

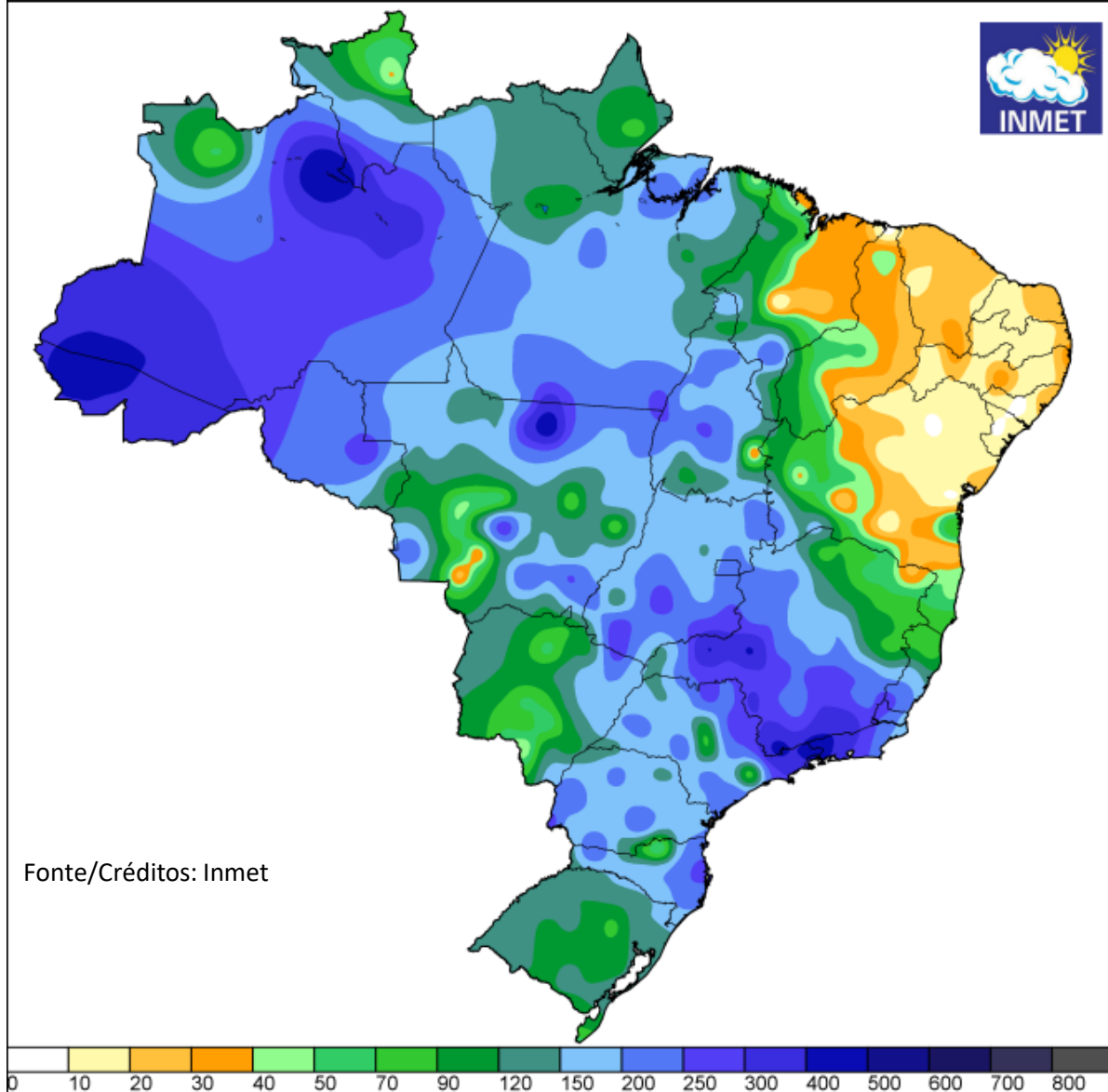
Short-Term Climate Outlooks

January 25 2021

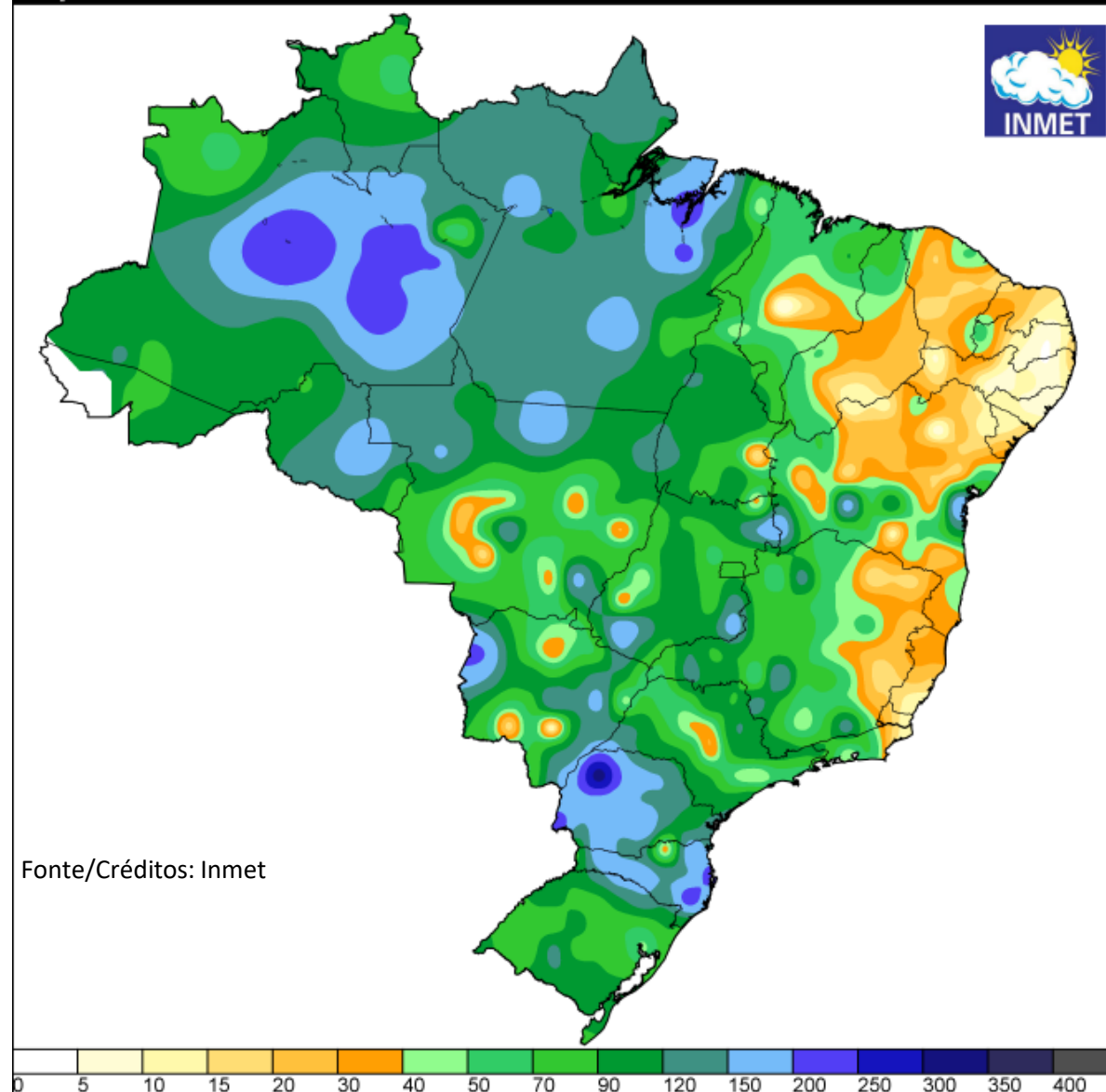
Presentation Merinaldo Bezerra

Precipitação acumulada

Instituto Nacional de Meteorologia - INMET
Precipitação Acumulada nos últimos 30 dias
Mapa do dia 31/12/2020



Instituto Nacional de Meteorologia - INMET
Precipitação Acumulada nos últimos 15 dias
Mapa do dia 24/01/2021

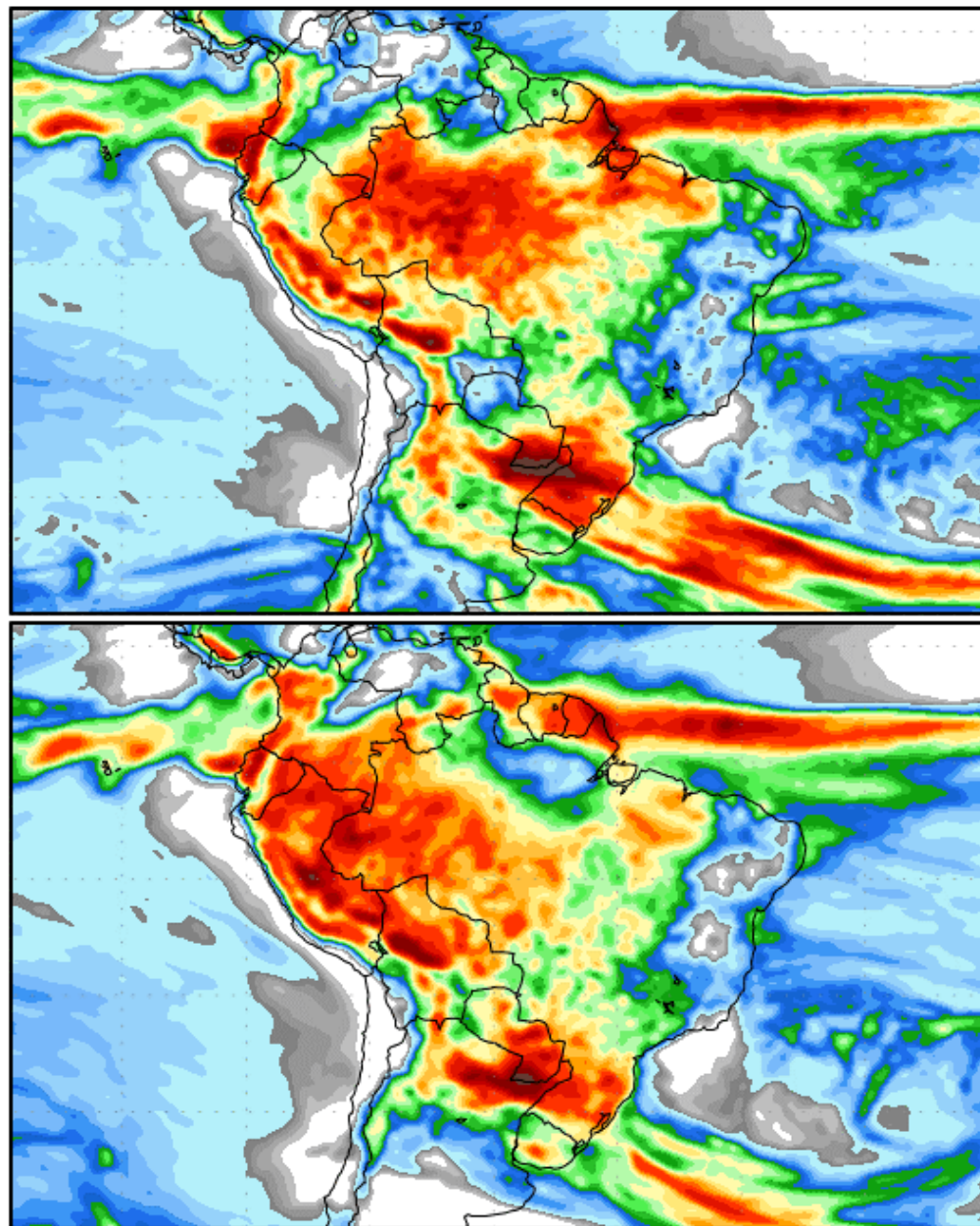
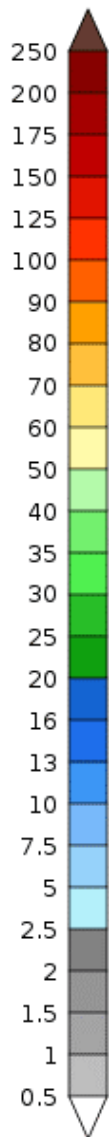


Previsão de precipitação Acumulada (25.Jan a 10.Fev) e precipitação (% do normal 25.Jan a 02.Fev)

Precipitation (mm)
during the period:

