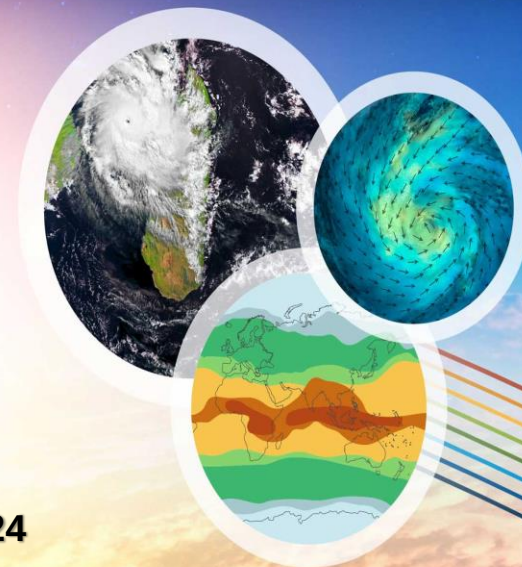


AFRICAN CENTRE OF  
METEOROLOGICAL  
APPLICATIONS FOR  
DEVELOPMENT (ACMAD)

REGIONAL CLIMATE OUTLOOK FORUM  
OVER SUDANO AND SAHELIAN REGION

PRESASS 11 UP-DATE

UP-DATE SEASONAL  
FORECAST FOR JAS 2024



Issued on: JULY 4-5<sup>th</sup>, 2024

Validity period: July to September 2024



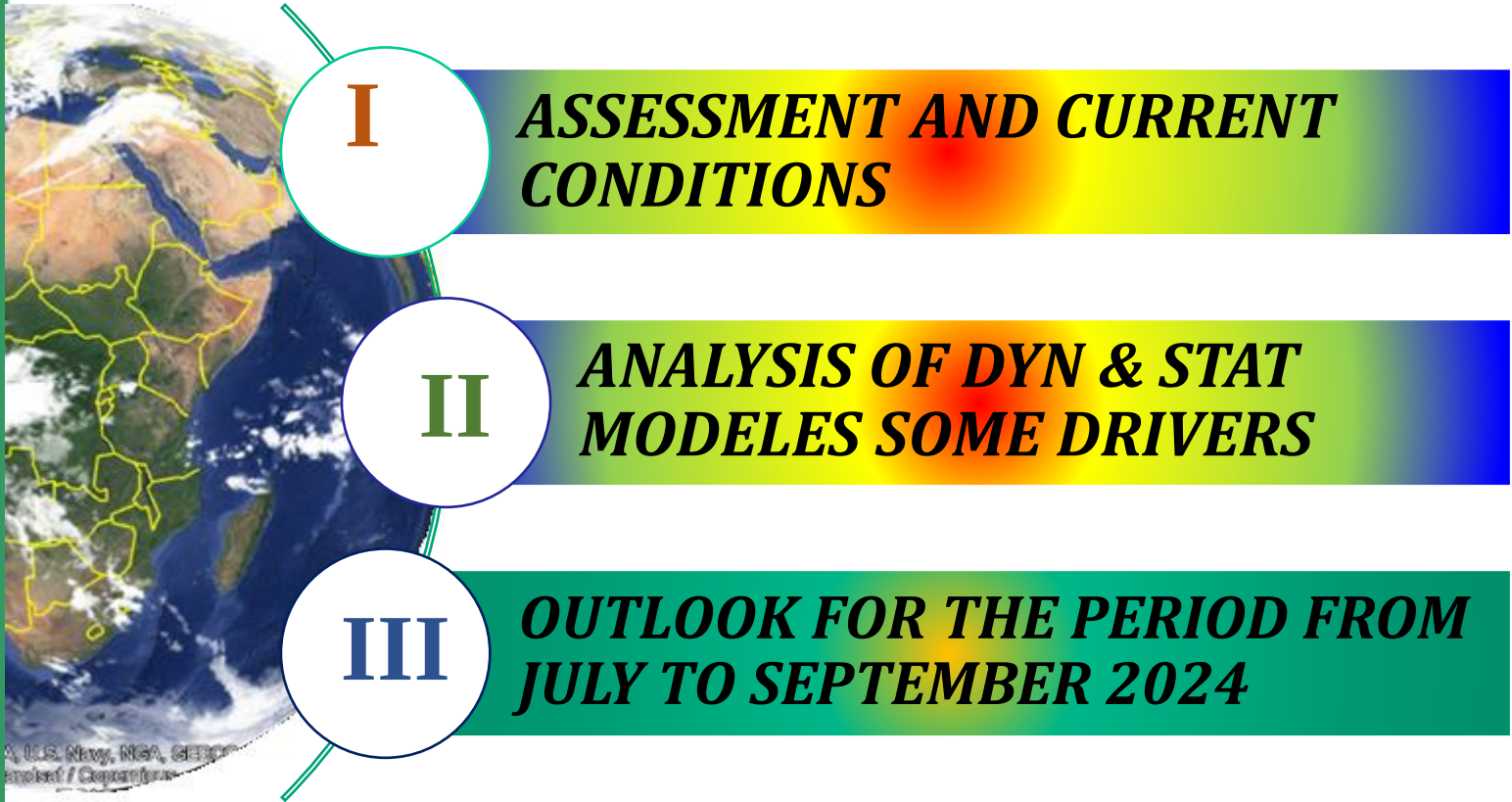
## Contributors

| Name                       | Function                                      | Date       |
|----------------------------|-----------------------------------------------|------------|
| Mr. Hubert KABENGELA       | Thematic Expert – Data and Climate Monitoring | 09-02-2024 |
| Pierre H. KAMSU TAMO, PhD  | Senior Expert Forecaster                      | 09-02-2024 |
| Mr. Godefroid NSHIMIRIMANA | Thematic expert in Meteorology                | 09-02-2024 |

## Versions

| Version | Date       | By                         | Descriptions                                                  |
|---------|------------|----------------------------|---------------------------------------------------------------|
| V0      | 09-02-2024 | CDD Climate Experts        | First draft for « Briefing », with all experts' contributions |
| Final   | 09-02-2024 | Dr. Andre KAMGA FOAMOUHOUE | Final Review                                                  |

# OUTLINE





# I

## ***ASSESSMENT AND CURRENT CONDITIONS***

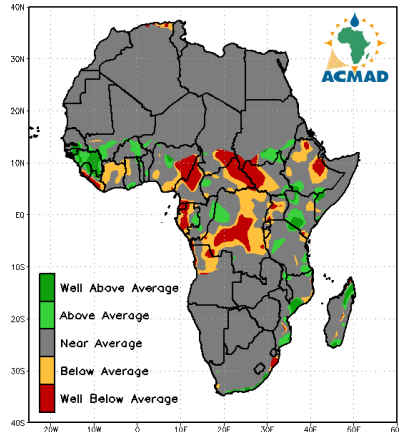
A, U.S. Navy, NSA, SECDEF  
and/or / Operations

## Current condition Precip

### Latest 90-days

08Jan2024-06Apr2024

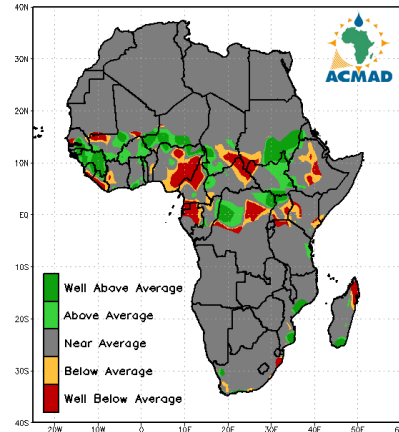
CPC-Uni 90day Precipitation in Percent of Average (%)  
Period: 04Apr2024 to 02Jul2024



### Last 30-days

08Mar-06Apr 2024

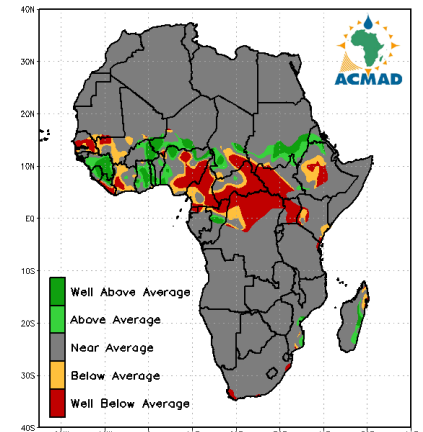
CPC-Uni 30day Precipitation in Percent of Average (%)  
Period: 03Jun2024 to 02Jul2024



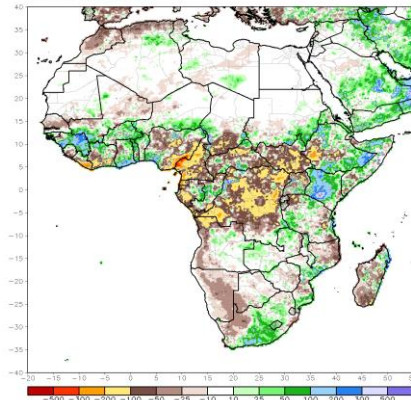
### Last 10-days

26Mar-06Apr 2024

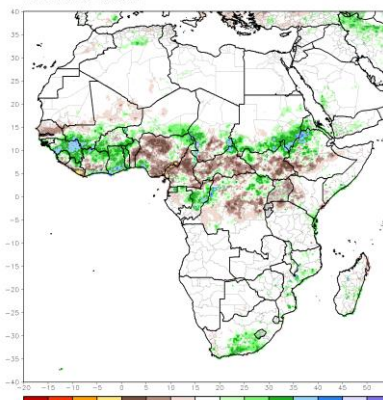
CPC-Uni 10day Precipitation in Percent of Average (%)  
Period: 23Jun2024 to 02Jul2024



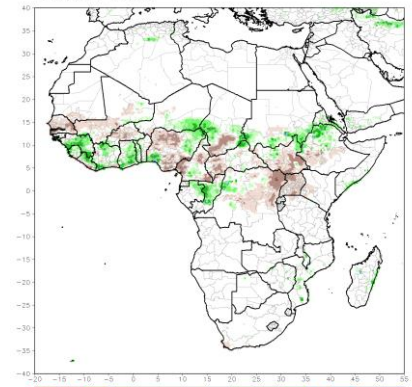
RFE2 90-Day Total Rainfall Anomaly (mm)  
Period: 03Apr2024 - 01Jul2024



