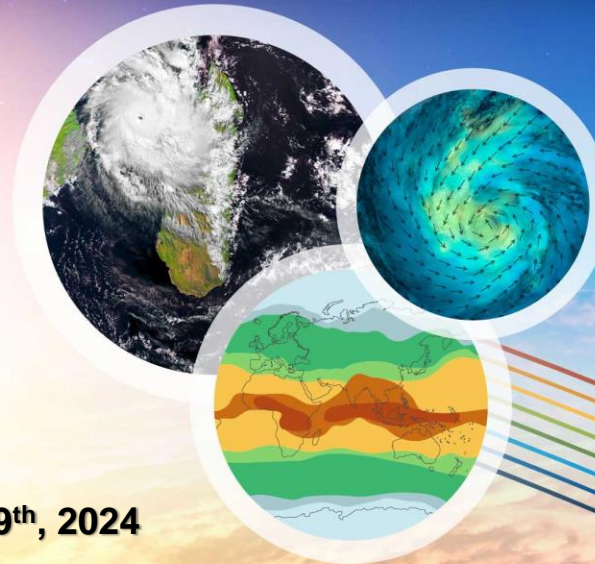
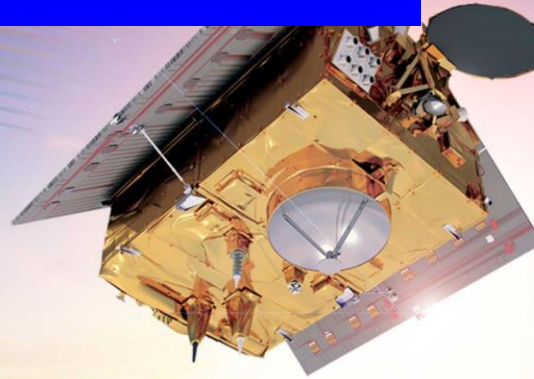




# AFRICAN CENTRE OF METEOROLOGICAL APPLICATIONS FOR DEVELOPMENT (ACMAD)

<https://rcc.acmad.org/longerangebulletin.php>  
<https://rcc.acmad.org>

# CONTINENTAL CLIMATE OUTLOOK FOR FMA AND MAM 2024 SEASONS



Issued on: January 9<sup>th</sup>, 2024

Validity period: February to May 2024



An initiative of the Organisation of African, Caribbean and Pacific States funded by the European Union



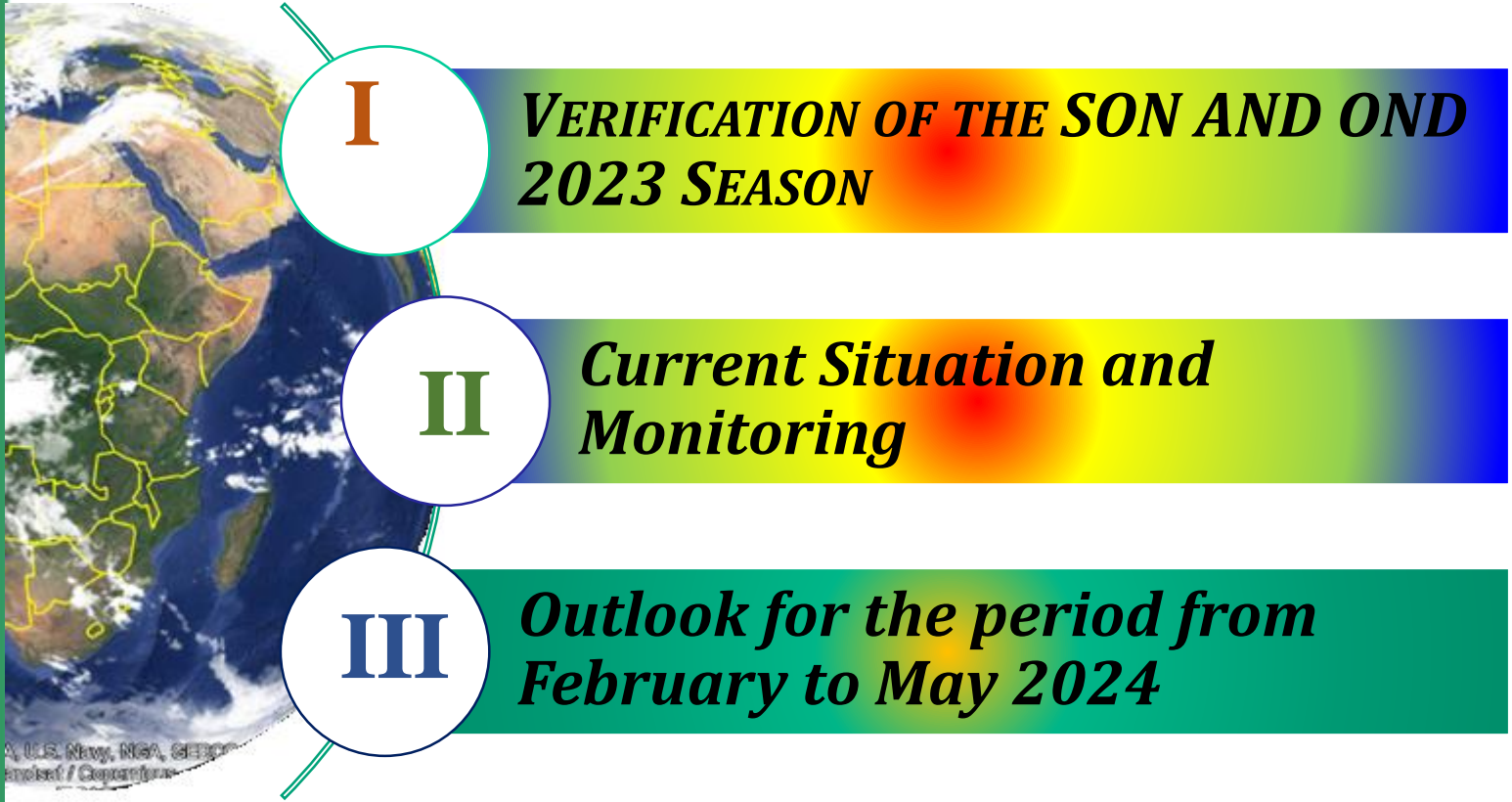
## Contributors

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**

***VERIFICATION OF THE SON AND OND  
2023 SEASON***

**II**

***Current Situation and  
Monitoring***

**III**

***Outlook for the period from  
February to May 2024***

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and/or Copernicus

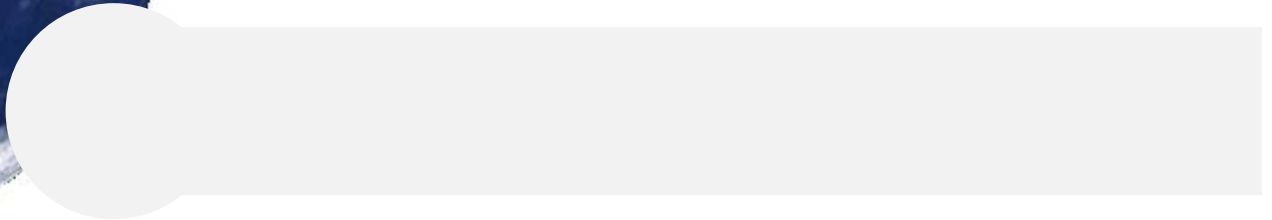
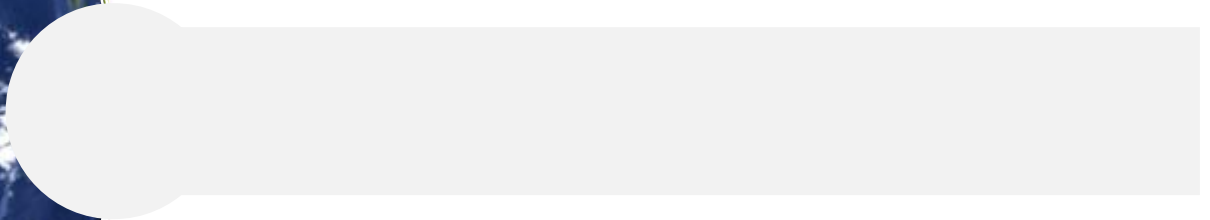