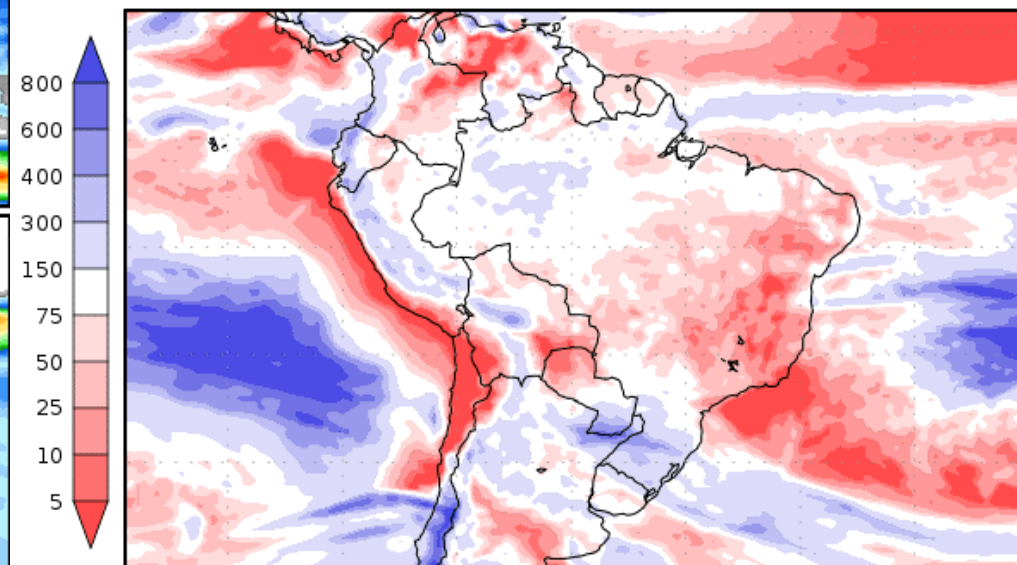
Mon, 25 JAN 2021 at 12Z
-to-
Tue, 02 FEB 2021 at 12Z

Tue, 02 FEB 2021 at 12Z
-to-
Wed, 10 FEB 2021 at 12Z



Precipitation (% of normal)
during the first period:

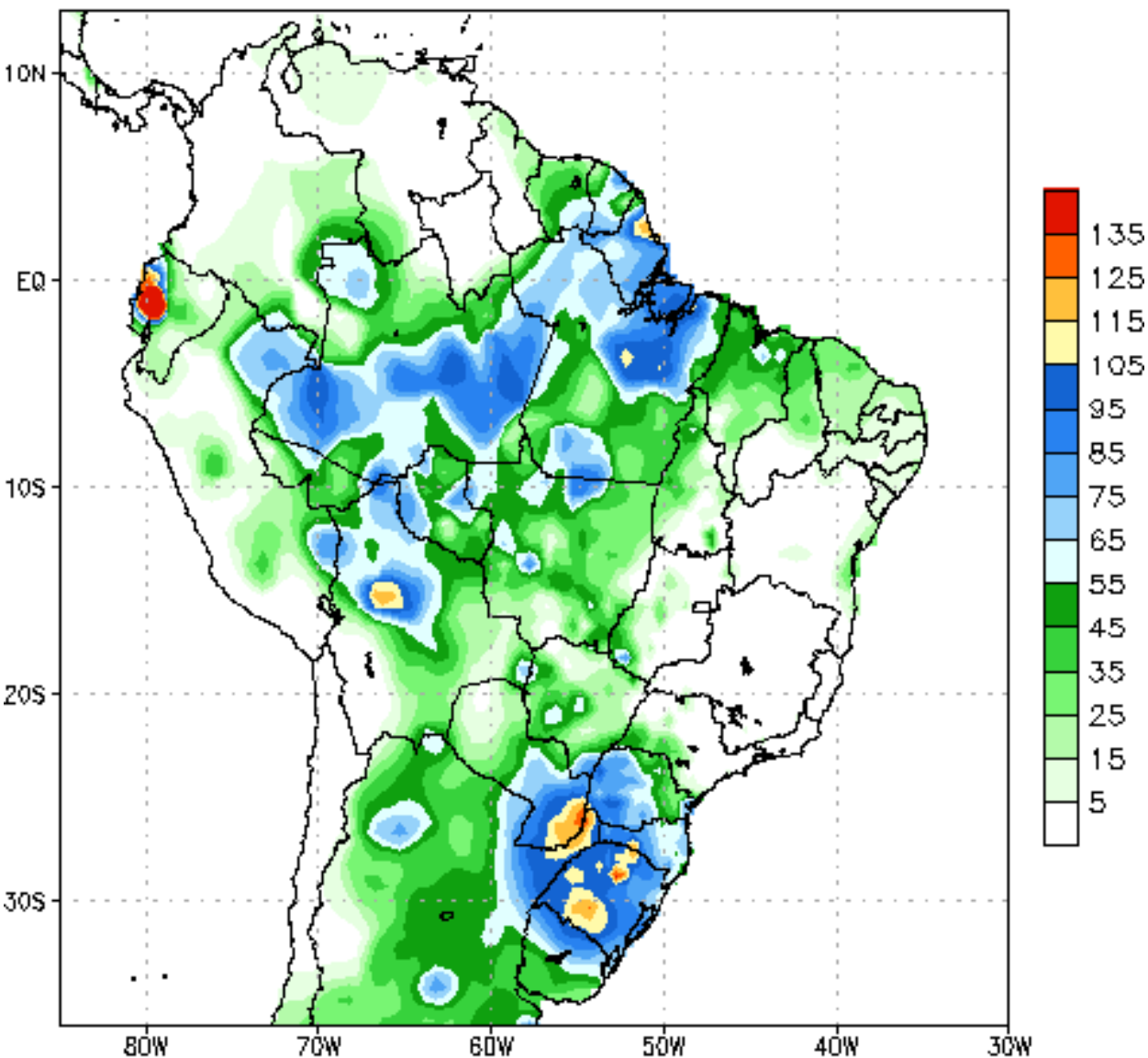
Mon, 25 JAN 2021 at 12Z
-to-
Tue, 02 FEB 2021 at 12Z



Precipitation forecasts from the National Centers for Environmental Prediction.
Normal rainfall derived from Xie-Arkin (CMAP) Monthly Climatology for 1979-2003.
Forecast Initialization Time: 12Z25JAN2021

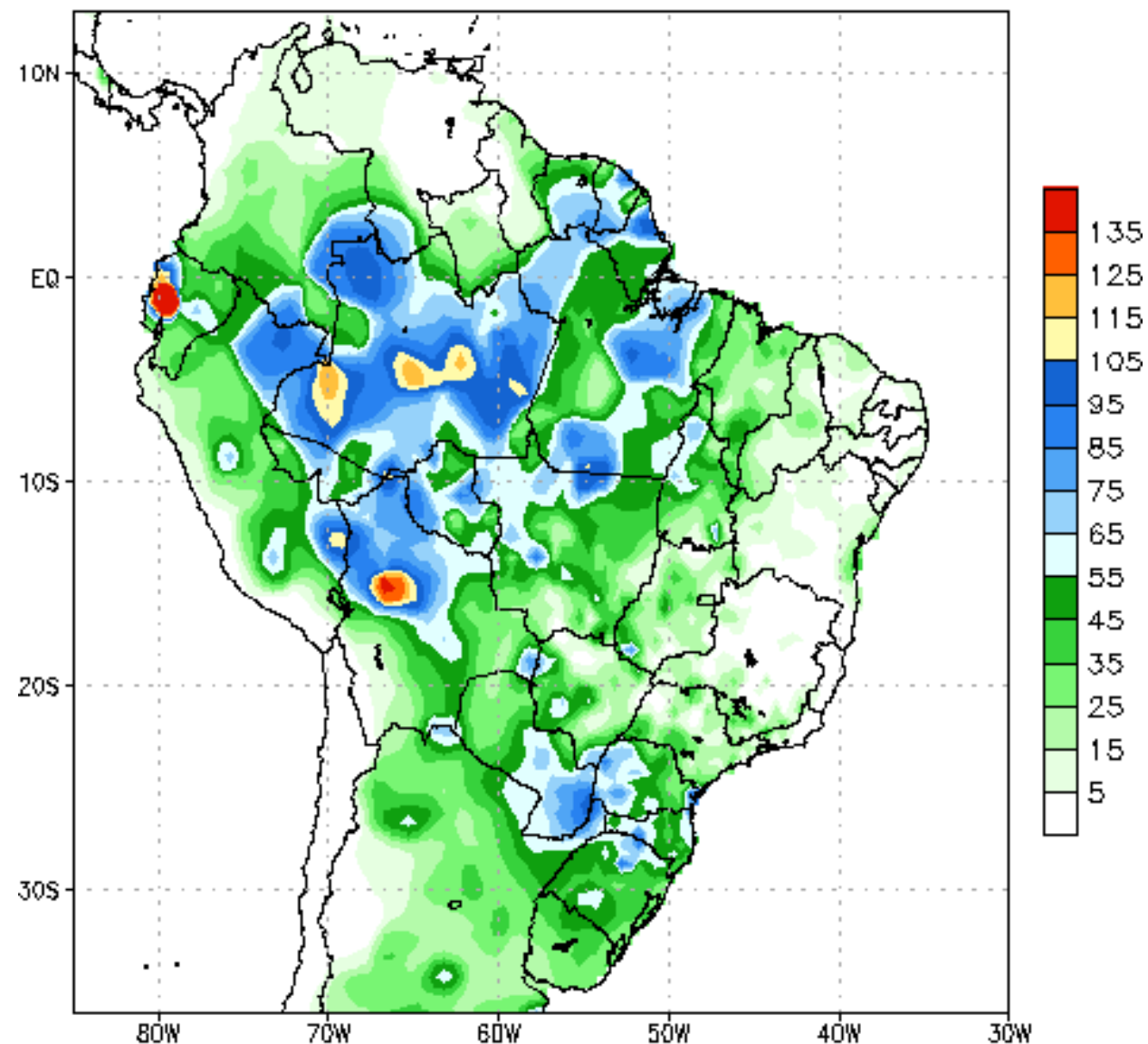
Previsão de precipitação Semanal Acumulada (25 a 31.Jan e 01 a 07.Fev.2021)

NCEP GFS Ensemble Forecast 1–7 Day Precipitation (mm)
from: 25Jan2021
25Jan2021–31Jan2021 Accumulation



Fonte/Créditos: NOAA

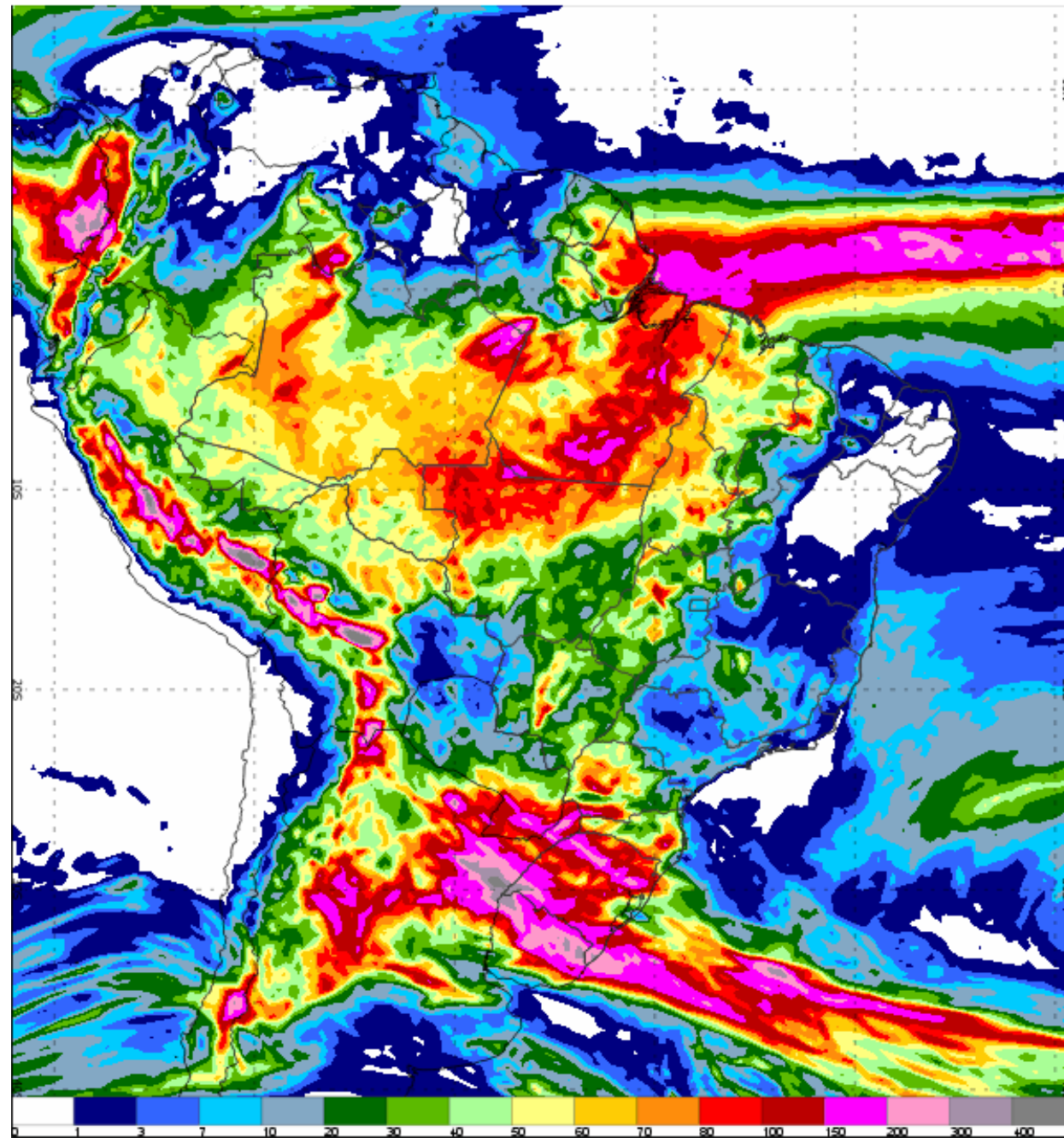
NCEP GFS Ensemble Forecast 8–14 Day Precipitation (mm)
from: 25Jan2021
01Feb2021–07Feb2021 Accumulation