RFE2 30-Day Total Rainfall Anomaly (mm)  
Period: 02Jun2024 - 01Jul2024



RFE2 10-Day Total Rainfall Anomaly (mm)  
Period: 22Jun2024 - 01Jul2024





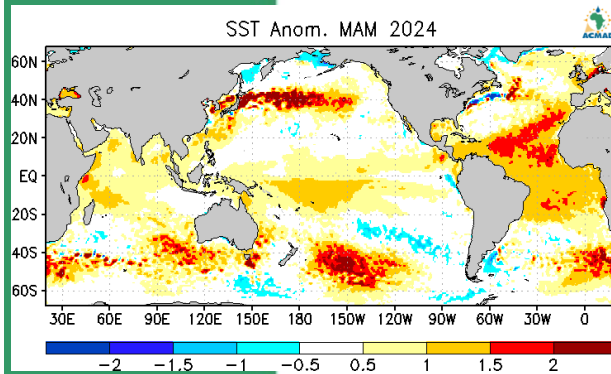
## Current condition SST anom

**MAM 2024**

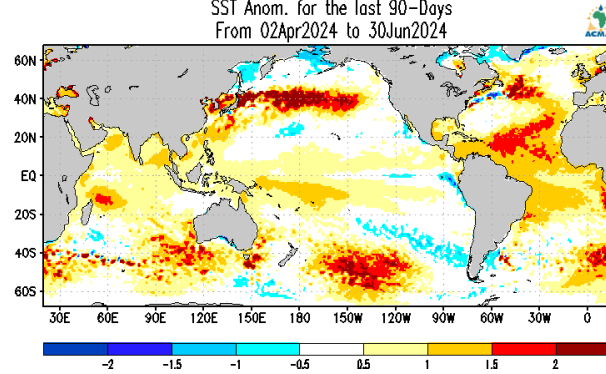
**Latest 90-days**

**May 2024**

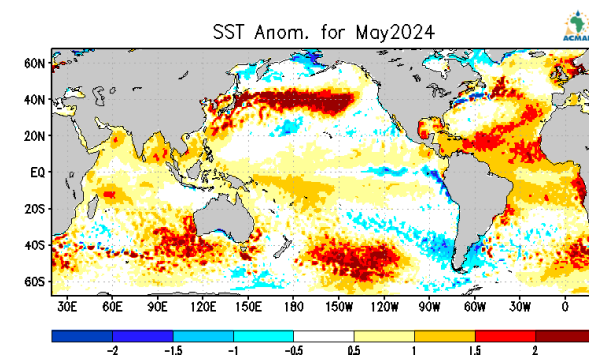
SST Anom. MAM 2024



SST Anom. for the last 90-Days  
From 02Apr2024 to 30Jun2024



SST Anom. for May2024

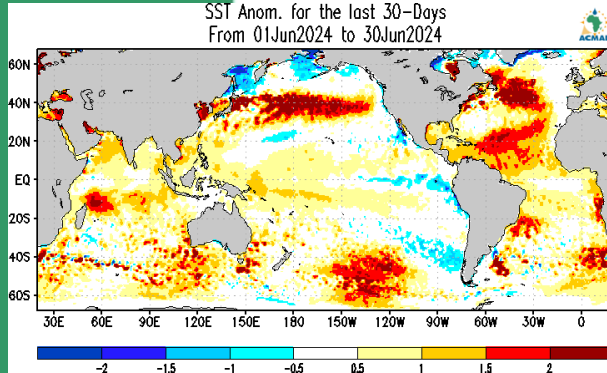


**Last 30-days**

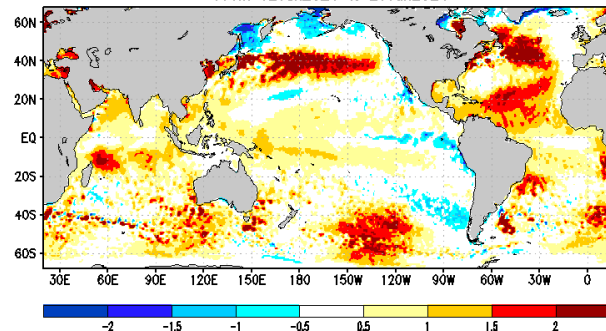
**Latest 4 Weeks**

**Last 10-days**

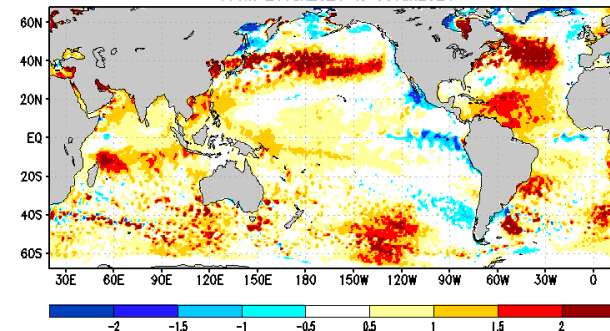
SST Anom. for the last 30-Days  
From 01Jun2024 to 30Jun2024



SST Anom. for the Week  
From 02Jun2024 to 29Jun2024



SST Anom. for the last 10-Days  
From 21Jun2024 to 30Jun2024



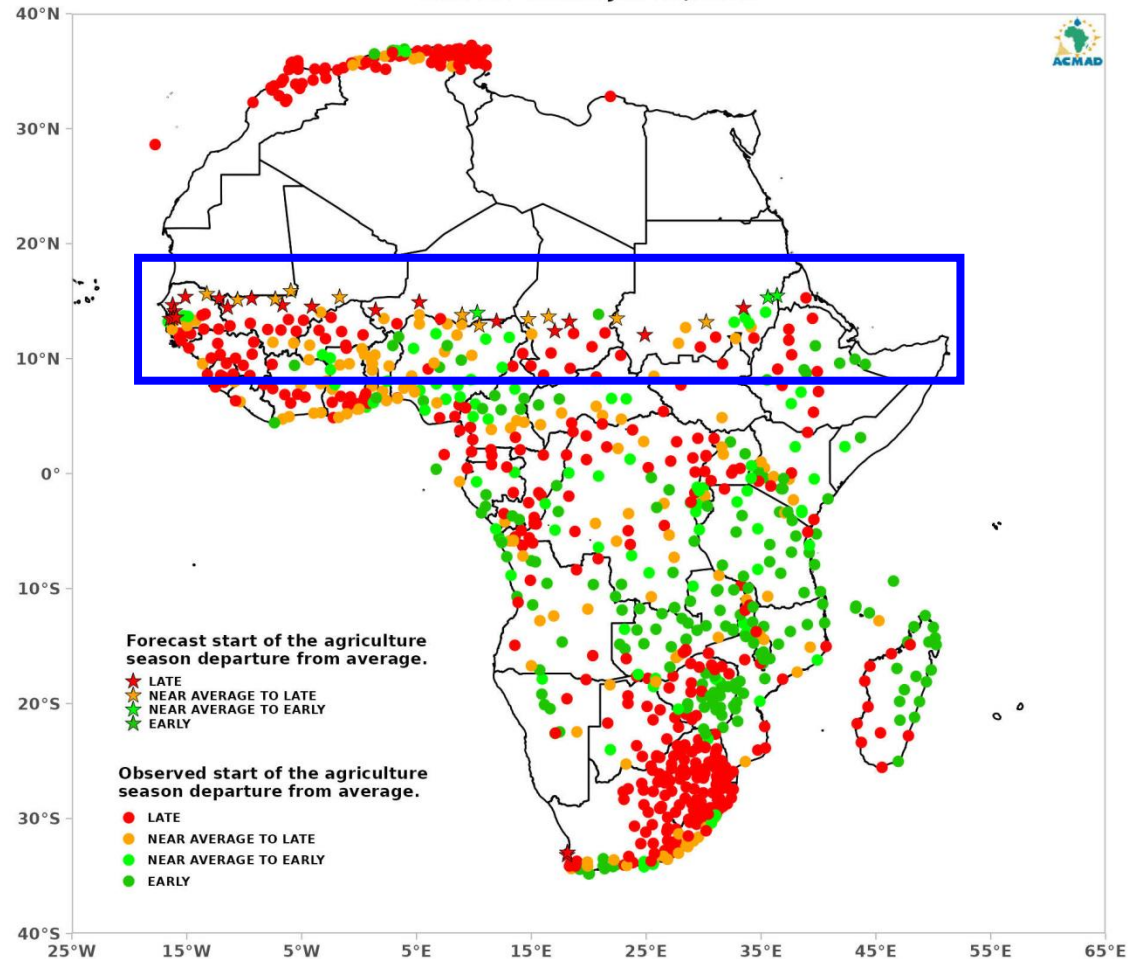
## ONSET

MONITORING OF OBSERVED ANOMALIES ON THE START OF THE AGRICULTURE SEASON AND OUTLOOK

OBSERVATION AND MONITORING UNTIL: Jun-25, 2024

OUTLOOK VALIDITY PERIOD: From Jun-26-2024 to Jul-10-2024

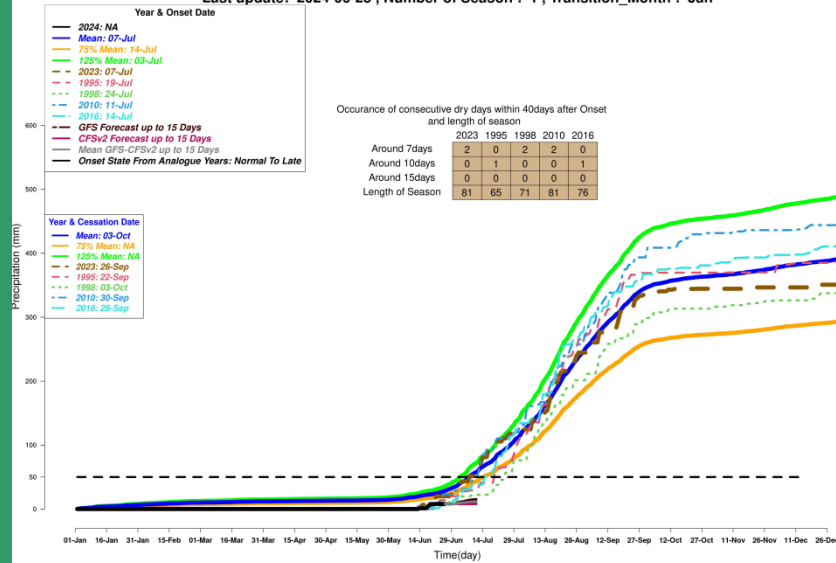
DATE OF ISSUE: Jun-26, 2024.



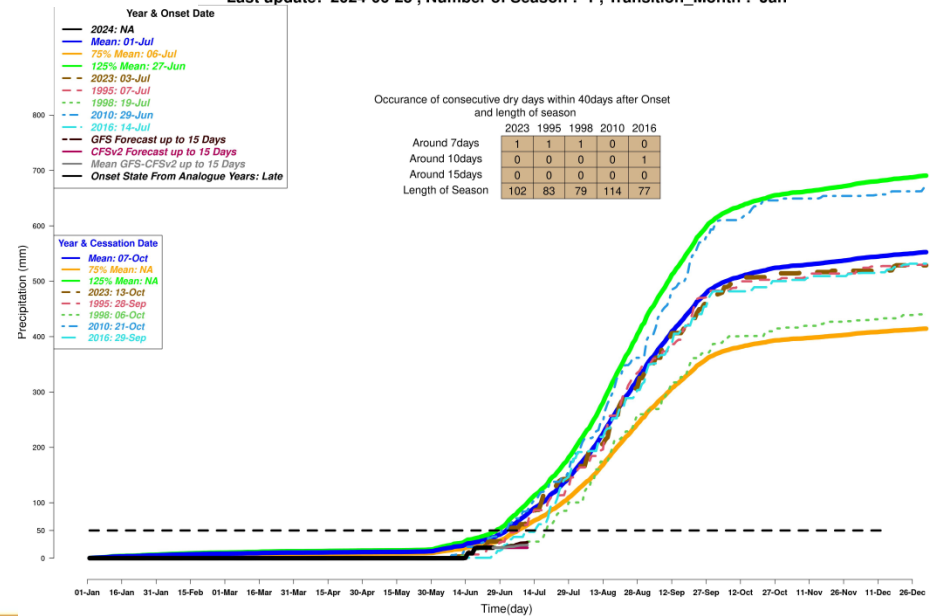


# CUMULATIVE DAILY RAINFALL PROFIL

Senegal : Cumulative precipitation for MATAM , Data source: TAMSAT  
Last update: 2024-06-25 , Number of Season : 1 , Transition\_Month : Jan



Senegal : Cumulative precipitation for KAOLACK , Data source: TAMSAT  
Last update: 2024-06-25 , Number of Season : 1 , Transition\_Month : Jan

