

CEMADEN

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



Monitoramento e Previsões da situação hidrometeorológica na Região Sul

DEZEMBRO 2024

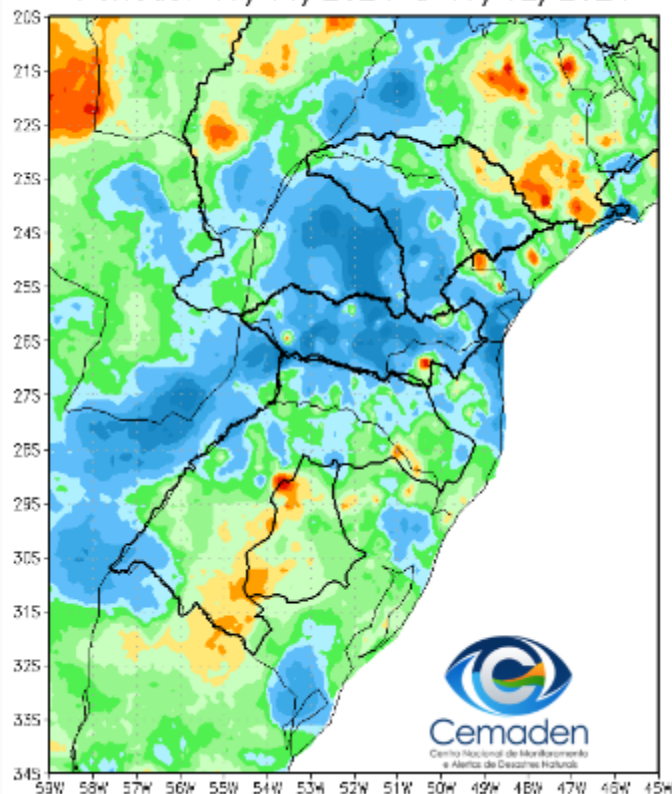


**MINISTÉRIO DA
CIÊNCIA, TECNOLOGIA
E INOVAÇÃO**

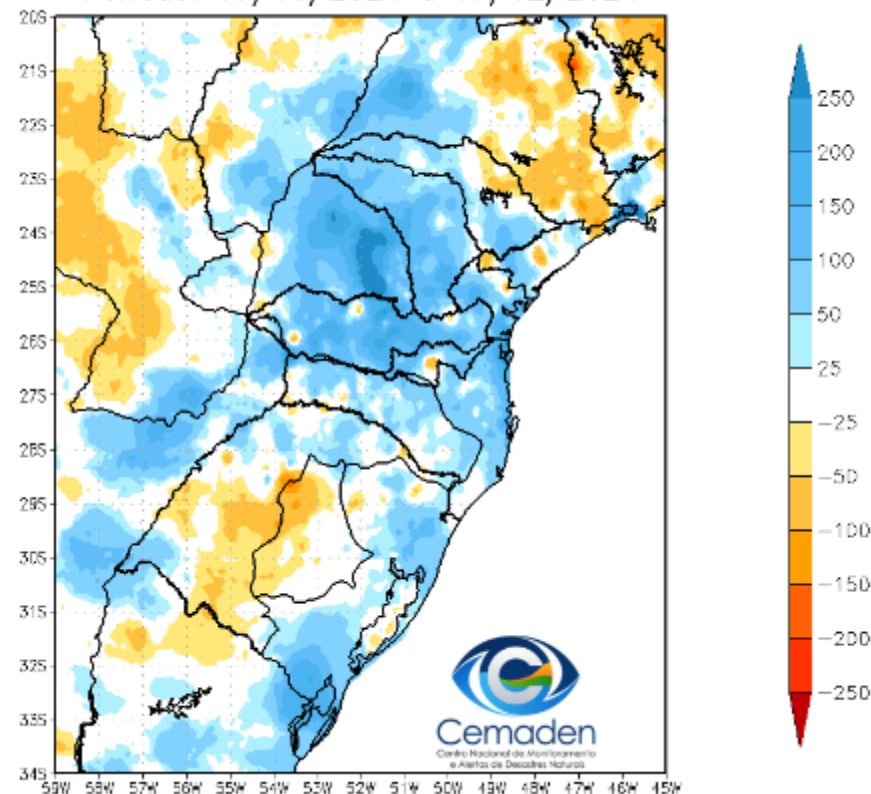


Precipitação nos últimos 30 dias

Precipitação Acumulada (mm) A.S.
Período: 17/11/2024 a 17/12/2024

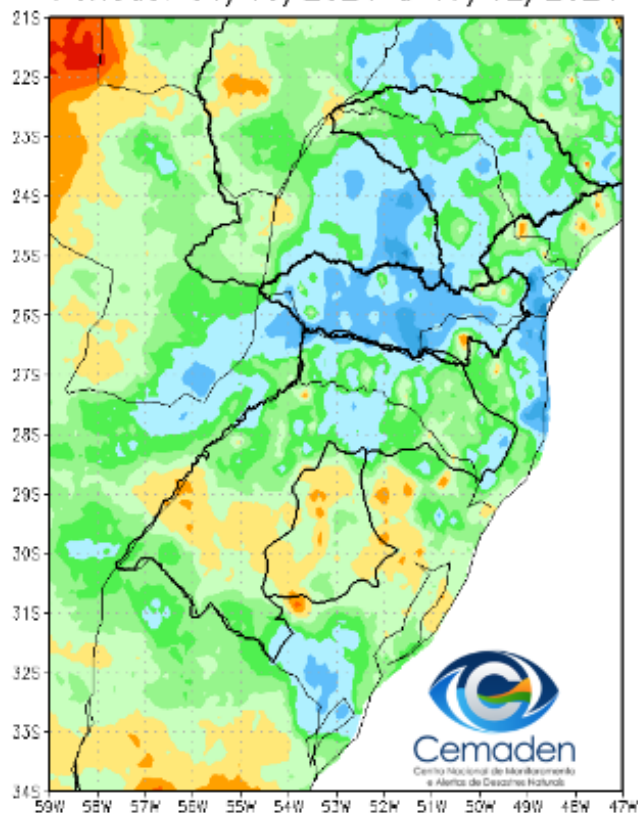


Anomalia de Precipitação (mm) A.S.
Período: 17/11/2024 a 17/12/2024

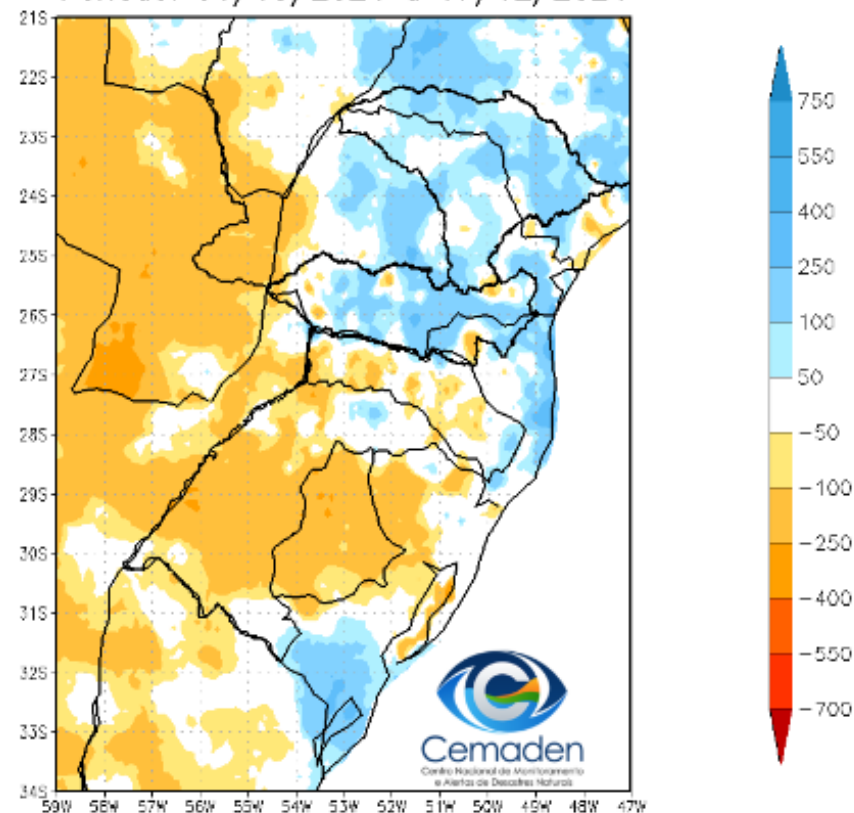


Precipitação no Ano Hidrológico

Precipitação Acumulada (mm) A.S.
Período: 01/10/2024 a 17/12/2024

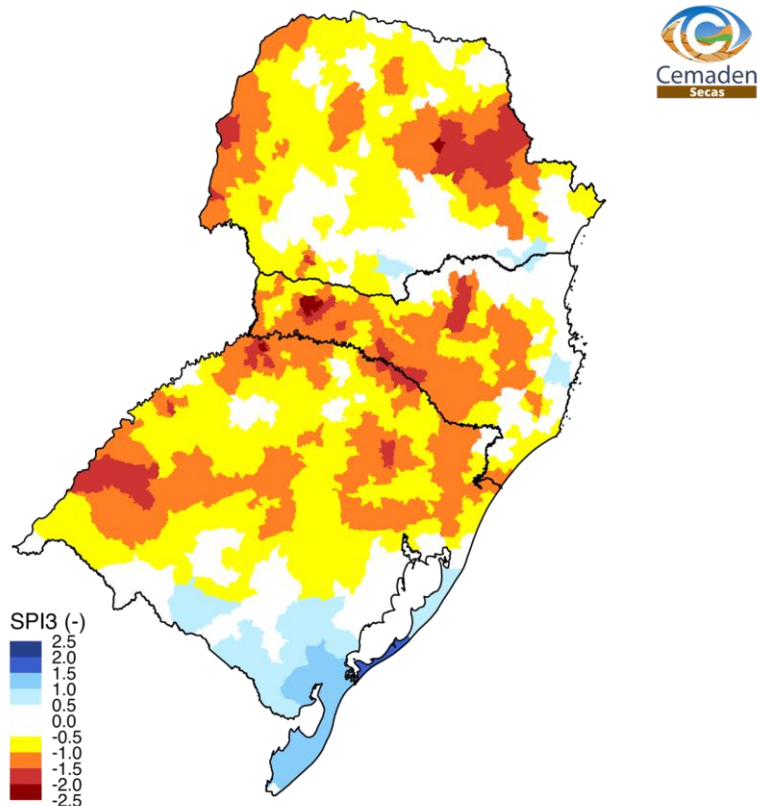


Anomalia de Precipitação (mm) A.S.
Período: 01/10/2024 a 17/12/2024



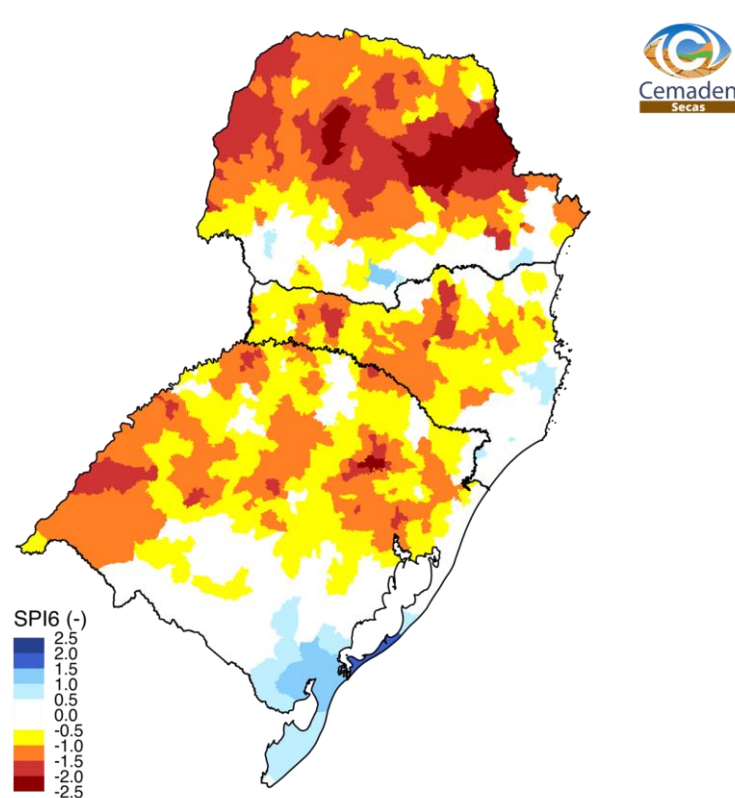
SPI: NOVEMBRO 2024

SPI-03



Novembro 2024
Índice Padronizado de Precipitação (SPI, 3 meses)
Fonte: Cemaden/MCTI.

SPI-06



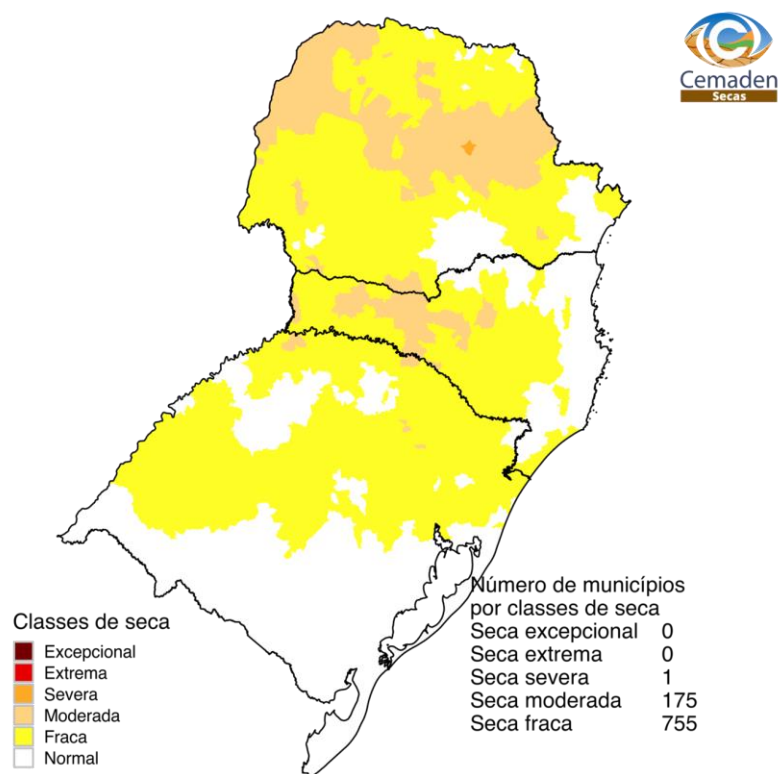
Novembro 2024
Índice Padronizado de Precipitação (SPI, 6 meses)
Fonte: Cemaden/MCTI.

