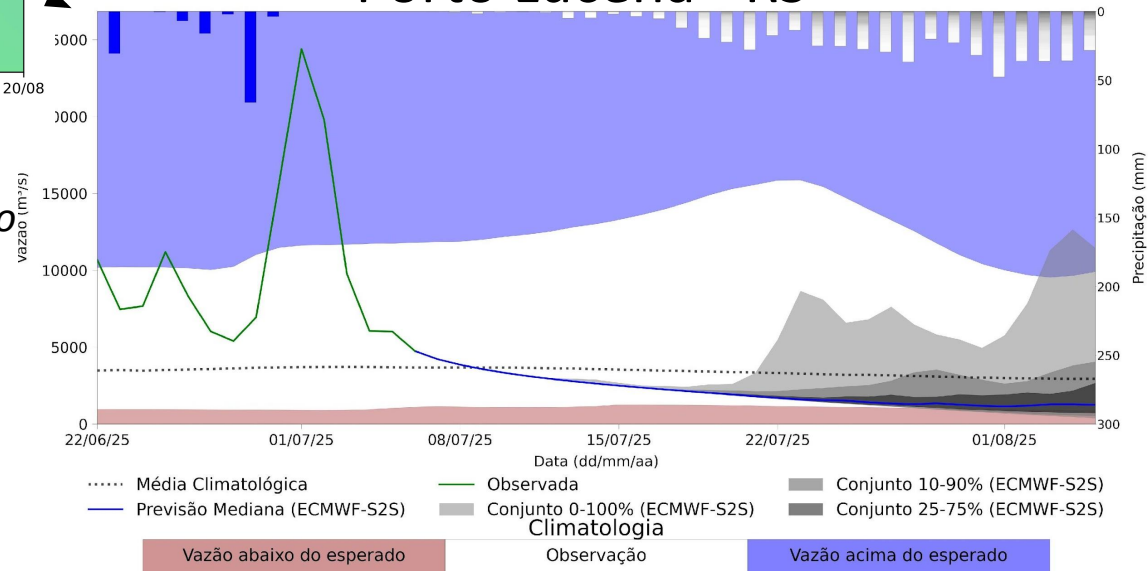
30 dias (Modelo hidrológico MHD)

