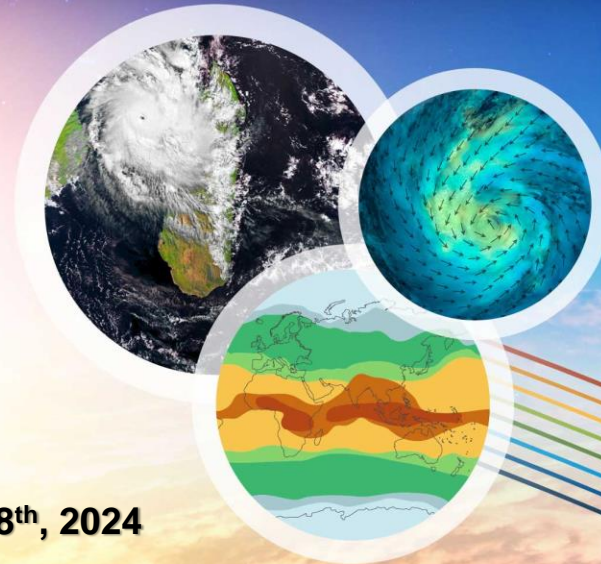
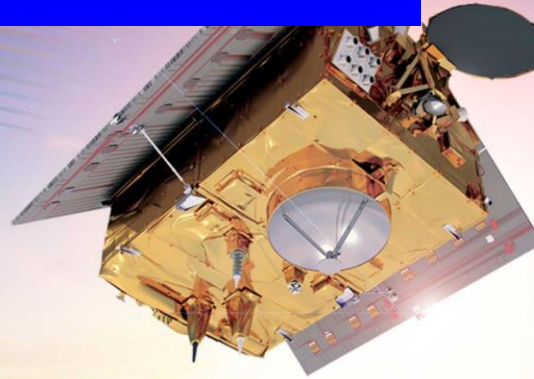




AFRICAN CENTRE OF METEOROLOGICAL APPLICATIONS FOR DEVELOPMENT (ACMAD)

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

CONTINENTAL CLIMATE OUTLOOK FOR AMJ AND MJJ 2024 SEASONS



Issued on: April 8th, 2024

Validity period: April to July 2024



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



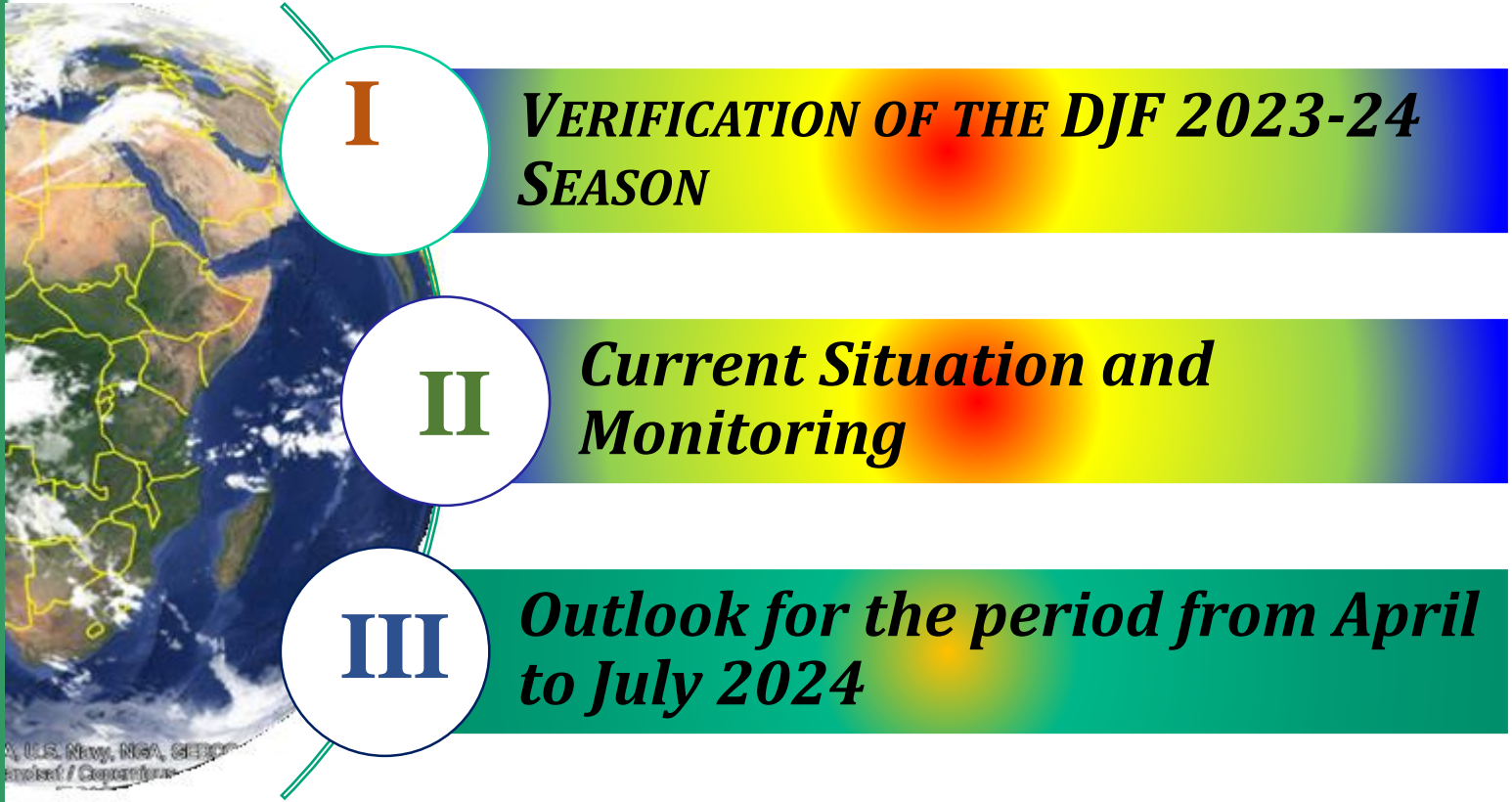
Contributors

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





OUTLINE



I

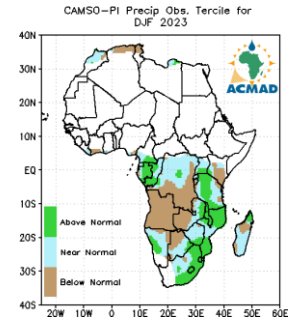
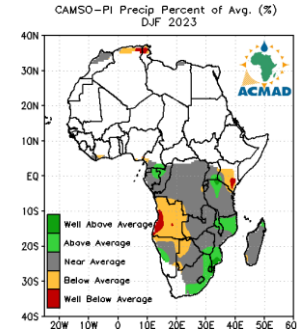
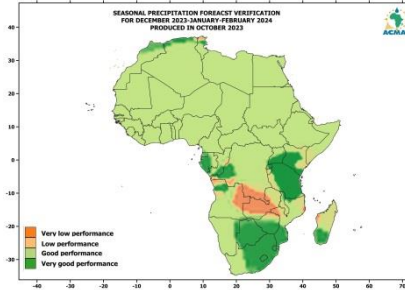
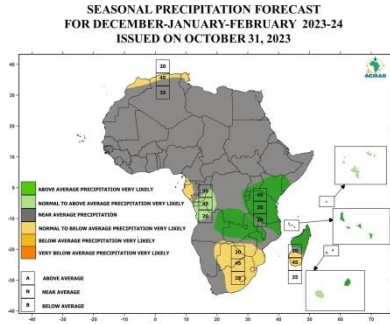
VERIFICATION OF THE DJF 2023-24 SEASON