ÍNDICE INTEGRADO DE SECA: ANÁLISE POR

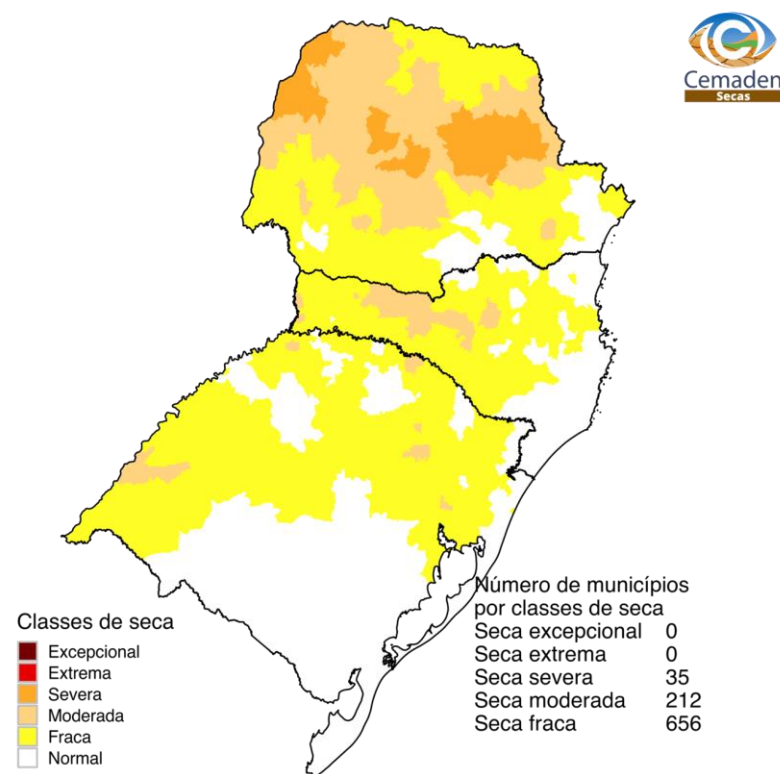
IIS-03
OBSERVADO

MUNICÍPIOS

IIS-06
OBSERVADO



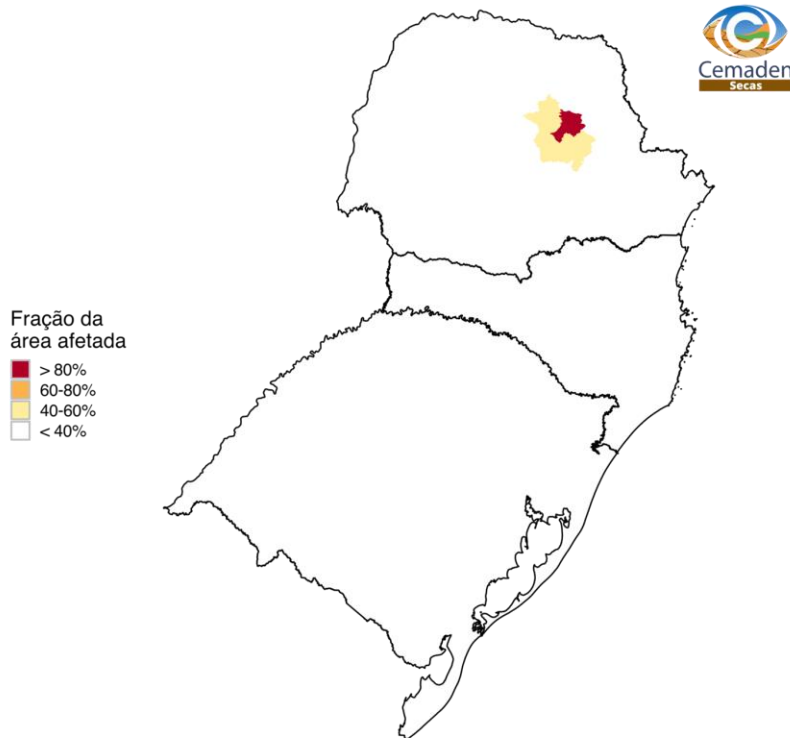
Novembro 2024
Índice Integrado de Seca (SPI3, VHI, US)
Fonte: Cemaden/MCTI.



Novembro 2024
Índice Integrado de Seca (SPI6, VHI, US)
Fonte: Cemaden/MCTI.

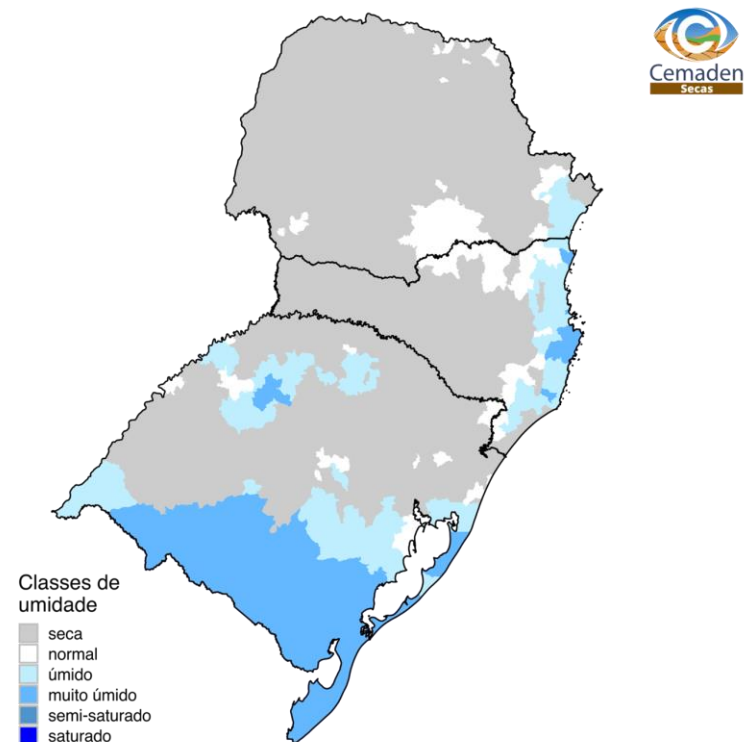
ÁREAS DE PASTAGENS E AGRÍCOLAS AFETADAS PELA SECA: NOVEMBRO/2024

IIS



Novembro 2024
Fração da área agroprodutiva afetada pela seca
Fonte: Cemaden/MCTI.

IARA

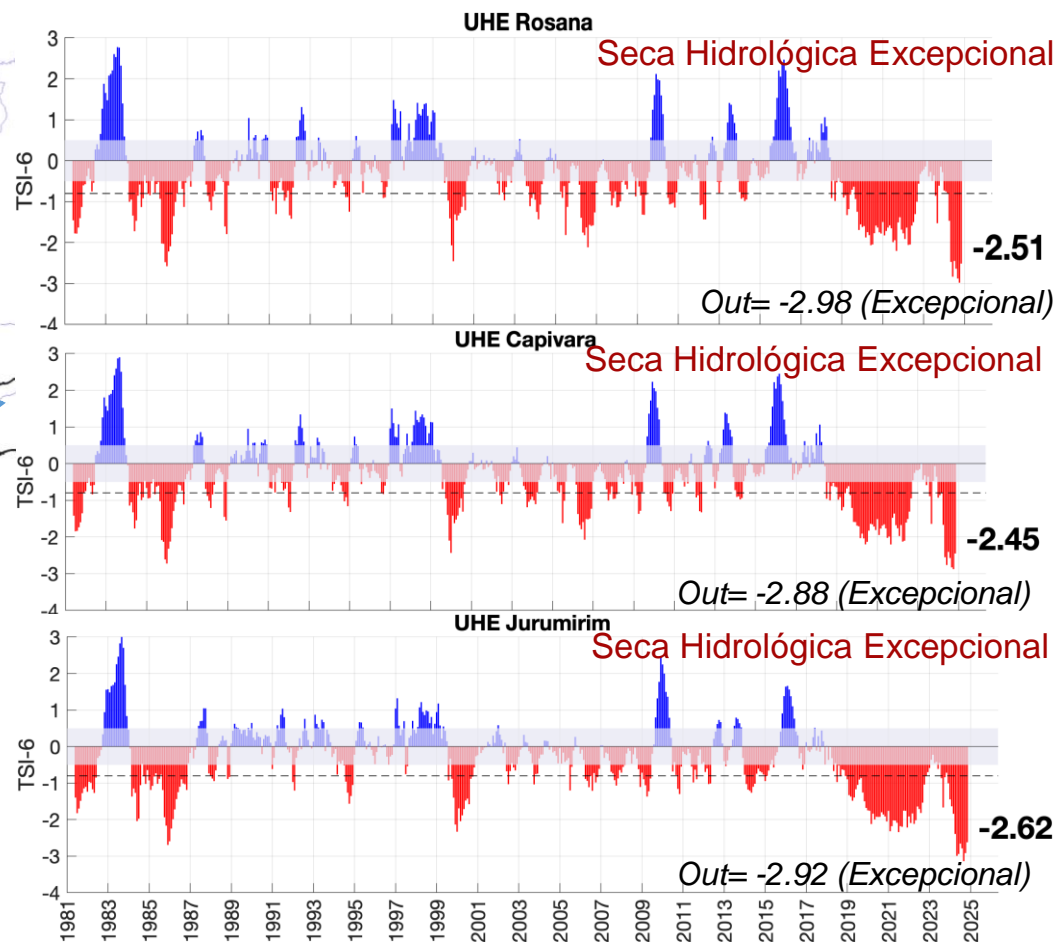
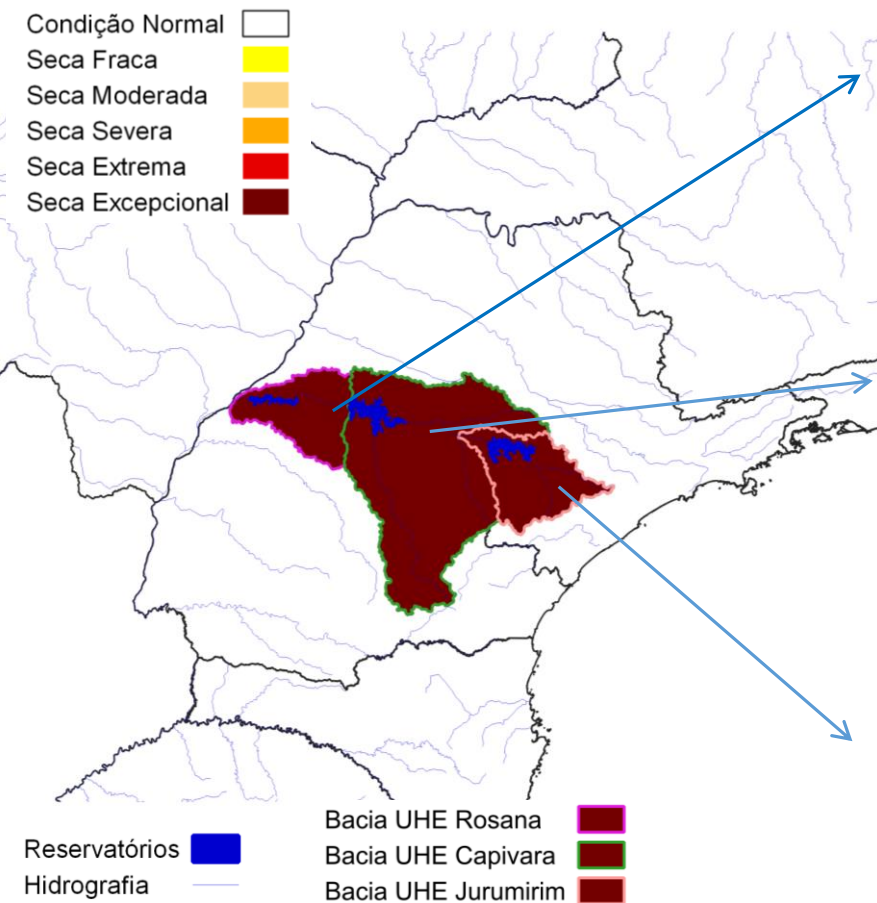


Novembro 2024
Índice Agregado de Recursos de Água (IARA, 3 meses)
Fonte: Cemaden/MCTI.