Bias correction based on last 30-day forecast error

Bias correction based on last 30-day forecast error

Previsão de precipitação Acumulada (25.Jan a 01.Fev.2021)



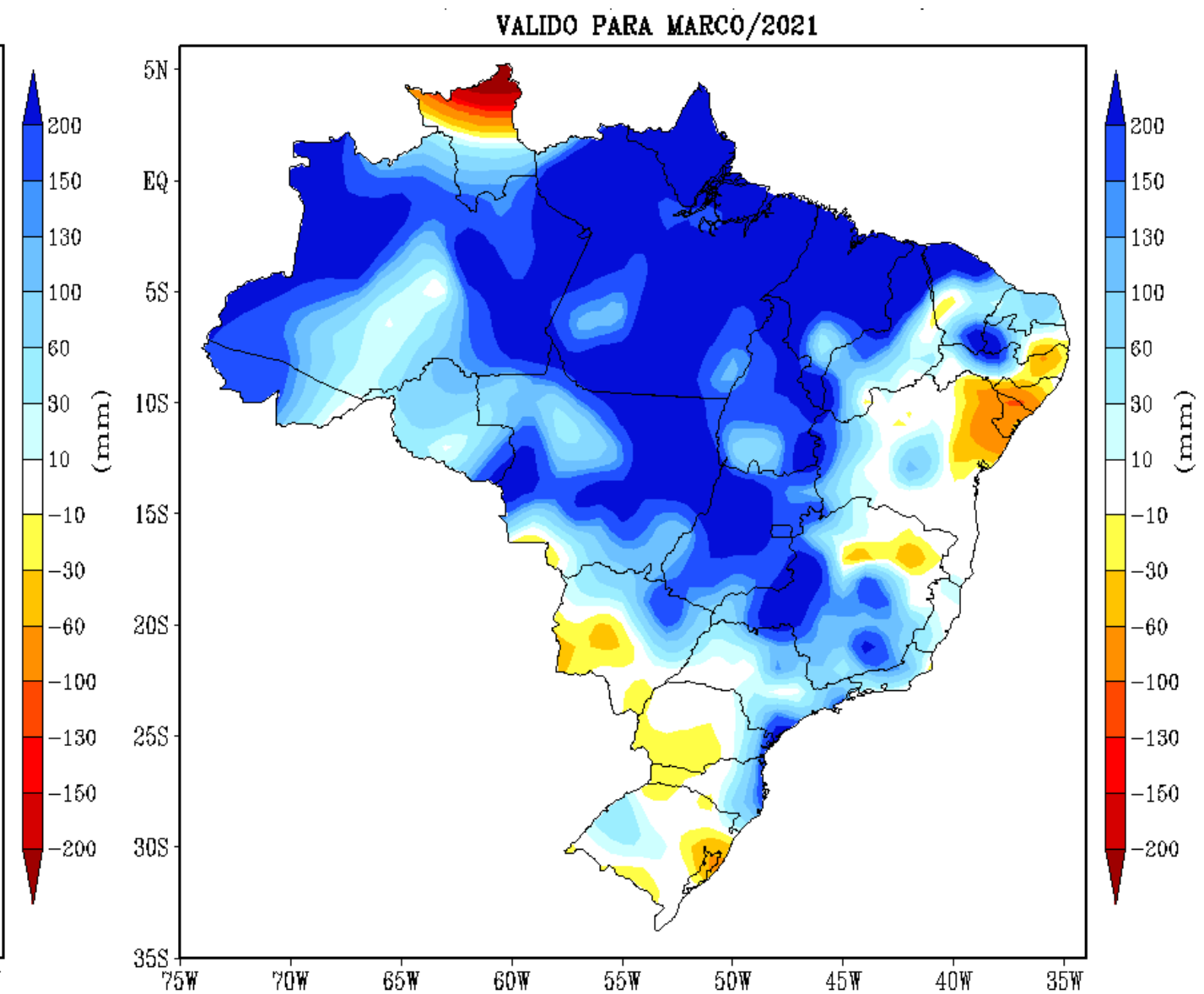
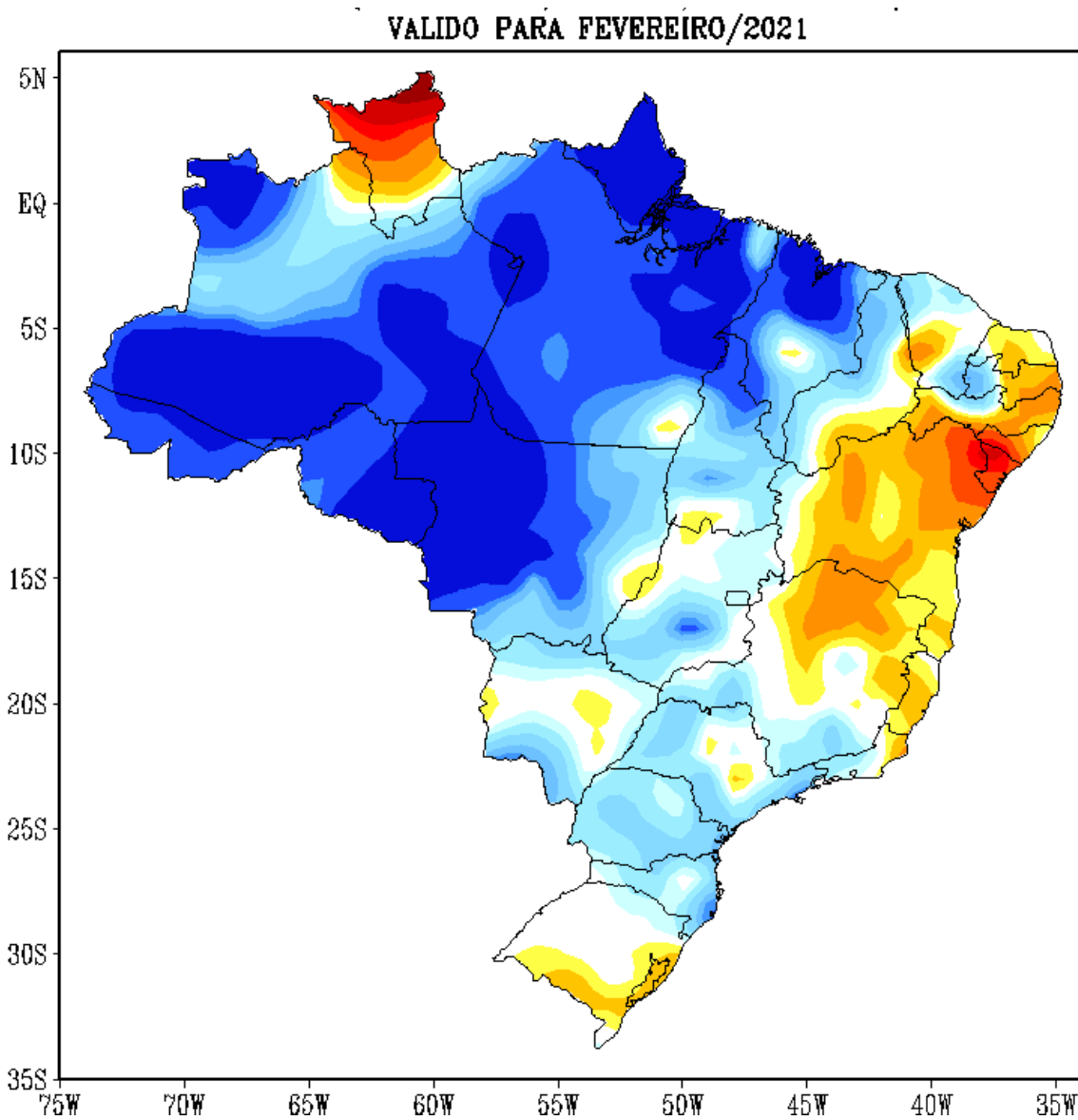
Modelo COSMO [7 x 7 km] - INMET
PRECIPITAÇÃO ACUMULADA (mm) em 174 horas
Inicialização (i): 12:00 UTC do dia 25/01/2021
Validade: entre 12:00 UTC do dia 25/01/2021 e 18:00 UTC do dia 01/02/2021

Medium-term climate outlook

January 25 2021

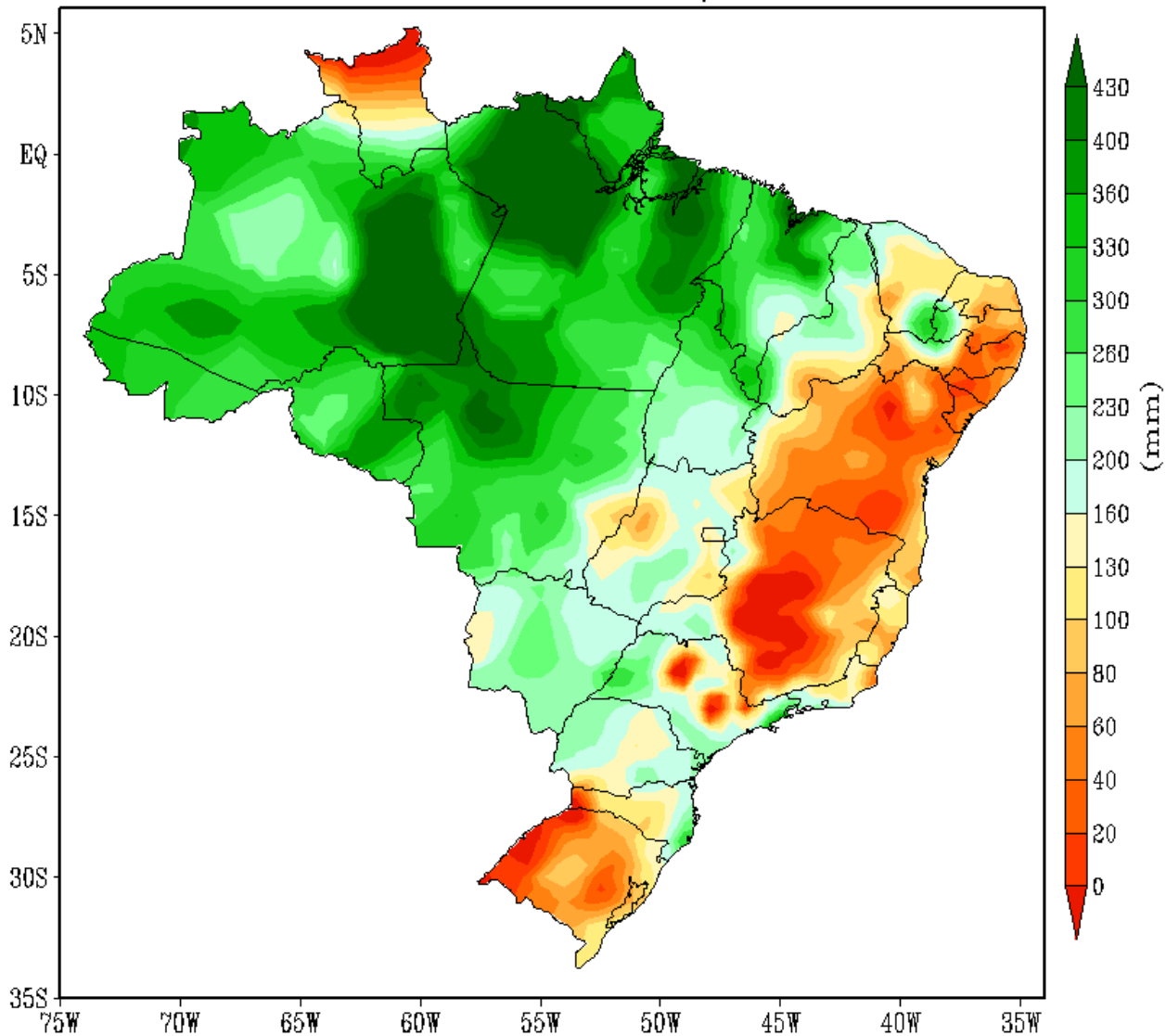
Presentation Merinaldo Bezerra

Previsão déficit e excesso hídrico para os meses fevereiro a março de 2021 no Brasil