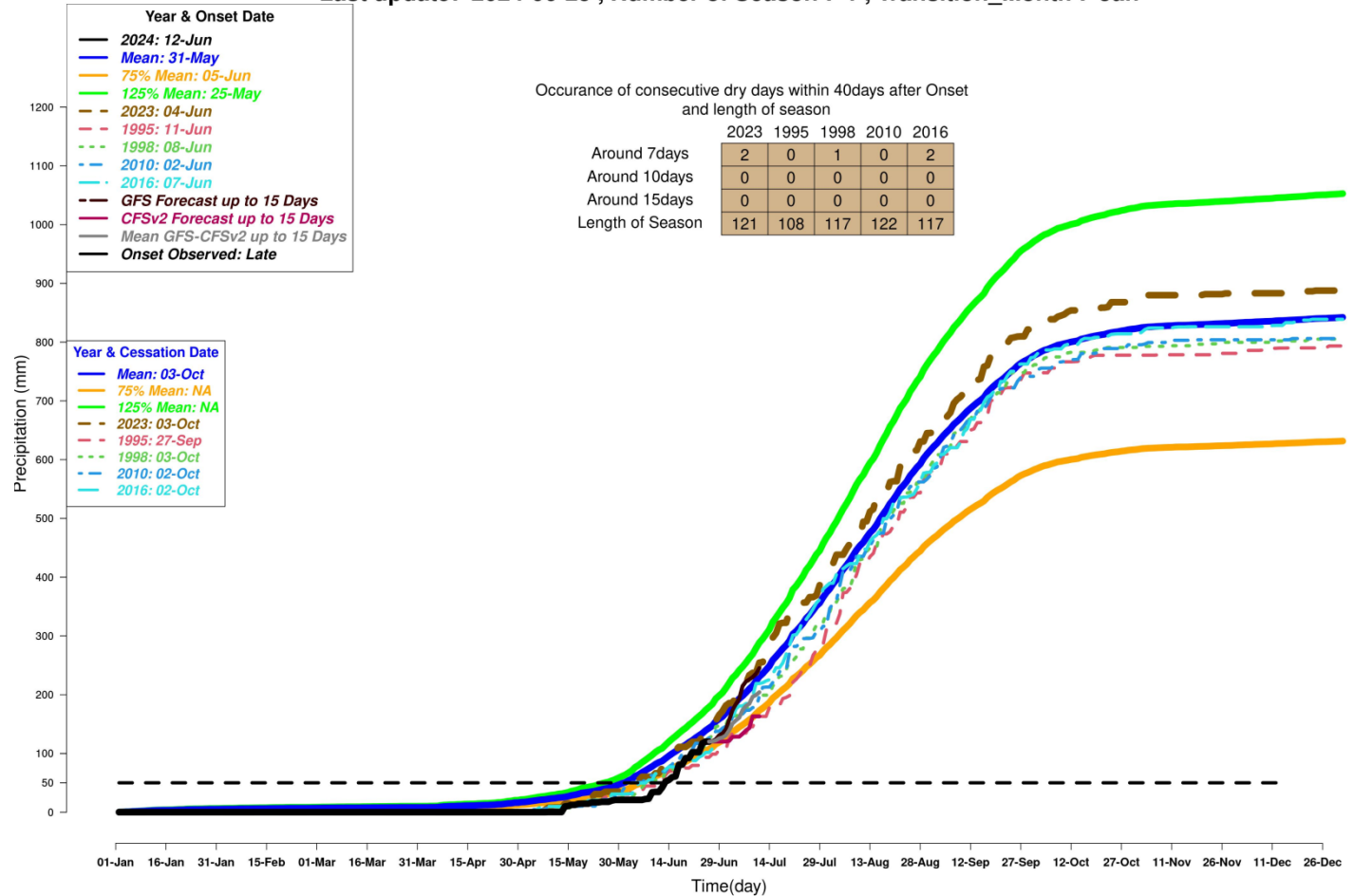






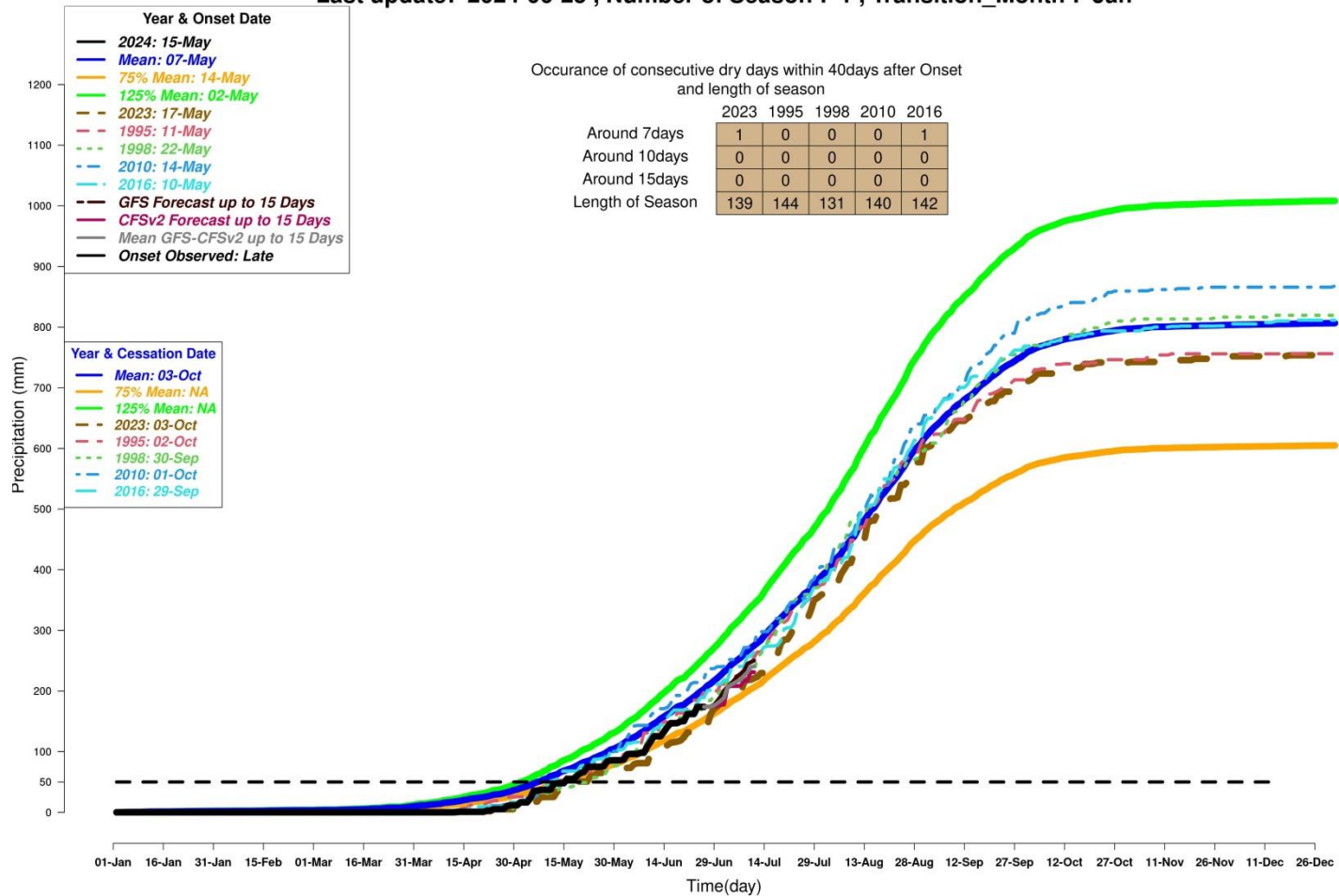
# CUMULATIVE DAILY RAINFALL PROFIL

Mali : Cumulative precipitation for KITA , Data source: TAMSAT  
Last update: 2024-06-25 , Number of Season : 1 , Transition\_Month : Jan



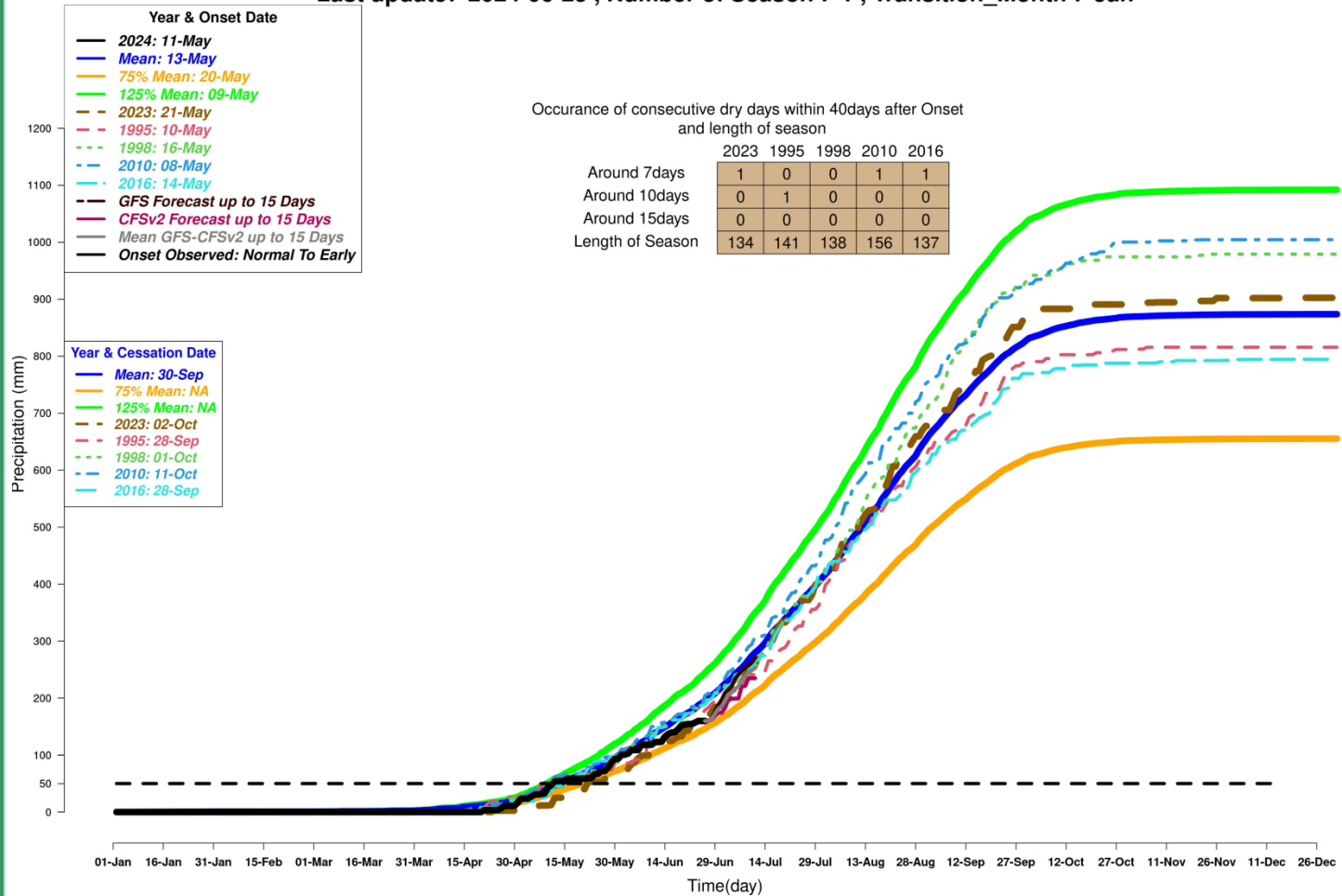
# CUMULATIVE DAILY RAINFALL PROFIL

Burkina : Cumulative precipitation for FADA-N\_GOURMA , Data source: TAMSAT  
Last update: 2024-06-25 , Number of Season : 1 , Transition\_Month : Jan



# CUMULATIVE DAILY RAINFALL PROFIL

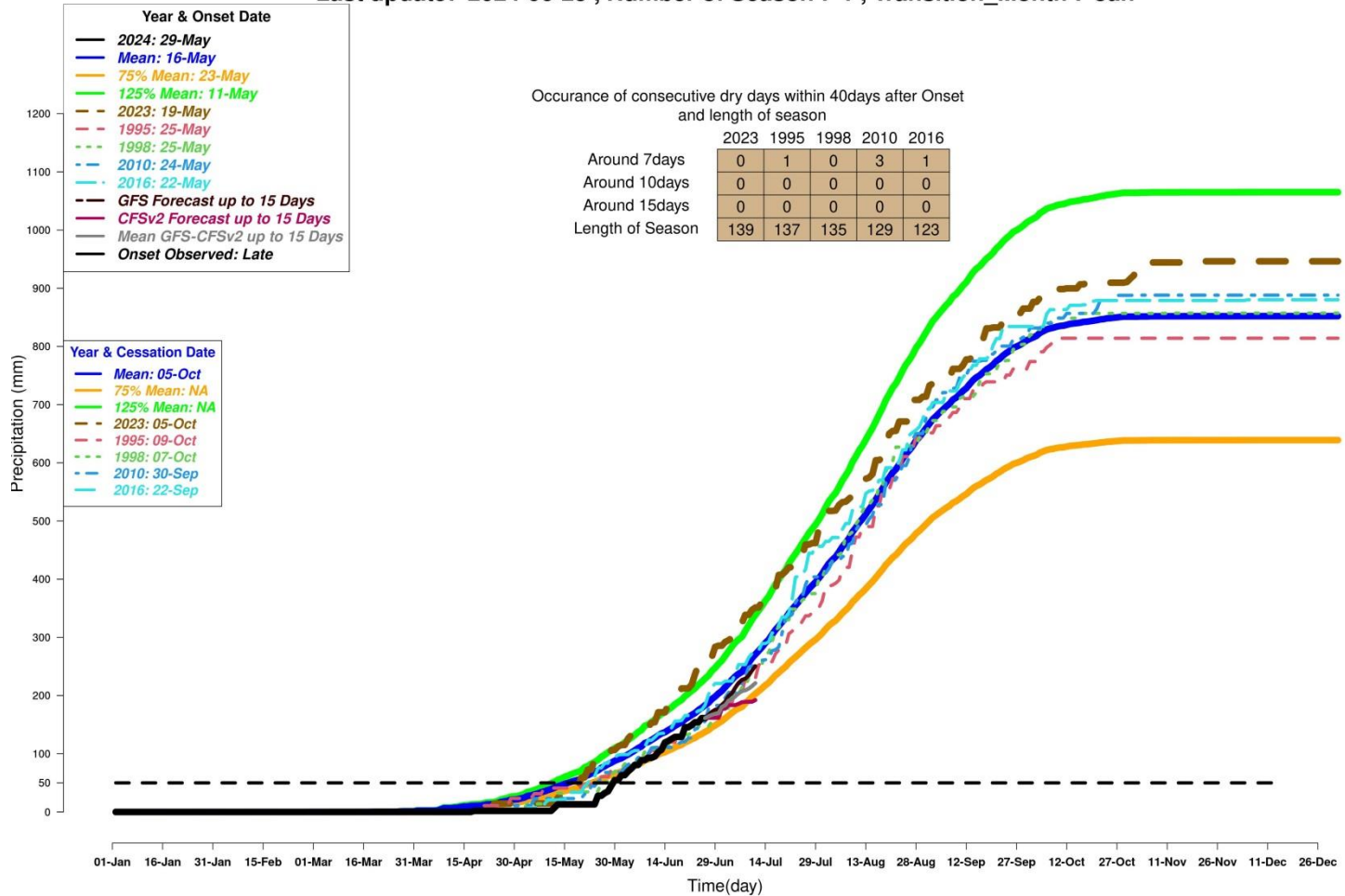
Nigeria : Cumulative precipitation for GUSAU , Data source: TAMSAT  
Last update: 2024-06-25 , Number of Season : 1 , Transition\_Month : Jan