BACIA DO RIO PARANAPANEMA

Novembro/2024

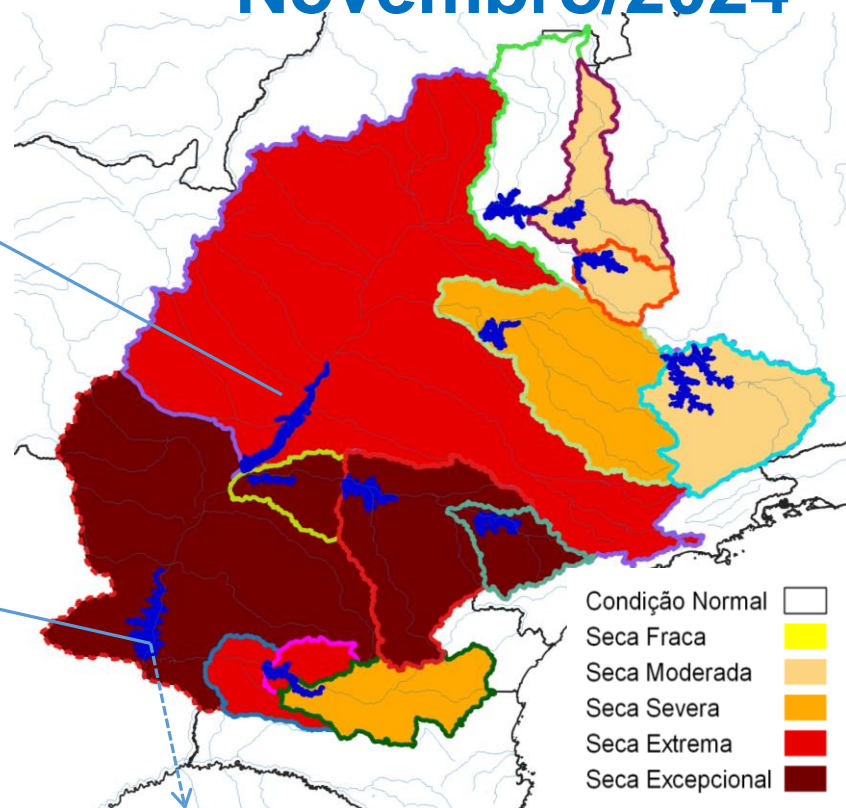
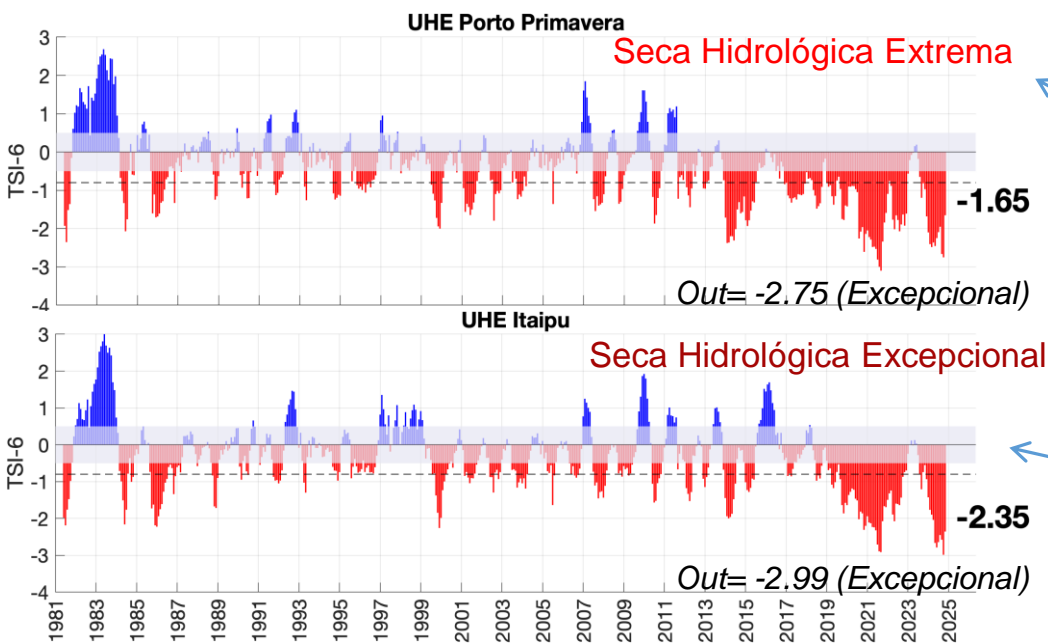
Índice de Seca Bivariado (Chuva-Vazão) – TSI 6