A, U.S. Navy, NOAA, GEBCO
and/or Copernicus

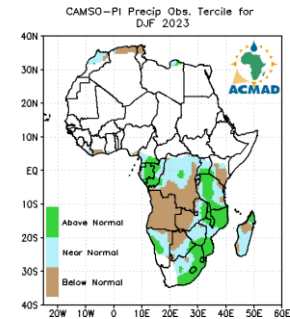
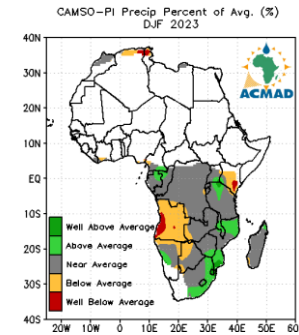
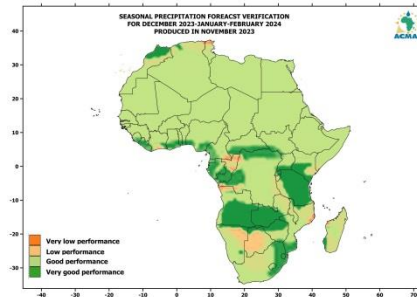
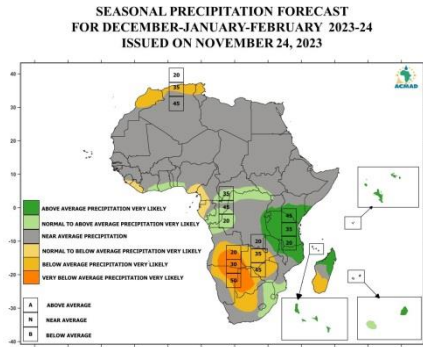


VERIFICATION: CONTINENTAL DJF 2023-24

Initial Condition October 2023



Initial Condition November 2023



OUTLINE



II

Current Situation and Monitoring

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

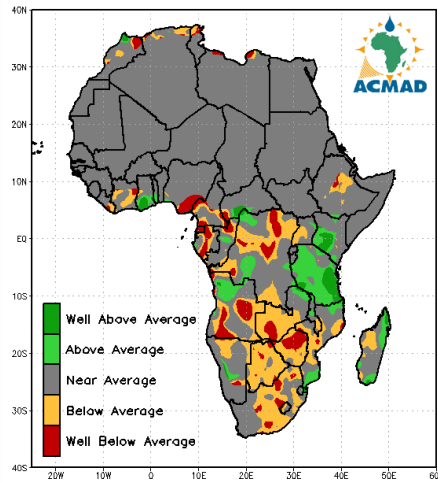


CURRENT RAINFALL CONDITION

Latest 90-days

08Jan2024-06Apr2024

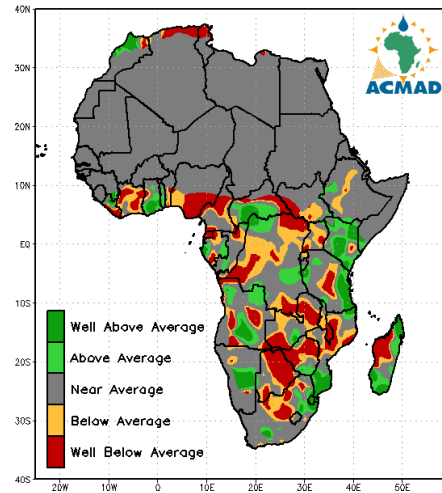
CPC-Uni 90day Precipitation in Percent of Average (%)
Period: 08Jan2024 to 06Apr2024



Last 30-days

08Mar-06Apr 2024

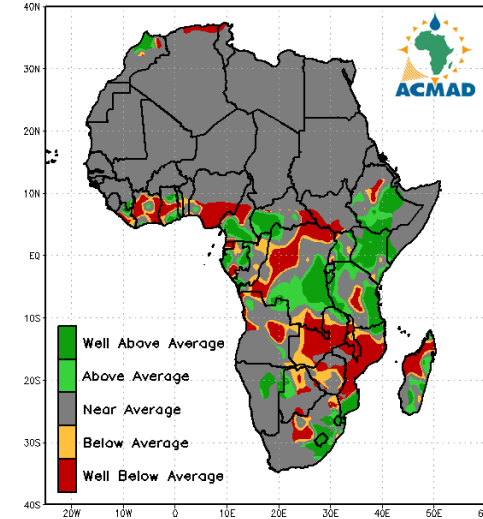
CPC-Uni 30day Precipitation in Percent of Average (%)
Period: 08Mar2024 to 06Apr2024



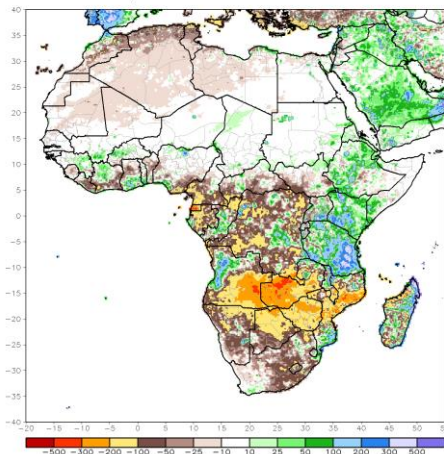
Last 10-days

26Mar-06Apr 2024

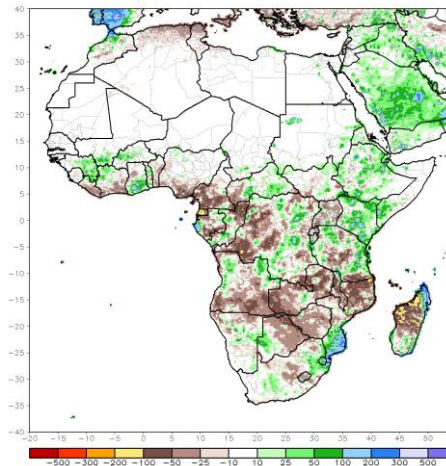
CPC-Uni 10day Precipitation in Percent of Average (%)
Period: 28Mar2024 to 06Apr2024



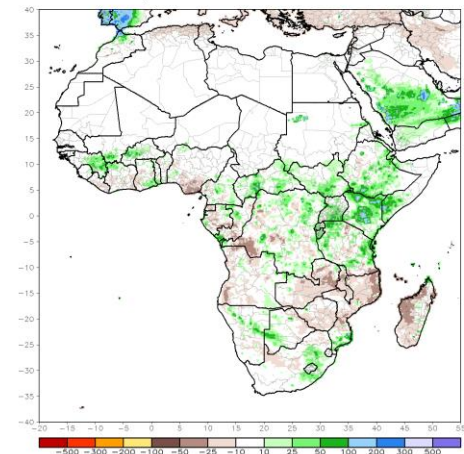
RFE2 90-Day Total Rainfall Anomaly (mm)
Period: 08Jan2024 - 06Apr2024