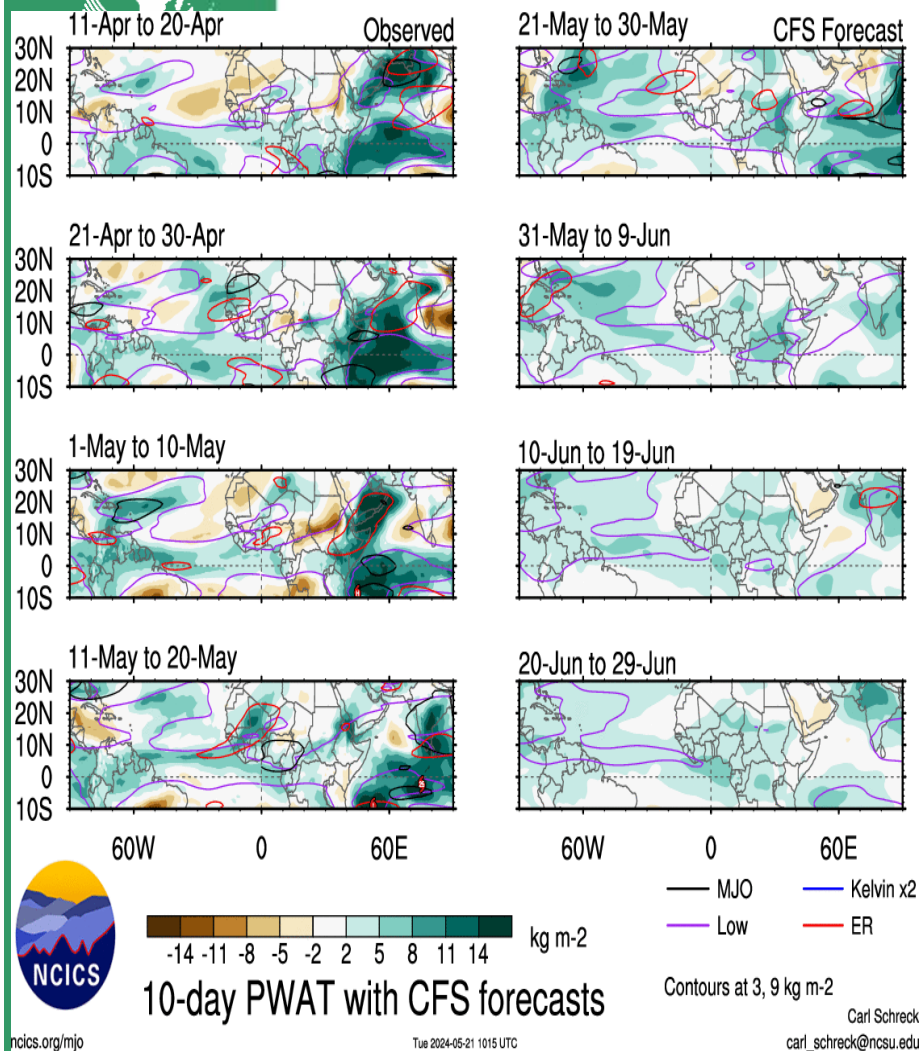


# CUMULATIVE DAILY RAINFALL PROFIL

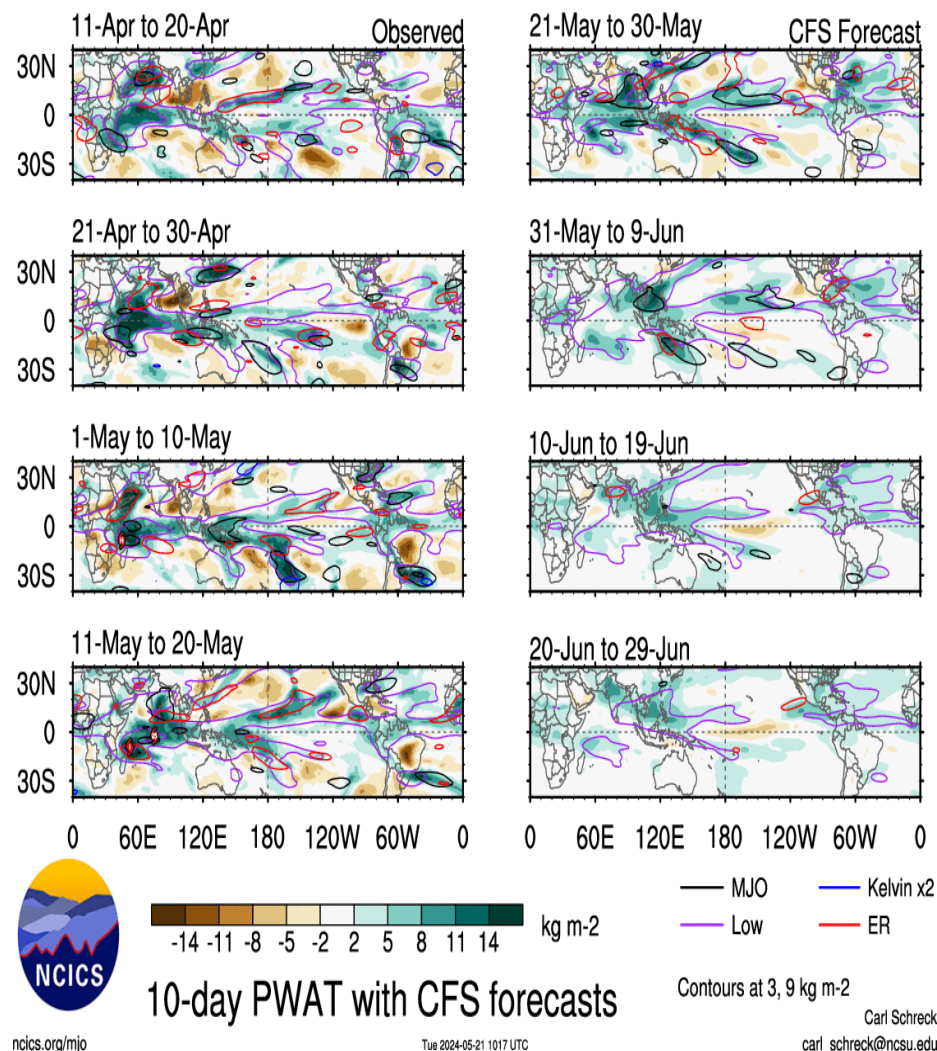
Chad : Cumulative precipitation for BOUSSO , Data source: TAMSAT  
Last update: 2024-06-25 , Number of Season : 1 , Transition\_Month : Jan