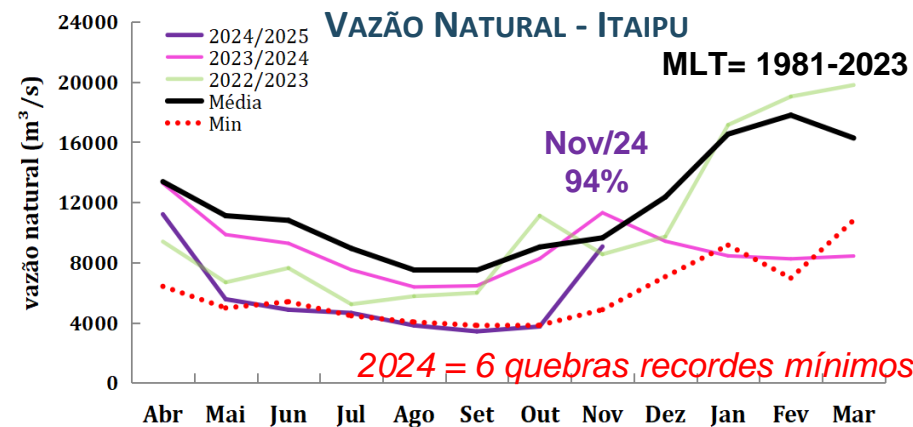
BACIA DO RIO PARANÁ

Novembro/2024

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



Série de dados = Jan/1981- Nov/2024



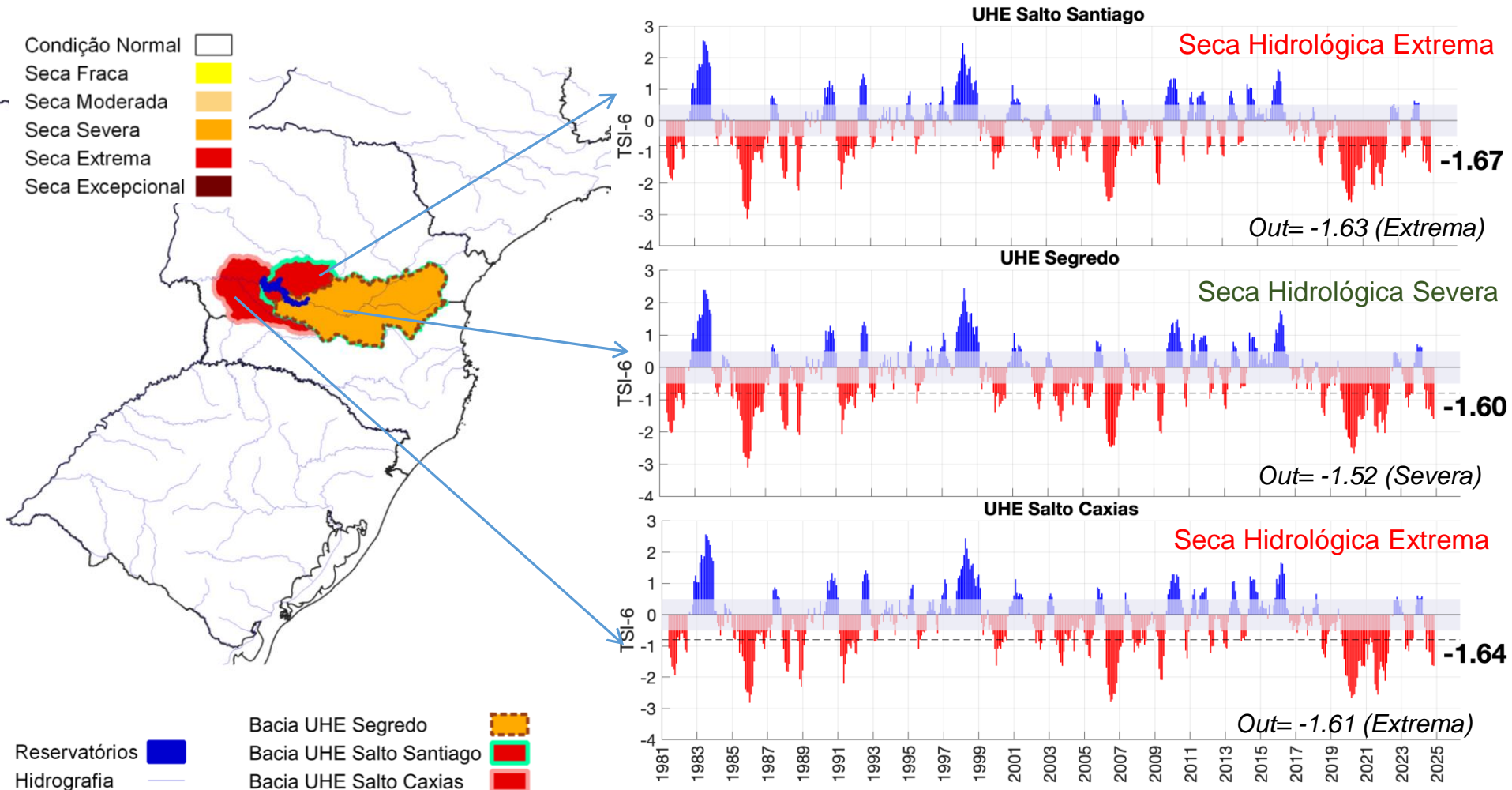
Fonte: CEMADEN/MCTI

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

BACIA DO RIO IGUAÇU

Novembro/2024

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



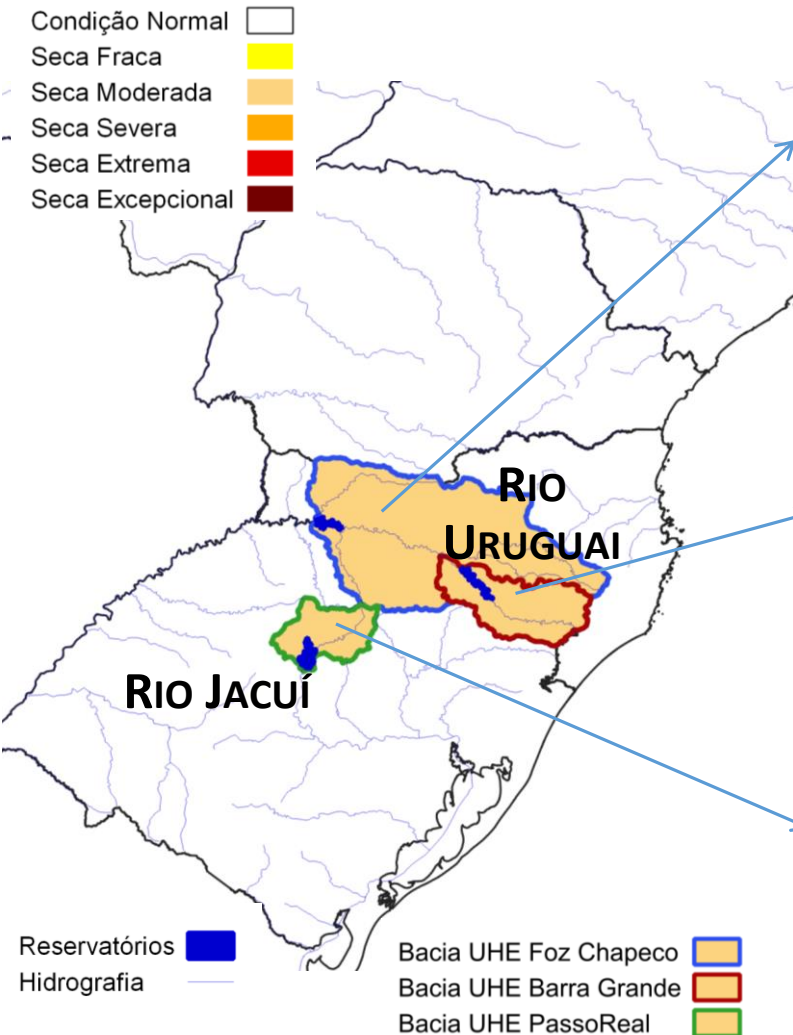
Fonte: CEMADEN/MCTI

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

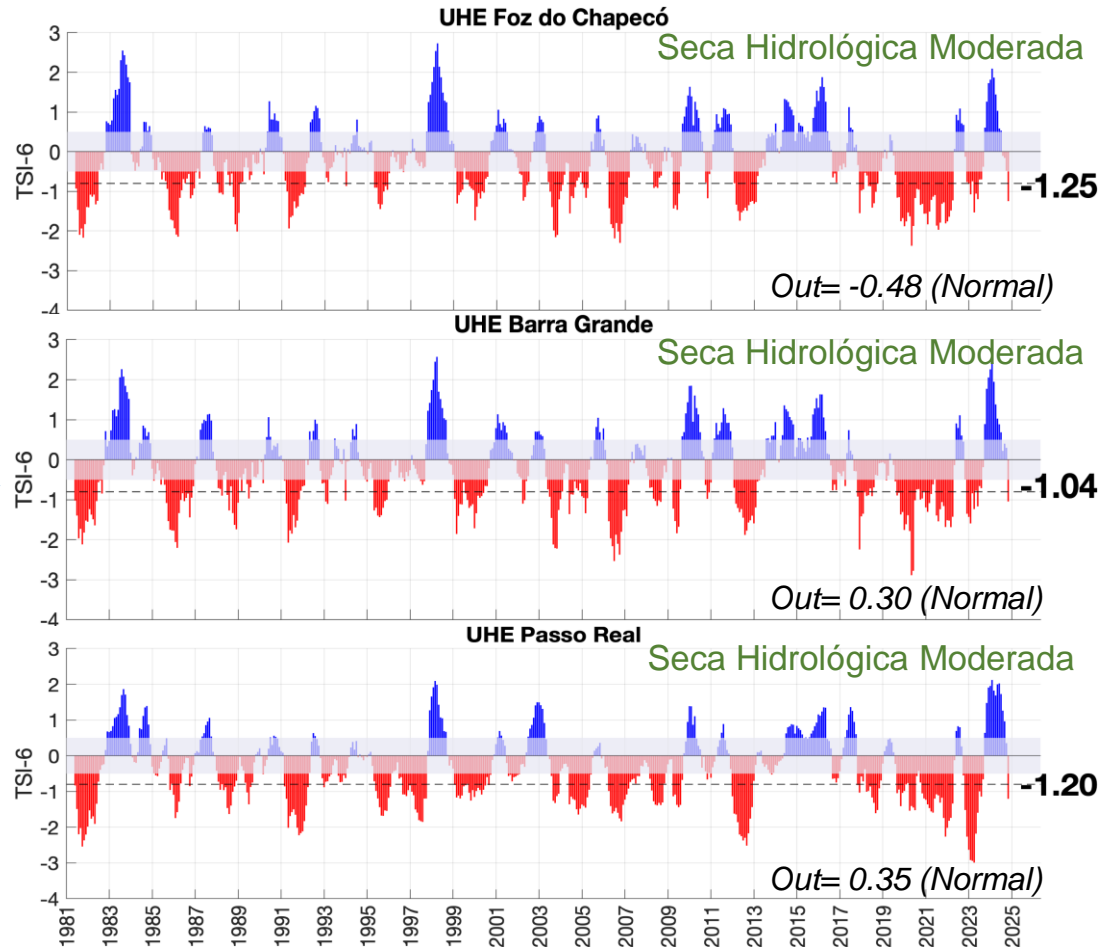
Série de dados = Jan/1981- Nov/2024

BACIAS HIDROGRÁFICAS: ESTADOS SC-RS

Novembro/2024



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



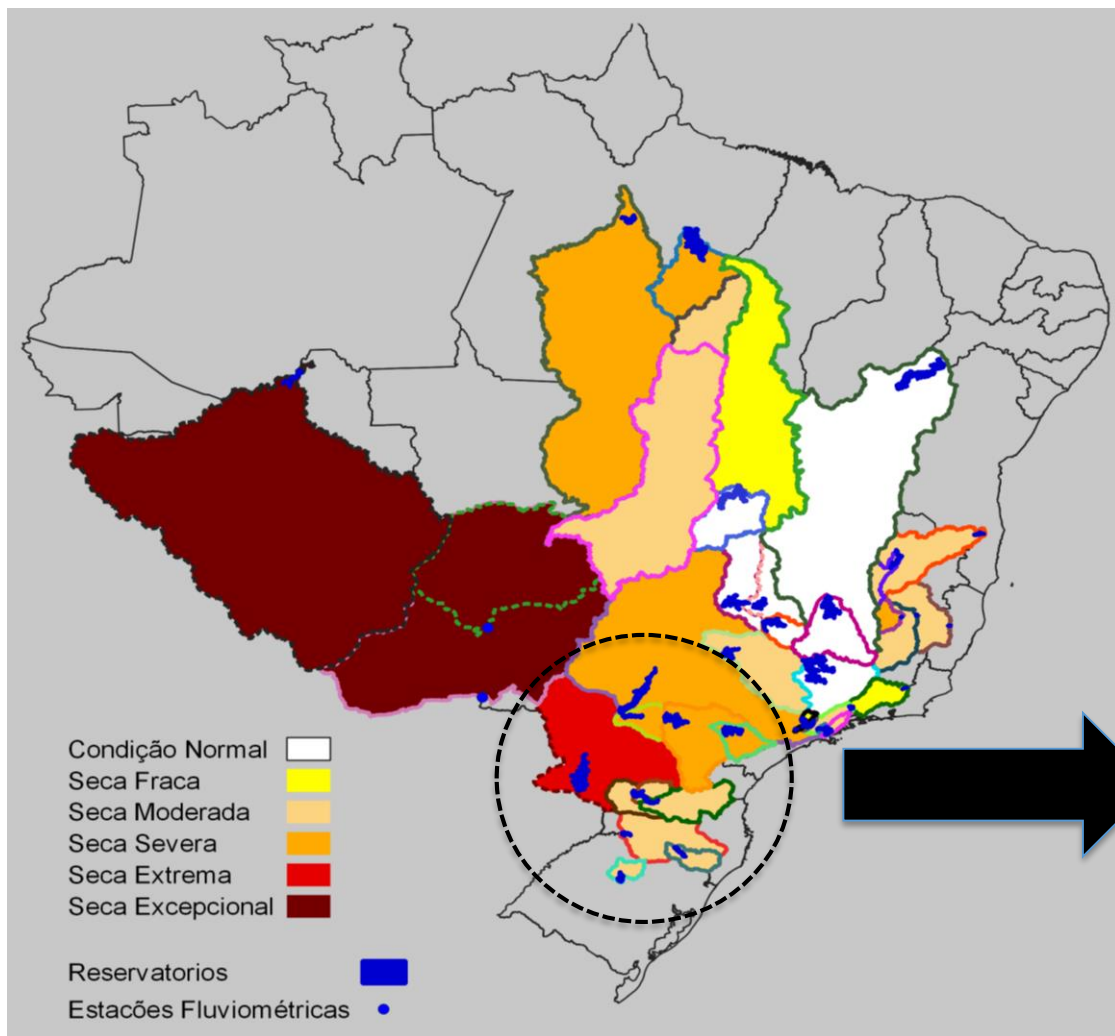
Fonte: CEMADEN/MCTI

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

Série de dados = Jan/1981- Nov/2024

BACIAS HIDROGRÁFICAS: SUL DO PAÍS

Previsão Próximos 30 dias



Desintensificação da seca:

- Jurumirim (rio *Paranapanema*)
- Capivara (rio *Paranapanema*)
- Rosana (rio *Paranapanema*)
- Salto Santiago (rio *Iguaçu*)
- Segredo (rio *Iguaçu*)
- Salto Caxias (rio *Iguaçu*)
- Porto Primavera (rio *Paraná*)
- Itaipu (rio *Paraná*)

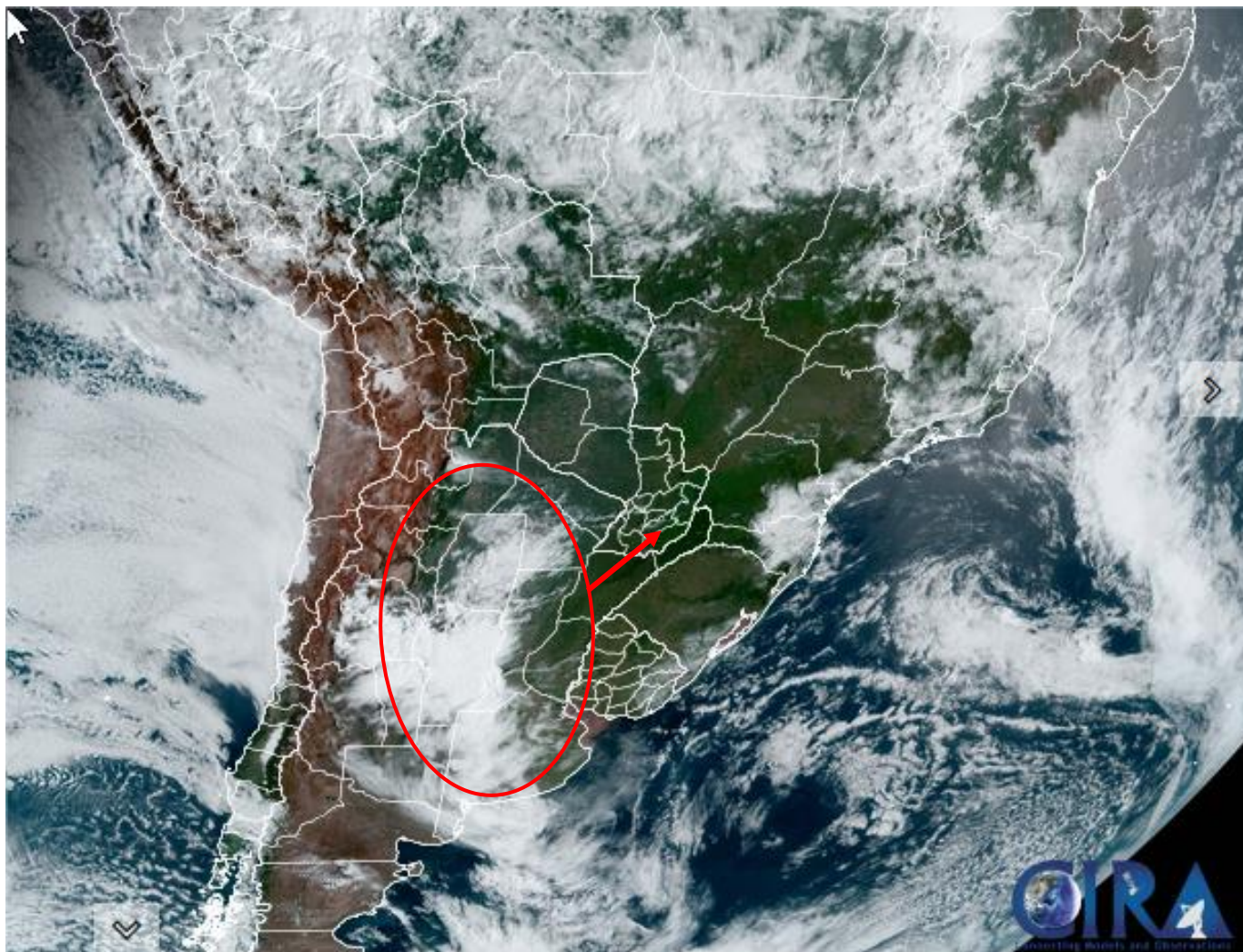
Estabilidade da seca:

- Barra Grande (rio *Uruguai*)
- Foz Chapecó (rio *Uruguai*)
- Passo Real (rio *Jacuí*)

Fonte: CEMADEN/MCTI

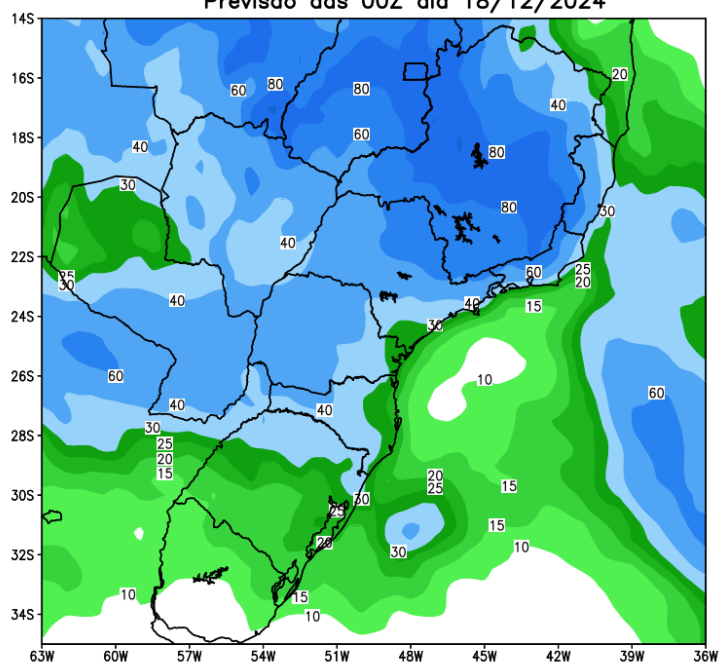
Previsão de Precipitação: Climate Forecast System (CFS)

Situação meteorológica atual

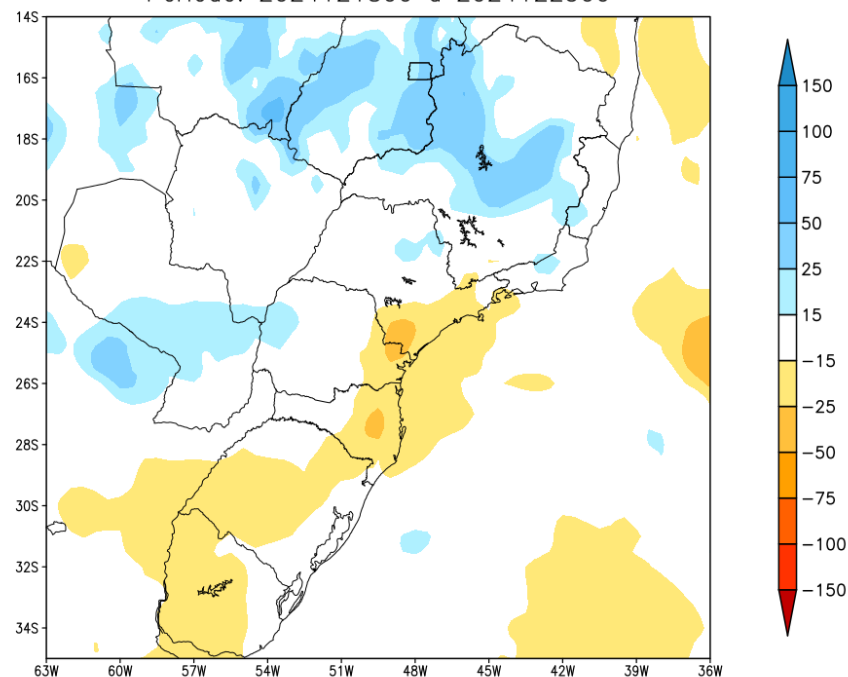


Previsão de chuva próximos 7 dias

GEFS / BRASIL_SUL
Precipitação acumulada 1aSem (mm)
Previsão das 00Z dia 18/12/2024



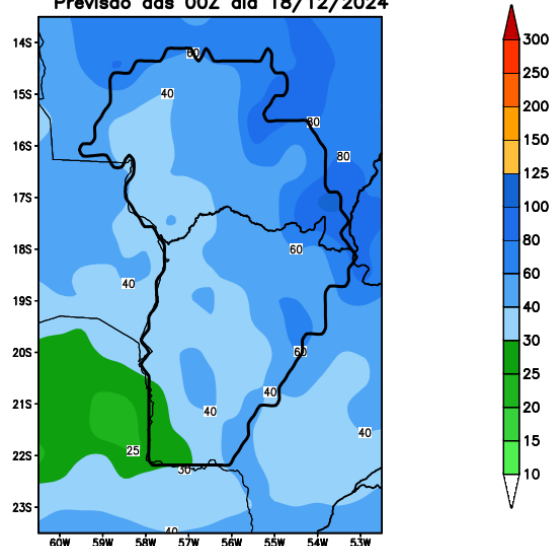
Anomalia de Precipitação BR SUL (mm)
Período: 2024121800 a 2024122500