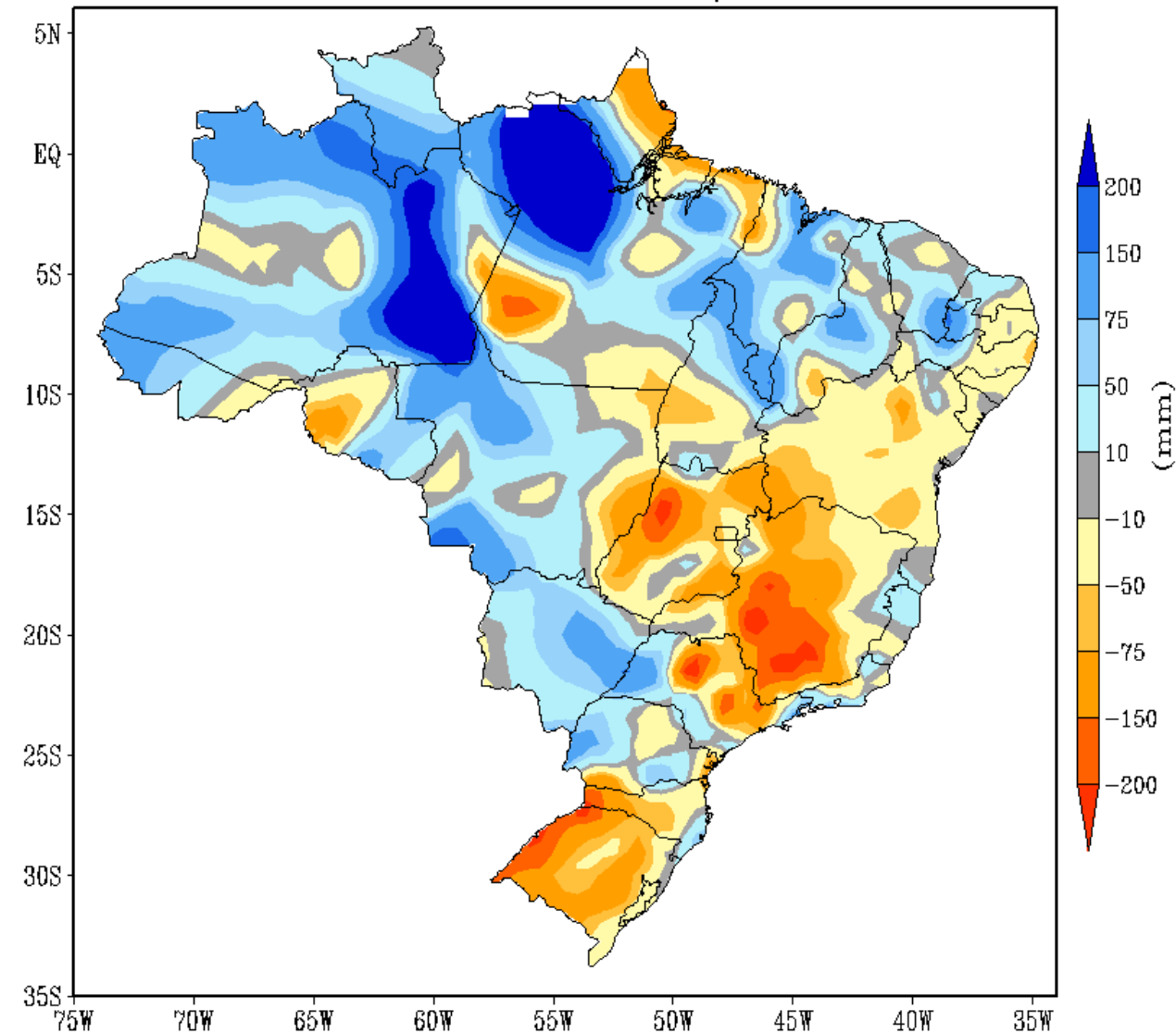


Previsão de precipitação e Anomalia FEV 2021

PRECIPITACAO TOTAL PREVISTA (mm)
ATUALIZACAO - JANEIRO/2021
VALIDO PARA FEVEREIRO/2021

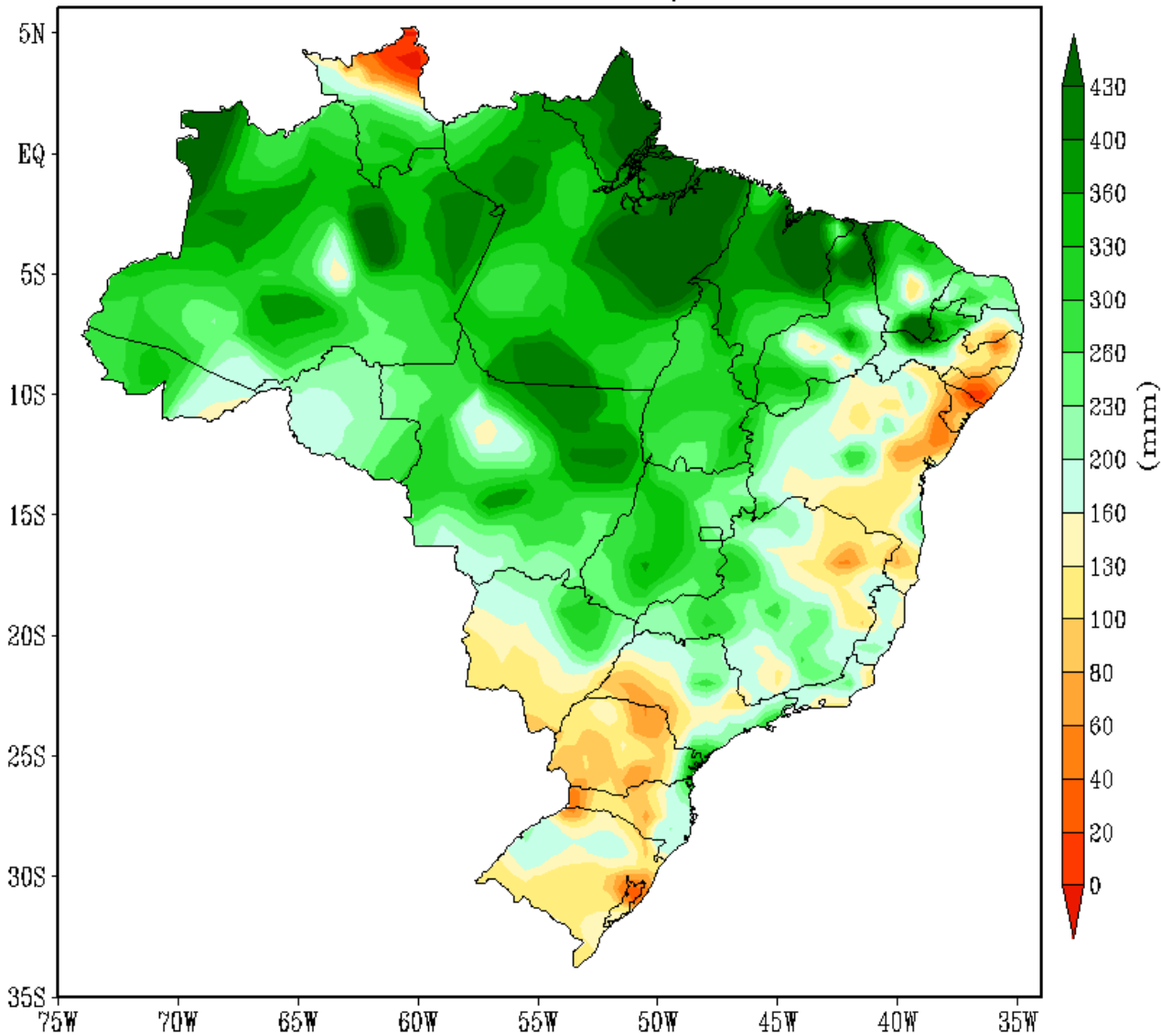


PREVISÃO DE ANOMALIAS DE PRECIPITAÇÃO (mm)
ATUALIZACAO - JANEIRO/2021
VALIDO PARA FEVEREIRO/2021

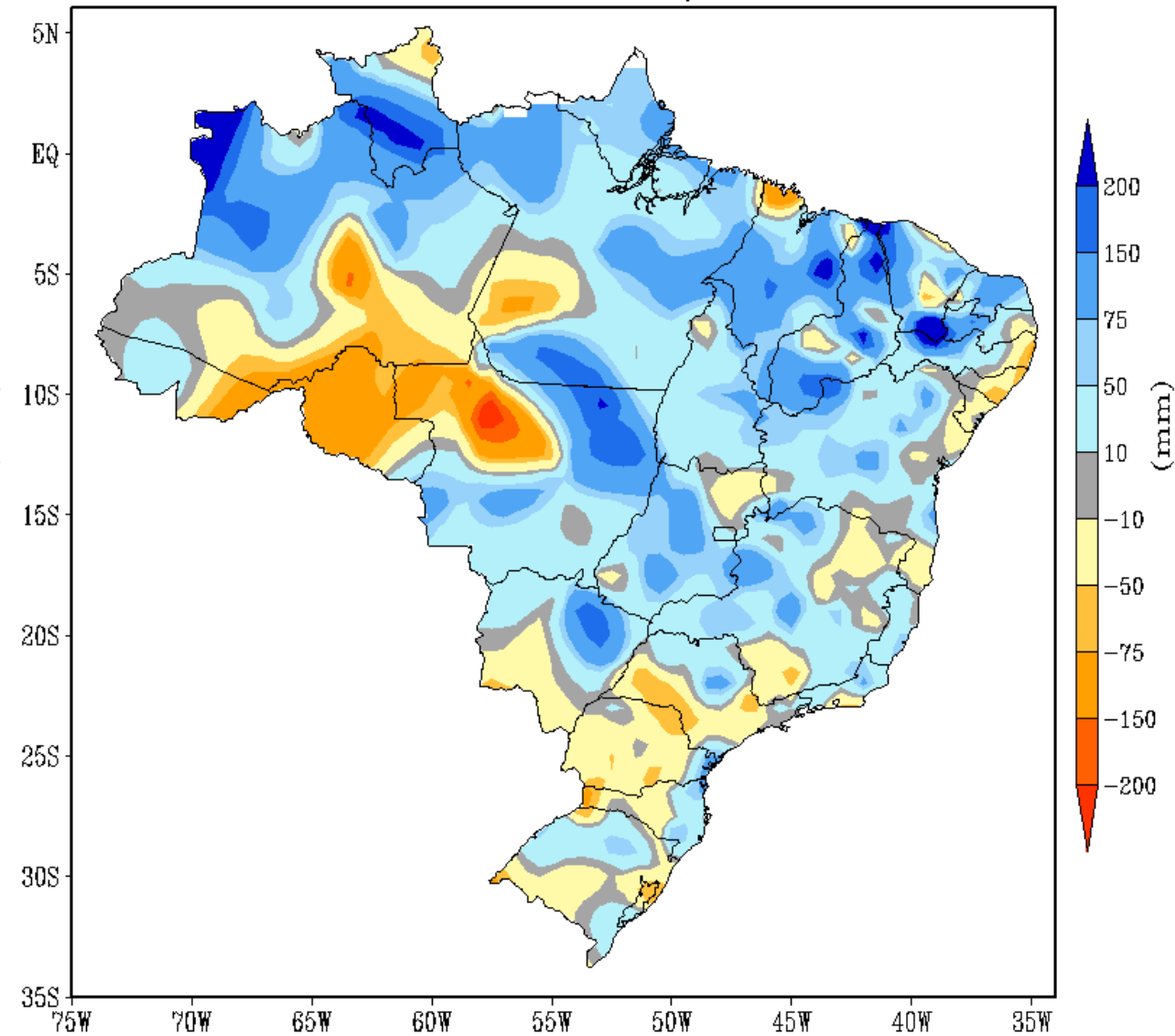


Previsão de precipitação e Anomalia MAR 2021

PRECIPITACAO TOTAL PREVISTA (mm)
ATUALIZACAO - JANEIRO/2021
VALIDO PARA MARCO/2021