RFE2 30-Day Total Rainfall Anomaly (mm)
Period: 08Mar2024 - 06Apr2024

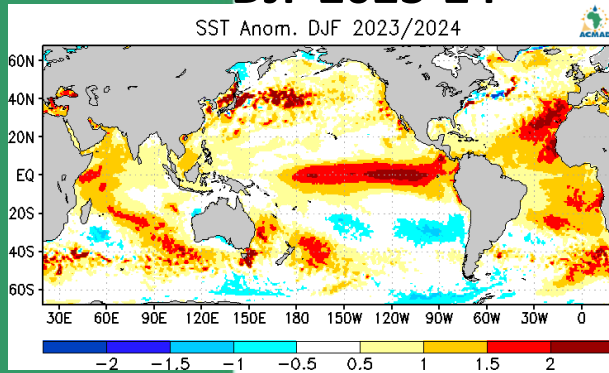


RFE2 10-Day Total Rainfall Anomaly (mm)
Period: 28Mar2024 - 06Apr2024



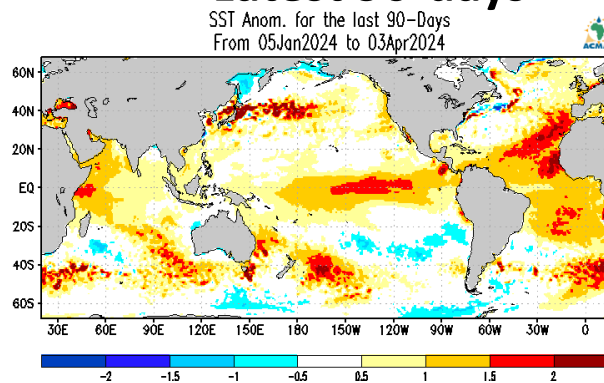
DJF 2023-24

SST Anom. DJF 2023/2024



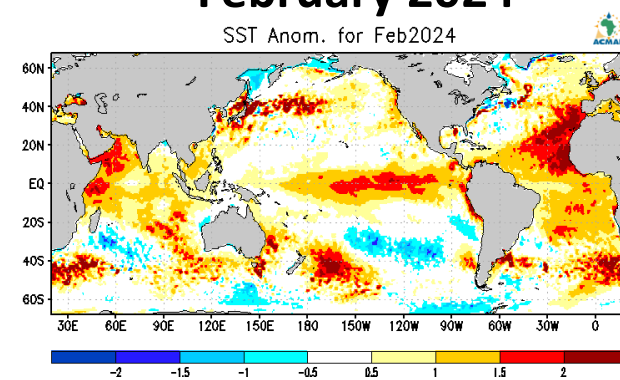
Latest 90-days

SST Anom. for the last 90-Days
From 05Jan2024 to 03Apr2024



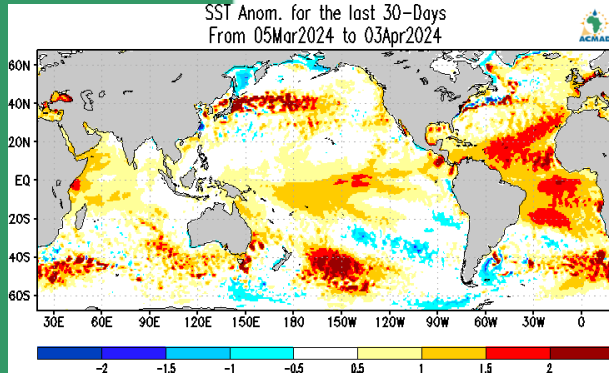
February 2024

SST Anom. for Feb2024



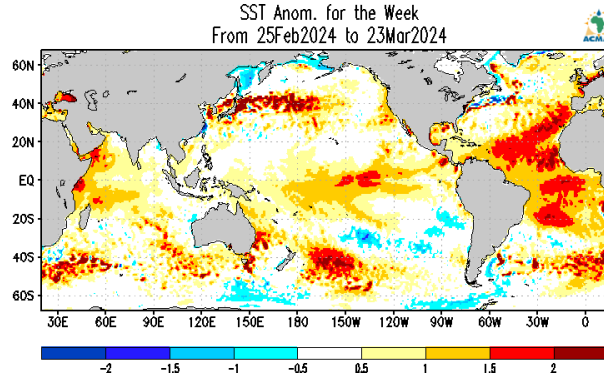
Last 30-days

SST Anom. for the last 30-Days
From 05Mar2024 to 03Apr2024



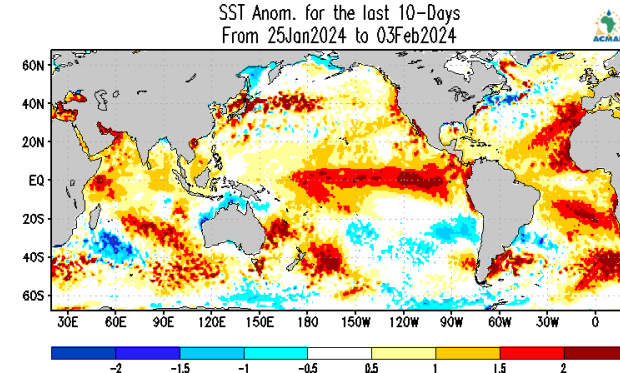
Latest 4 Weeks

SST Anom. for the Week
From 25Feb2024 to 23Mar2024



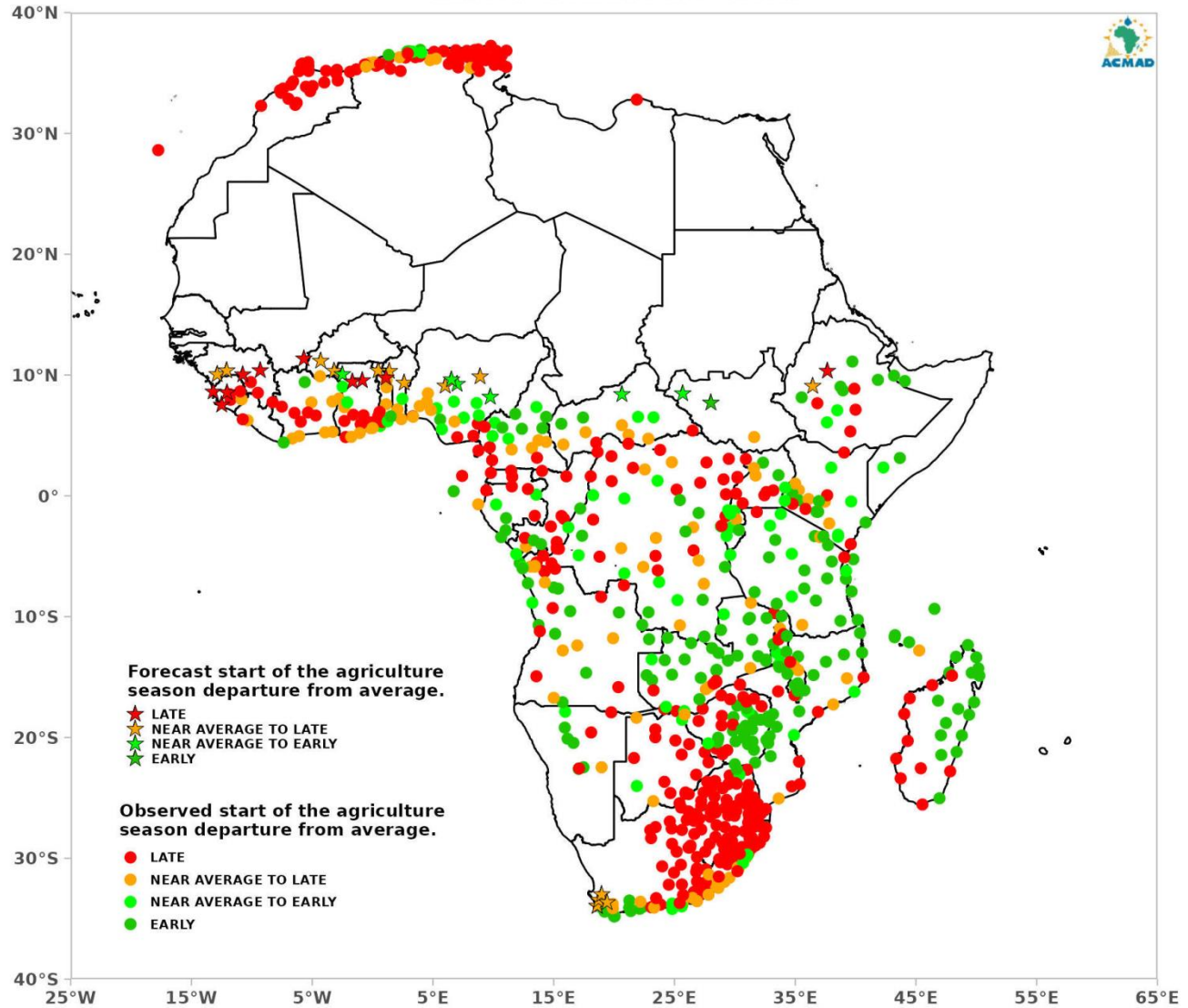
Last 10-days

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



SEASONAL AGRICULTURE

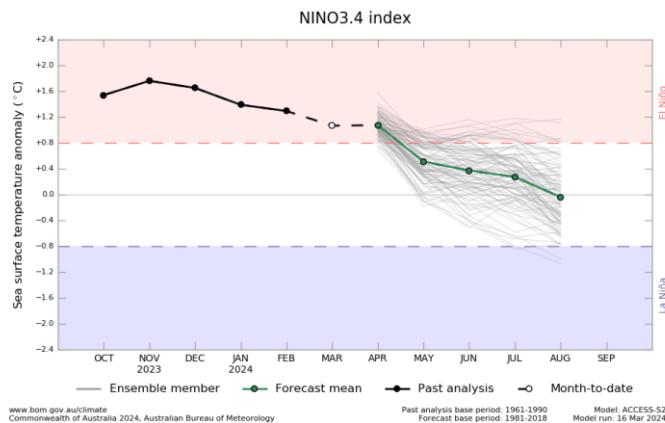
MONITORING OF OBSERVED ANOMALIES ON THE START OF THE AGRICULTURE SEASON AND OUTLOOK
MONITORING PERIOD: Jul-2023 to Apr-2024
OUTLOOK VALIDITY PERIOD: From Apr-06-2024 to Apr-20-2024
DATE OF ISSUE: APR-06-2024.