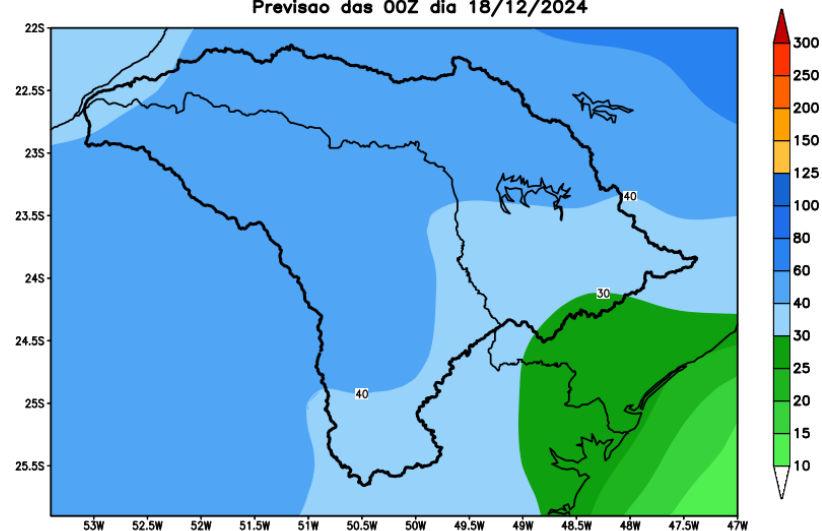
MODELO GEFS

Previsão para as principais bacias

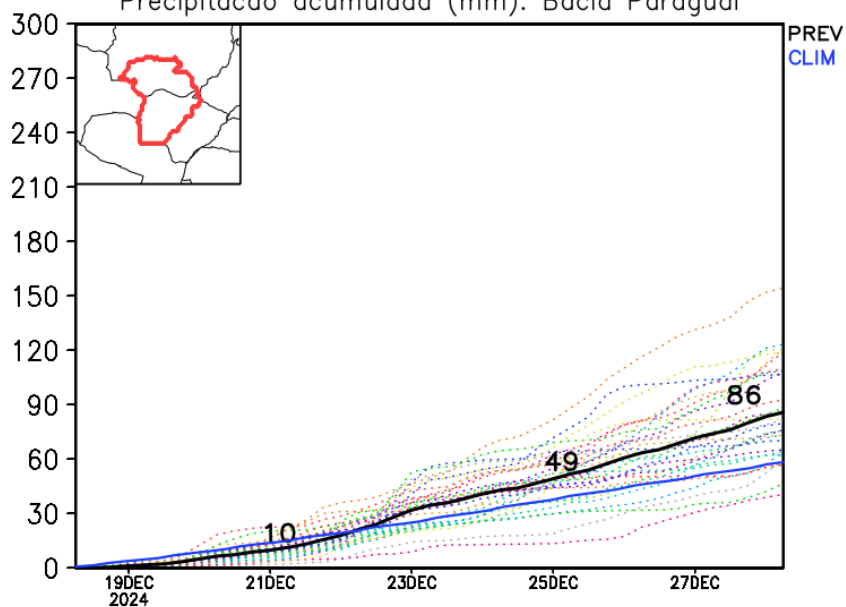
GEFS / Bacia do Rio Paraguai
Precipitação acumulada em 7 dias (mm)
Previsão das 00Z dia 18/12/2024



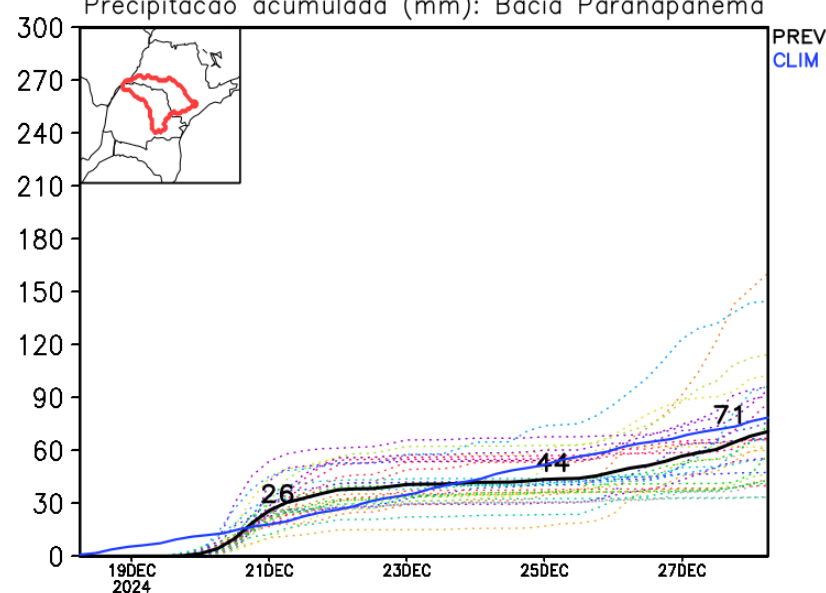
GEFS / Bacia do Rio Paranapanema
Precipitação acumulada em 7 dias (mm)
Previsão das 00Z dia 18/12/2024



Precipitação acumulada (mm): Bacia Paraguai



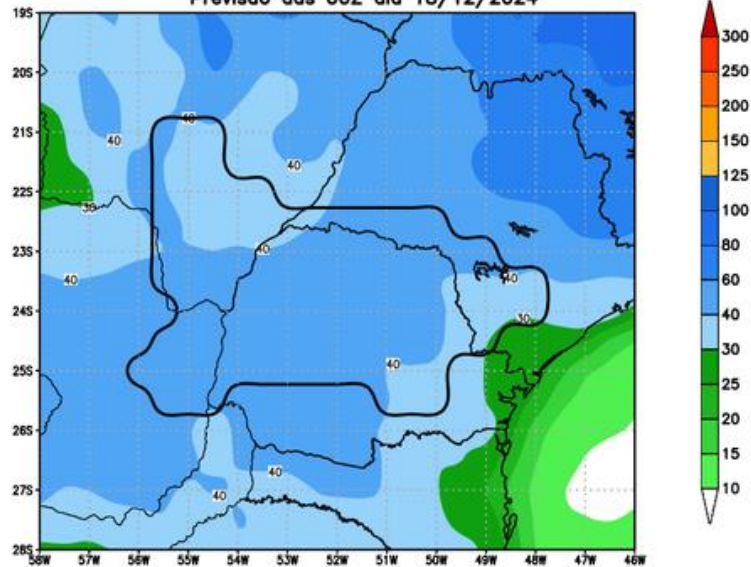
Precipitação acumulada (mm): Bacia Paranapanema



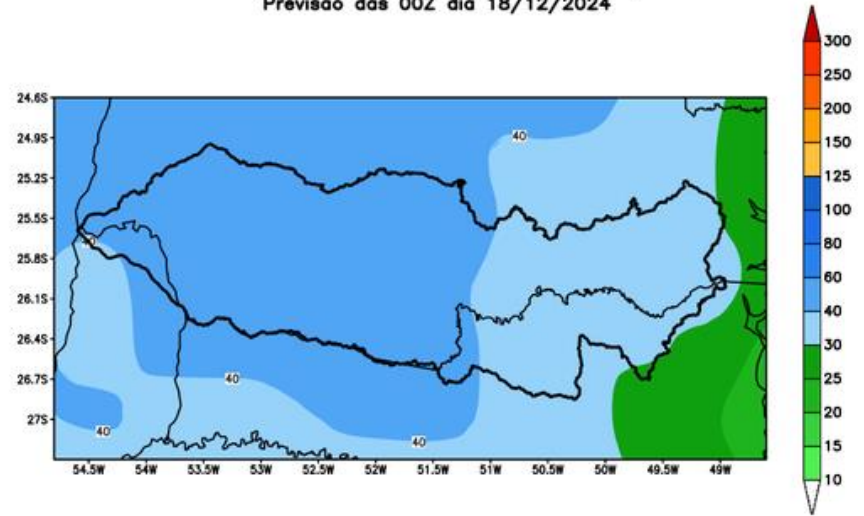
MODELO GEFS

Previsão para as principais bacias

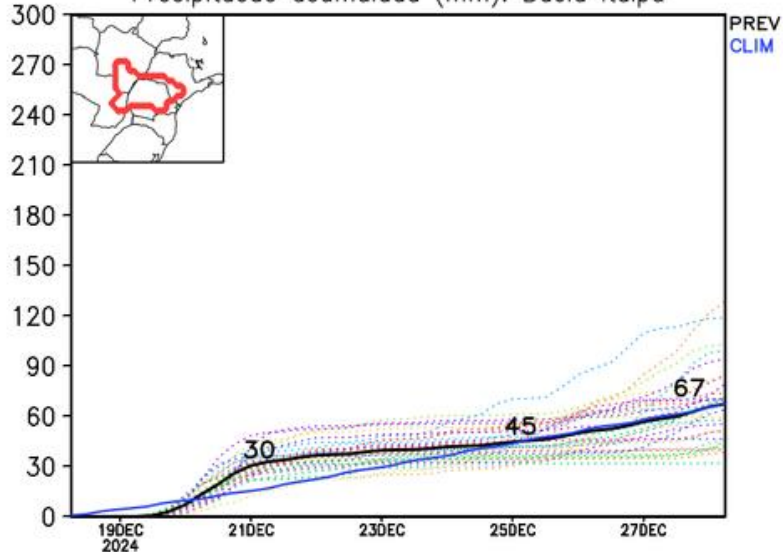
GEFS / Itaipu
Precipitação acumulada em 7 dias (mm)
Previsão das 00Z dia 18/12/2024



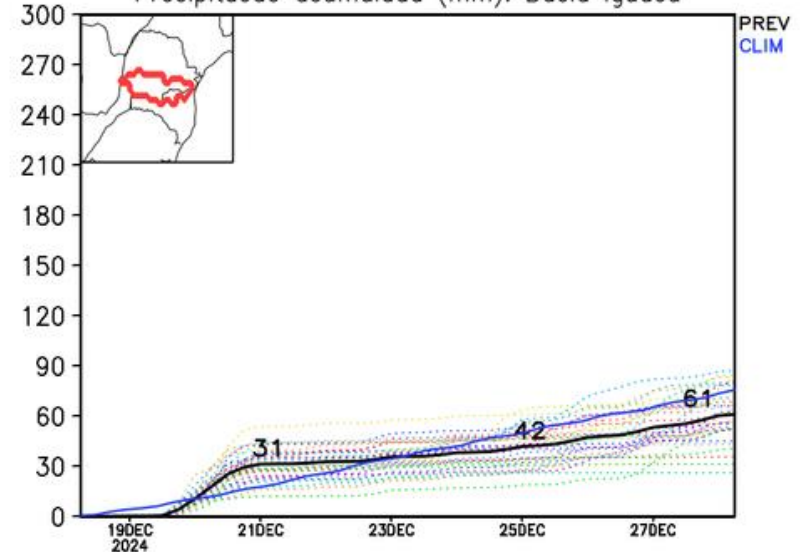
GEFS / Bacia do Rio Iguacu
Precipitação acumulada em 7 dias (mm)
Previsão das 00Z dia 18/12/2024



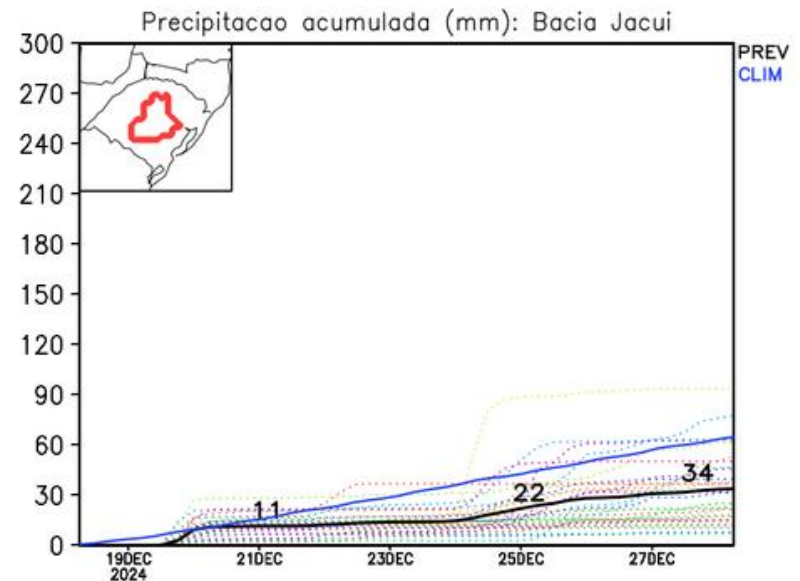
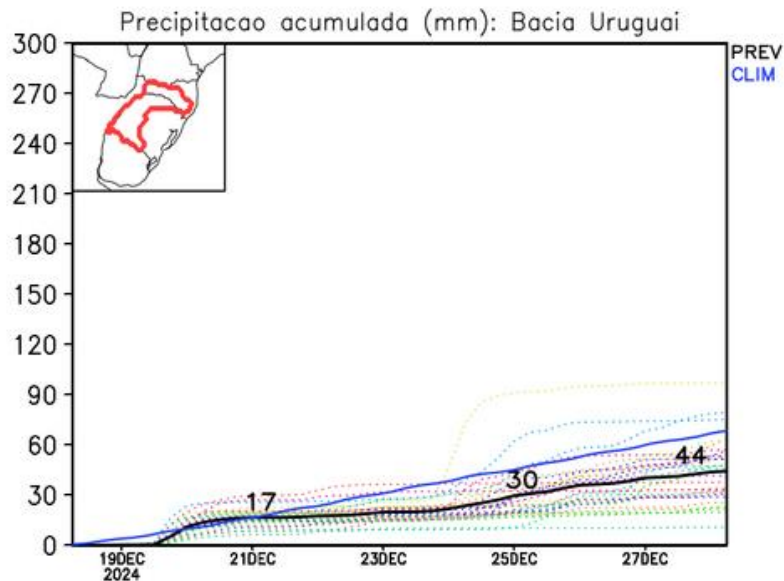
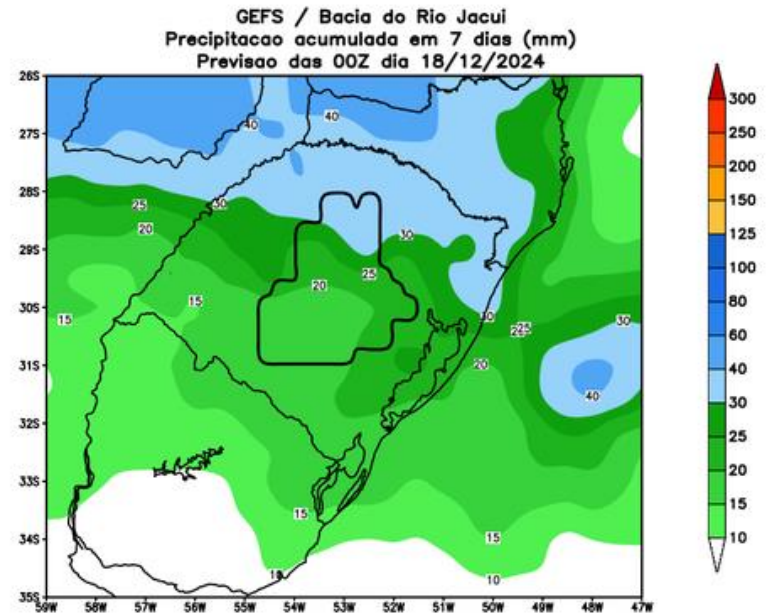
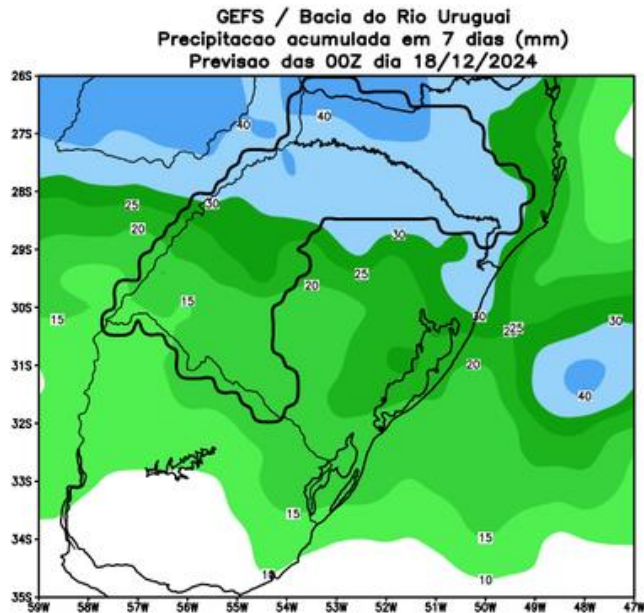
Precipitação acumulada (mm): Bacia Itaipu