# OUTLINE



**I**

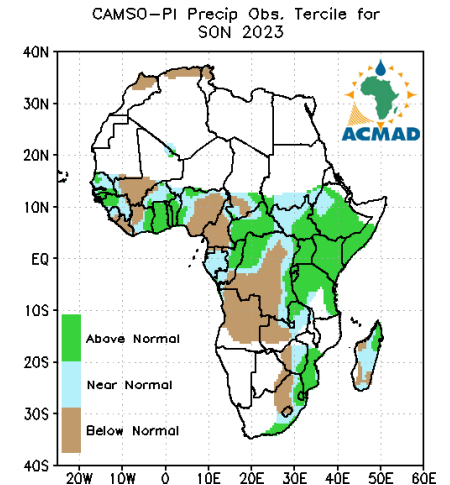
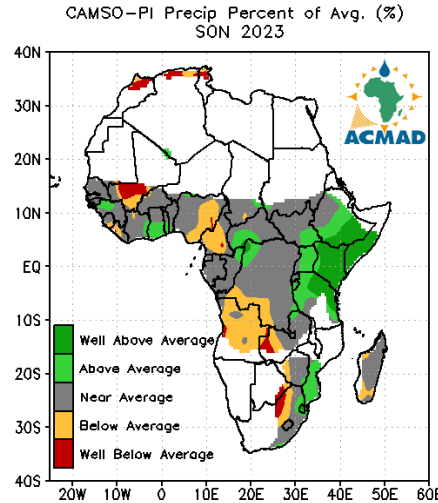
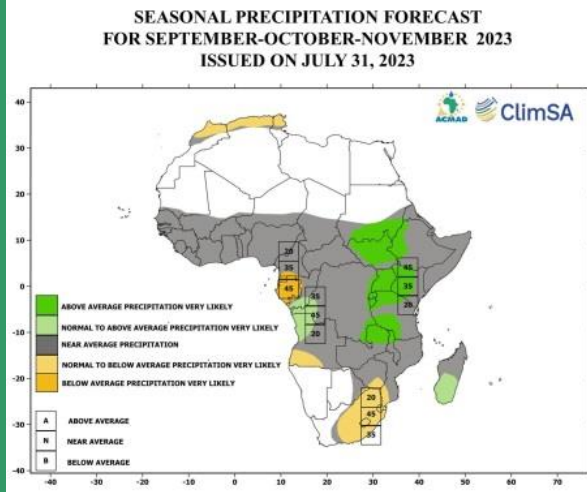
## VERIFICATION OF THE SON AND OND 2023 SEASON



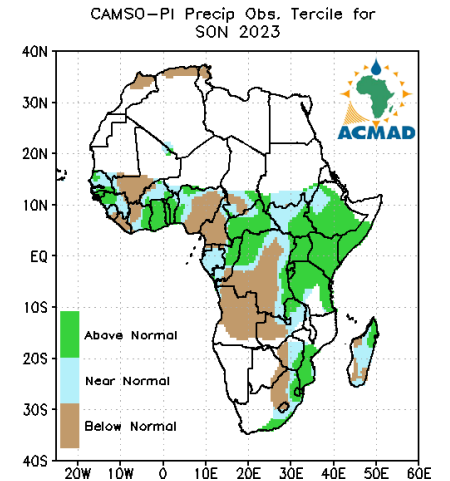
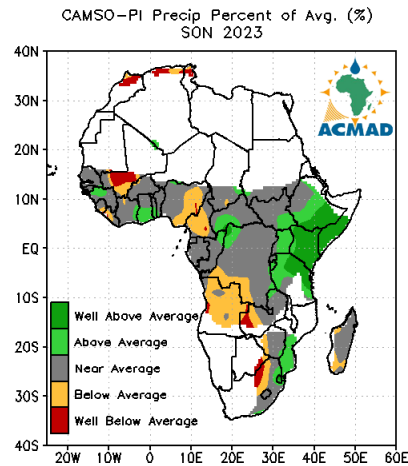
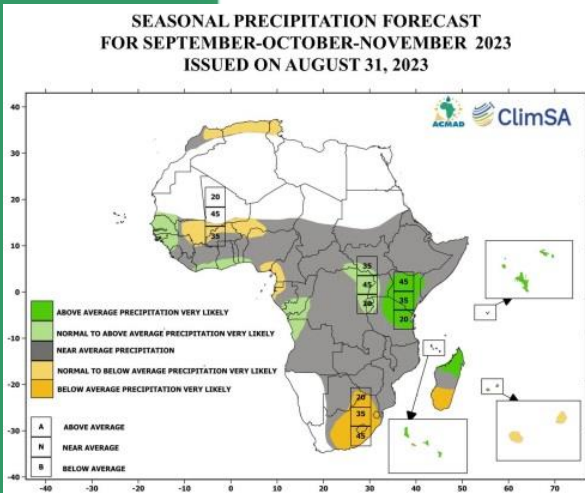


# VERIFICATION: CONTINENTAL SON 2023

## Initial Condition July 2023



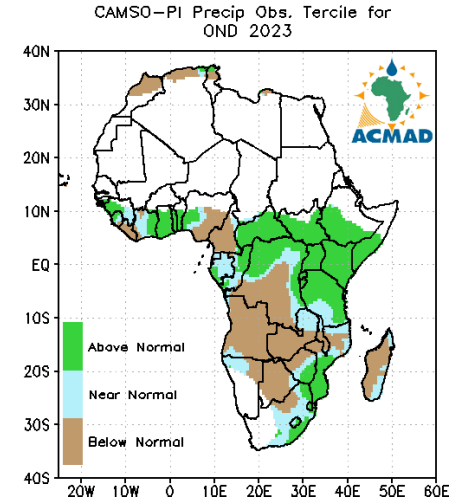
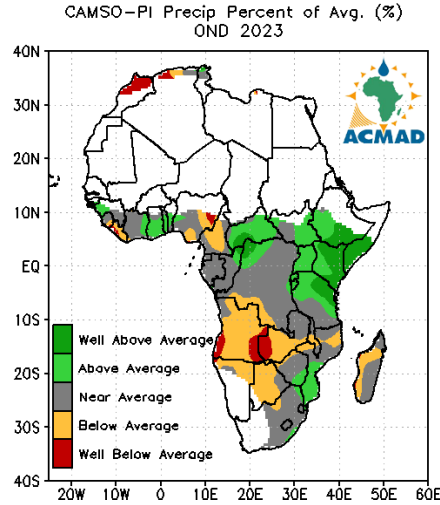
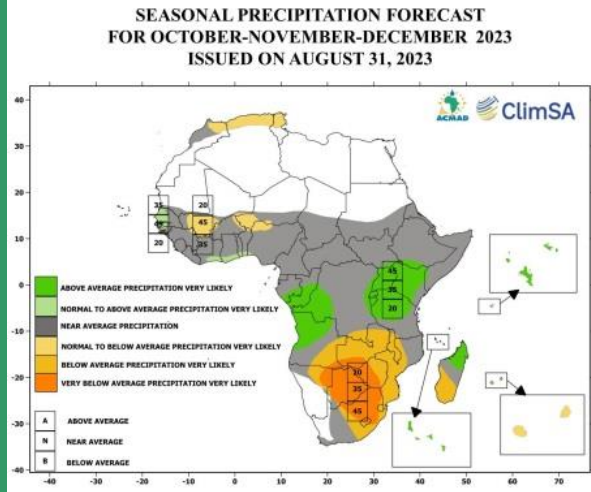
## Initial Condition August 2023