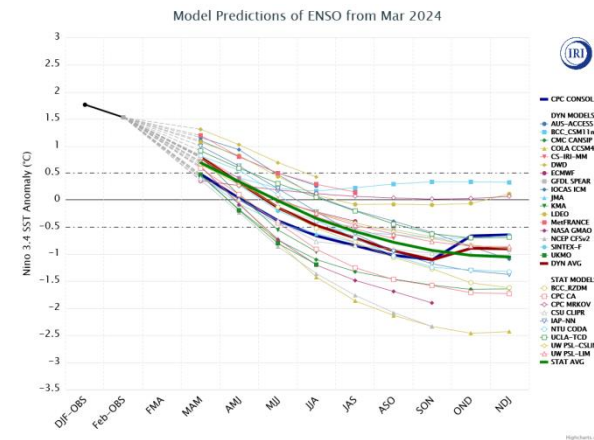
Teleconnections analysis (i,e ENSO) - Index plumes



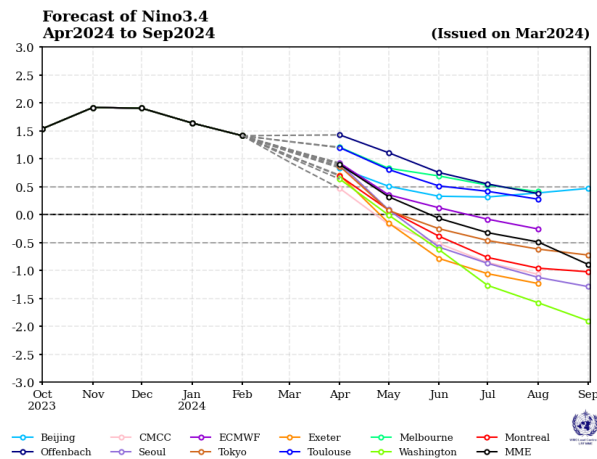
BoM



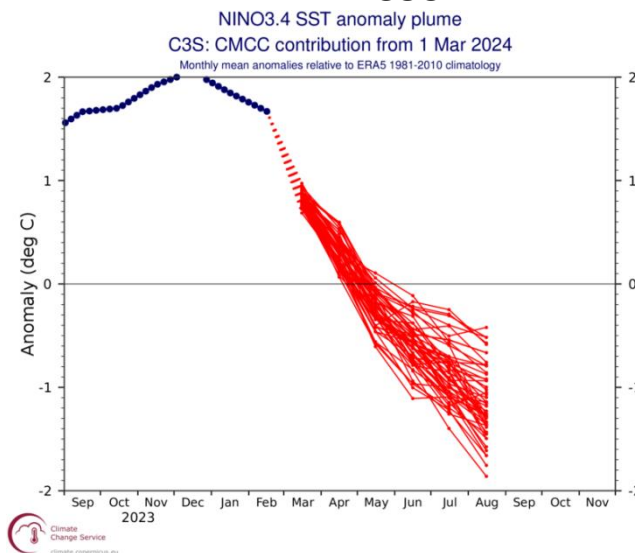
IRI



WMO-LC



C3S



https://www.wmolc.org/seasonIndicesUI/plot_Indices#
https://climate.copernicus.eu/charts/c3s_seasonal/c3s_seasonal_plume_mm?fa
 cets=undefined&time=2022070100,0,2022070100&type=plume&area=nino34

Moderate to Weak El Niño

https://iri.columbia.edu/our-expertise/climate/forecasts/ens0/current/?enso_tab=ens0-quicklook

Multimodel Ensemble Analysis (SSTs and Precip)



ACMAD

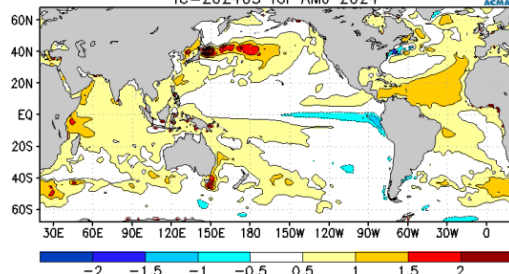
AMJ SST

NMME

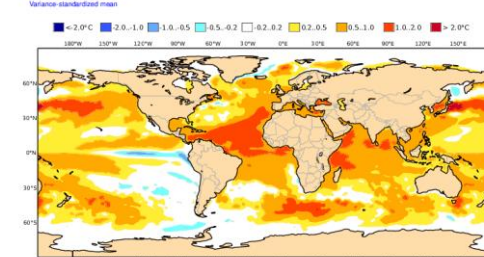
C3S

WLC

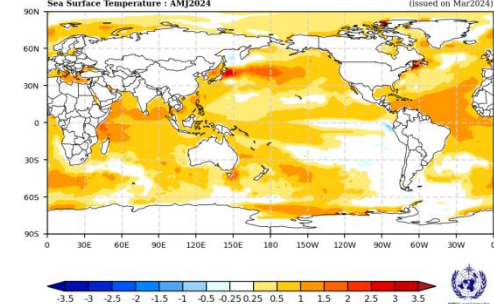
NMME Fcst of SST Anom:
IC=202403 for AMJ 2024



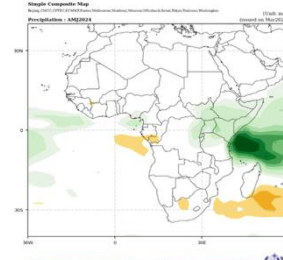
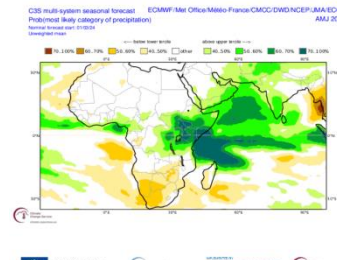
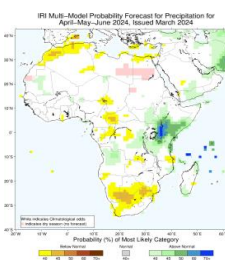
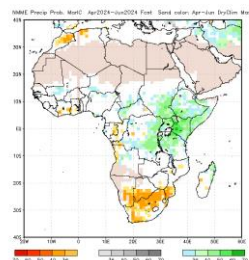
C3S multi-system seasonal forecast
Mean forecast SST anomaly
Normal forecast start: 01/03/24
Variance standardized mean



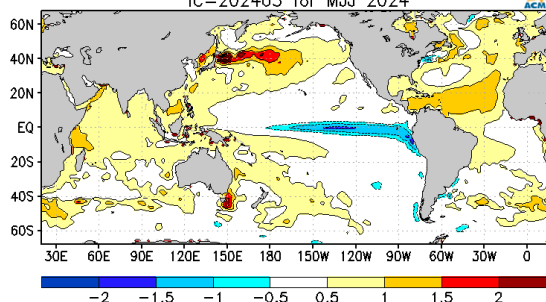
Simple Composite Map
Sea Surface Temperature : AMJ2024
(Unit: K)
(issued on Mar2024)