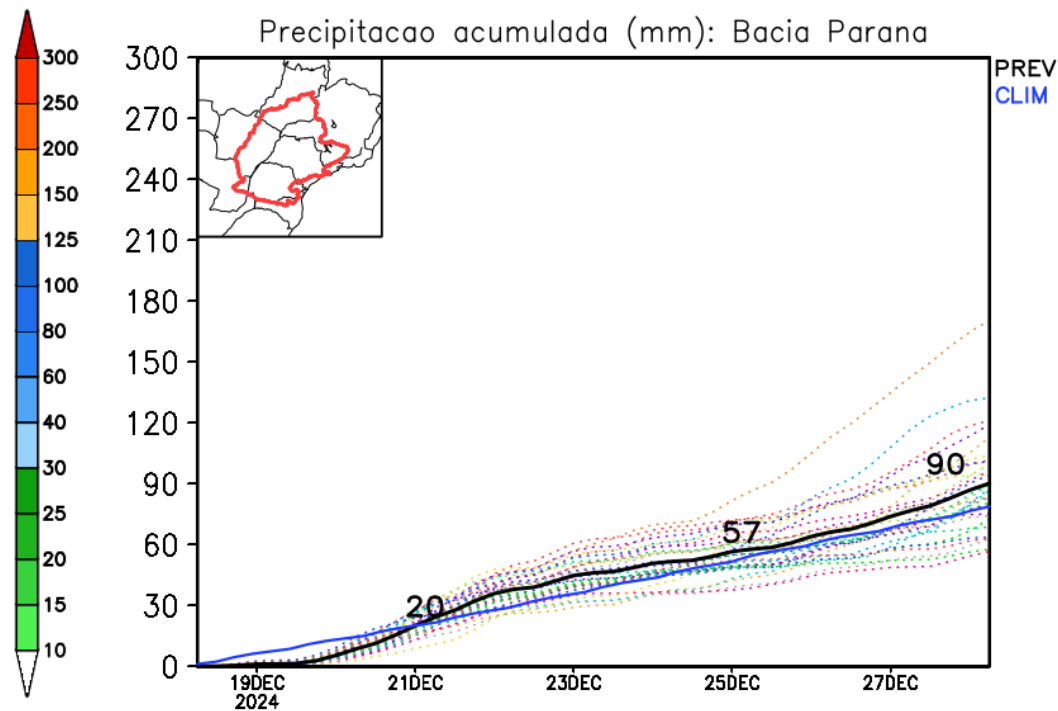
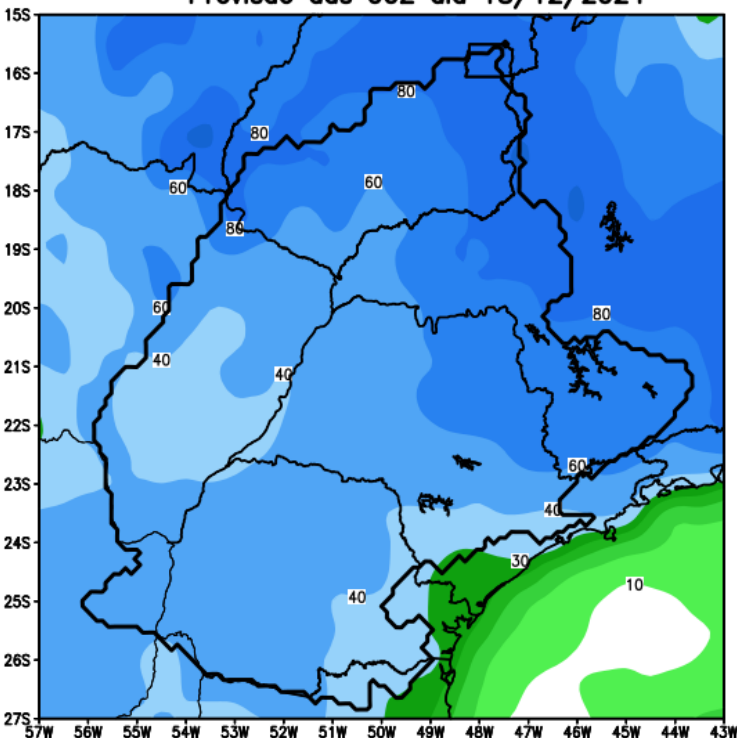
Precipitação acumulada (mm): Bacia Iguacu



Previsão para as principais bacias

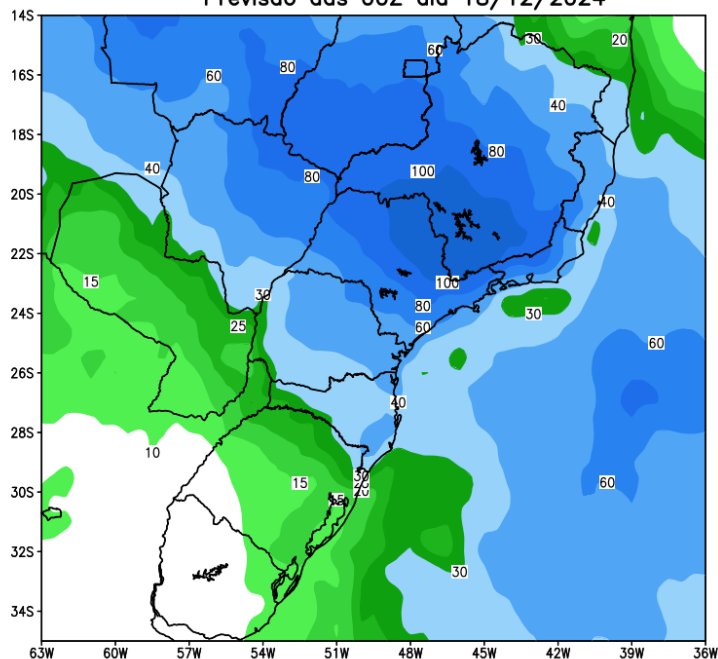


GEFS / Bacia do Parana
Precipitacao acumulada em 7 dias (mm)
Previsao das 00Z dia 18/12/2024

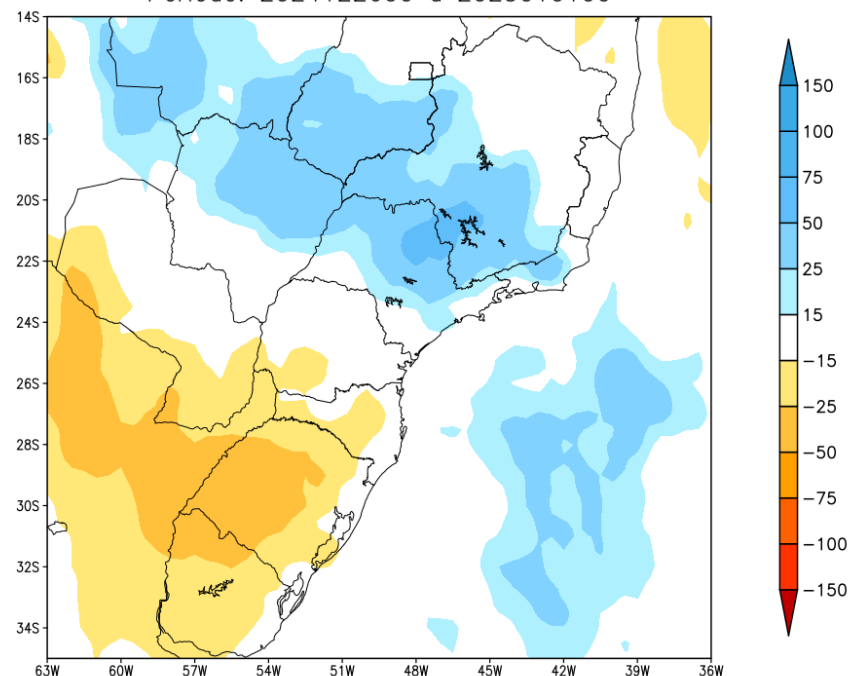


Tendência para a segunda semana

GEFS / BRASIL_SUL
Precipitação acumulada 2aSem (mm)
Previsão das 00Z dia 18/12/2024



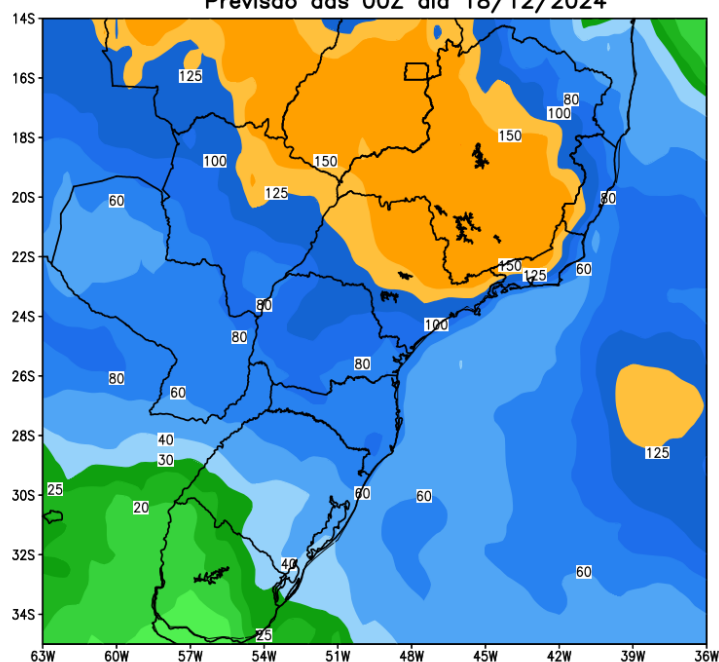
Anomalia de Precipitação BR_SUL (mm)
Período: 2024122600 a 2025010100



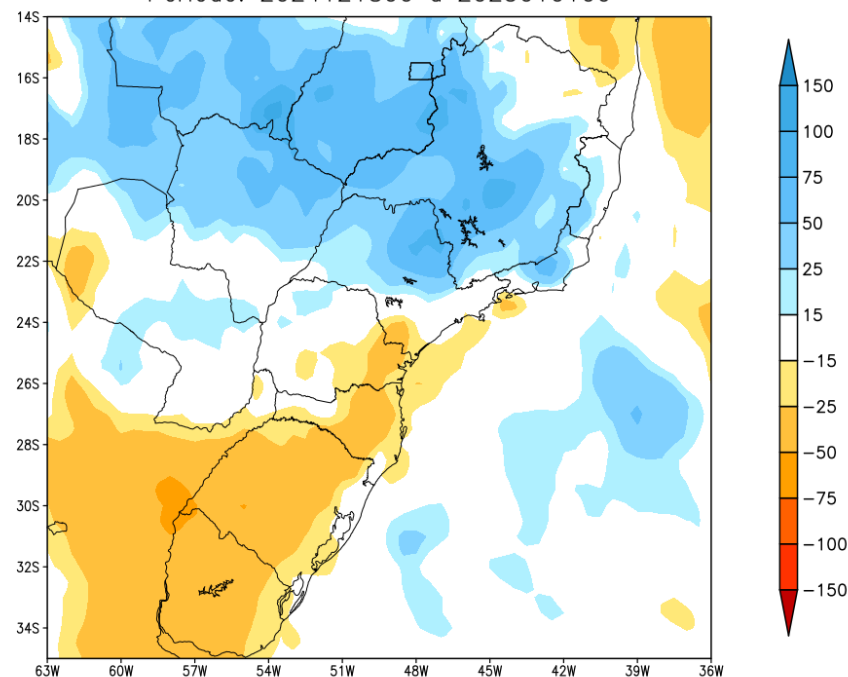
MODELO GEFS

Tendência para as duas próximas semanas

GEFS / BRASIL_SUL
Precipitação acumulada 14 dias (mm)
Previsão das 00Z dia 18/12/2024