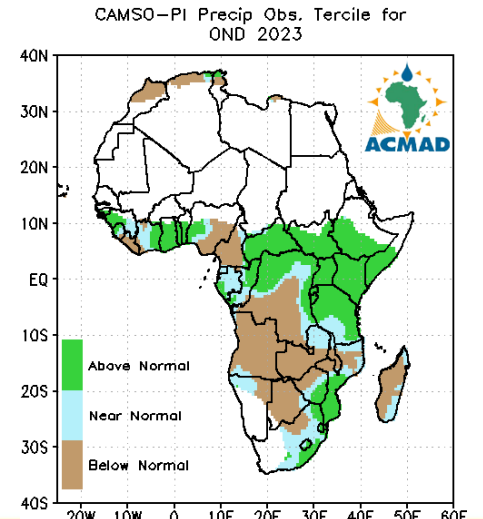
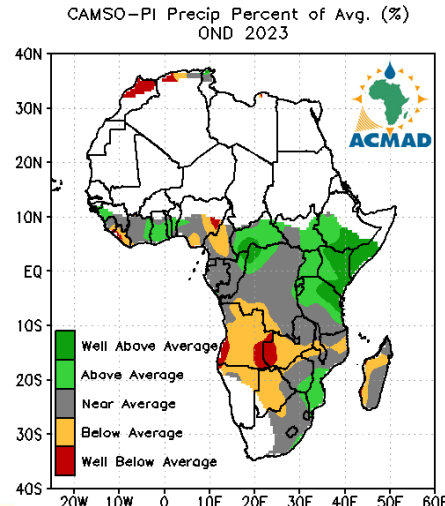
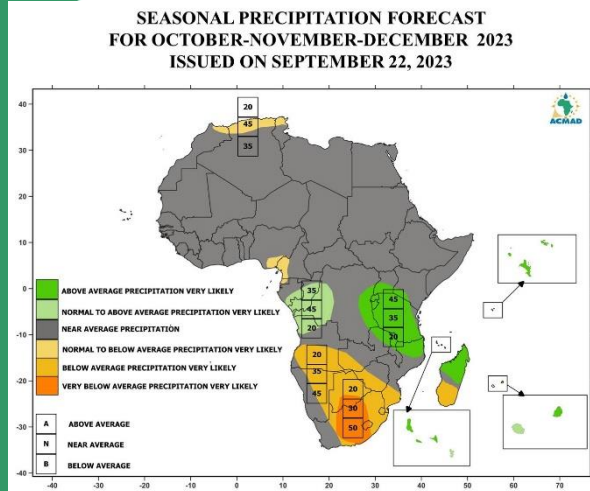


# VERIFICATION: CONTINENTAL OND 2023

## Initial Condition August 2023



## Initial Condition September 2023



# OUTLINE



## II

## *Current Situation and Monitoring*

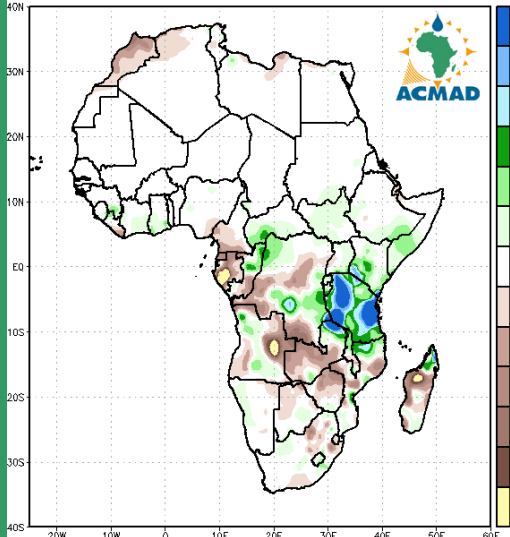
U.S. Navy, NSA, GEOPRO  
and/or / Cooperation



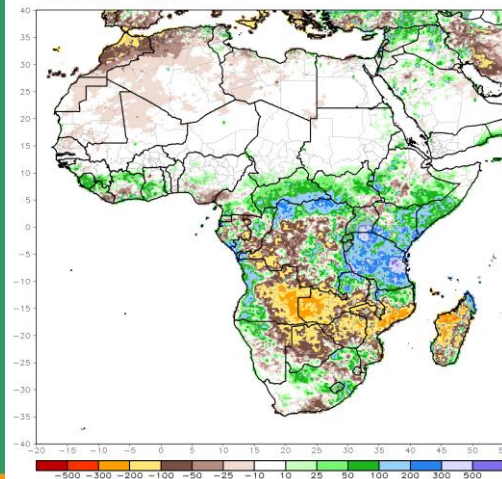
# CURRENT RAINFALL CONDITION

## Latest 90-days 09Nov2023-06Feb2024

CPC-Uni 90day Precip Anomaly (mm)  
Period: 09Nov2023 to 06Feb2024

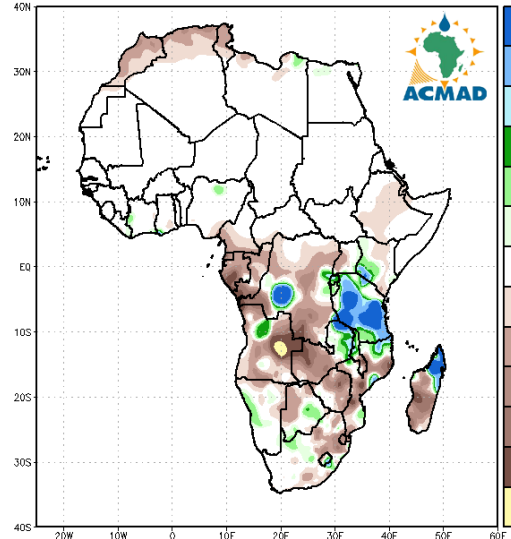


RFE2 90-Day Total Rainfall Anomaly (mm)  
Period: 09Nov2023 - 06Feb2024

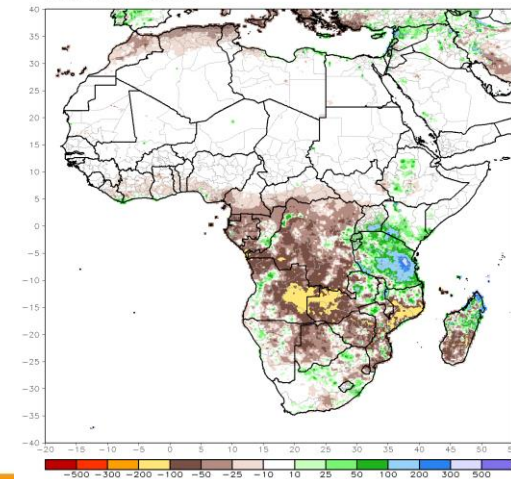


## Last 30-days 08Jan-06Feb 2024

CPC-Uni 30day Precip Anomaly (mm)  
Period: 08Jan2024 to 06Feb2024

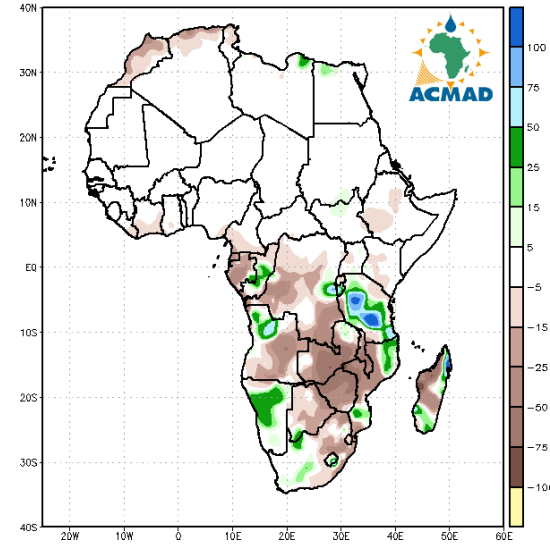


RFE2 30-Day Total Rainfall Anomaly (mm)  
Period: 08Jan2024 - 06Feb2024

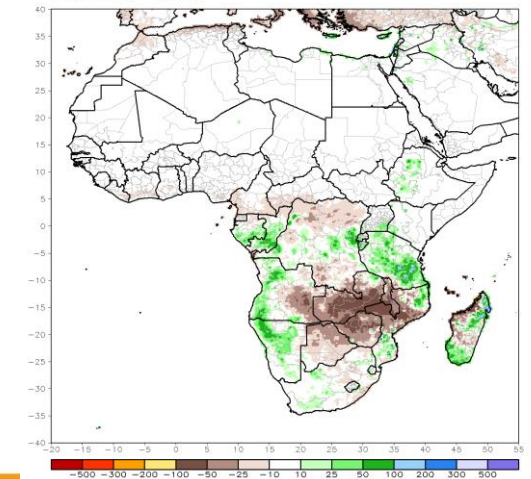


## Last 10-days 28Jan-06Feb 2024

CPC-Uni 10day Precip Anomaly (mm)  
Period: 28Jan2024 to 06Feb2024



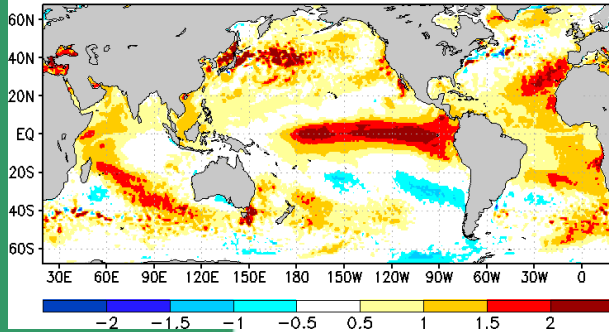
RFE2 10-Day Total Rainfall Anomaly (mm)  
Period: 28Jan2024 - 06Feb2024