# Dekadal Precipitable Water (PWAT) Anomalies – Obs. and Fcst



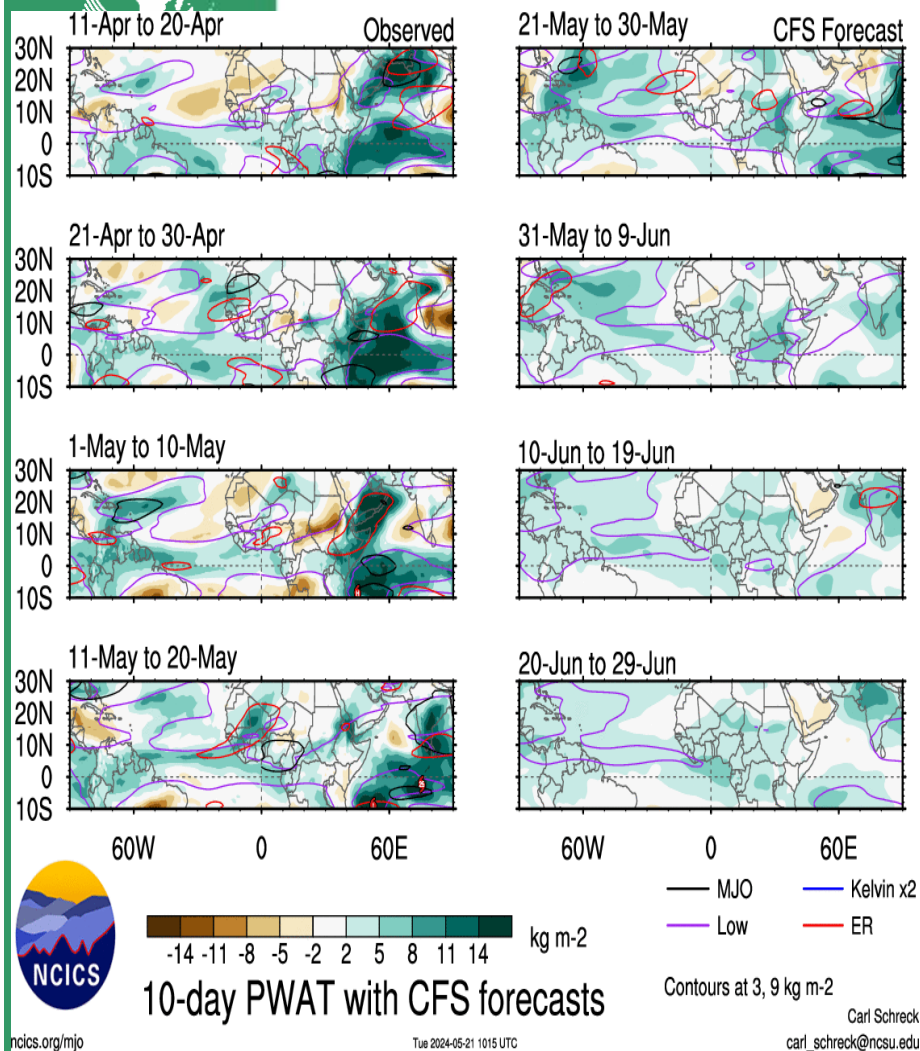
**Figure 7a:**  
**Africa**



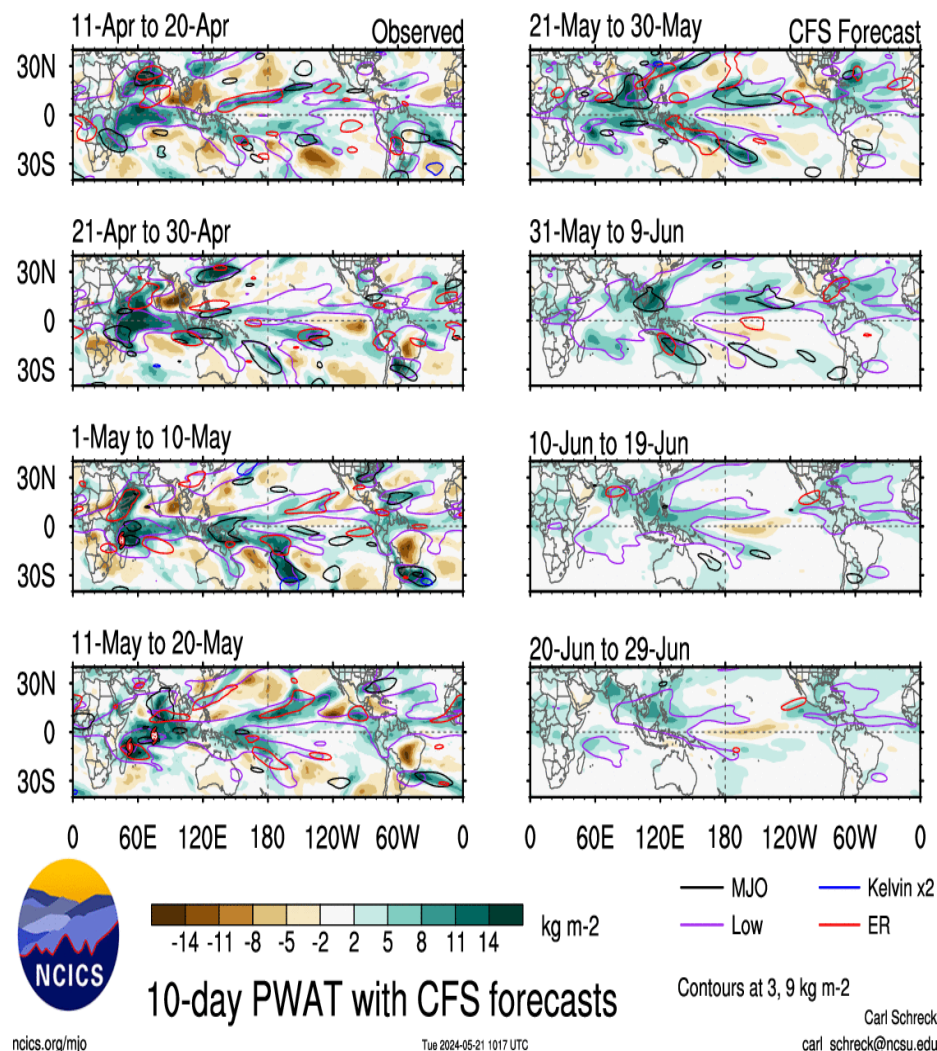
**Figure 7b:**  
**Global**



# Dekadal Precipitable Water (PWAT) Anomalies – Obs. and Fcst

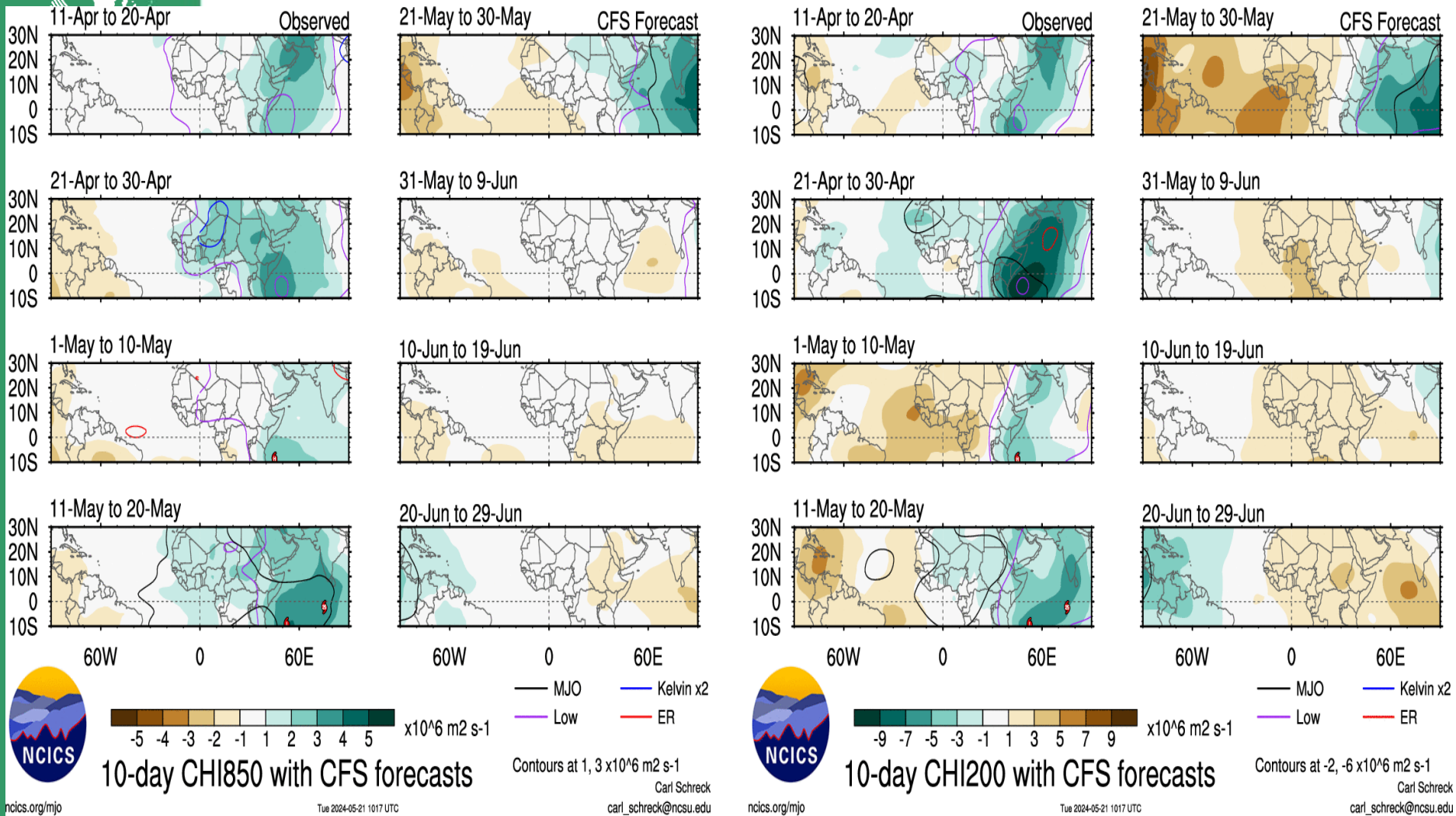


**Figure 7a:**  
**Africa**



**Figure 7b:**  
**Global**

# Dekadal Velocity Potential Anomalies – Obs and Fcst

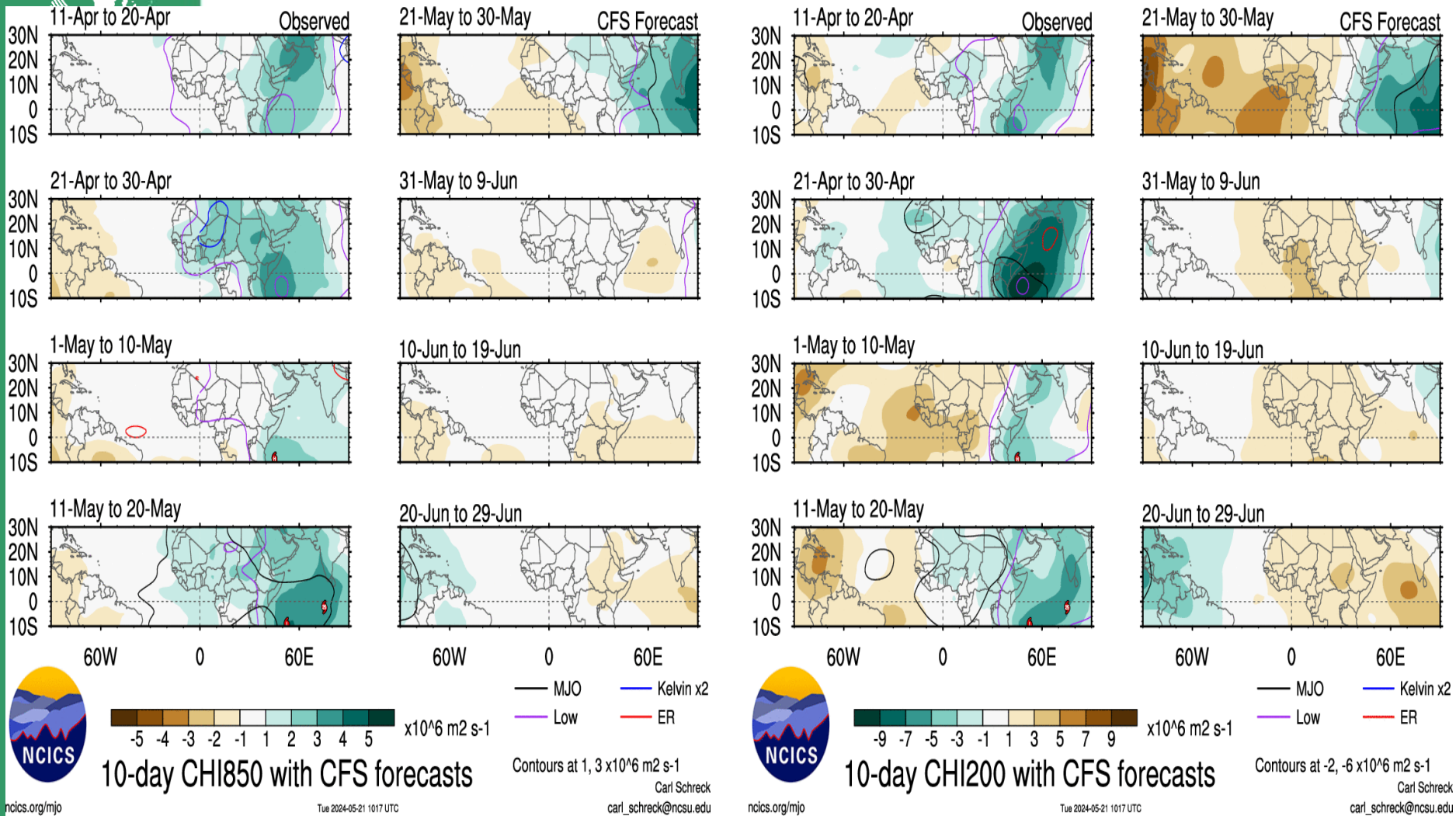


<https://ncics.org/pub/mjo/v2/map/chi850.cfs.all.global.10.png>

<https://ncics.org/pub/mjo/v2/map/chi200.cfs.all.global.10.png>



# Dekadal Velocity Potential Anomalies – Obs and Fcst



<https://ncics.org/pub/mjo/v2/map/chi850.cfs.all.global.10.png>

<https://ncics.org/pub/mjo/v2/map/chi200.cfs.all.global.10.png>

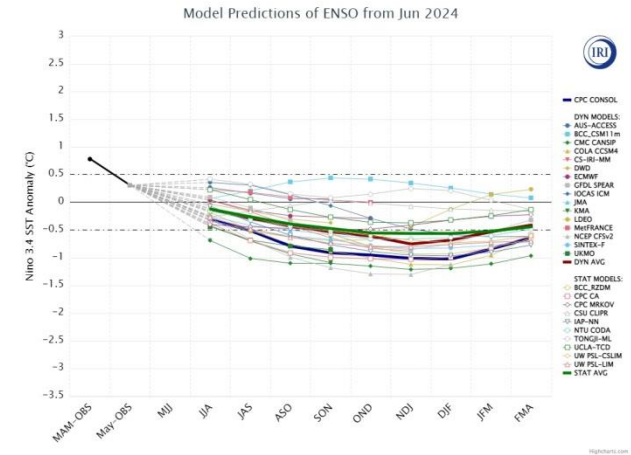
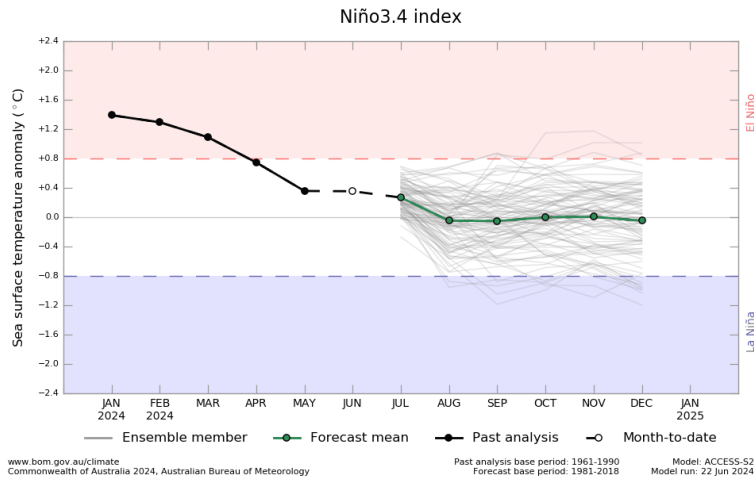