UHE Foz do Chapecó

PREVISÃO: 06/07/25 a 05/08/25



Porto Lucena - RS



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

MLT: 2003-2024

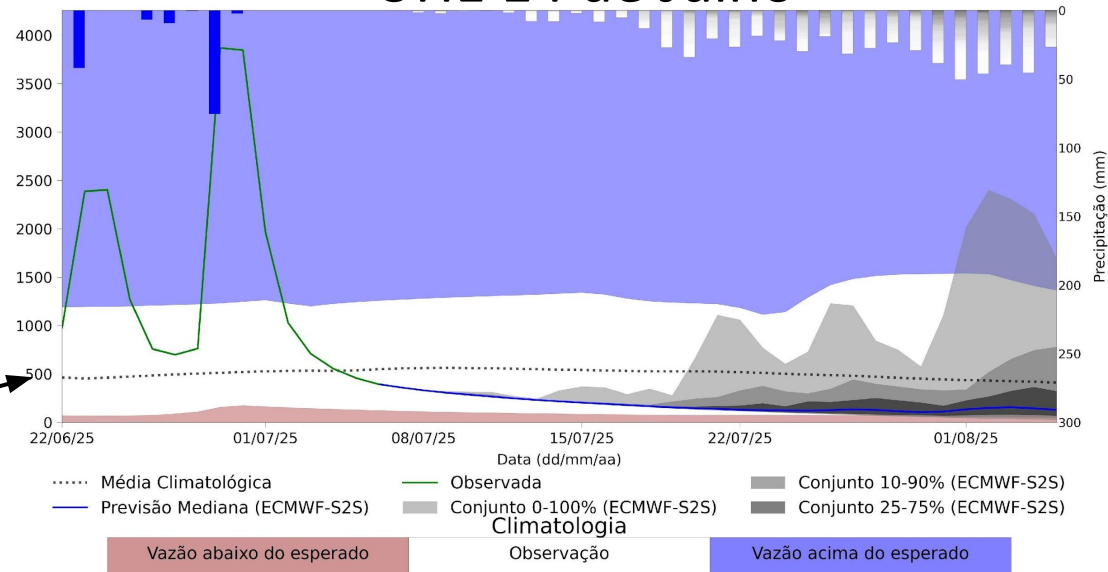
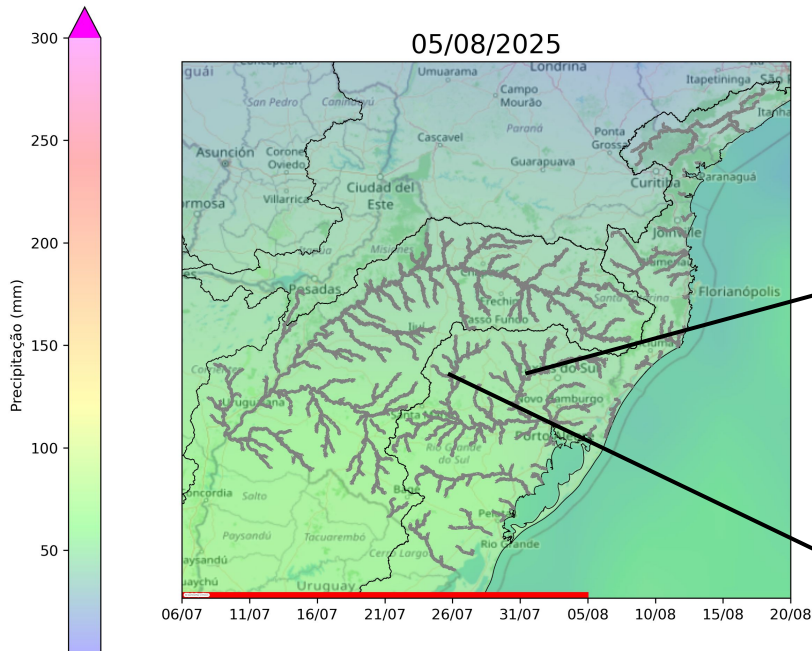
Previsão Meteorológica: ECMWF

Previsão de vazão natural na Região Sul

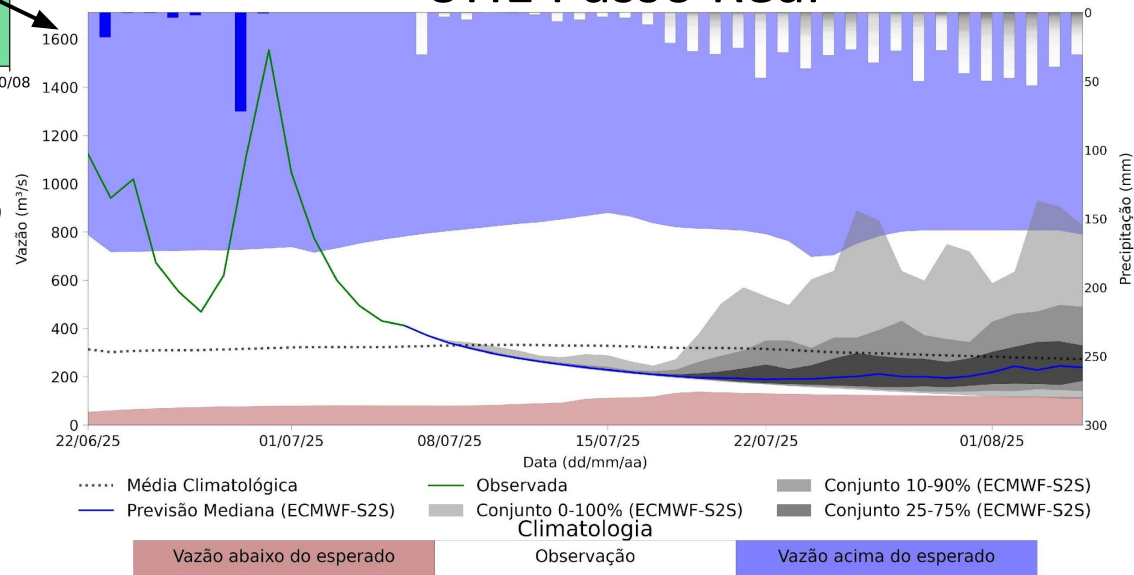
30 dias (Modelo hidrológico MHD)