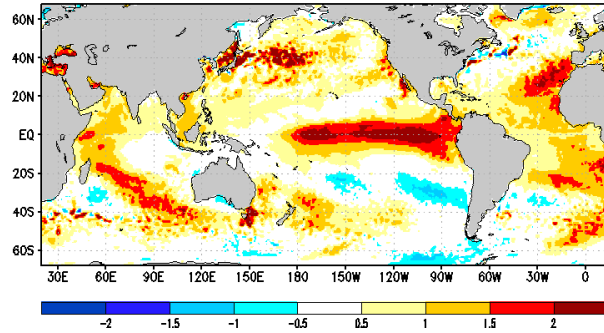
## NDJ 2023-24

SST Anom. NDJ 2023/2024



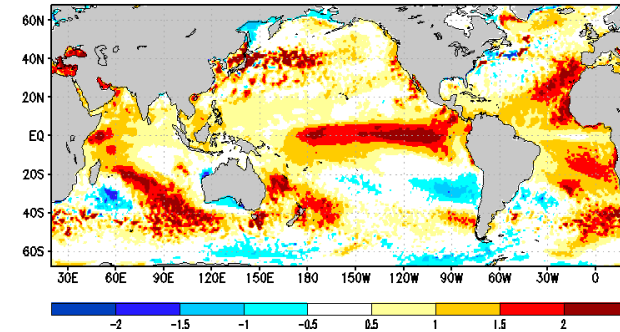
## Latest 90-days

SST Anom. for the last 90-Days  
From 06Nov2023 to 03Feb2024



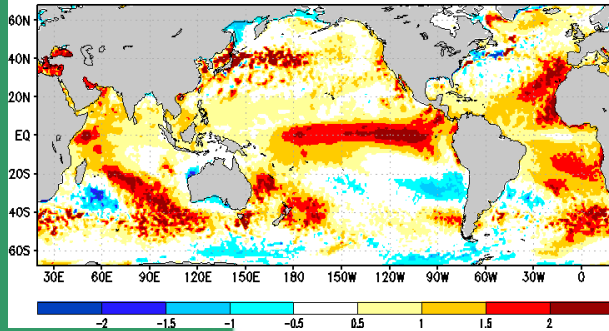
## January 2024

SST Anom. for Jan2024



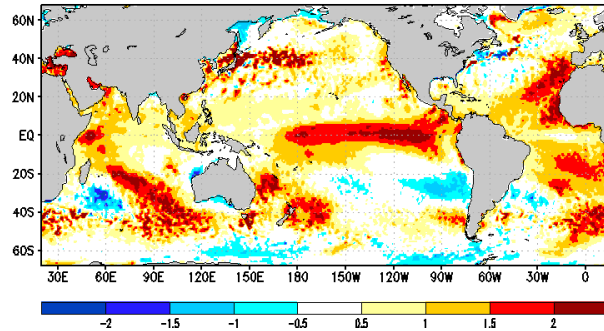
## Last 30-days

SST Anom. for the last 30-Days  
From 05Jan2024 to 03Feb2024



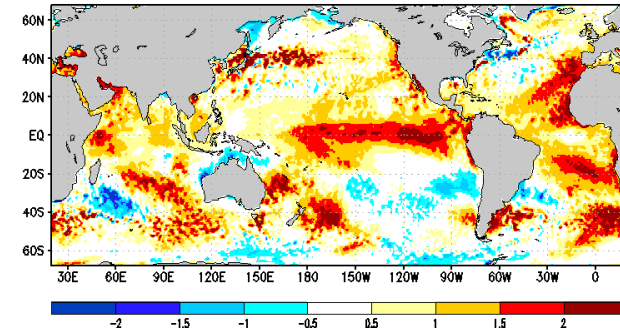
## Latest 4 Weeks

SST Anom. for the Week  
From 07Jan2024 to 03Feb2024



## Last 10-days

SST Anom. for the last 10-Days  
From 25Jan2024 to 03Feb2024

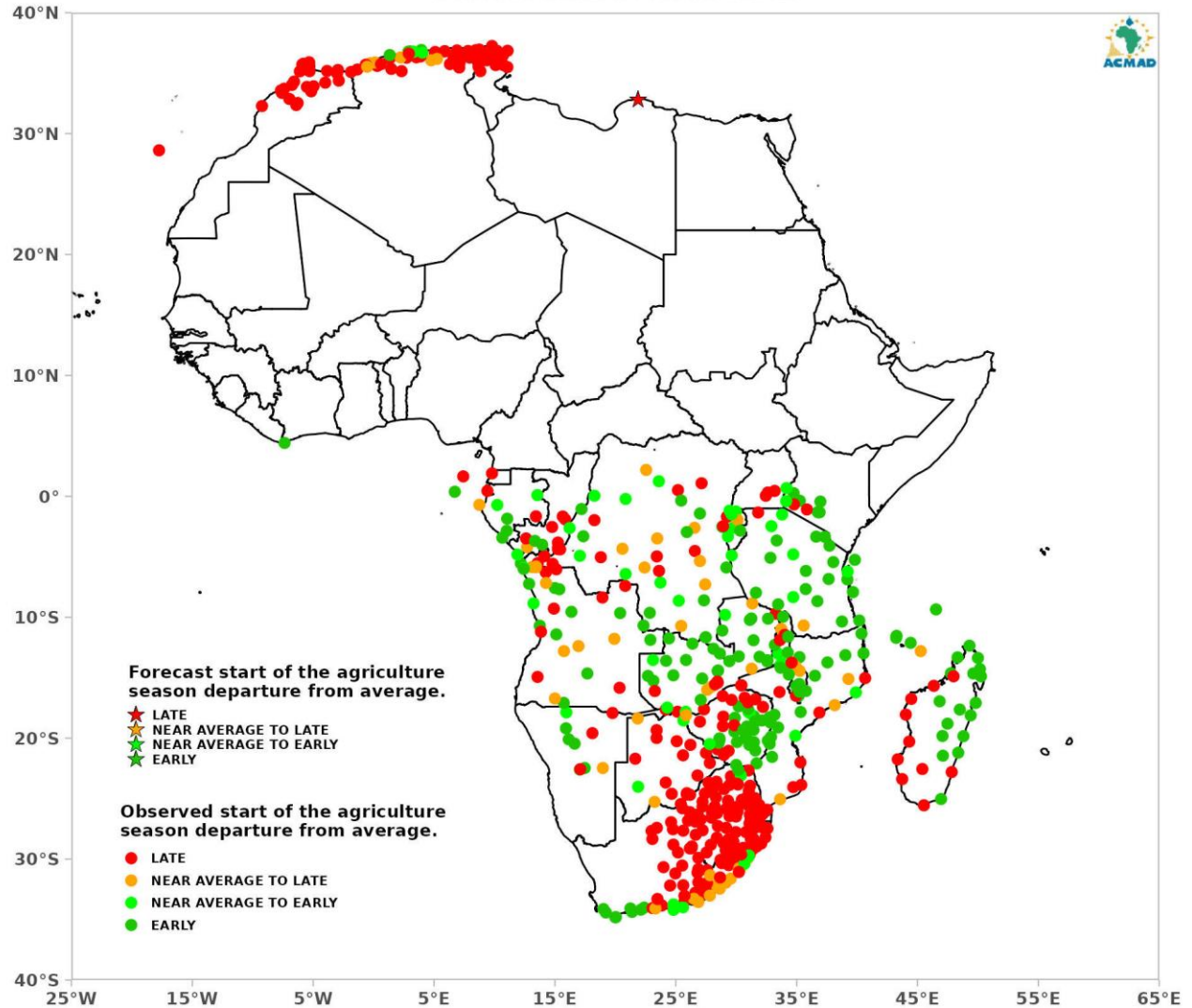


## MONITORING OF OBSERVED ANOMALIES ON THE START OF THE AGRICULTURE SEASON AND OUTLOOK

MONITORING PERIOD: Jul-2023 to Feb-2024

OUTLOOK VALIDITY PERIOD: From Feb-07-2024 to Feb-21-2024

DATE OF ISSUE: FEB-07-2024.