## II

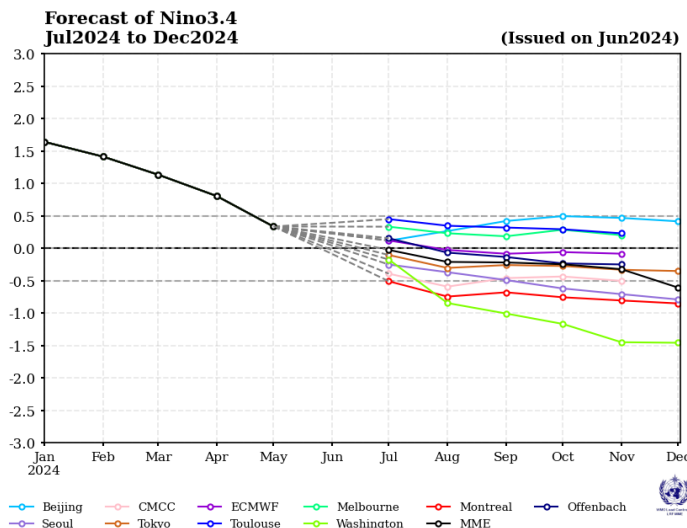
***ANALYSIS OF DYN & STAT  
MODELES SOME DRIVERS***

U.S. Navy, NSA, SECDEF  
and/or Government

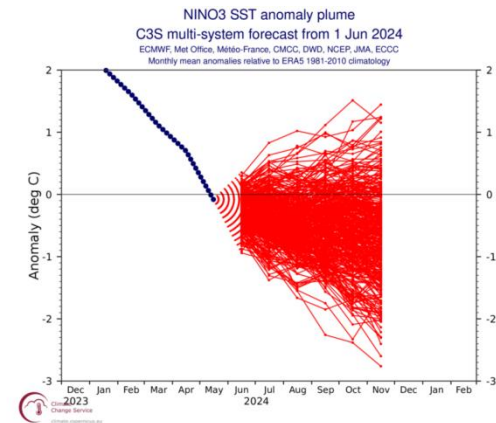
IRI



WMO-LC



# C3S



cesUI/plot\_Indices#

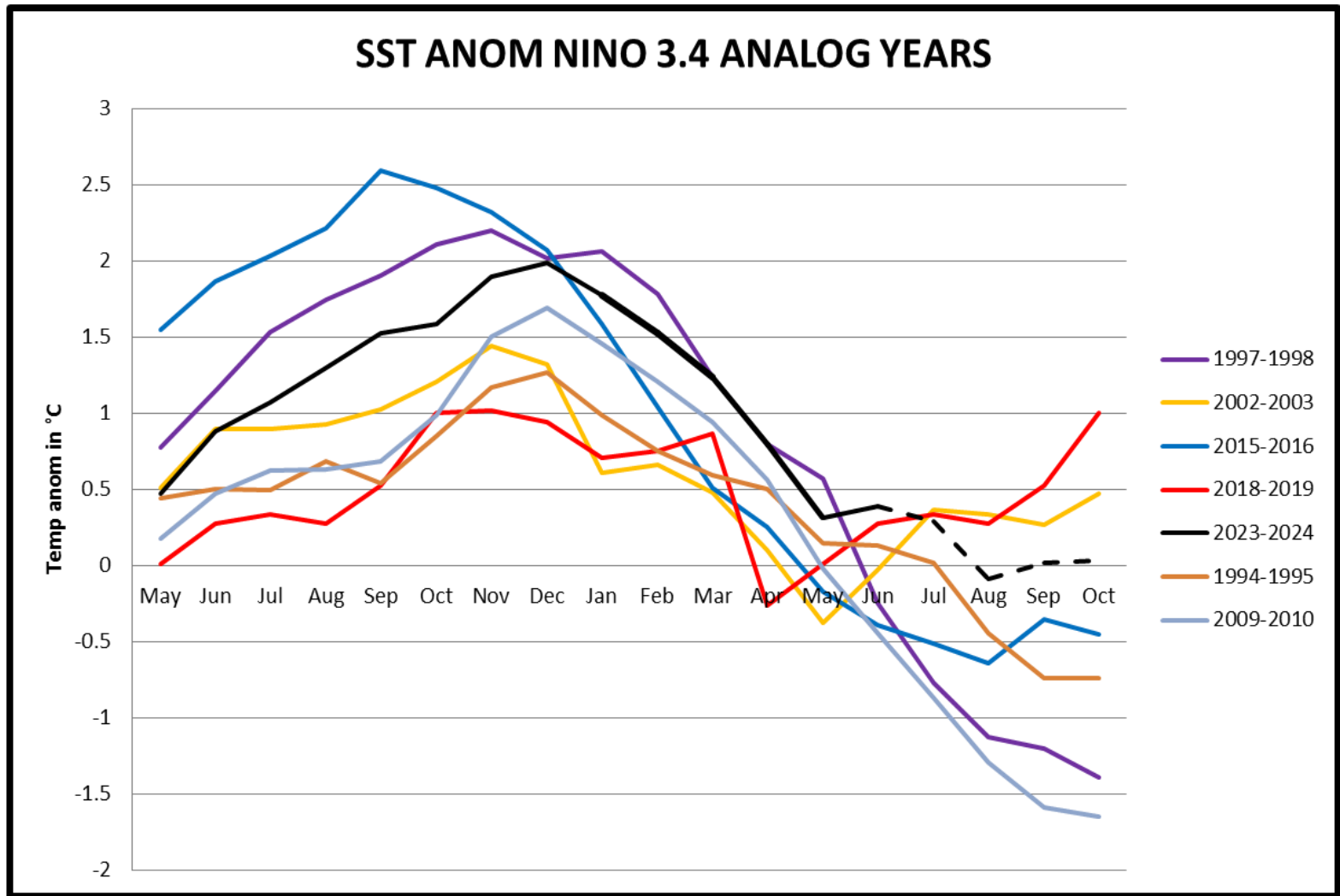
[https://climate.copernicus.eu/charts/c3s\\_seasonal/c3s\\_seasonal\\_plume\\_mm?facts=undefined&time=2022070100,0,2022070100&type=plume&area=nino34](https://climate.copernicus.eu/charts/c3s_seasonal/c3s_seasonal_plume_mm?facts=undefined&time=2022070100,0,2022070100&type=plume&area=nino34)

[https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/?enso\\_tab=enso-quicklook](https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/?enso_tab=enso-quicklook)

## Moderate El Nino



# Analogue Analysis SST NINO 3.4 basin

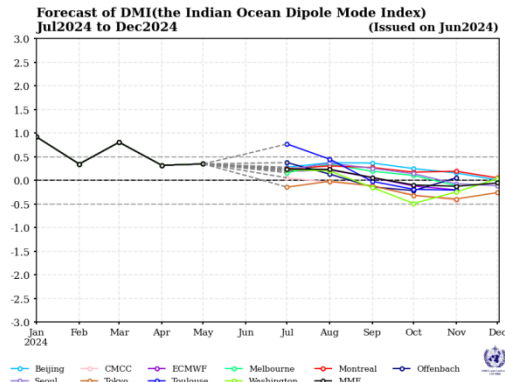




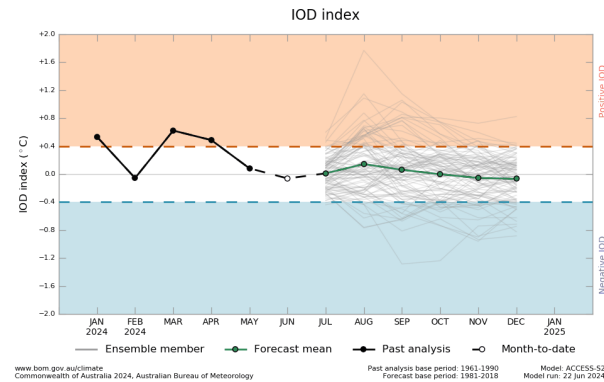
# Teleconnections analysis (IOD) (TNA-TSA ° - Index plumes