Anomalia de Precipitação BR SUL (mm)
Período: 2024121800 a 2025010100

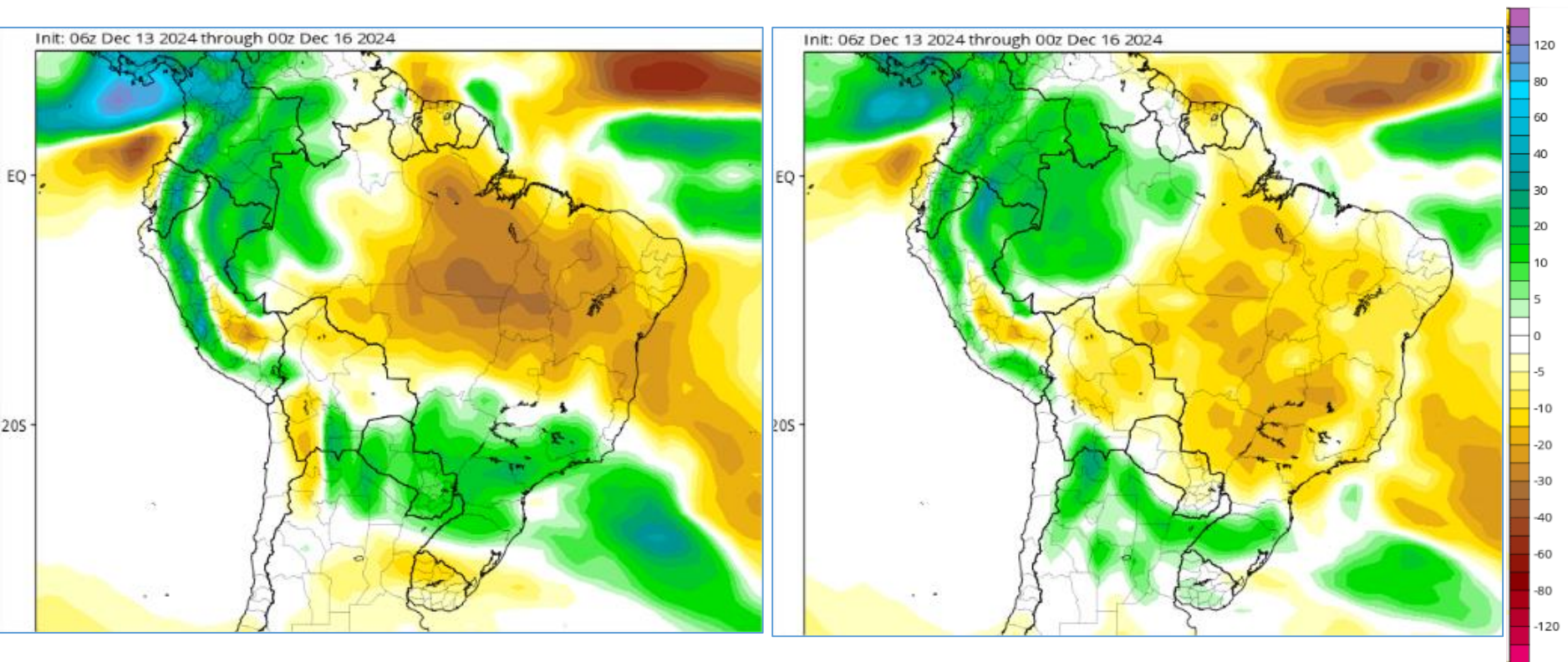


MODELO GEFS

Tendência 3a e 4a semanas

30 Dez -06 Jan

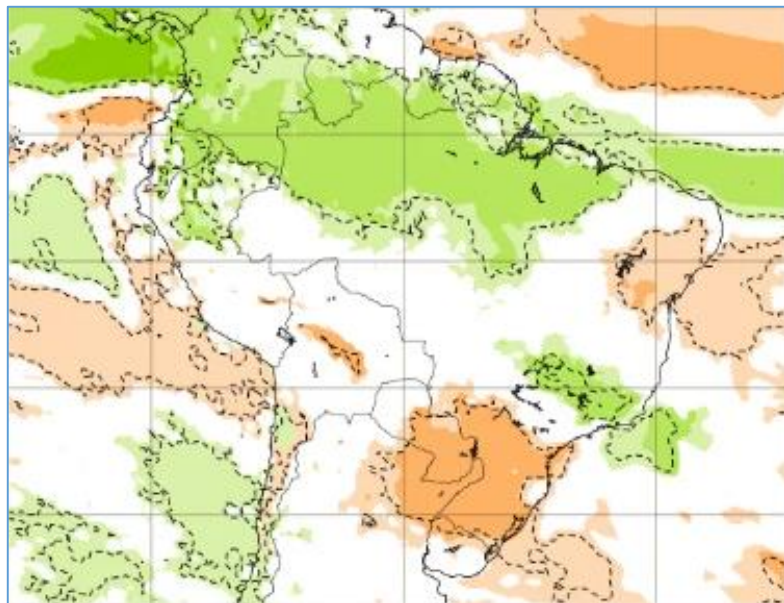
06-13 Jan



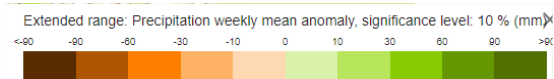
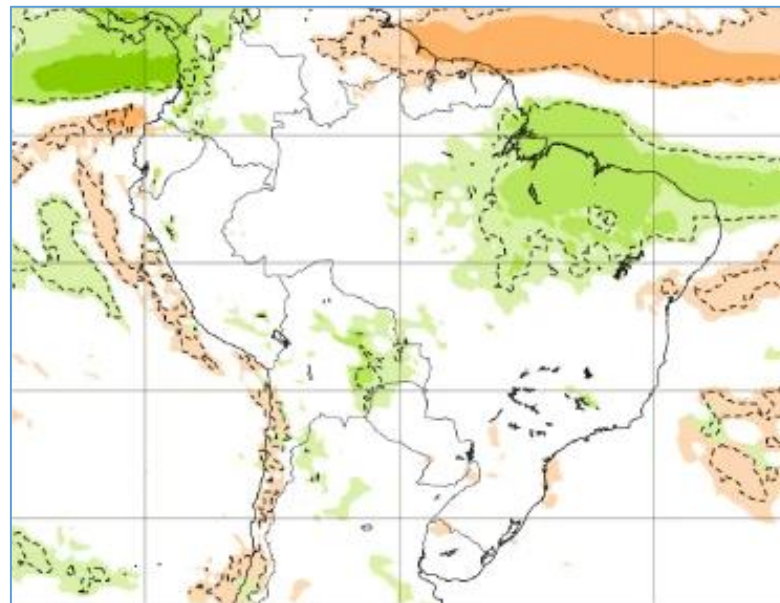
CFSv2 Accumulated Precip. Anomaly (mm)

Tendência para 3ª e 4ª semanas

30 Dez -06 Jan

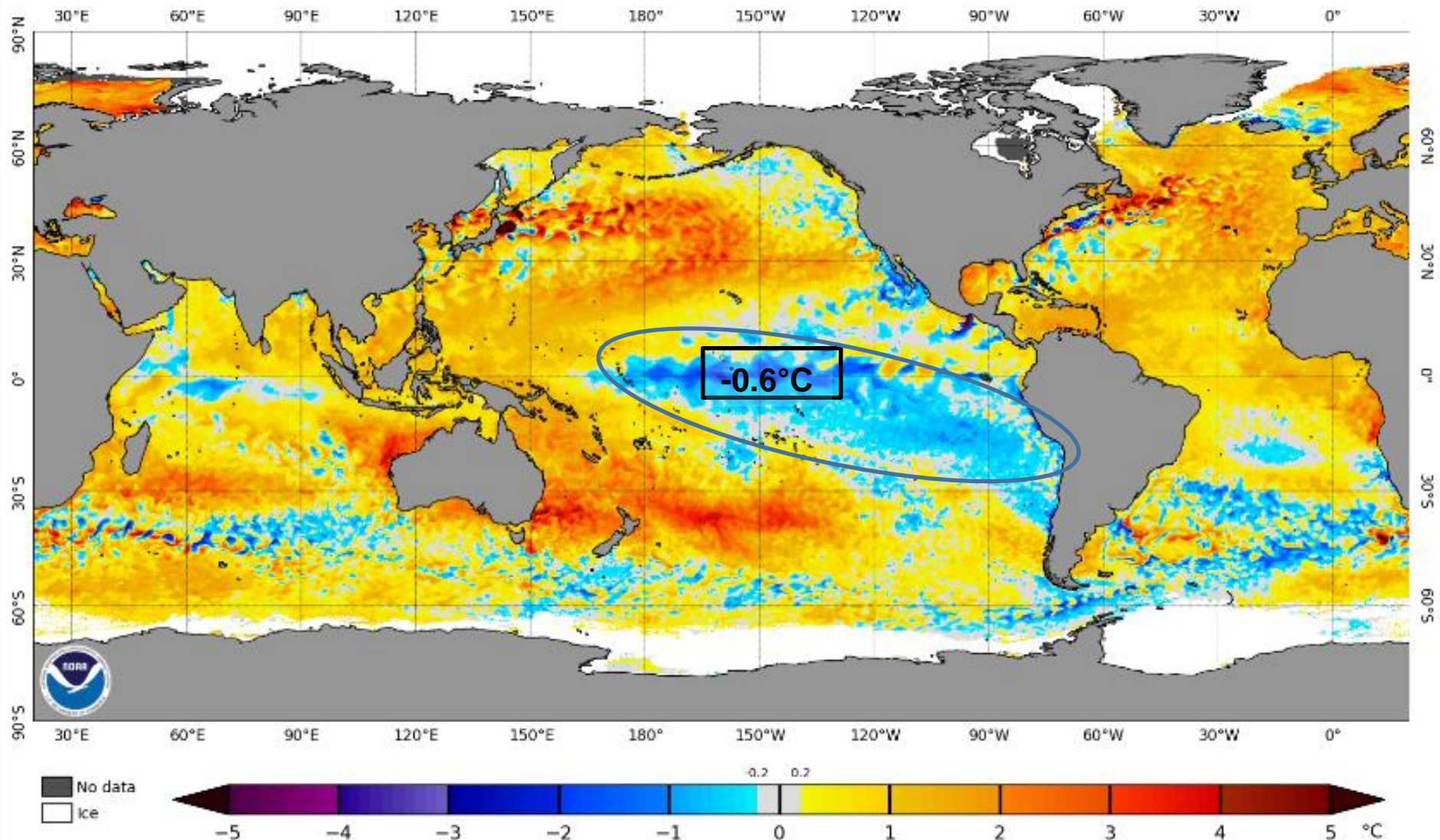


06-13 Jan

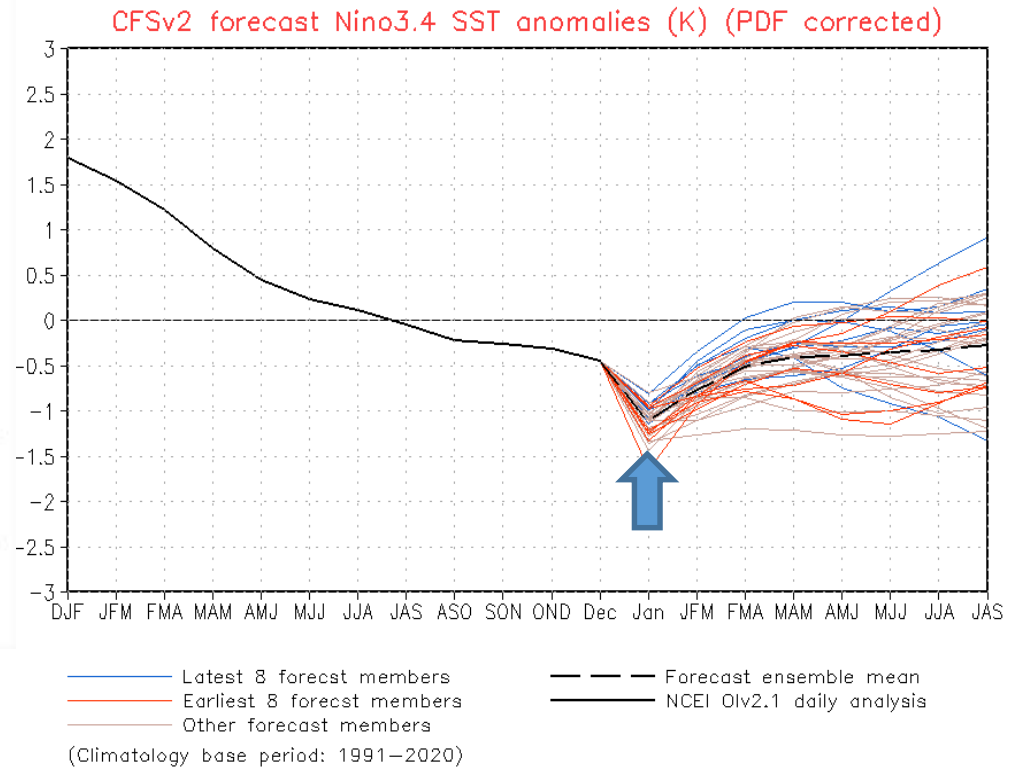
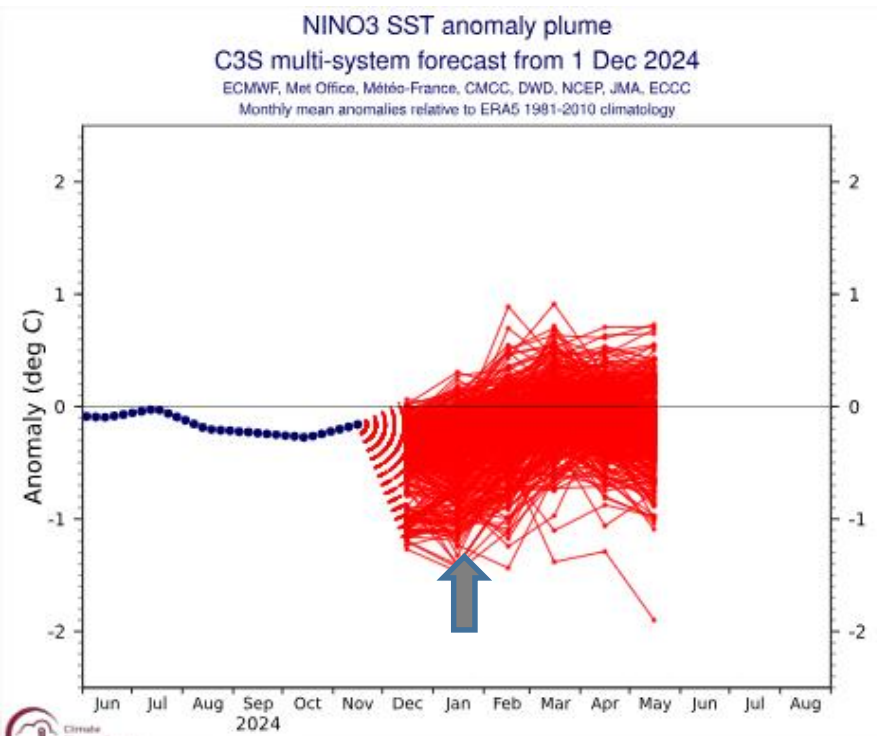


Status Atual: **La Niña Watch**

NOAA Coral Reef Watch Daily 5km SST Anomalies (v3.1) 16 Dec 2024



Previsão do “ENSO”