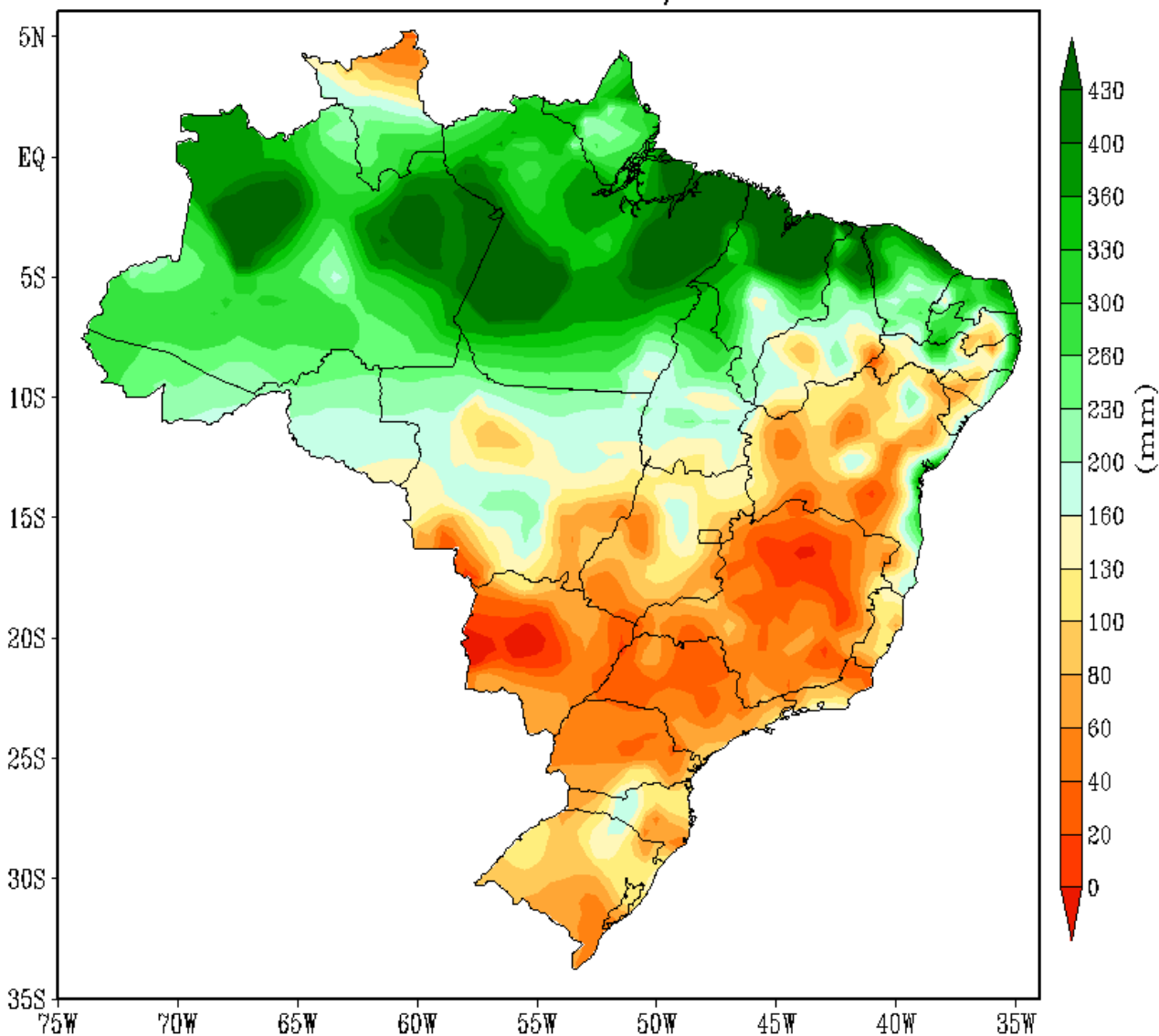


PREVISÃO DE ANOMALIAS DE PRECIPITAÇÃO (mm)
ATUALIZACAO - JANEIRO/2021
VALIDO PARA MARCO/2021

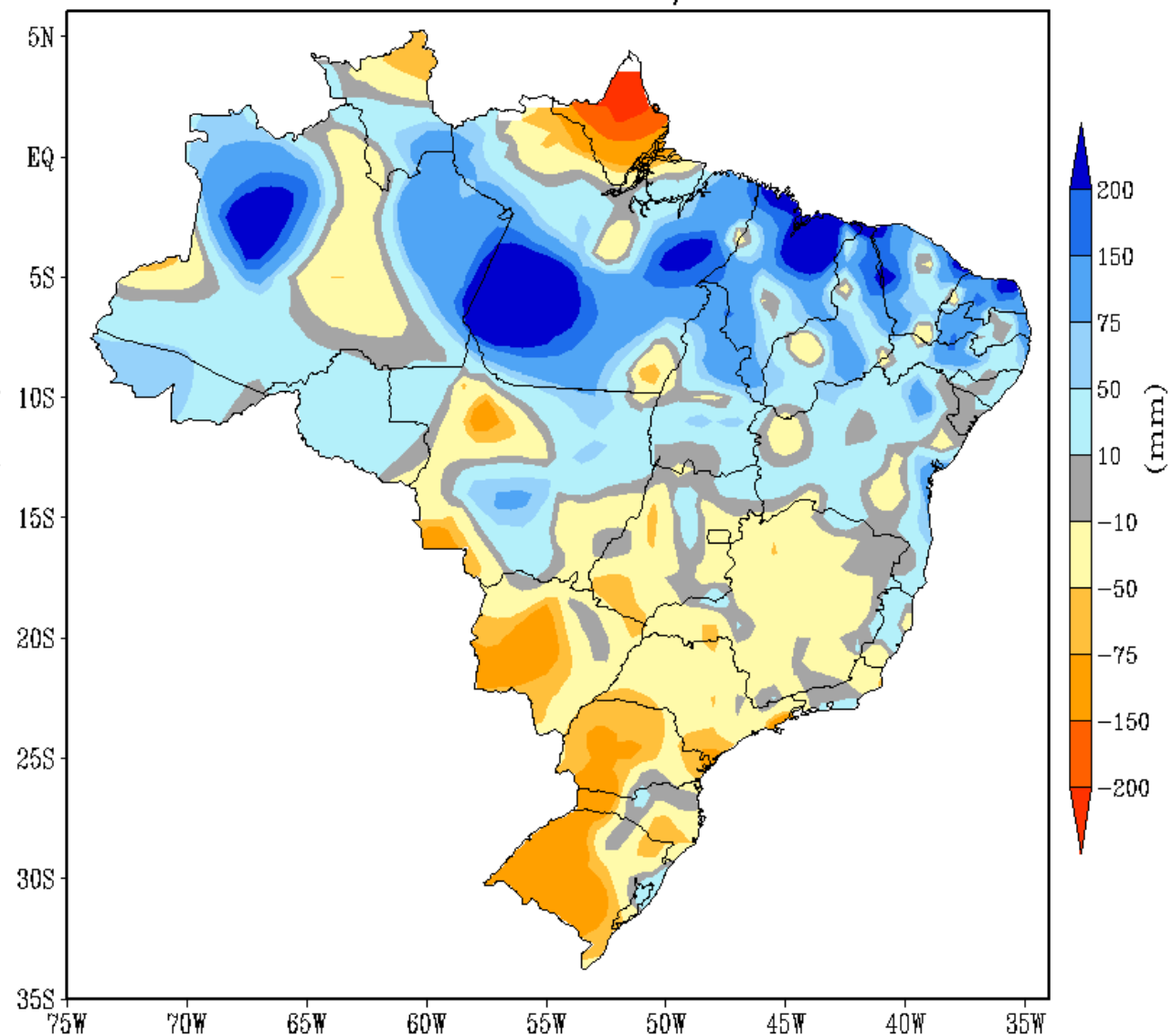


Previsão de precipitação e Anomalia ABR 2021

PRECIPITACAO TOTAL PREVISTA (mm)
ATUALIZACAO - JANEIRO/2021
VALIDO PARA ABRIL/2021



PREVISÃO DE ANOMALIAS DE PRECIPITAÇÃO (mm)
ATUALIZACAO - JANEIRO/2021
VALIDO PARA ABRIL/2021



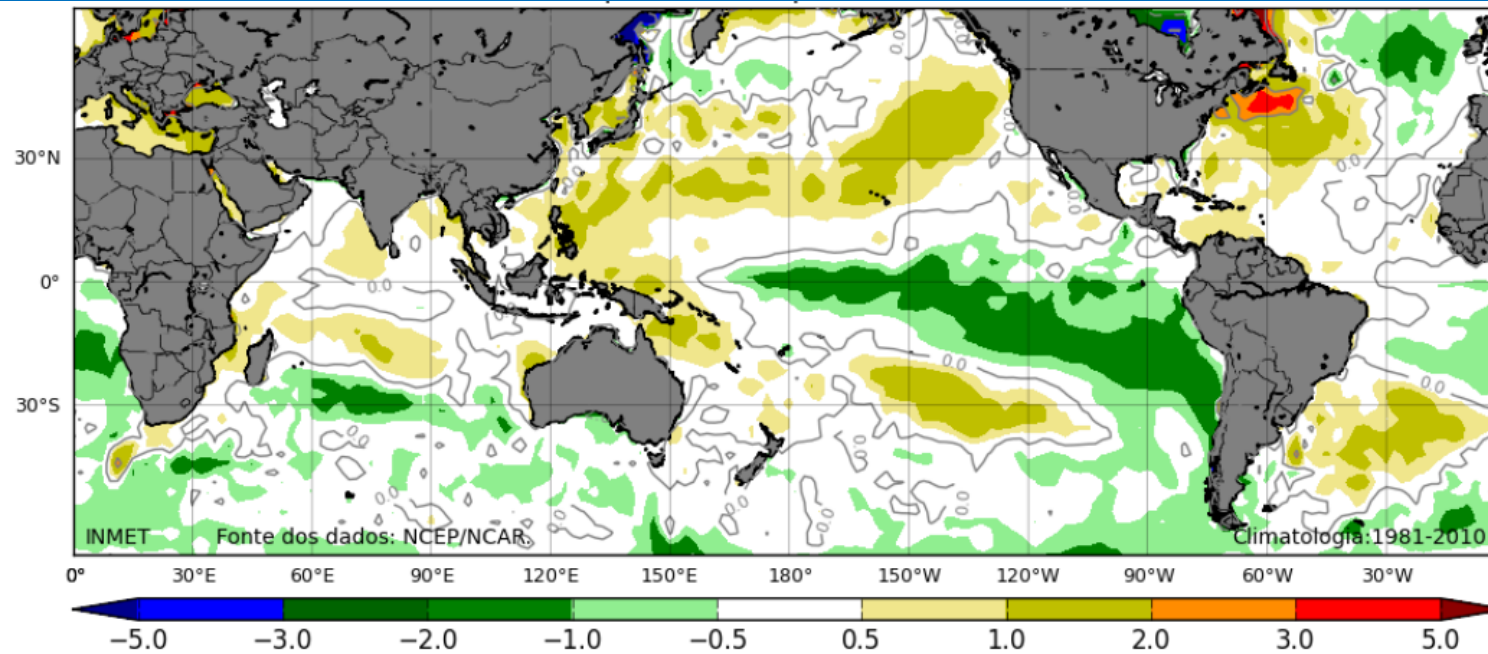
ENSO: Recent Evolution, Current Status and Predictions