## Positive DMI

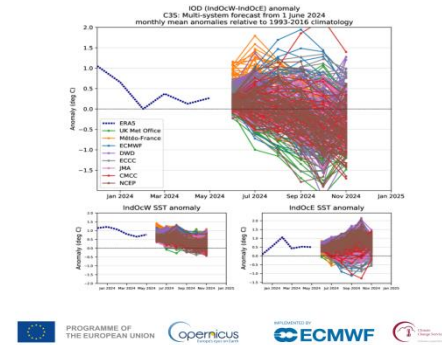
### WMO-LC



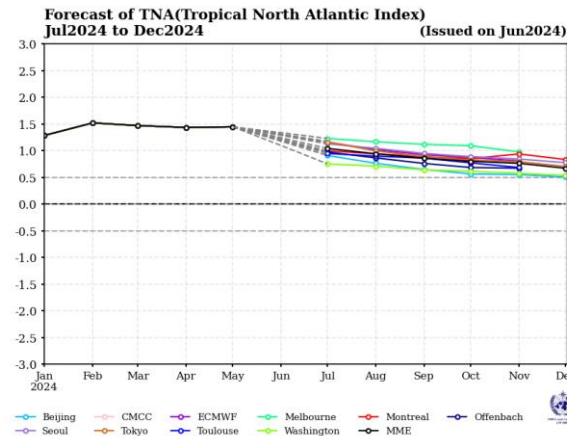
### BoM



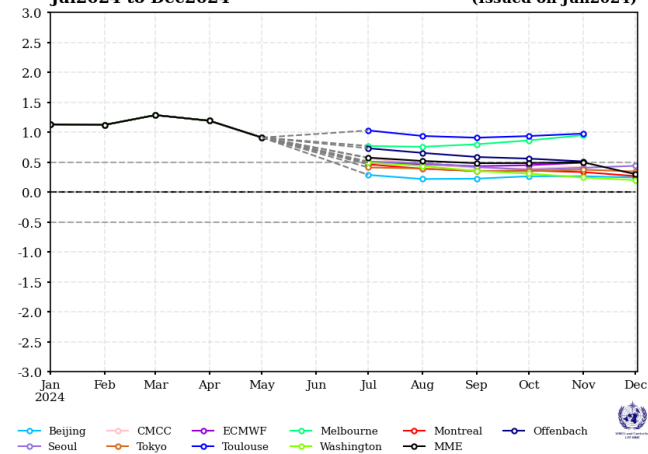
### C3S



## Positive TNA-TSA



### Forecast of TSA(Tropical South Atlantic Index)



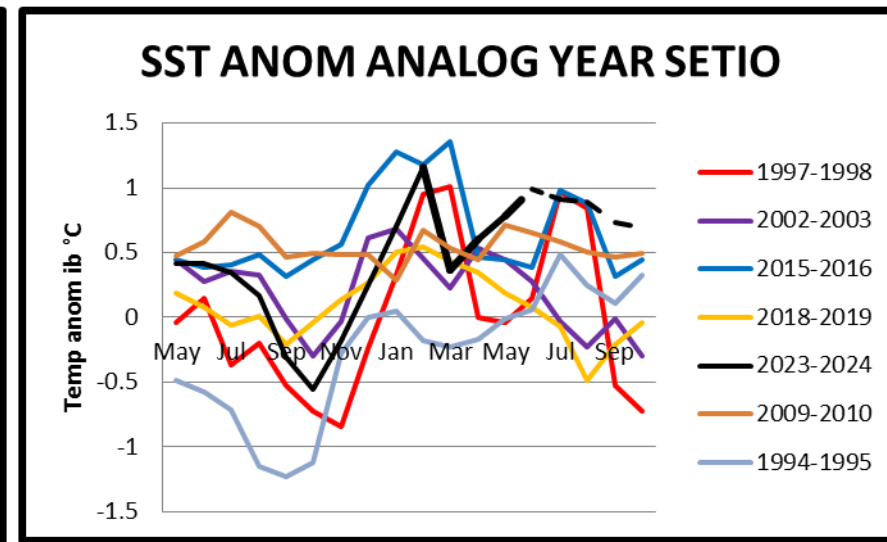
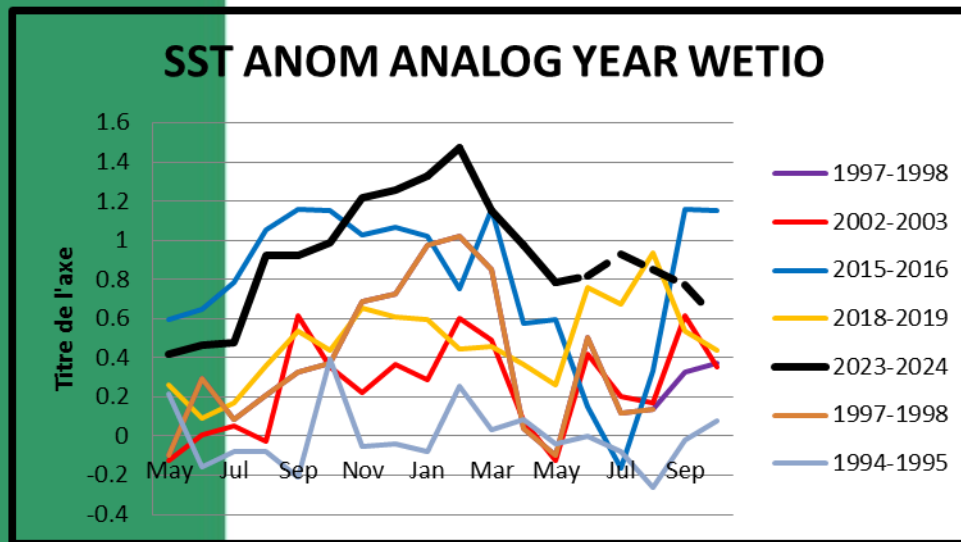
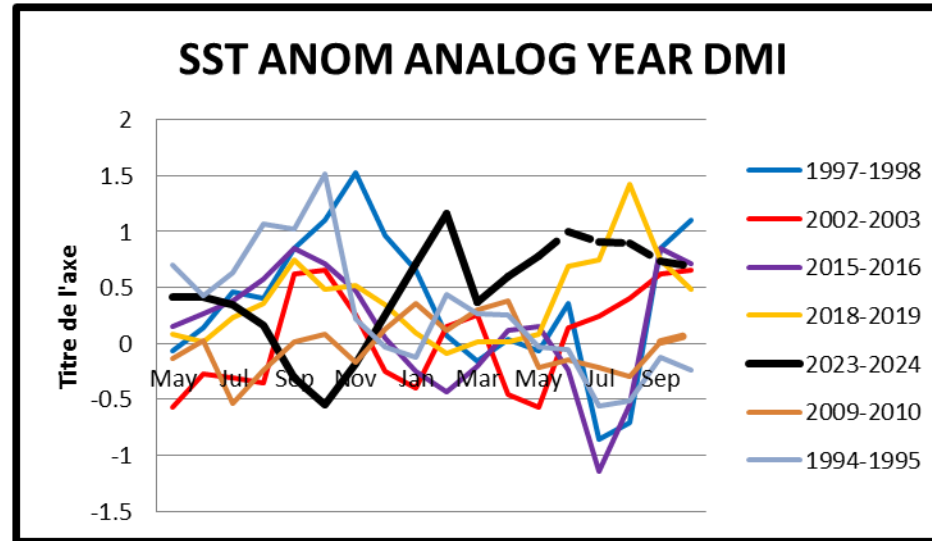
[https://www.wmolc.org/seasonIndicesUI/plot\\_Indices#](https://www.wmolc.org/seasonIndicesUI/plot_Indices#)

[https://climate.copernicus.eu/charts/c3s\\_seasonal/c3s\\_seasonal\\_plume\\_mm?fa](https://climate.copernicus.eu/charts/c3s_seasonal/c3s_seasonal_plume_mm?fa)  
[cets=undefined&time=2022070100,0,2022070100&type=plume&area=nino34](https://climate.copernicus.eu/charts/c3s_seasonal/c3s_seasonal_plume_mm?fa)

[https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/?enso\\_tab=enso-quicklook](https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/?enso_tab=enso-quicklook)



# Analogue Analysis SST INDIAN basin



# Analogue Analysis SST ATLANTIC basin

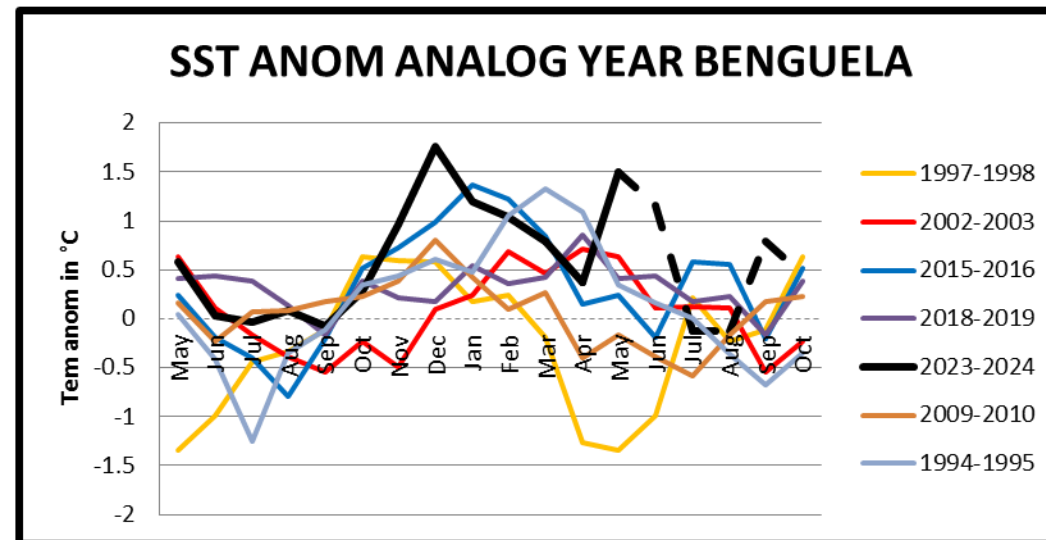
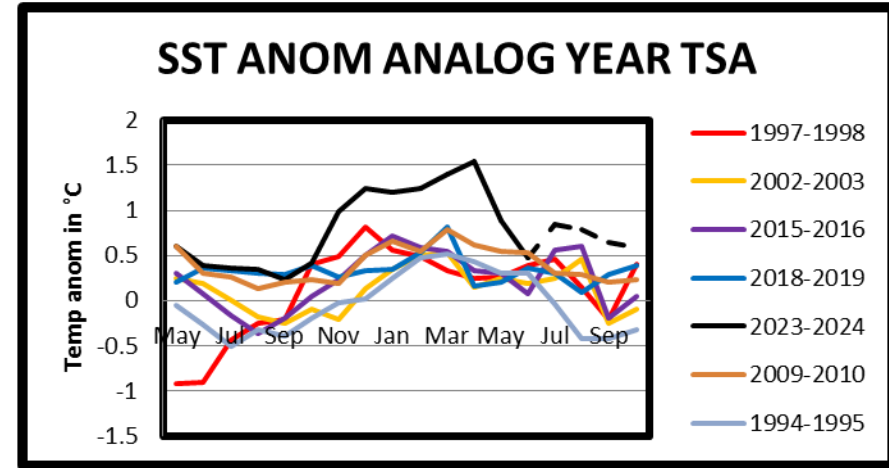
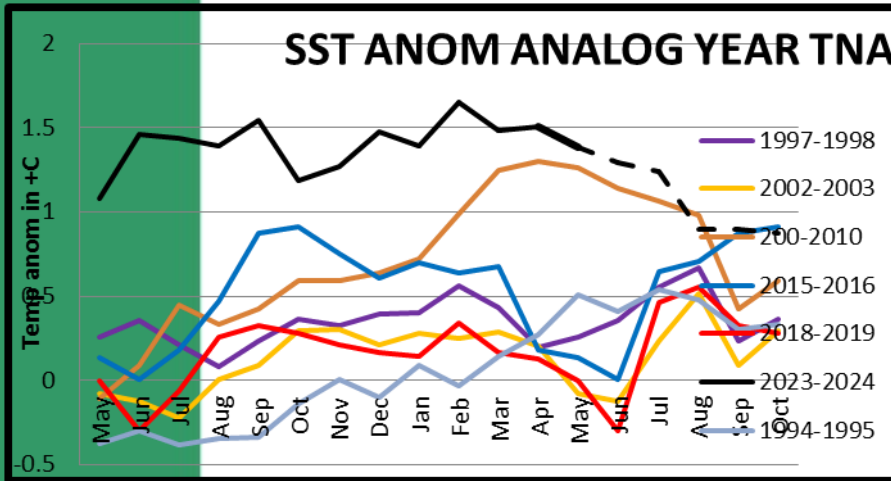




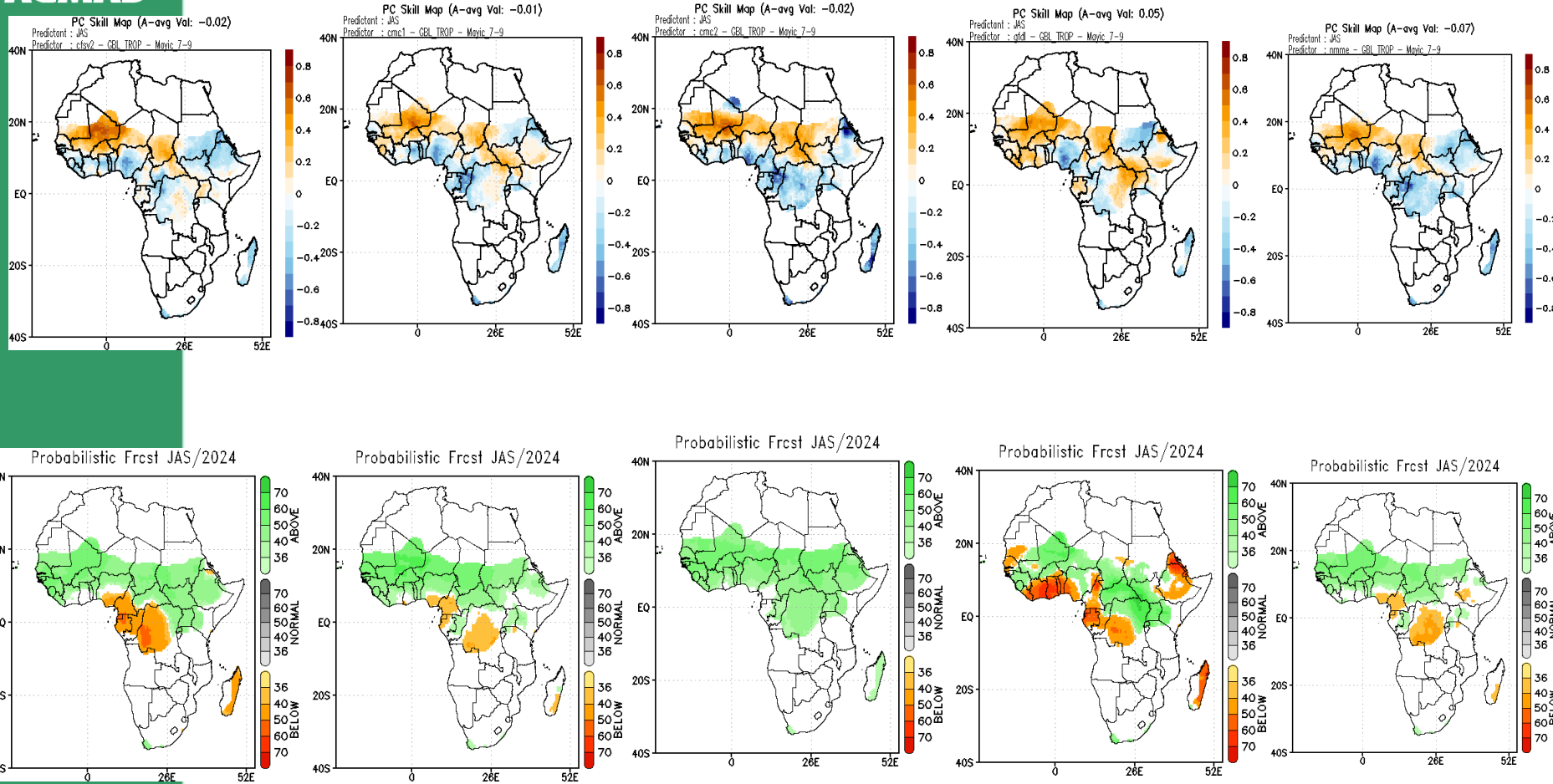
Figure 1 displays a series of maps illustrating Sea Surface Temperature (SST) anomalies and precipitation percent of average for the JAS (June-August-September) season across different years and models.

The top row shows SST Anom. JAS 2010, followed by SST Anom. JAS 2016, and SST Anom. JAS 2019. The bottom row shows the NMMF Fcst of SST Anom: IC=202406 for JAS 2024.