## Identification of Analogue Years (2)

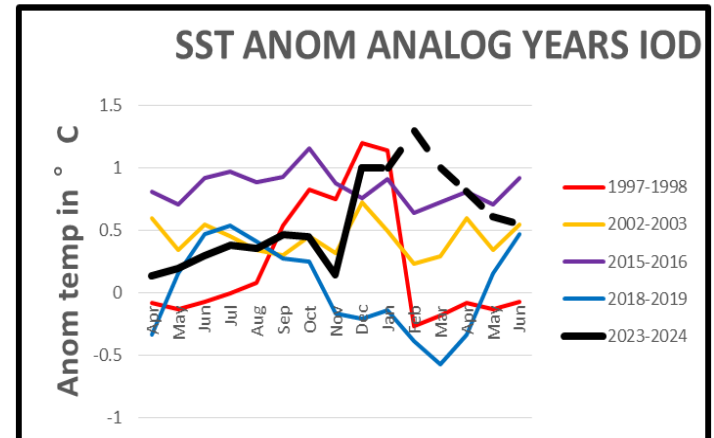
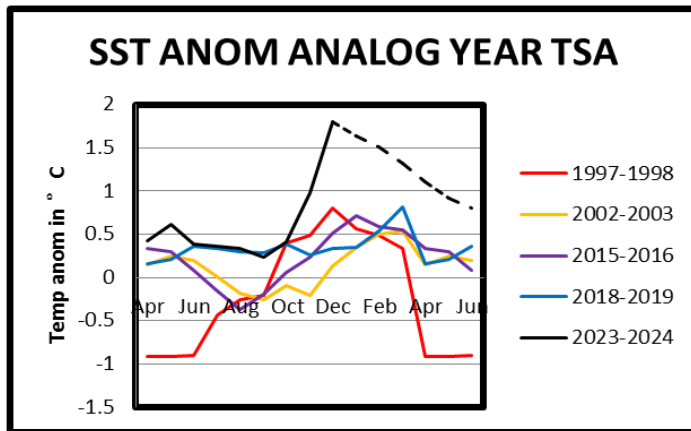
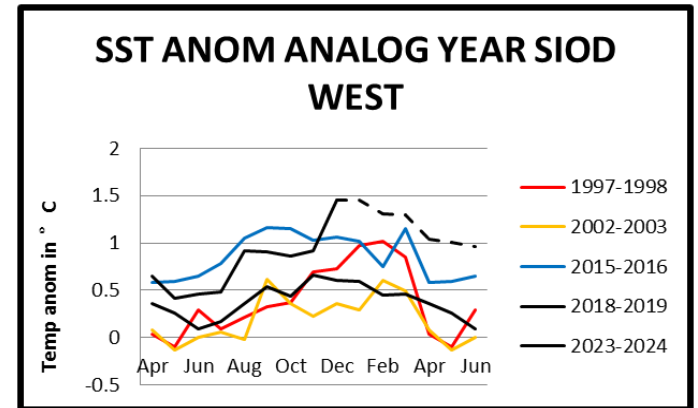
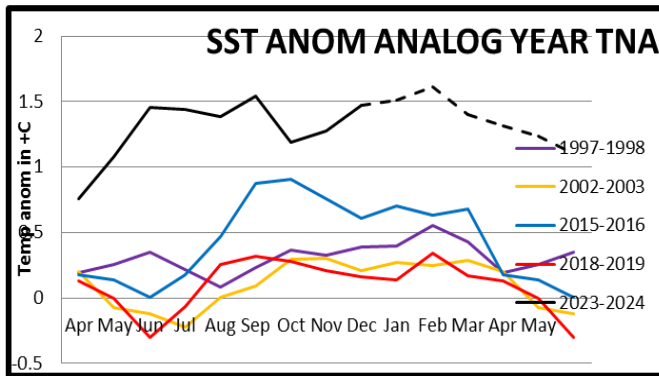
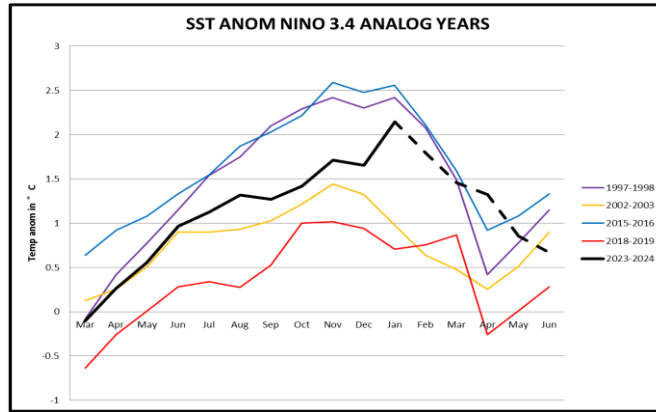


Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2000	-1.7	-1.4	-1.1	-0.8	-0.7	-0.6	-0.6	-0.5	-0.5	-0.6	-0.7	-0.7
2001	-0.7	-0.5	-0.4	-0.3	-0.3	-0.1	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3
2002	-0.1	0.0	0.1	0.2	0.4	0.7	0.8	0.9	1.0	1.2	1.3	1.1
2003	0.9	0.6	0.4	0.0	-0.3	-0.2	0.1	0.2	0.3	0.3	0.4	0.4
2004	0.4	0.3	0.2	0.2	0.2	0.3	0.5	0.6	0.7	0.7	0.7	0.7
2005	0.6	0.6	0.4	0.4	0.3	0.1	-0.1	-0.1	-0.1	-0.3	-0.6	-0.8
2006	-0.9	-0.8	-0.6	-0.4	-0.1	0.0	0.1	0.3	0.5	0.8	0.9	0.9
2007	0.7	0.2	-0.1	-0.3	-0.4	-0.5	-0.6	-0.8	-1.1	-1.3	-1.5	-1.6
2008	-1.6	-1.5	-1.3	-1.0	-0.8	-0.6	-0.4	-0.2	-0.2	-0.4	-0.6	-0.7
2009	-0.8	-0.8	-0.6	-0.3	0.0	0.3	0.5	0.6	0.7	1.0	1.4	1.6
2010	1.5	1.2	0.8	0.4	-0.2	-0.7	-1.0	-1.3	-1.6	-1.6	-1.6	-1.6
2011	-1.4	-1.2	-0.9	-0.7	-0.6	-0.4	-0.5	-0.6	-0.8	-1.0	-1.1	-1.0
2012	-0.9	-0.7	-0.6	-0.5	-0.3	0.0	0.2	0.4	0.4	0.3	0.1	-0.2
2013	-0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.3
2014	-0.4	-0.5	-0.3	0.0	0.2	0.2	0.0	0.1	0.2	0.5	0.6	0.7
2015	0.5	0.5	0.5	0.7	0.9	1.2	1.5	1.9	2.2	2.4	2.6	2.6
2016	2.5	2.1	1.6	0.9	0.4	-0.1	-0.4	-0.5	-0.6	-0.7	-0.7	-0.6
2017	-0.3	-0.2	0.1	0.2	0.3	0.3	0.1	-0.1	-0.4	-0.7	-0.8	-1.0
2018	-0.9	-0.9	-0.7	-0.5	-0.2	0.0	0.1	0.2	0.5	0.8	0.9	0.8
2019	0.7	0.7	0.7	0.7	0.5	0.5	0.3	0.1	0.2	0.3	0.5	0.5
2020	0.5	0.5	0.4	0.2	-0.1	-0.3	-0.4	-0.6	-0.9	-1.2	-1.3	-1.2
2021	-1.0	-0.9	-0.8	-0.7	-0.5	-0.4	-0.4	-0.5	-0.7	-0.8	-1.0	-1.0
2022	-1.0	-0.9	-1.0	-1.1	-1.0	-0.9	-0.8	-0.9	-1.0	-1.0	-0.9	-0.8
2023	-0.7	-0.4	-0.1	0.2	0.5	0.8	1.1	1.3	1.6	1.8	1.9	