January 25 2021

Presentation Merinaldo Bezerra

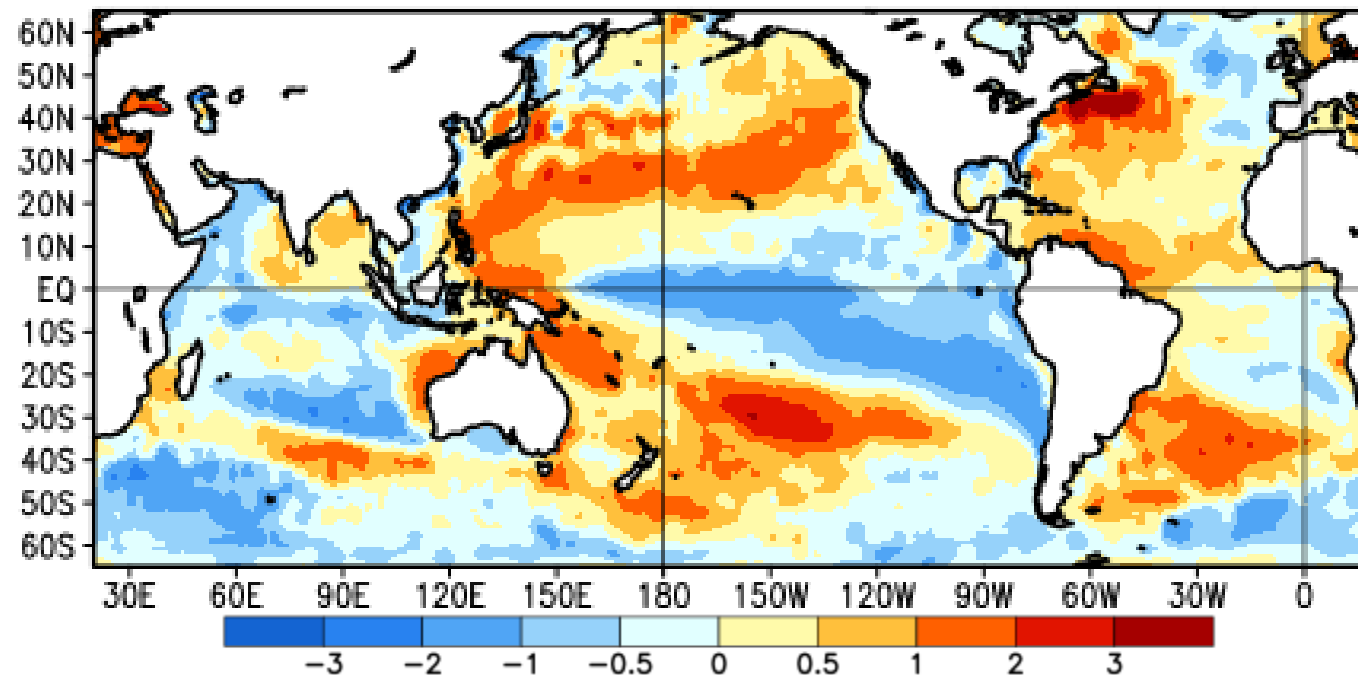
Anomalia de TMS (°C)

16 a 31.Dez.2020

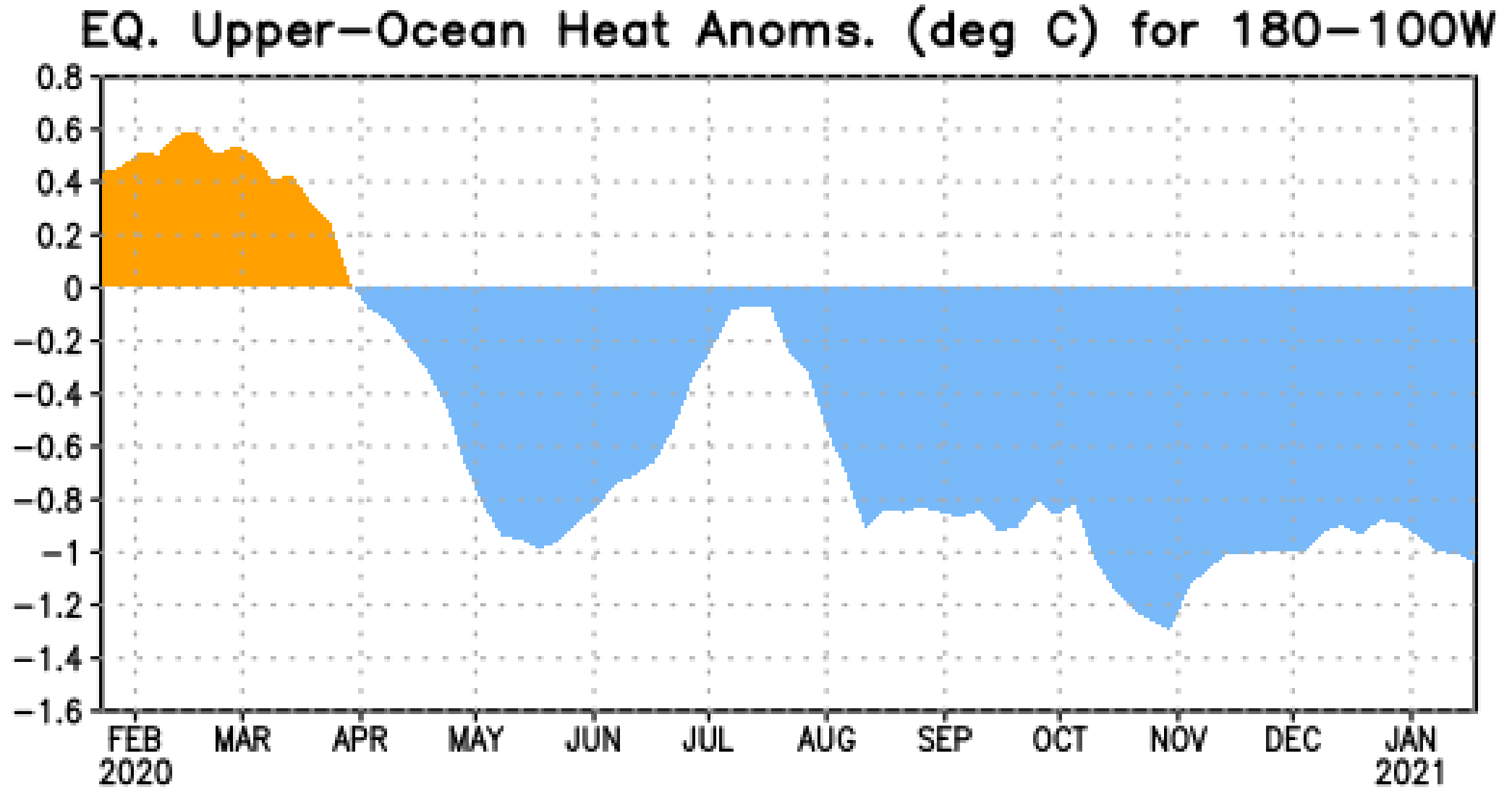


Fonte/Créditos: INMET

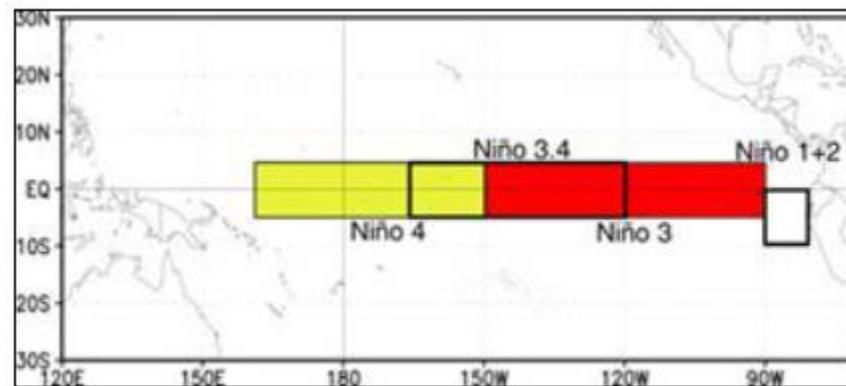
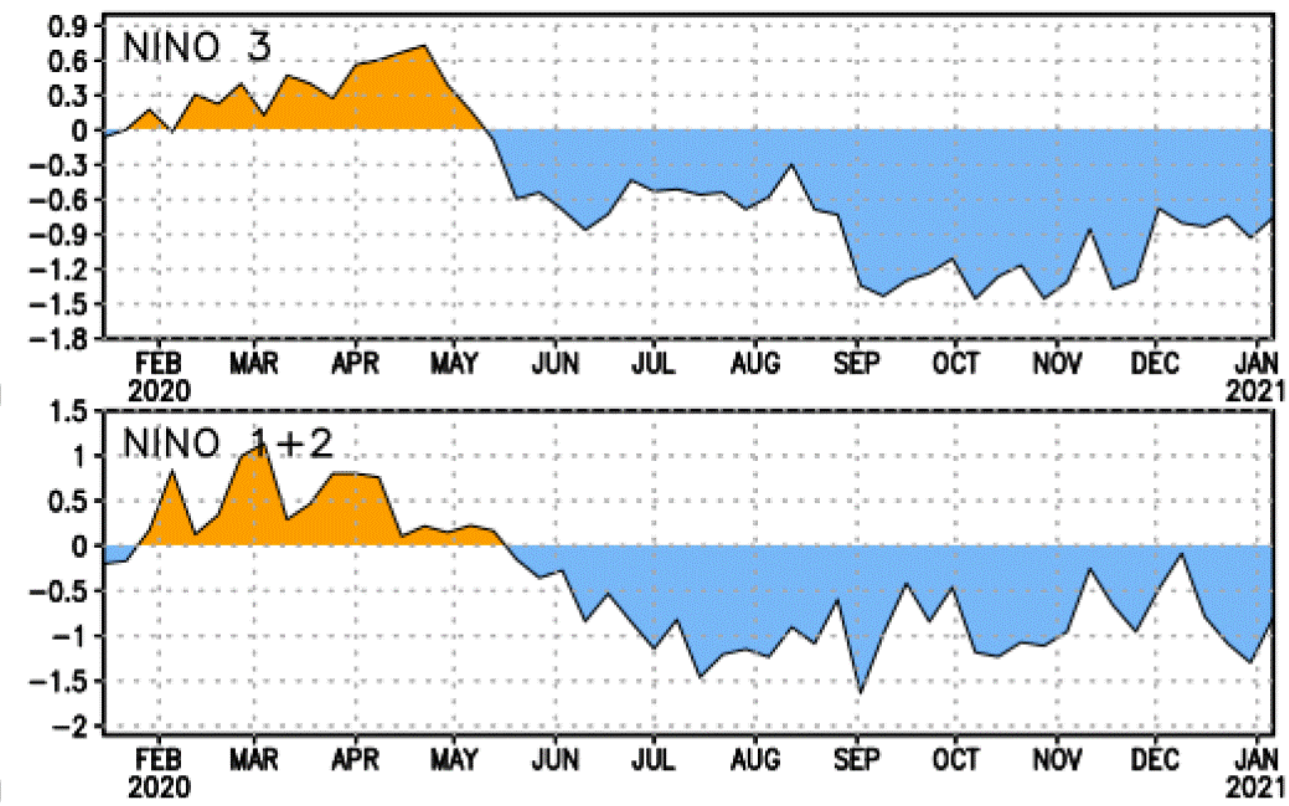
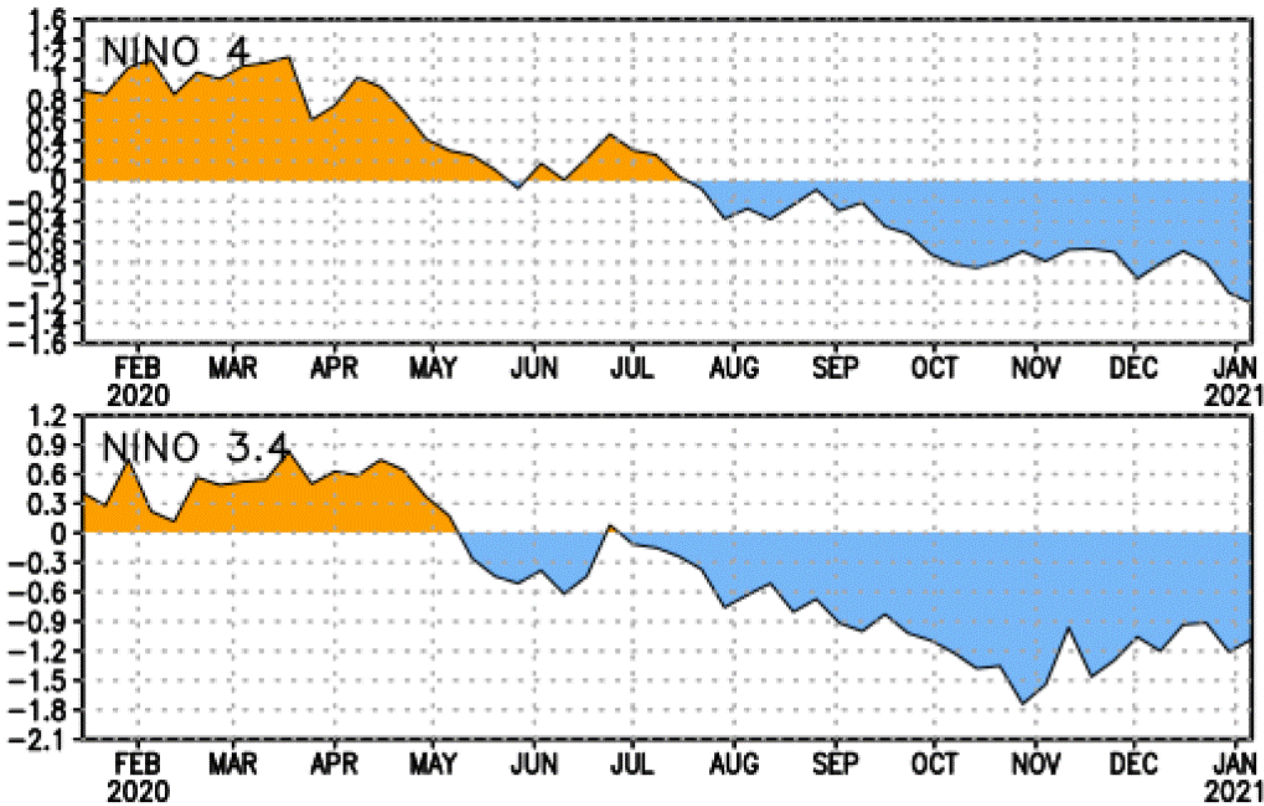
27.Dez a 23.Jan.2021