UHE 14 de Julho

PREVISÃO: 06/07/25 a 05/08/25



UHE Passo Real



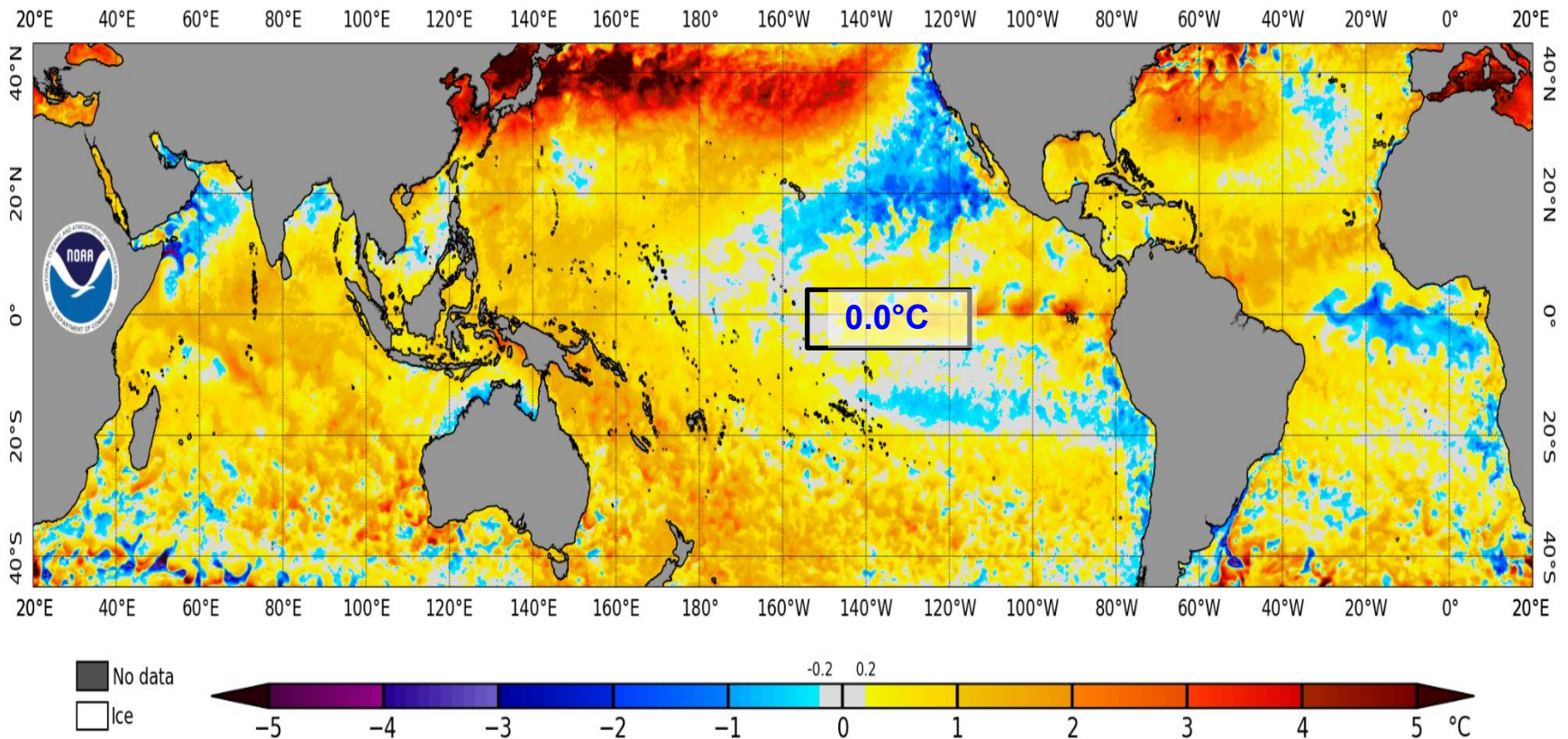
Fonte: Meteorologia (INMET/MERGE); Vazão (ANA/ONS)