Blue – La Nina

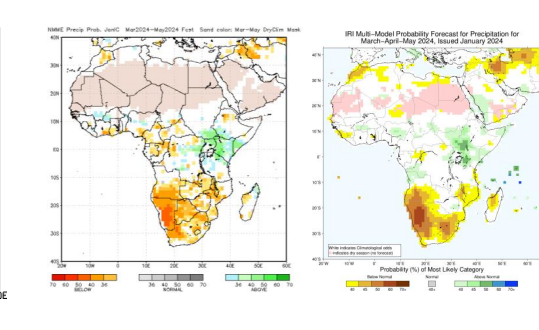
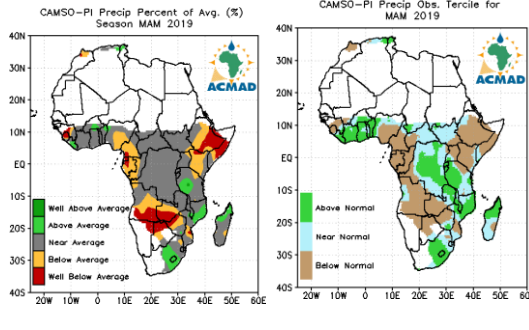
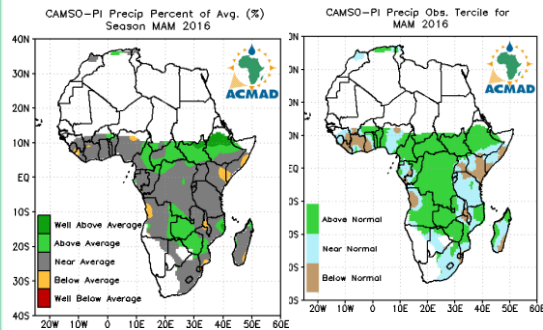
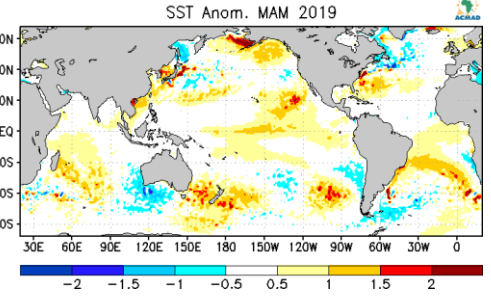
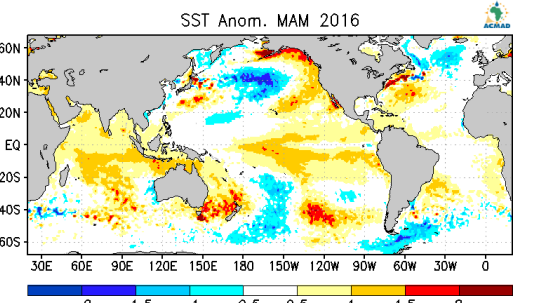
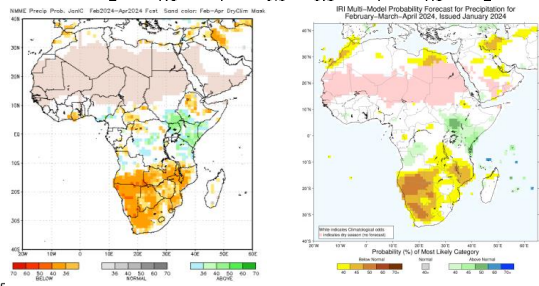
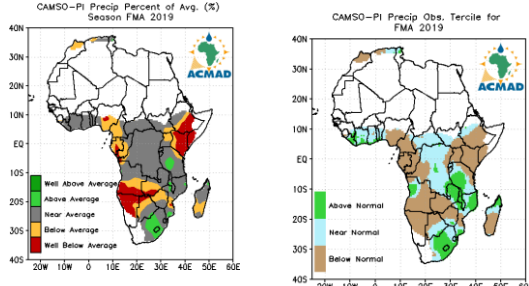
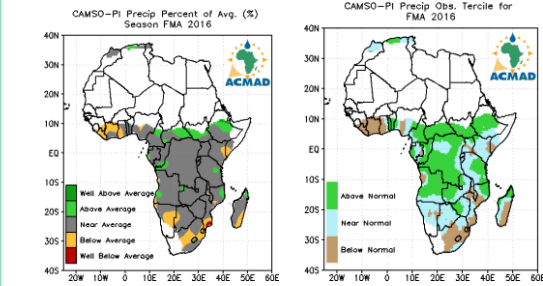
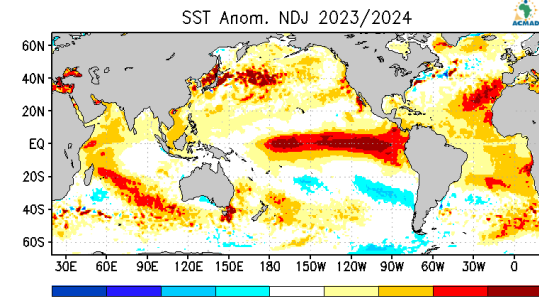
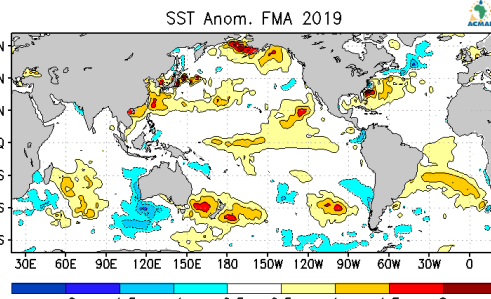
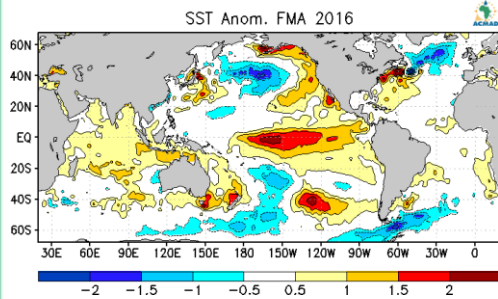
Red– El Nino

# SST ANALOG YEAR TIME SERIES





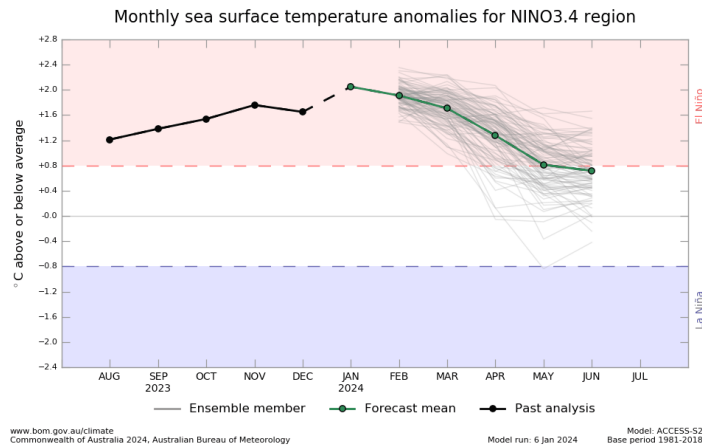
# ANALOG YEAR



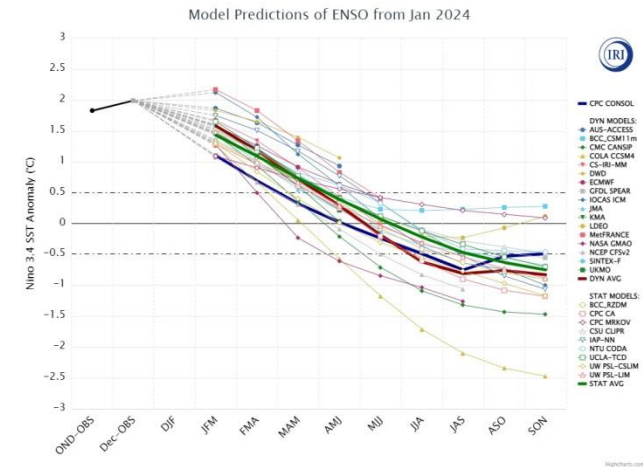
# Teleconnections analysis (i.e ENSO) - Index plumes