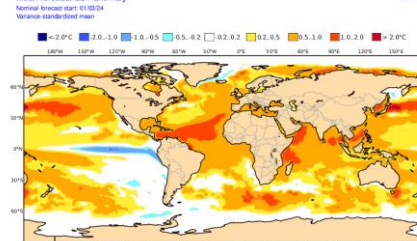
Precip



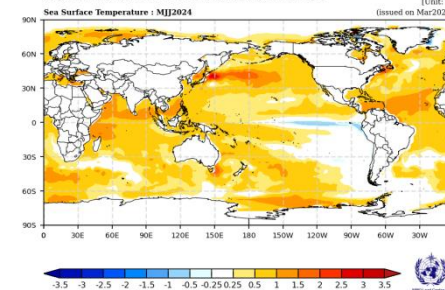
NMME Fcst of SST Anom:
IC=202403 for MJJ 2024



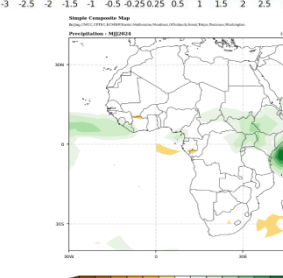
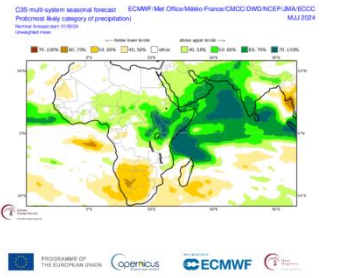
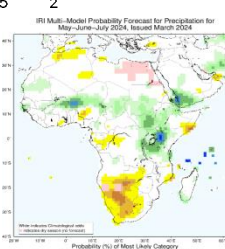
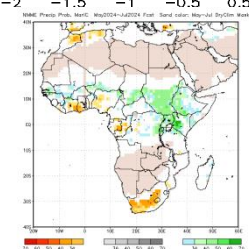
C3S multi-system seasonal forecast
Mean forecast SST anomaly
Normal forecast start: 01/03/24
Variance standardized mean



Simple Composite Map
Sea Surface Temperature : MJJ2024
(Unit: K)
(issued on Mar2024)



Precip



Analogue Years

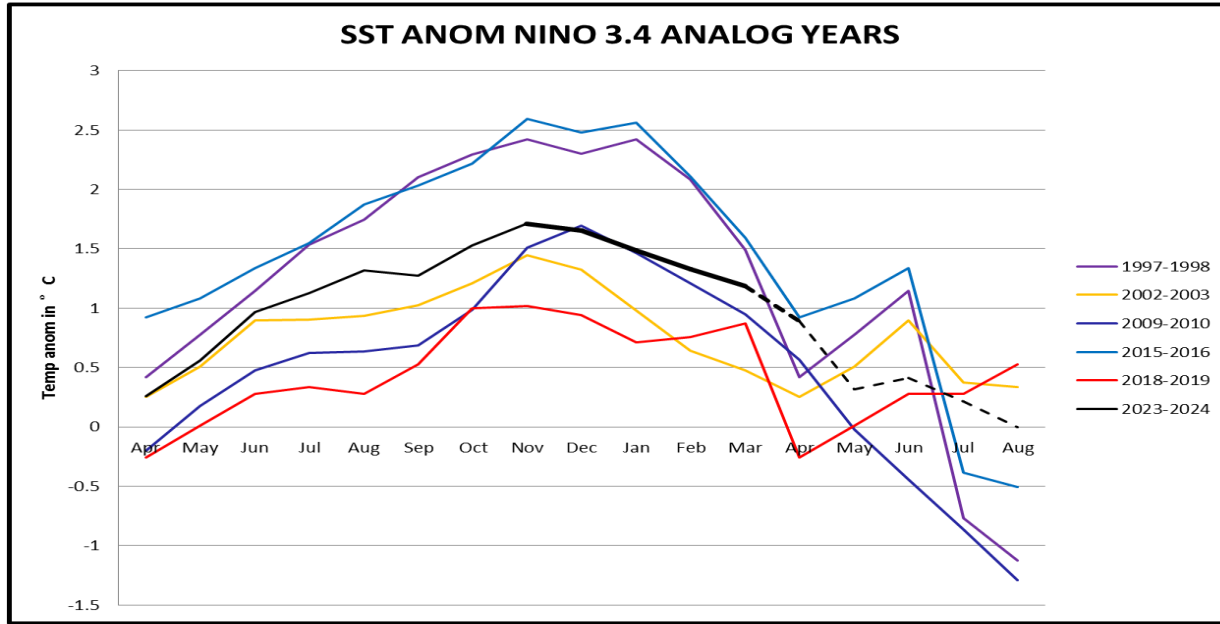


Blue – La Nina

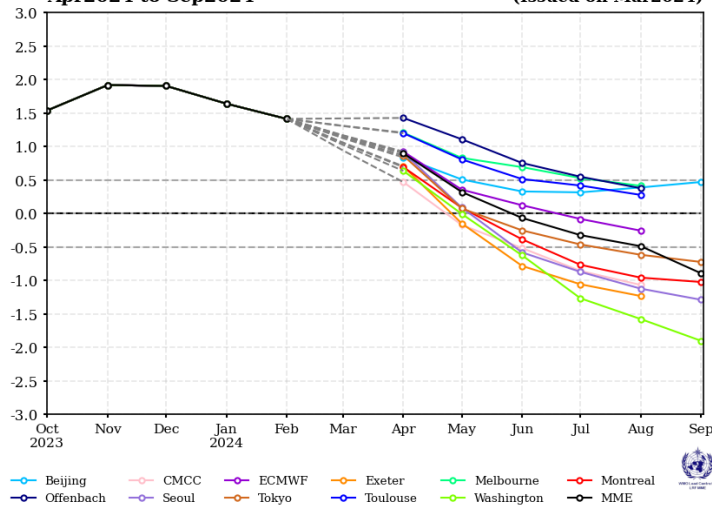
Red– El Nino

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	0.1	0.2	0.4	0.7	0.8	0.9	1	1.2	1.3	1.1
2003	0.9	0.6	0.4	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	0.1	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	-0.8	-0.6	-0.4	-0.2	-0.2	-0.4	-0.6	-0.7
2009	-0.8	-0.8	-0.6	-0.3	0	0.3	0.5	0.6	0.7	1	1.4	1.6
Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2010	1.5	1.2	0.8	0.4	-0.2	-0.7	-1	-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	-1.1	-1
2012	-0.9	-0.7	-0.6	-0.5	-0.3	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	0.2	0.2	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
2018	-0.9	-0.9	-0.7	-0.5	-0.2	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
Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
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	-0.9	-0.8	-0.7	-0.5	-0.4	-0.4	-0.5	-0.7	-0.8	-1	-1
2022	-1	-0.9	-1	-1.1	-1	-0.9	-0.8	-0.9	-1	-1	-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	2
2024	1.8	1.5	1.0	0.8	0.3	-0.1	-0.4	-0.7	-0.9	-1.0	-1.0	-1.0