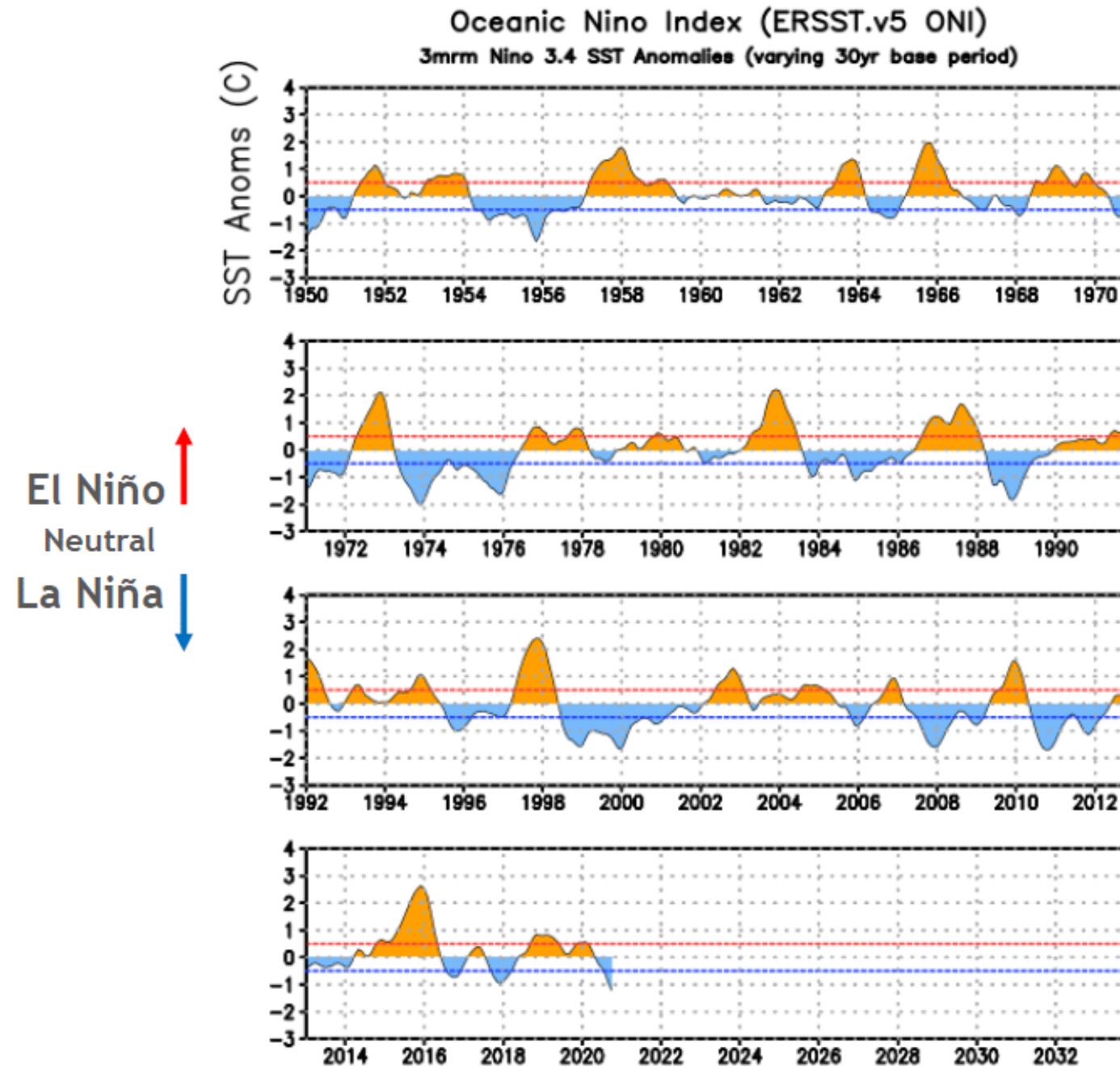
Fonte/Créditos: IRI



Evolução das Anomalias de TSM (SST) nas Diferente Regiões do Niño (°C) - Últimos 12 Meses



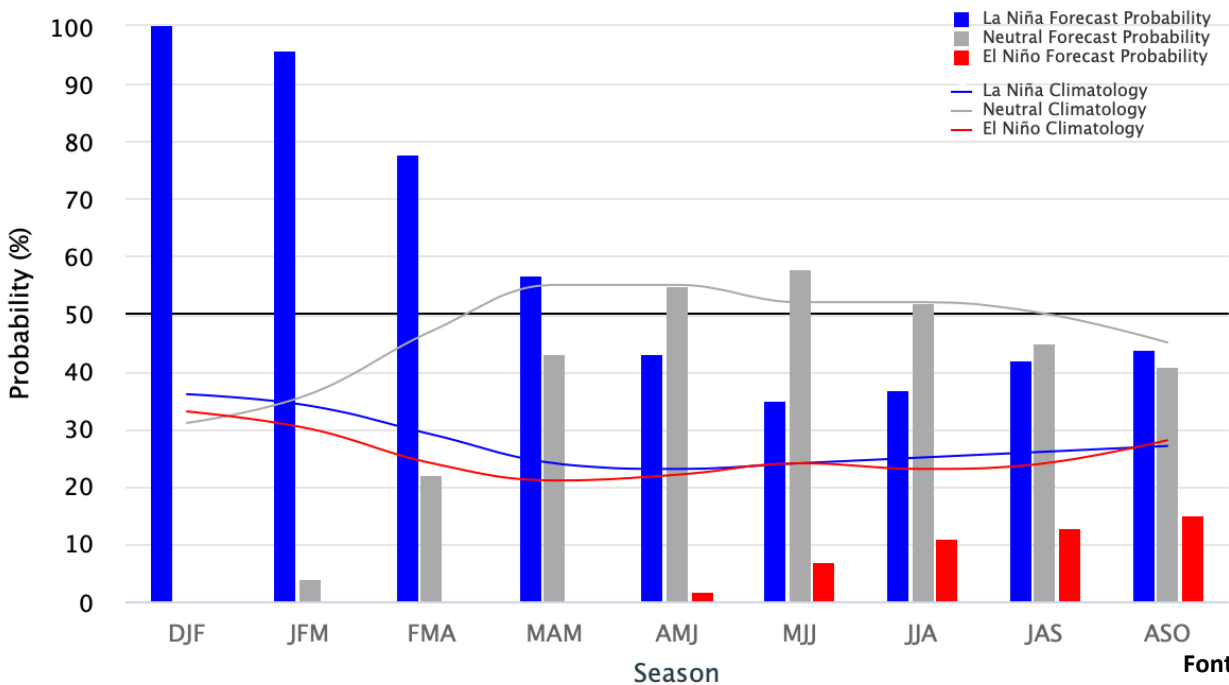
Oceanic Niño Index (ONI) – Evolução desde 1950 a 2020 (°C)



% de Probabilidade de previsão ENSO baseada em modelo do CPC / IRI (Início de jan.2021 VS Meados de Dez.2020)

Early-January 2021 CPC/IRI Official Probabilistic ENSO Forecasts

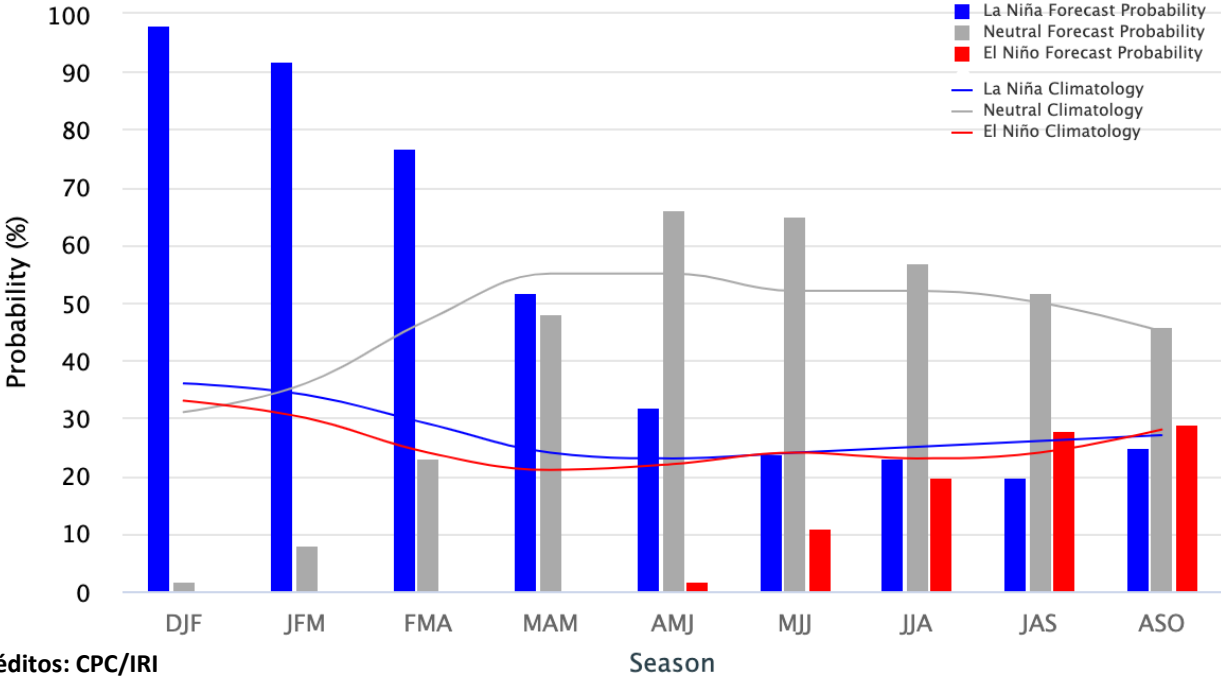
ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: -0.5 °C to 0.5 °C



Fonte/Créditos: CPC/IRI

Mid-December 2020 IRI/CPC Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: -0.5 °C to 0.5 °C



Probabilidades de previsão ENSO - base modelo meados (18) de DEZ (IRI / CPC)

Trimestre	La Niña	Neutro	El Niño
DJF 2021	98%	2%	0%
JFM 2021	92%	8%	0%
FMA 2021	77%	23%	0%
MAM 2021	52%	48%	0%
AMJ 2021	32%	66%	2%
MJJ 2021	24%	65%	11%
JJA 2021	23%	57%	20%
JAS 2021	20%	52%	28%
ASO 2021	25%	46%	29%