MLT: 2003-2024

Previsão Meteorológica: ECMWF

Status Atual: Neutralidade

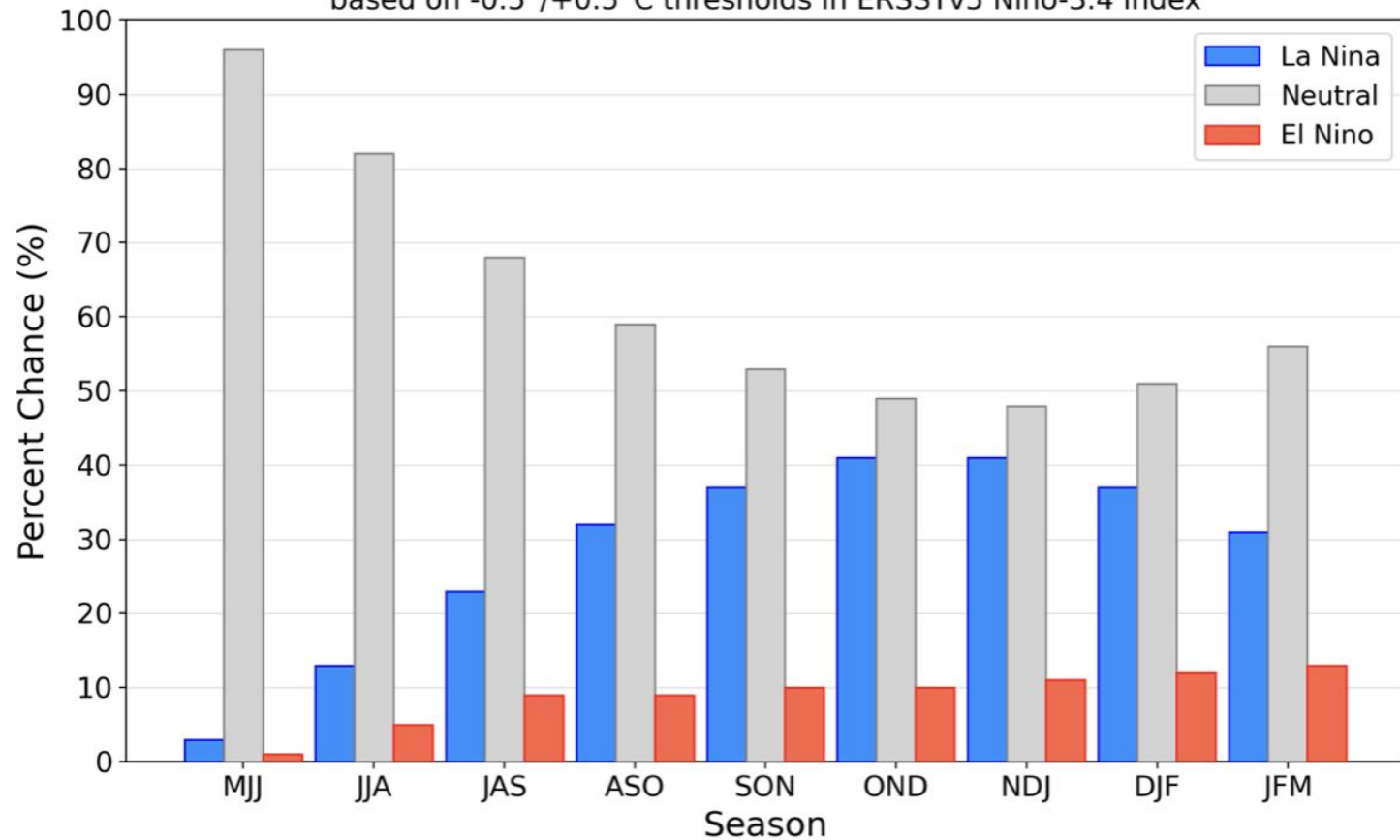
NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 8 Jul 2025



Previsão do “ENSO”