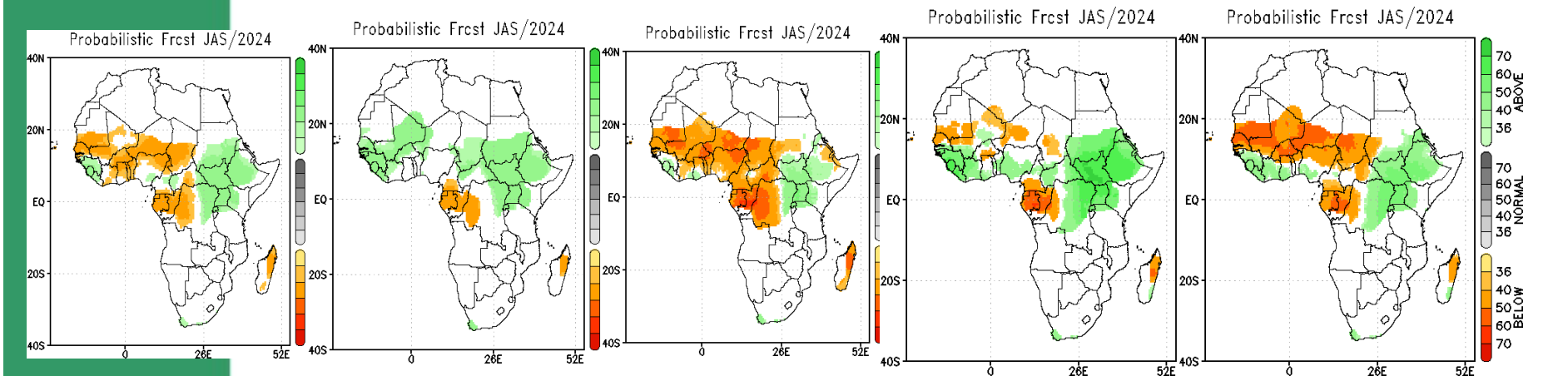
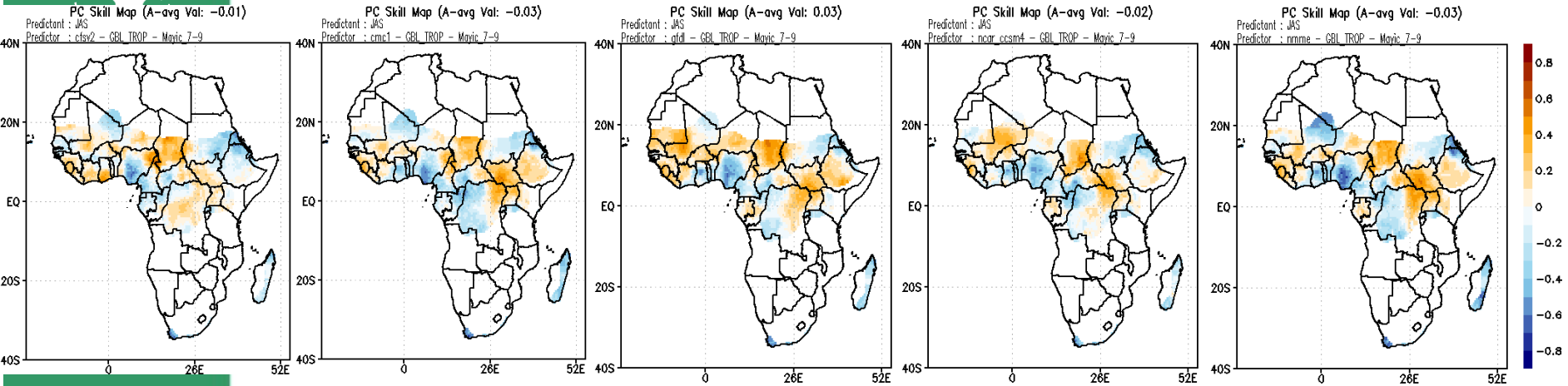
The middle rows show CAMS0-PI Precip Percent of Avg. (%) JAS 2010, CAMS0-PI Precip Percent of Avg. (%) JAS 2016, and CAMS0-PI Precip Percent of Avg. (%) JAS 2019. The rightmost column shows CAMS0-PI Precip Obs. Tercile for JAS 2010, CAMS0-PI Precip Obs. Tercile for JAS 2016, and CAMS0-PI Precip Obs. Tercile for JAS 2019.

The maps use color scales to represent different levels of anomaly or precipitation. The SST Anom. maps use a scale from -2 to 2. The CAMS0-PI Precip Percent of Avg. (%) maps use a scale from Well Below Average to Well Above Average. The CAMS0-PI Precip Obs. Tercile maps use a scale from Below Normal to Above Normal.

# Outlook based on Obs. SST Prediction, JAS CAMS-OPI



# Outlook based on FCST Precip – JAS CAMS-OPI

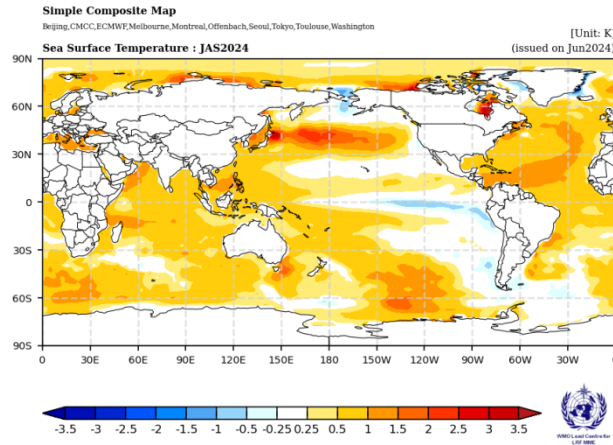


# Multimodel Ensemble Analysis (SSTs)

WMO

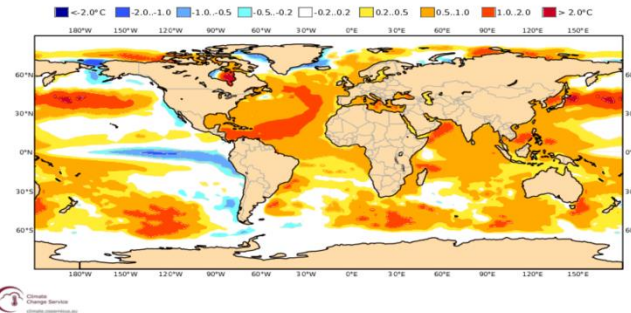
C3S

JAS



C3S multi-system seasonal forecast  
Mean forecast SST anomaly  
Nominal forecast start: 01/06/24  
Variance-standardized mean

ECMWF/Met Office/Météo-France/CMCC/DWD/NCEP/JMA/ECCC  
JAS 2024



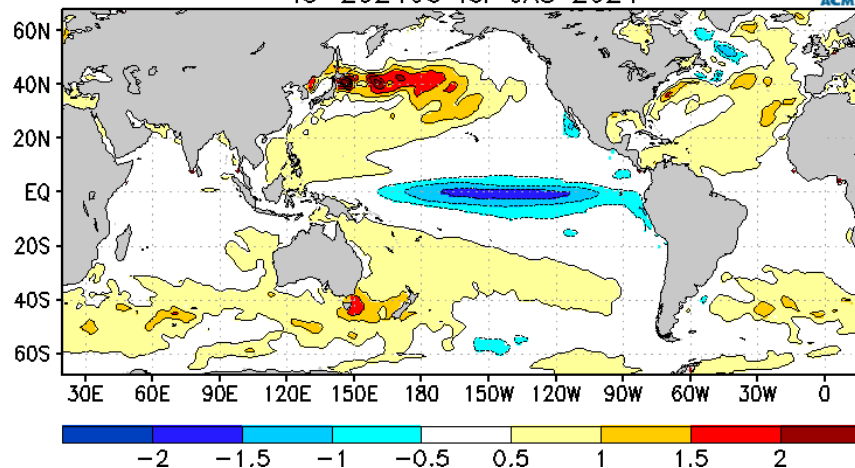
PROGRAMME OF THE EUROPEAN UNION

copernicus

ECMWF

Climate Change Service

NMME Fcst of SST Anom:  
IC=202406 for JAS 2024







# OUTLINE

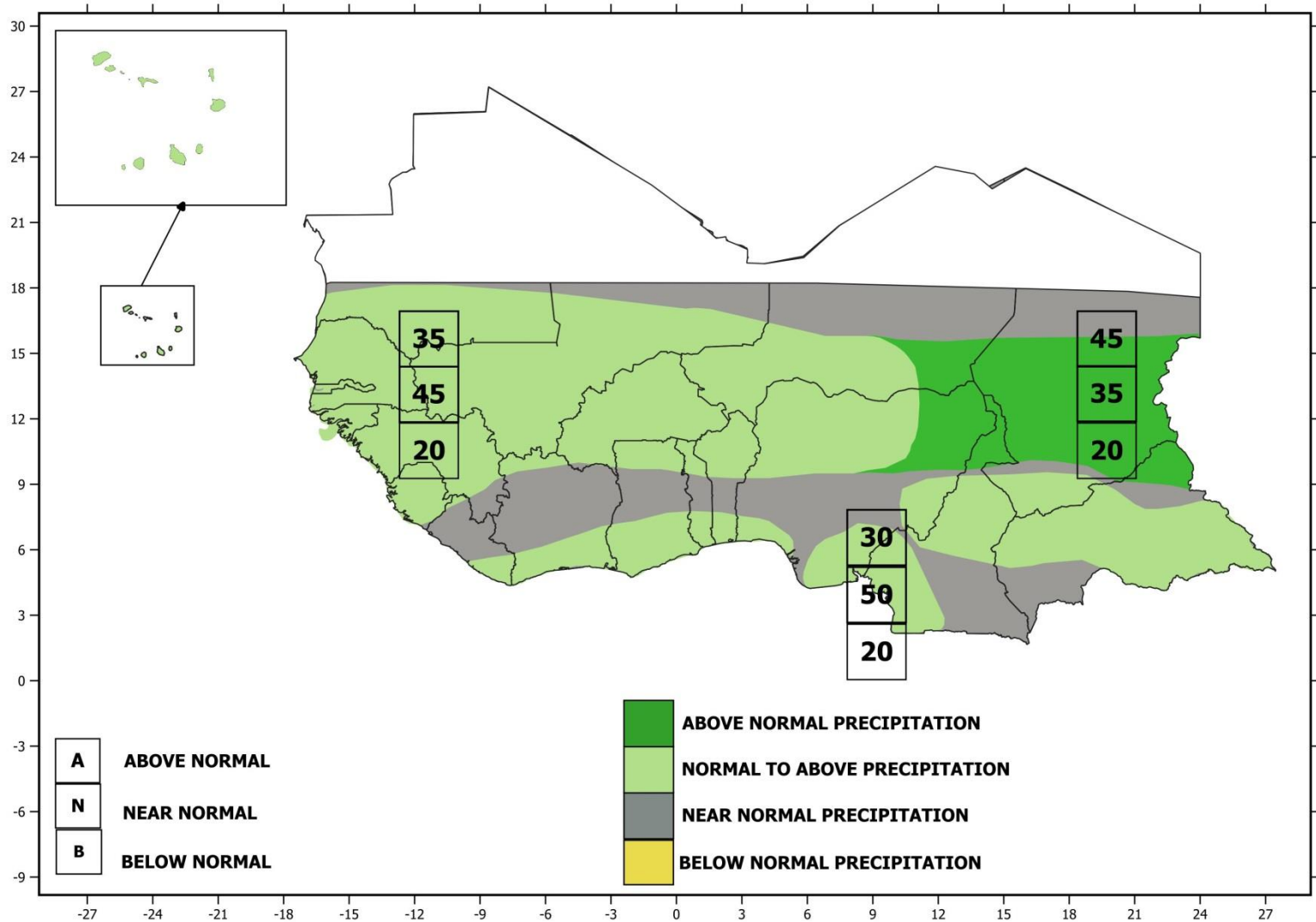


## III

*Outlook for the period from April to July 2024*

A, U.S. Navy, NSA, S&ICP  
and/or / Cooperation

# SEASONAL PRECIPITATION OUTLOOK FOR JAS 2024



## FIFTEENTH AFRICAN CONTINENTAL CLIMATE OUTLOOK FORUM (ACCOF-15)

THEME : “THE RECENT CLIMATE EVENTS ,  
DURING THE EL NINO EVOLUTION  
OVER THE REGION”

DATE : **09<sup>TH</sup> FEBRUARY, 2024**

TIME : **8:00 AM TO 10:30 AM (GMT)**

VENUE : **ONLINE**



TARGET SEASON: February to May(FMAM) 2024



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<https://www.facebook.com/ACMAD-470332183044388>