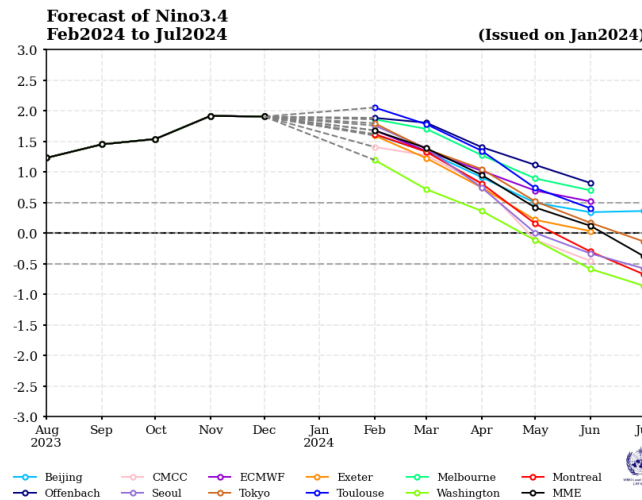
## BoM



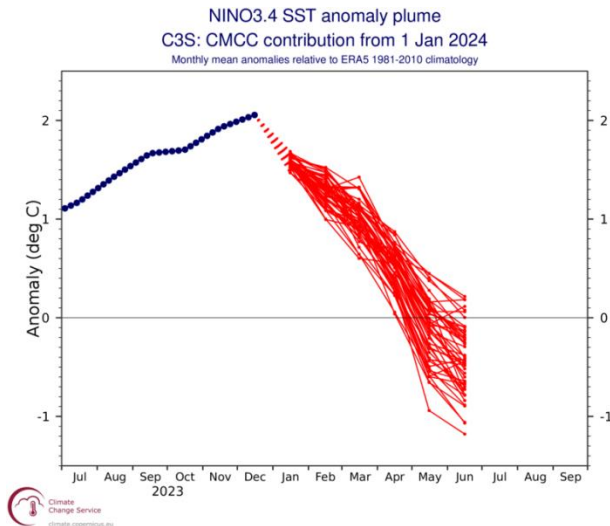
## IRI



## WMO-LC



## C3S



[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?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 Niño**



# Multimodel Ensemble Analysis (SSTs)

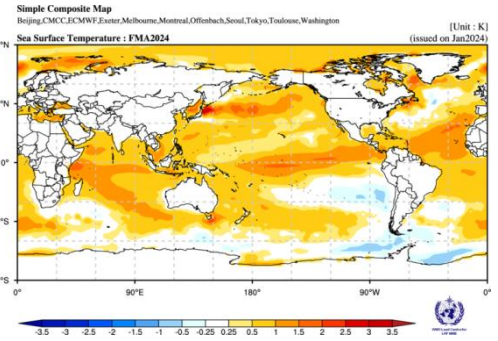
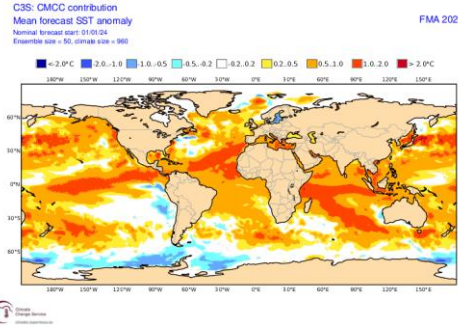
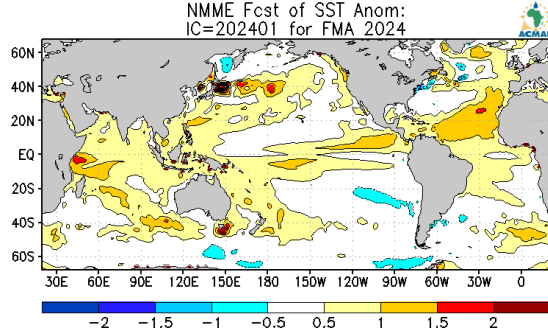
NMME

C3S

WLC

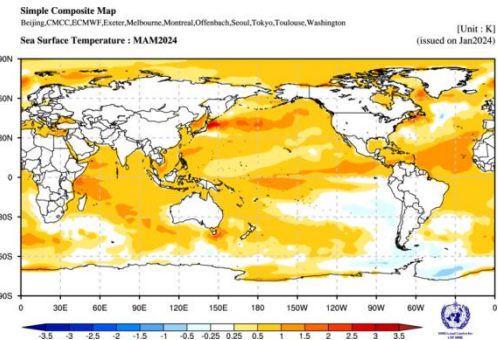
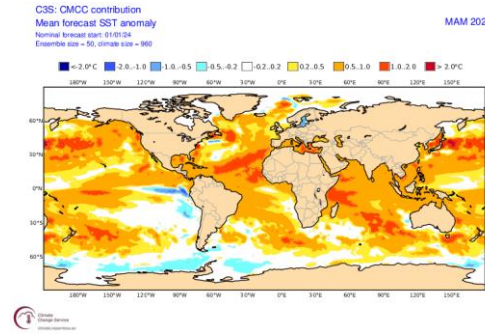
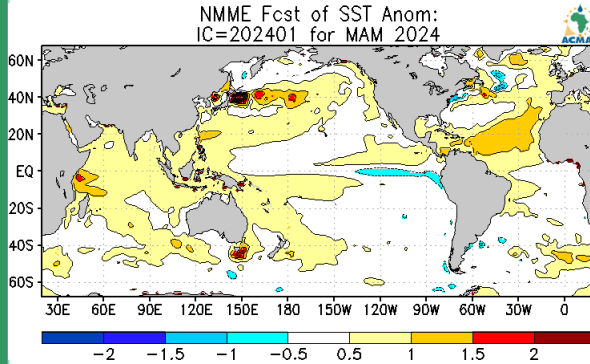
FMA

NMME Fcst of SST Anom:  
IC=202401 for FMA 2024



MAM

NMME Fcst of SST Anom:  
IC=202401 for MAM 2024

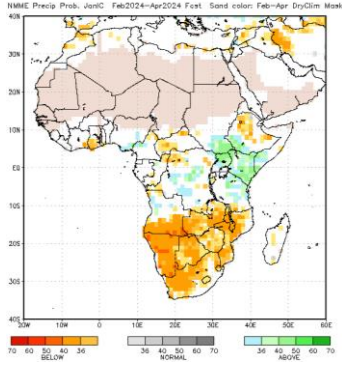




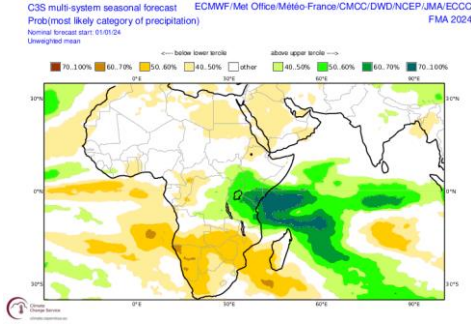
# Multimodel Ensemble Analysis (Rainfall)

FMA

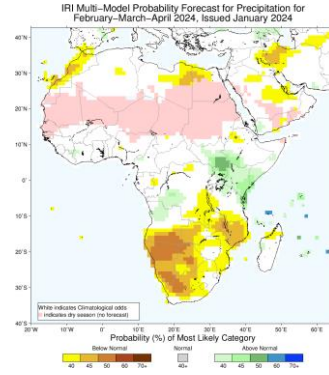
NMME



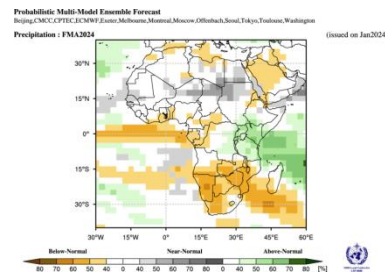
C3S



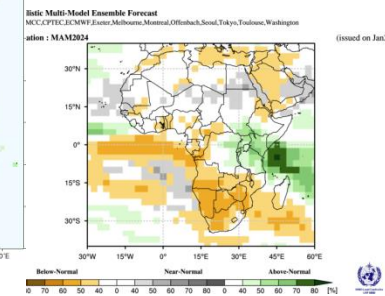
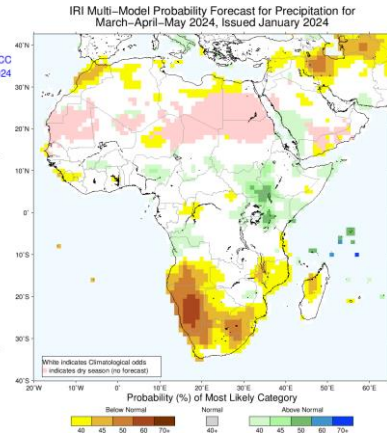
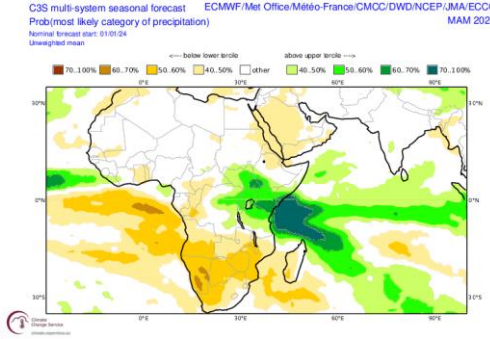
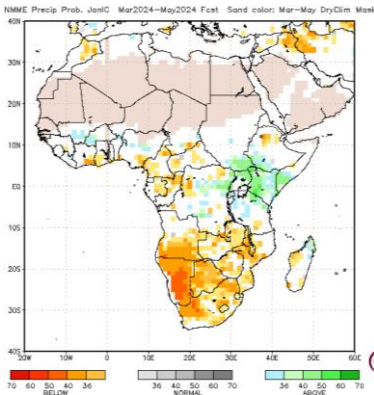
IRI