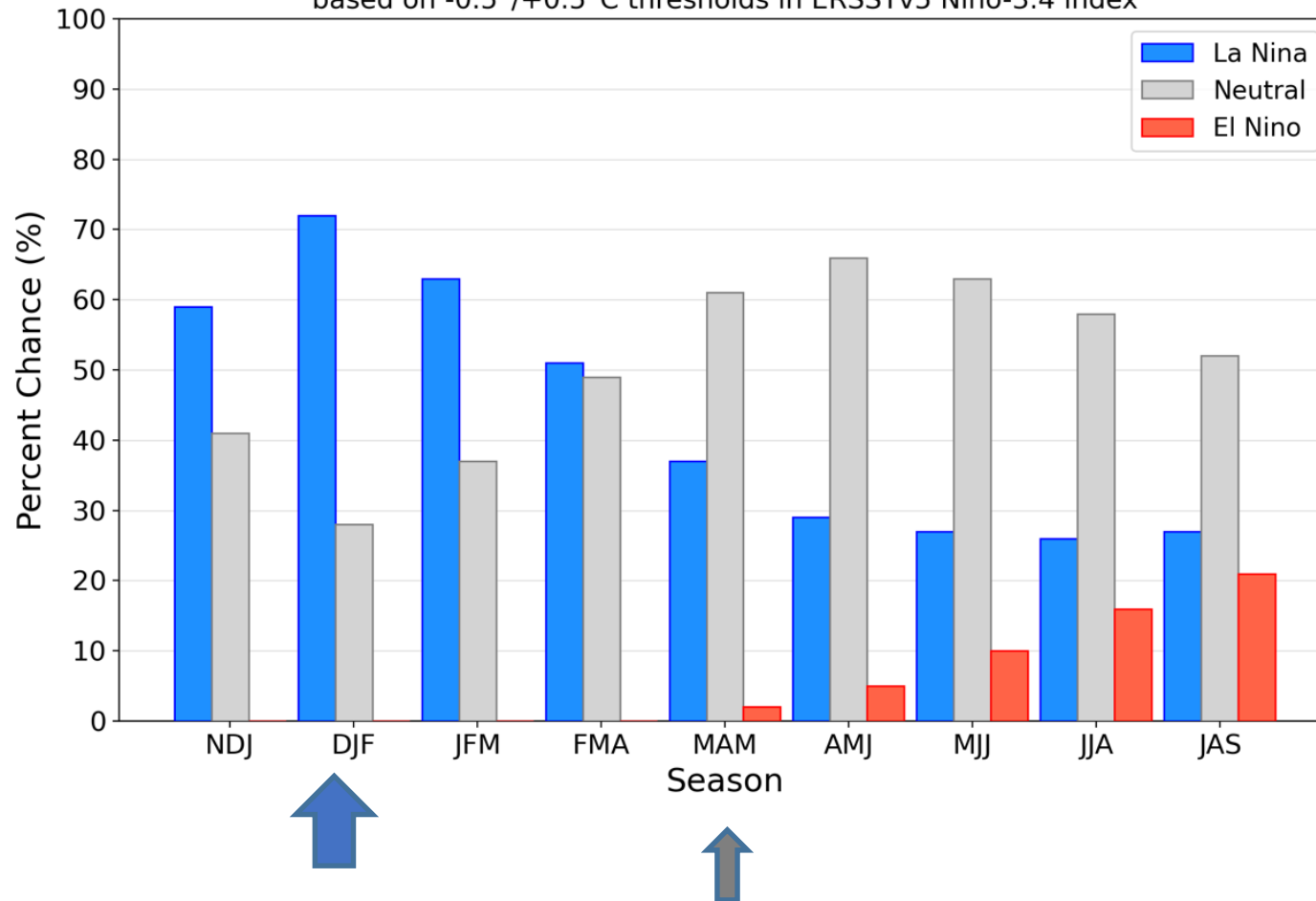


Atualizado 16 de dezembro

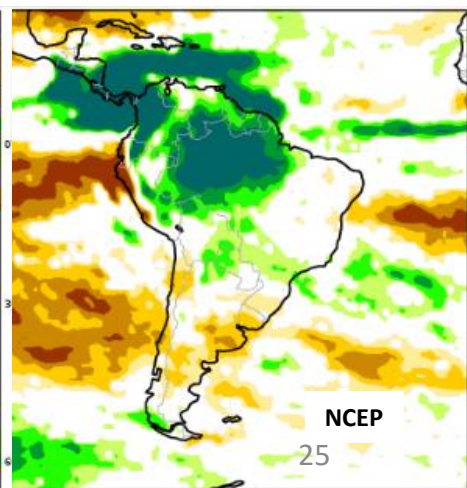
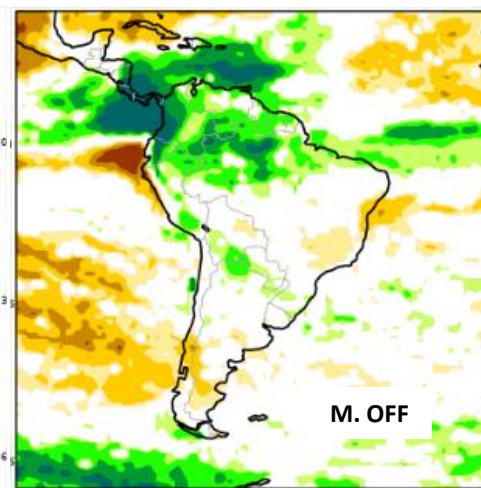
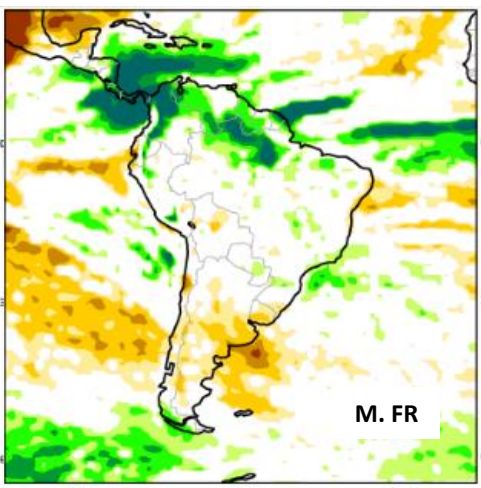
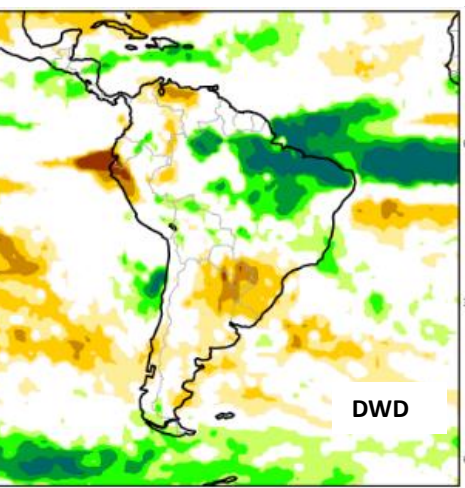
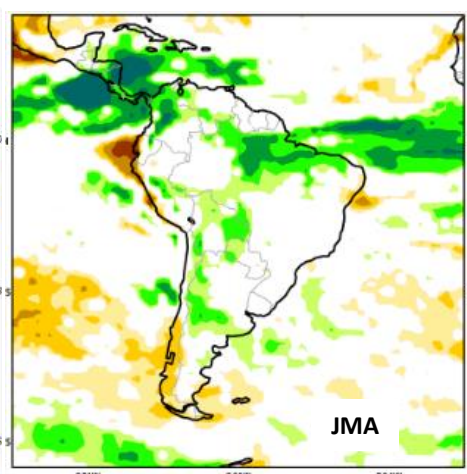
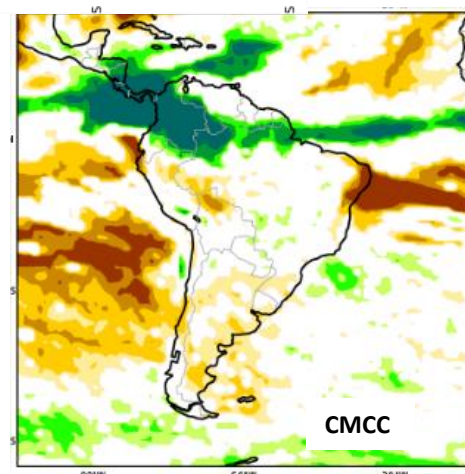
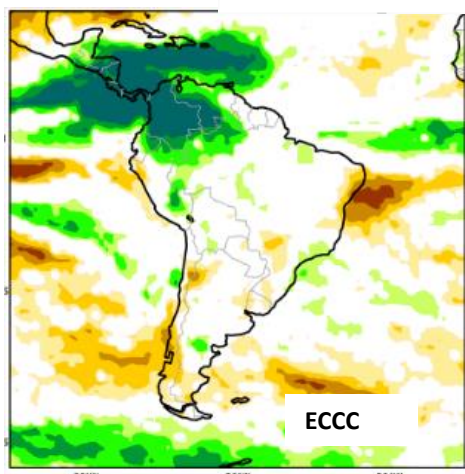
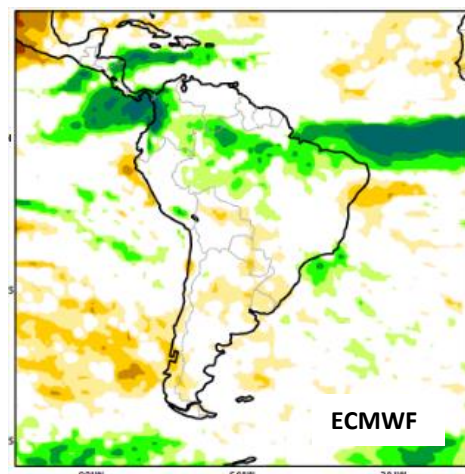
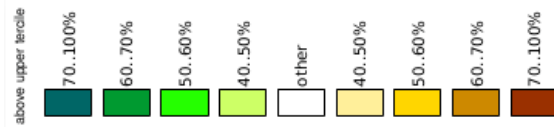
Previsão do “ENSO”

Official NOAA CPC ENSO Probabilities (issued December 2024)

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

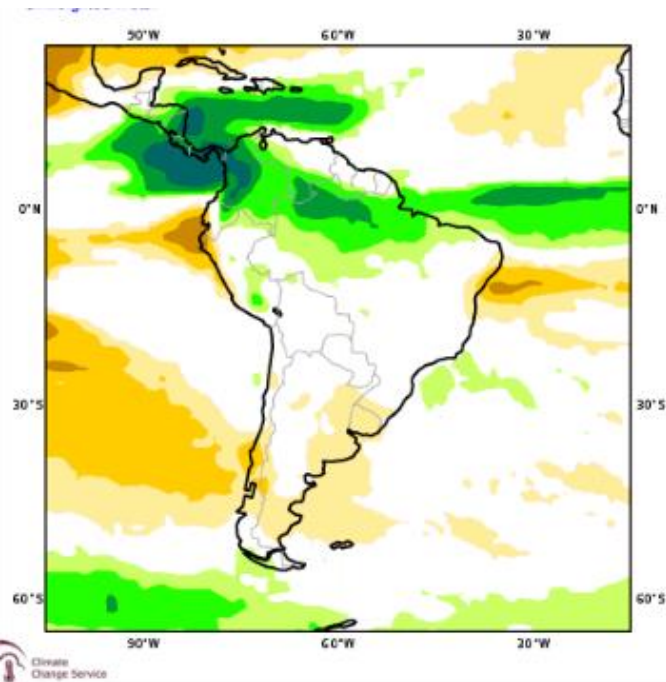


Previsão Sazonal de Chuva JFM

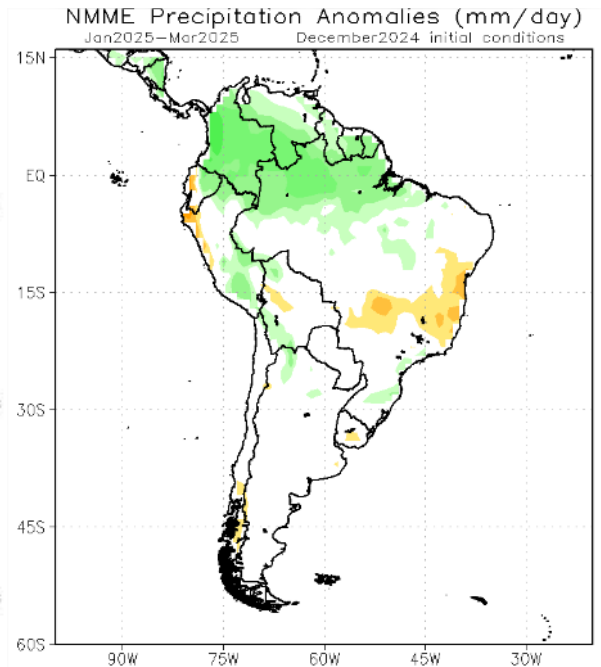


Previsão Sazonal de Chuva Multi-Modelo

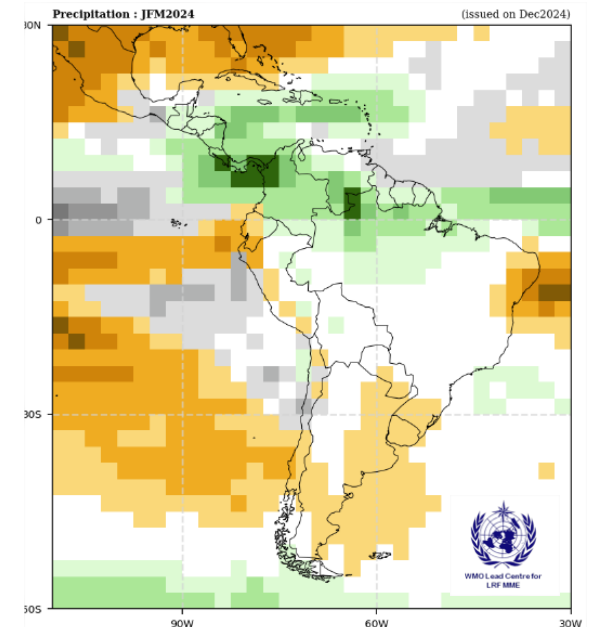
Janeiro-Fevereiro-Março



Modelos Europeus



Modelos Norte Americanos



Modelos da WMO