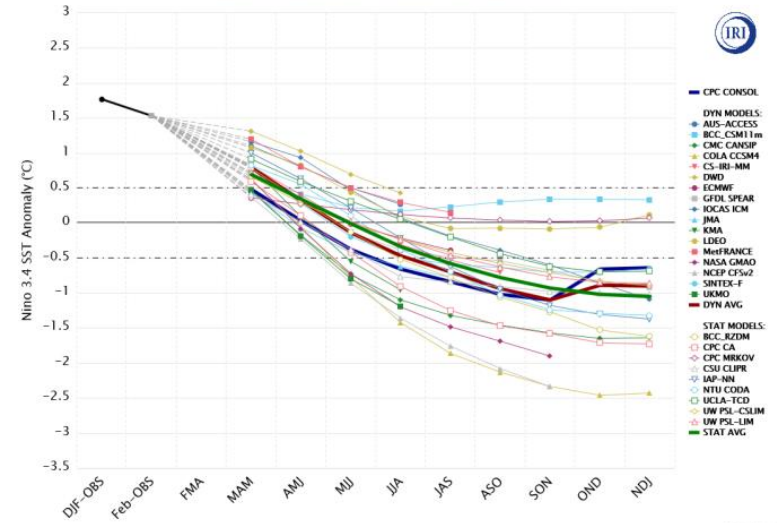
Analogue Analysis SST NINO 3.4 basin



Forecast of Nino3.4
Apr2024 to Sep2024

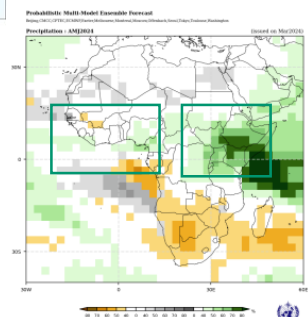
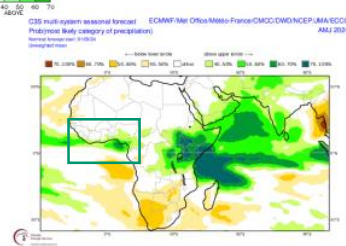
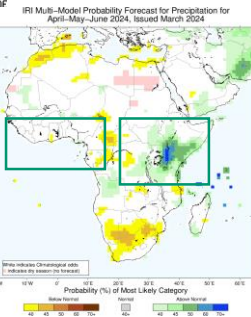
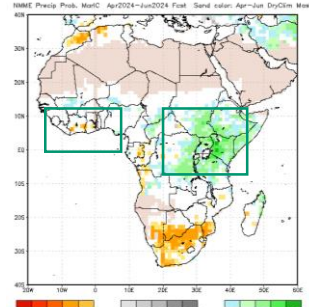
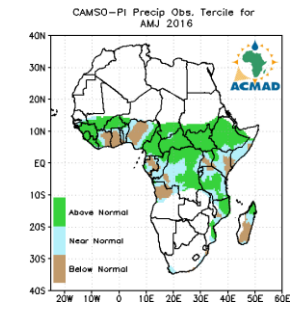
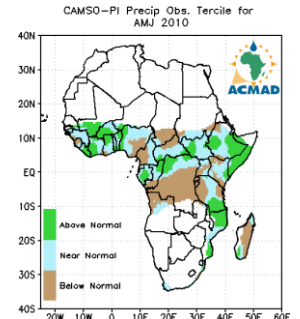
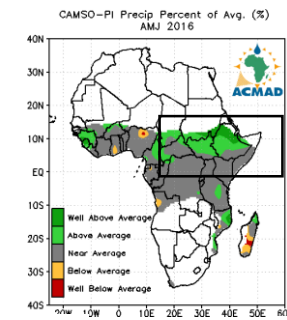
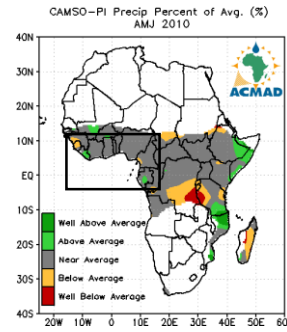
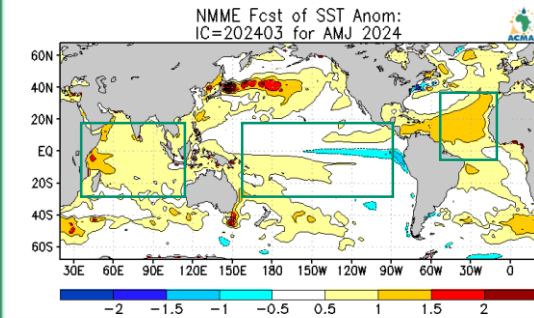
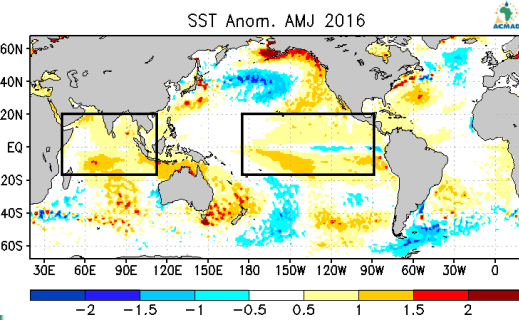
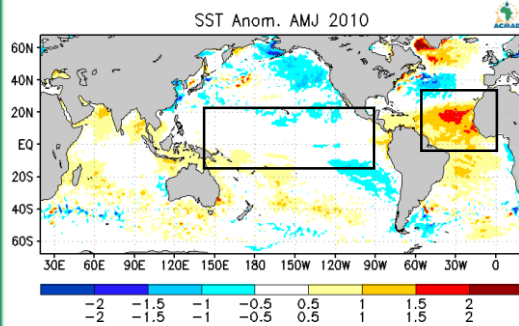


Model Predictions of ENSO from Mar 2024





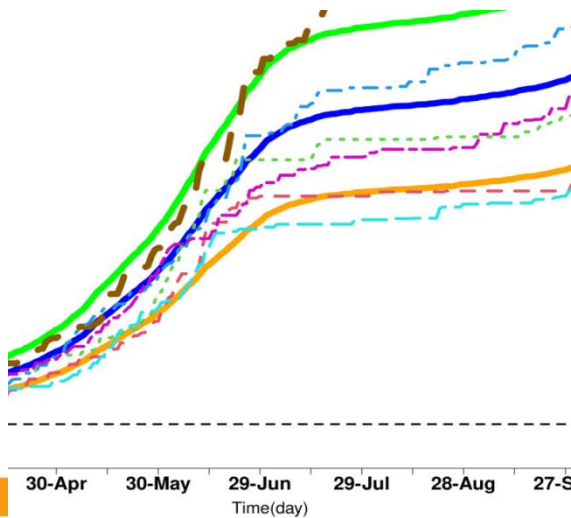
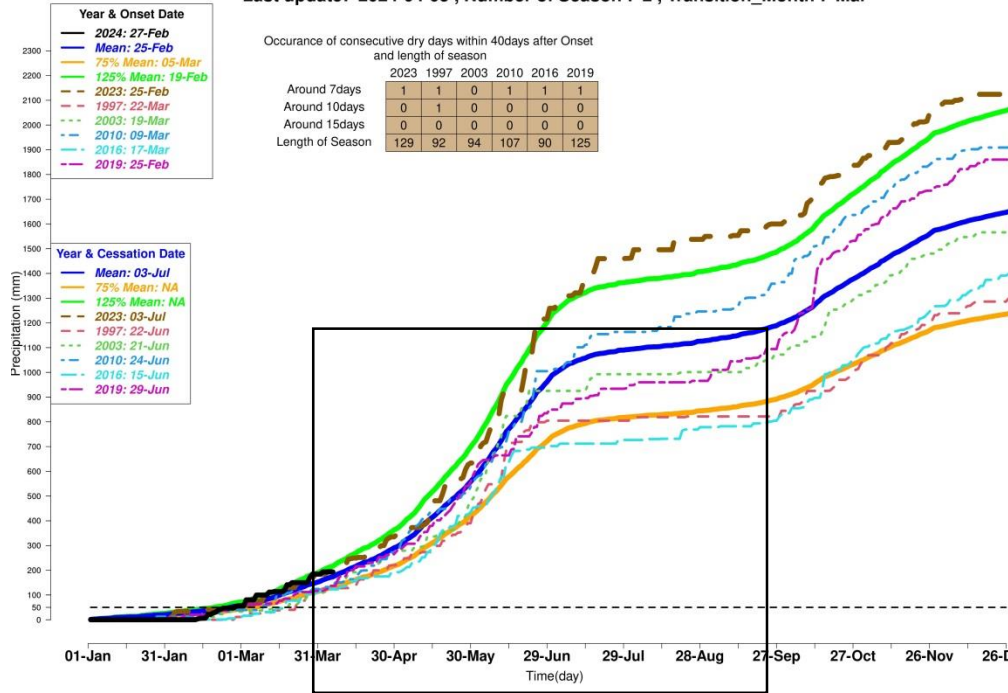
Analogue Analysis AMJJ