WLC



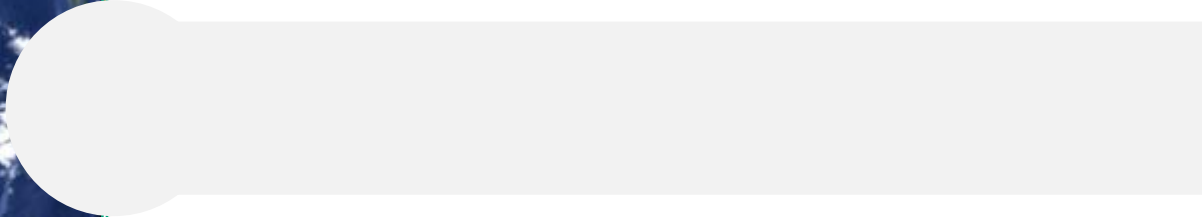
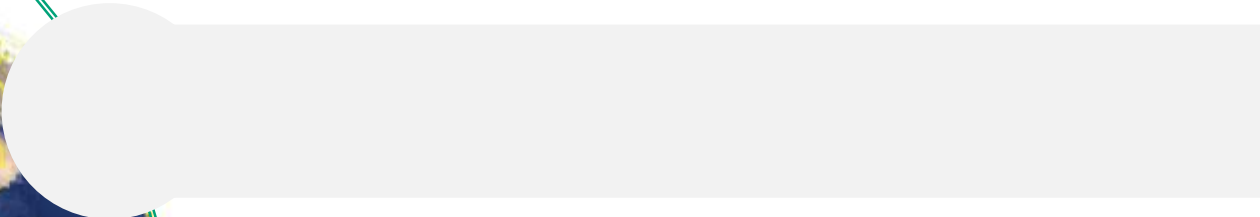
MAM







# OUTLINE



*Outlook for the period from February to May 2024*

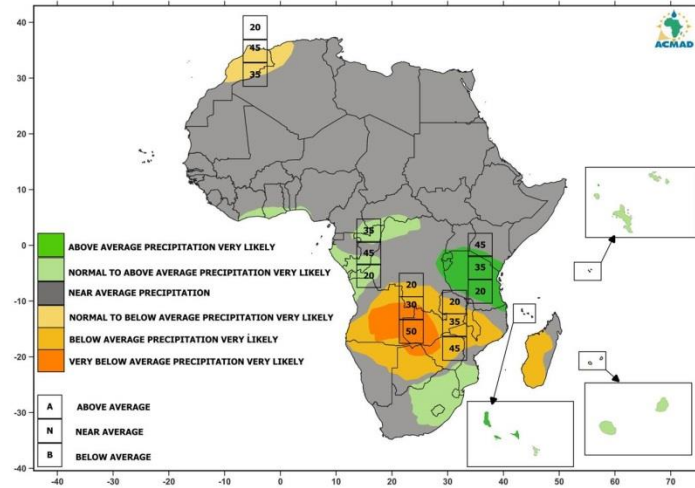
U.S. Navy, NGA, GEBCO  
and/or Copernicus

# SEASONAL PRECIPITATION OUTLOOK FOR FMA & MAM 2024



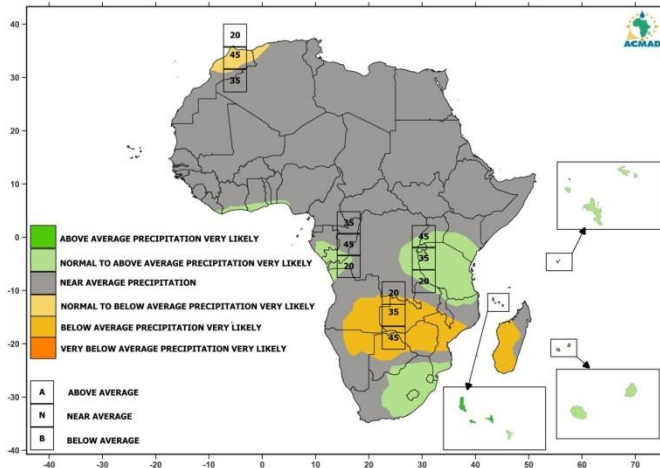
## SEASONAL PRECIPITATION FORECAST FOR FEBRUARY-MARCH-APRIL 2024 ISSUED ON JANUARY 31, 2024

**FMA**



## SEASONAL PRECIPITATION FORECAST FOR MARCH-APRIL-MAY 2024 ISSUED ON JANUARY 31, 2023

**MAM**



**Off season / Climatology Legend:**

- Off season (White box)
- Climatology (Grey box)

# POLICY BRIEF FOR FMAM 2024

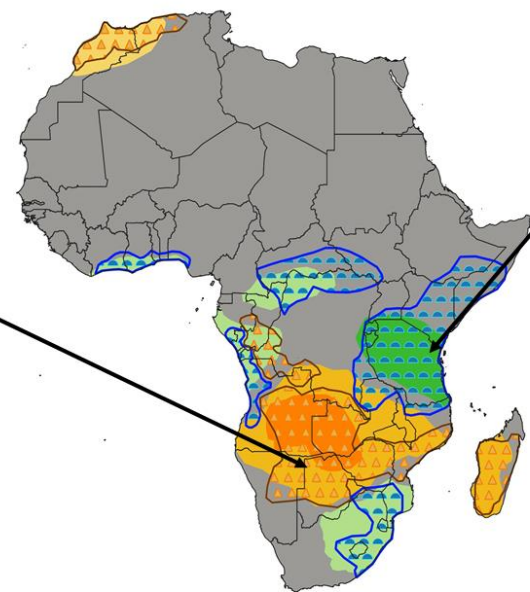


**CONTINENTAL**  
**BRIEF FOR POLICY AND DECISION MAKERS BASED ON**  
**SIGNIFICANT WEATHER AND CLIMATE EVENTS UPDATE.**

**VALID FOR: FEBRUARY TO MAY 2024**



<p><b>CLIMATE ANOMALIES</b></p> <p>Drier than average season very likely                  Prolonged drought with reported persistent impacts</p>
<p><b>HAZARDS</b></p> <p>Weak to Moderate drought, dry spells, near average to late onset very likely.</p>
<p><b>POTENTIAL IMPACTS</b></p> <p>Moisture stress, decreased river discharge, reduced rain-fed crop yield prospect, degradation of pastures and high food prices.</p>
<p><b>MEASURES</b></p> <p>Develop and implement policy to support drought tolerant and short cycle crops, soil and water conservation practice, maximize full irrigation farming. Use watershed based in-situ water harvesting structures Develop and Implement policy in support of weather based insurance and dam management</p>



**LEGEND**

	Observed drought hazard
	Observed flood hazard
	Drought hazard outlook
	Flood hazard outlook

<p><b>CLIMATE ANOMALIES</b></p> <p>Wetter than average season very likely                  Heavy rainfall with reported flooding events</p>
<p><b>HAZARDS</b></p> <p>Heavy rainfall events may lead to flash flood, riverine flooding, landslides and soil erosion. High chance of lightning, hail formation and stormy weather are expected</p>
<p><b>POTENTIAL IMPACTS</b></p> <p>Waterlogging, pest and diseases Infestation, Outbreak of water borne diseases damage to infrastructures(dams, reservoirs, bridges, roads...) Displacement of people due to floods.</p>
<p><b>MEASURES</b></p> <p>Select excess-water tolerant crops, wide tree planting campaigns Develop new and rehabilitate the existing drainage structure, Update and implement flood contingency plans improve water management in reservoirs and dams</p>



# THANK YOU



## 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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