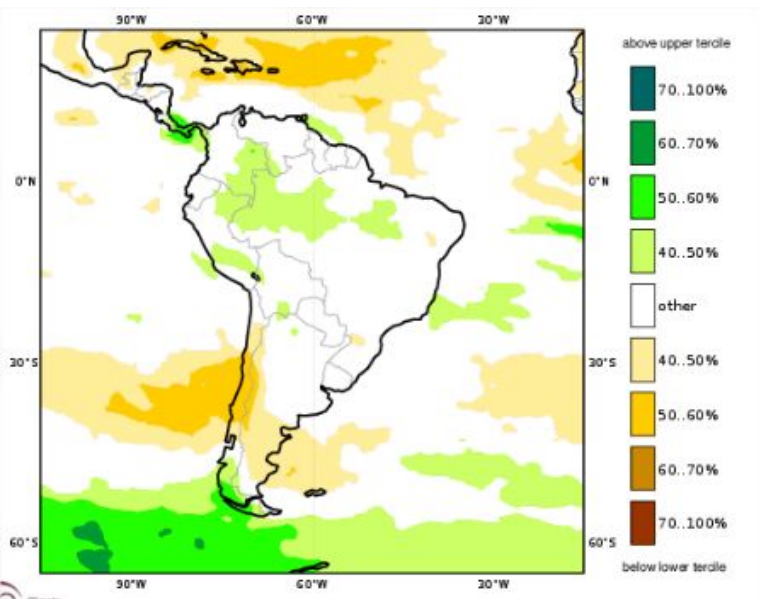
Official NOAA CPC ENSO Probabilities (issued June 2025)

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

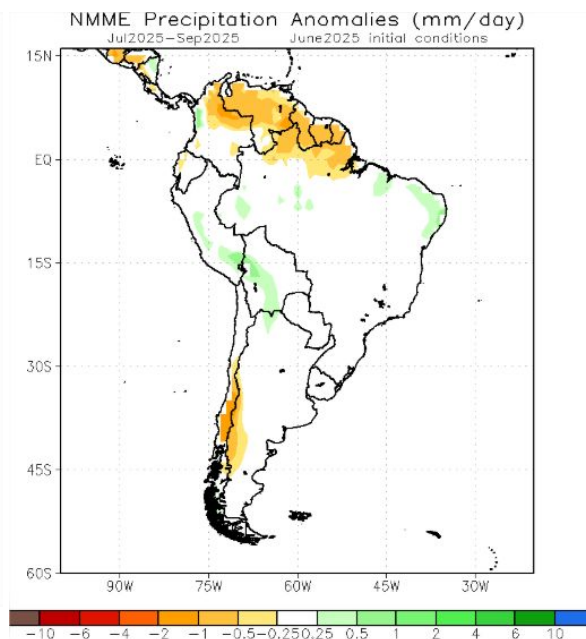


Previsão Sazonal de Chuva Multi-Modelo

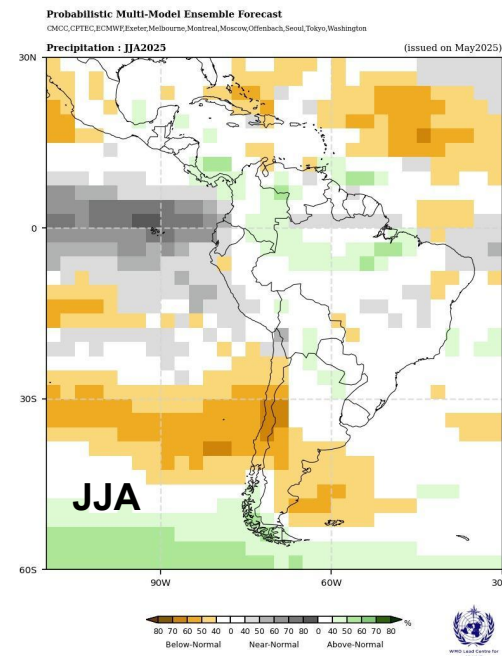
Julho-Agosto-Setembro



Modelos Europeus



Modelos Norte Americanos



Modelos da WMO