Analog with rainfall profil

Cotedivoire : Cumulative precipitation for ABIDJAN , Data source: TAMSAT
 Last update: 2024-04-05 , Number of Season : 2 , Transition_Month : Mar

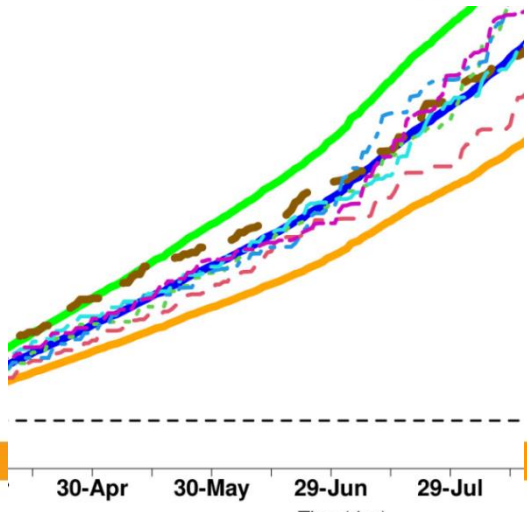
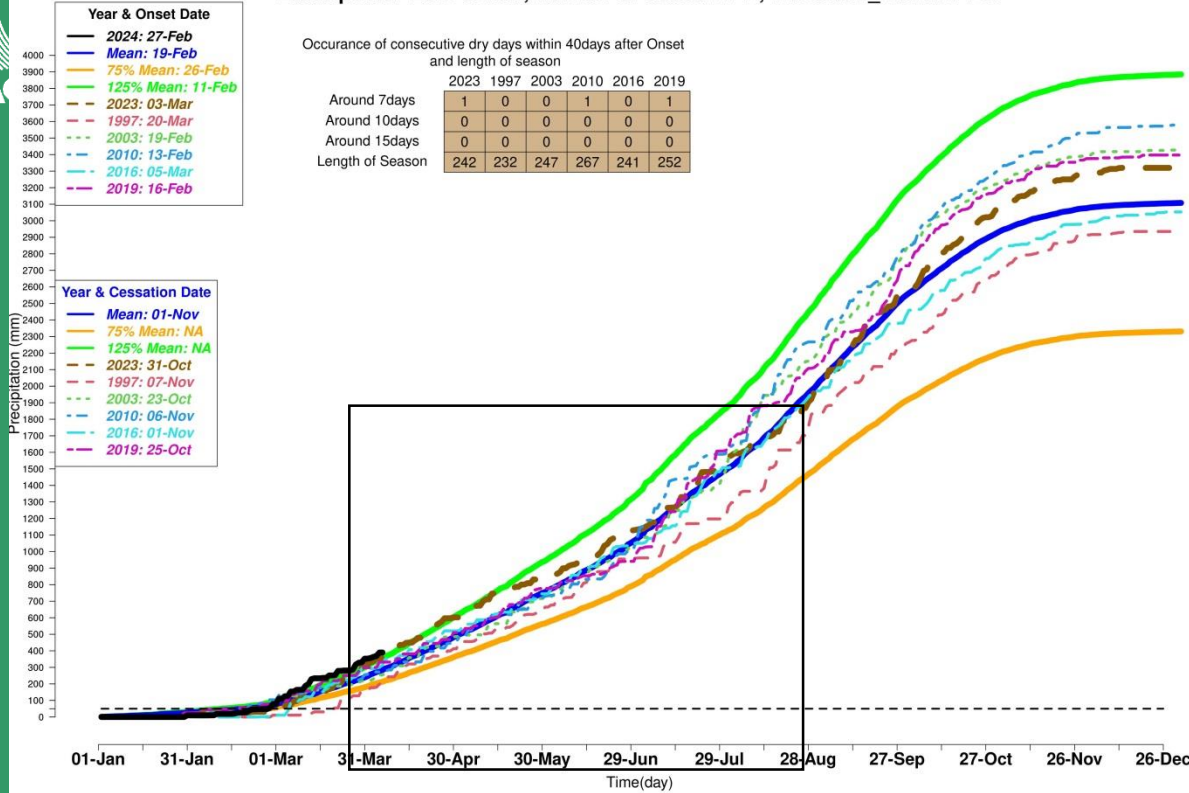


- 2024: 27-Feb
- Mean: 25-Feb
- 75% Mean: 05-Mar
- 125% Mean: 19-Feb
- 2023: 25-Feb
- 1997: 22-Mar
- 2003: 19-Mar
- 2010: 09-Mar
- 2016: 17-Mar
- 2019: 25-Feb

Analog with rainfall profil

Cameroon : Cumulative precipitation for DOUALA-OBS , Data source: TAMSAT

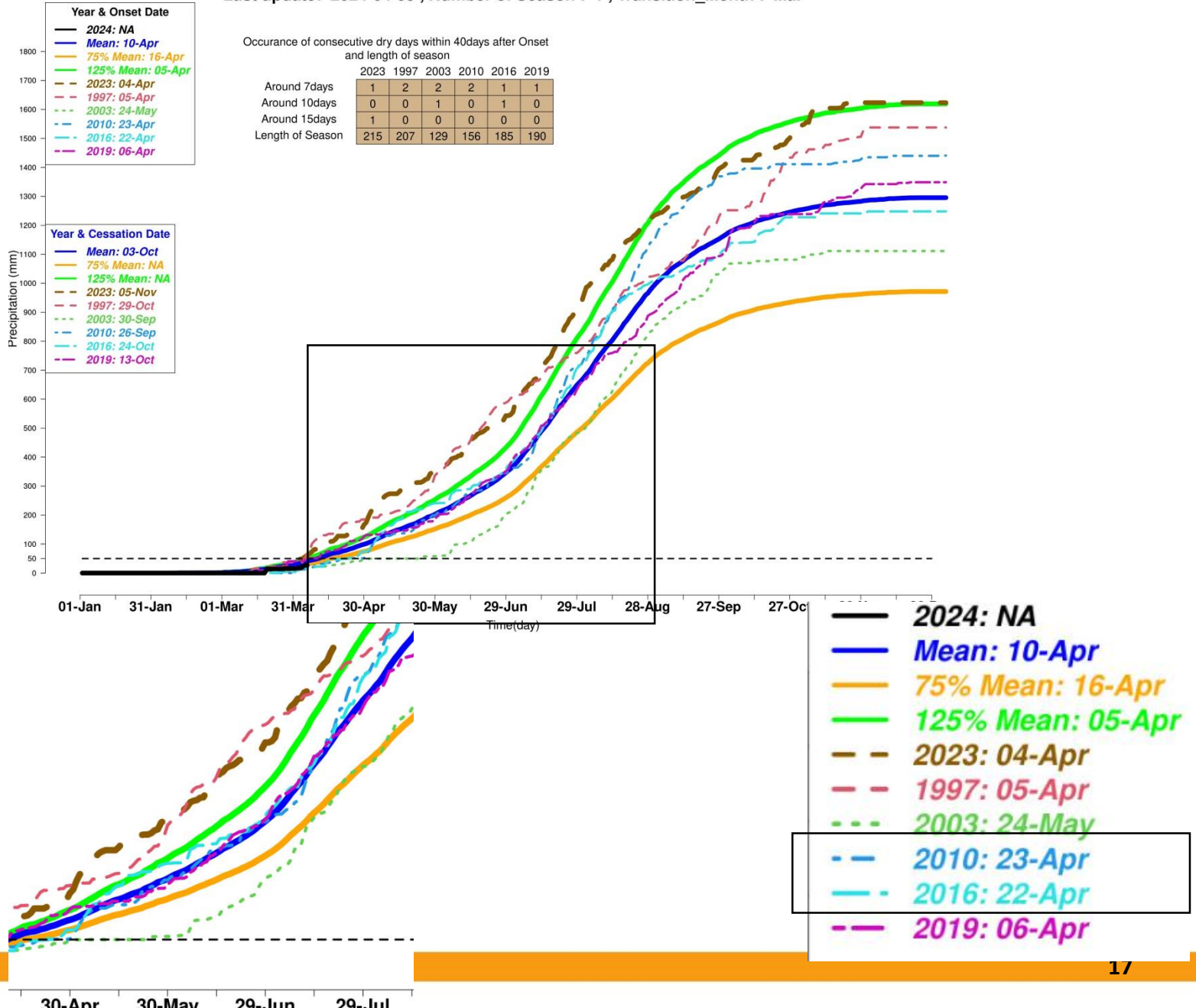
Last update: 2024-04-05 , Number of Season : 1 , Transition_Month : Feb