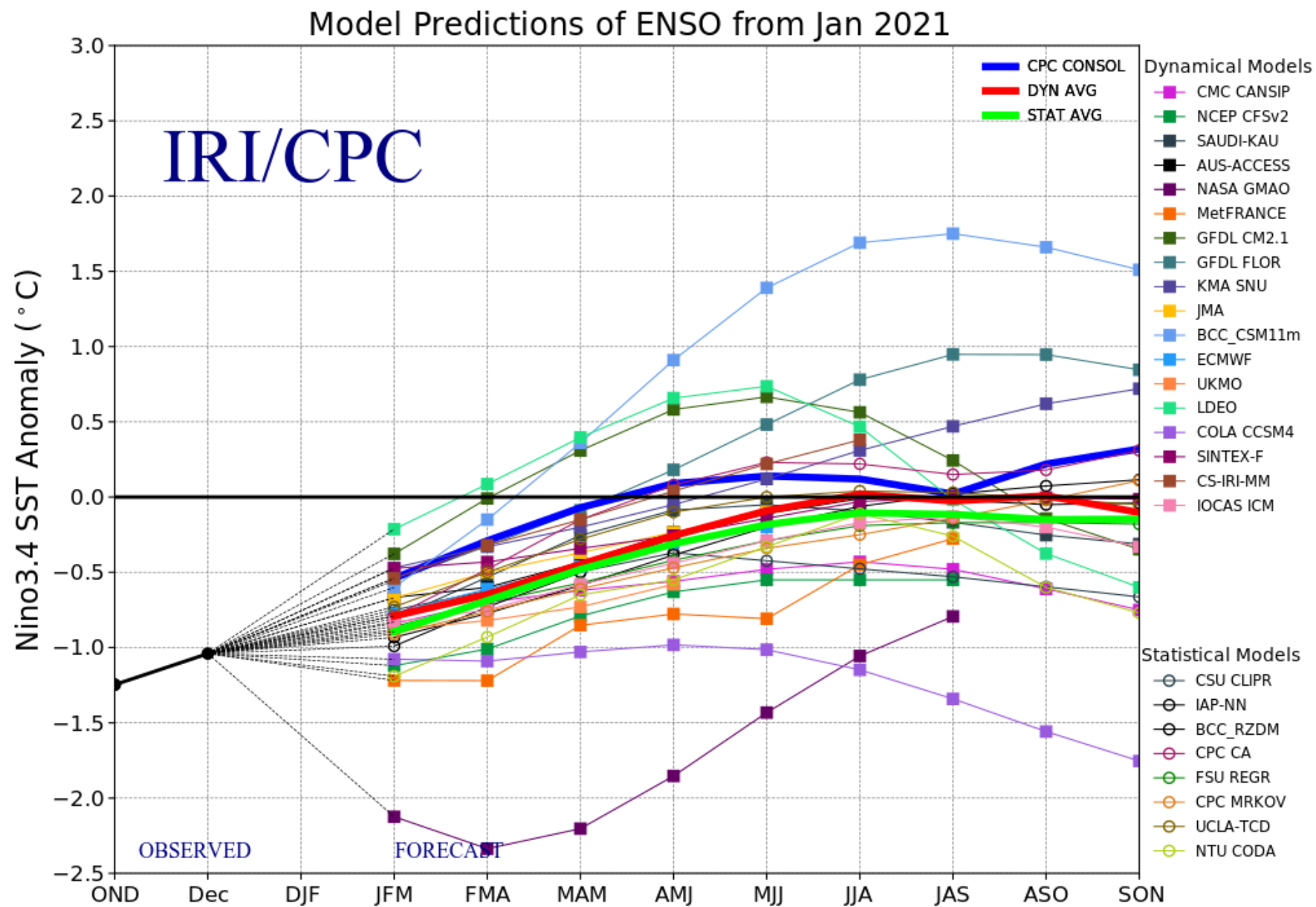
Fonte: CPC/IRI Elaboração: Merinaldo Bezerra

Probabilidades de previsão ENSO - base modelo início (14) de JAN (IRI / CPC)

Trimestre	La Niña	Neutro	El Niño
DJF 2021	100%	0%	0%
JFM 2021	96%	4%	0%
FMA 2021	78%	22%	0%
MAM 2021	57%	43%	0%
AMJ 2021	43%	55%	2%
MJJ 2021	35%	58%	7%
JJA 2021	37%	52%	11%
JAS 2021	42%	45%	13%
ASO 2021	44%	41%	14%

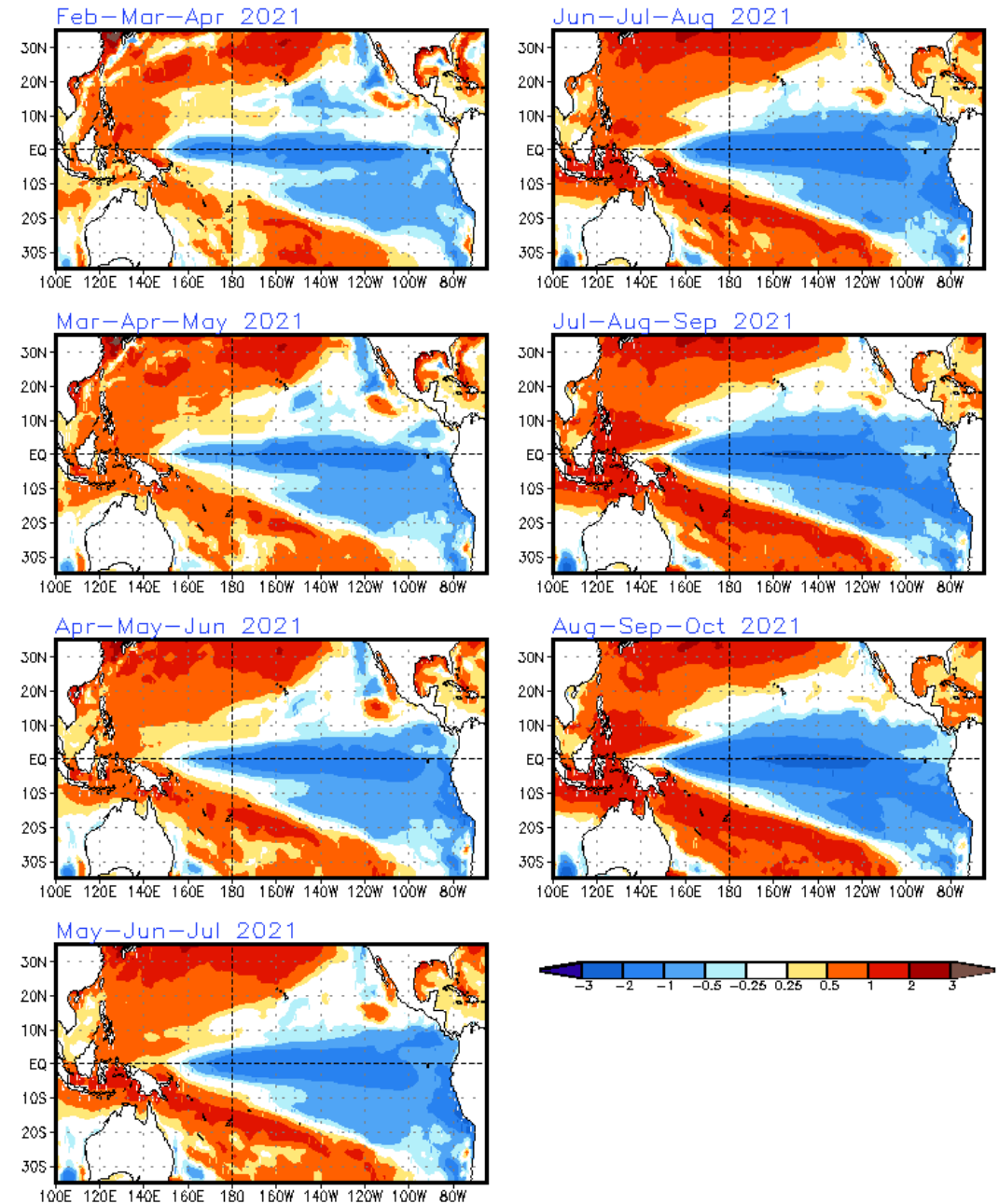
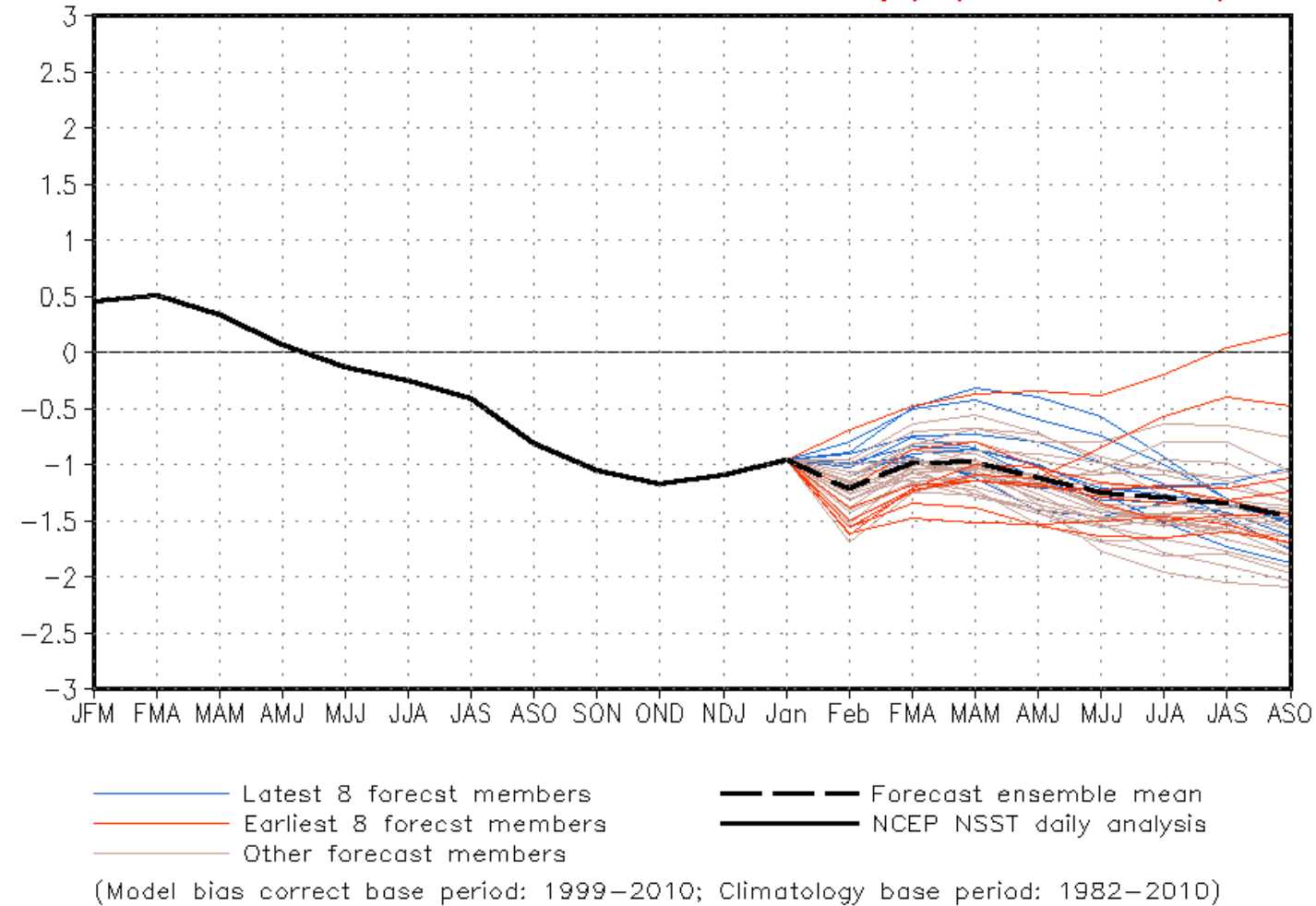
Fonte: CPC/IRI Elaboração: Merinaldo Bezerra

Modelo de Previsões de ENSO (Observado: Out a Dez.2020, Previsão: Jan.2021 a Nov.2021)



TSM Observada e Previsão (Sea Surface Temperature Outlook - NCEP CFS.v2 Forecast)

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



Anomalia Histórica da TSM (Temperatura da Superfície do Mar) - Nino 3.4