- 2024: 27-Feb**
- Mean: 19-Feb**
- 75% Mean: 26-Feb**
- 125% Mean: 11-Feb**
- 2023: 03-Mar**
- 1997: 20-Mar**
- 2003: 19-Feb**
- 2010: 13-Feb**
- 2016: 05-Mar**
- 2019: 16-Feb**

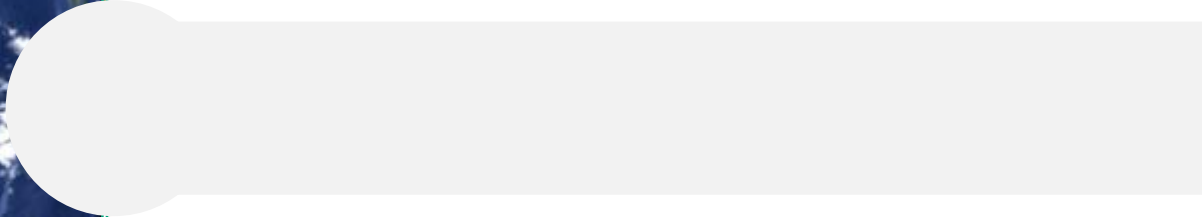
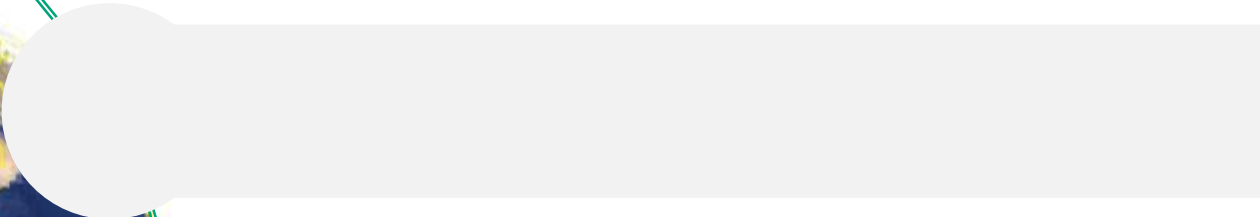
Analog with rainfall profil

Ethiopia : Cumulative precipitation for DEBREMARCOS , Data source: TAMSAT
 Last update: 2024-04-05 , Number of Season : 1 , Transition_Month : Mar





OUTLINE



Outlook for the period from April to July 2024

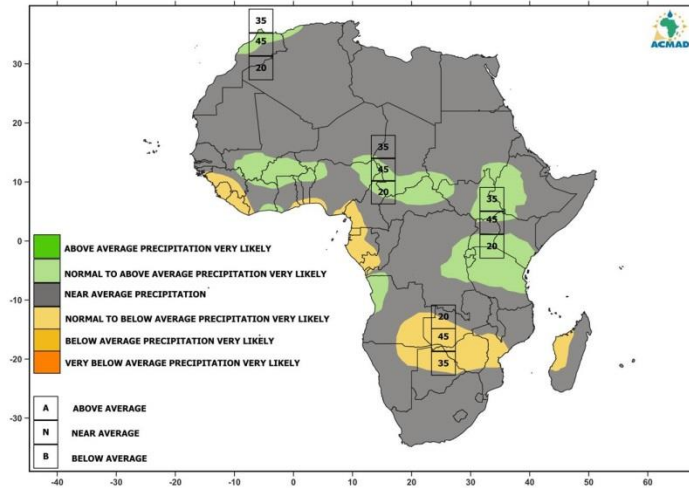
U.S. Navy, NGA, GEOPAC
and/or Copernicus

SEASONAL PRECIPITATION OUTLOOK FOR AMJ & MJJ 2024



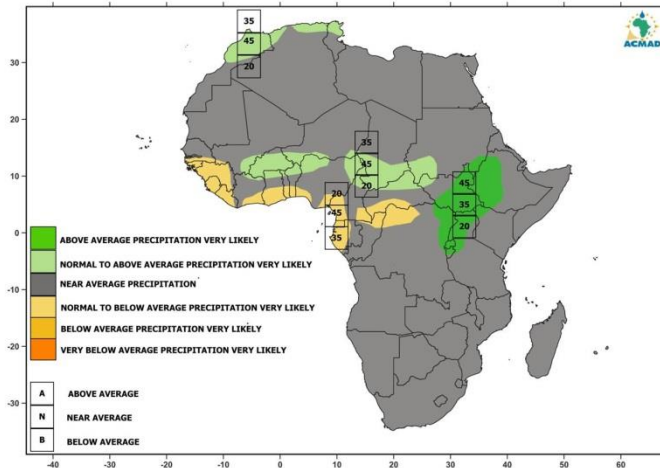
AMJ

SEASONAL PRECIPITATION FORECAST FOR APRIL-MAY-JUNE 2024 ISSUED ON MARCH 29, 2024



MJJ

SEASONAL PRECIPITATION FORECAST FOR MAY-JUNE-JULY 2024 ISSUED ON MARCH 29, 2024



Off season
Climatology

POLICY BRIEF FOR AMJJ 2024



CONTINENTAL
BRIEF FOR POLICY AND DECISION MAKERS BASED ON
SIGNIFICANT WEATHER AND CLIMATE EVENTS UPDATE.
VALID FOR: APRIL TO JULY 2024

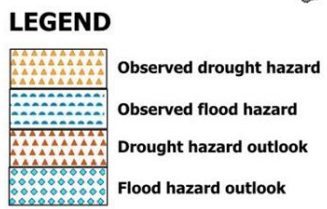
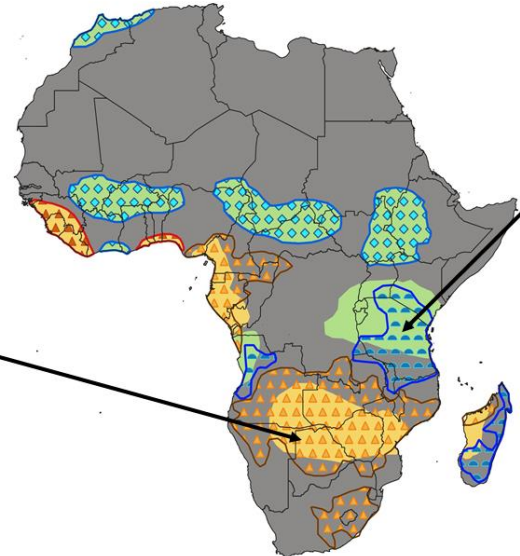


CLIMATE ANOMALIES
 Drier than average season very likely
 Prolonged drought with reported persistent impacts

HAZARDS
 Weak to Moderate drought, dry spells, near average to late onset very likely.

POTENTIAL IMPACTS
 Moisture stress, decreased river discharge, reduced rain-fed crop yield prospect, degradation of pastures and high food prices.

MEASURES
 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



CLIMATE ANOMALIES
 Wetter than average season very likely
 Heavy rainfall with reported flooding events

HAZARDS
 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

POTENTIAL IMPACTS
 Waterlogging, pest and diseases Infestation, Outbreak of water borne diseases damage to infrastructures (dams, reservoirs, bridges, roads...) Displacement of people due to floods.

MEASURES
 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



THANK YOU



FIFTEENTH AFRICAN CONTINENTAL CLIMATE OUTLOOK FORUM (ACCOF-15)

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

DATE : **09TH FEBRUARY, 2024**
TIME : **8:00 AM TO 10:30 AM (GMT)**
VENUE : **ONLINE**



TARGET SEASON: February to May(FMAM) 2024



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