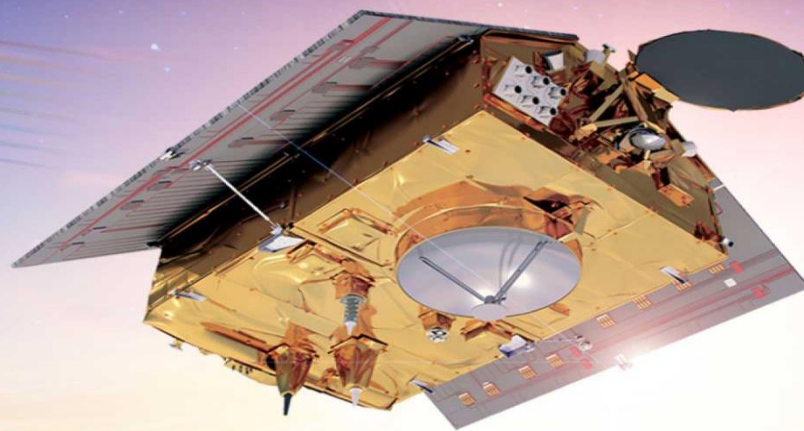
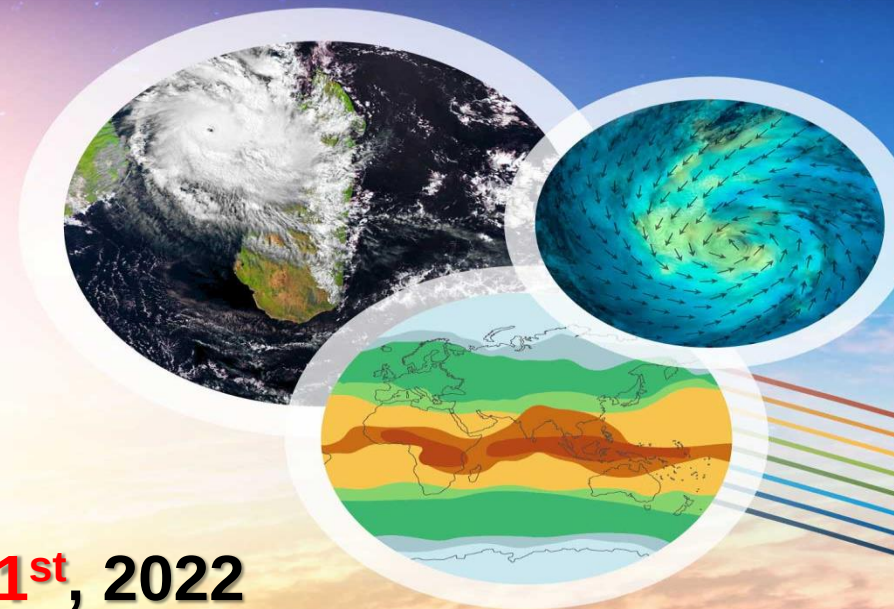




NTRA-ACP CLIMATE SERVICES AND RELATED APPLICATIONS PROGRAMME

African Centre of Meteorological Applications for Development (ACMAD)

Dekadal Technical Note and Precipitation Outlook for Week 1 and 2



Issued on: **October 01st**, 2022

Contributors

Name	Function	Date
Mr. Hubert N. Kabengela	Thematic Climate Monitoring and Seasonal Forecast expert	01-10-2022
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Versions

Version	Date	By	Descriptions
V0	01-10-2022	CDD Climate Experts	First draft for « Briefing », with all Climate's Expert contributions
Last	01-10-2022	Dr. Pierre Kamsu	Final Review

1. Climate Monitoring

- Forecast Verification
- Observed Mean Sea Level Pressure (MSLP) during last dekad
- Observed 500 hPa Geopotential Height during last dekad
- Observed Precipitation during last dekad
- Observed Temporal Variation of precipitation
- Start of Agricultural Season – Current Status and Outlook
- Observed OLR Anomalies during the passed dekad
- Observed Wind Anomaly at 850 and 700 hPa
- Observed Relative Humidity Anomaly
- Weekly and Monthly SST Anomaly Assessment

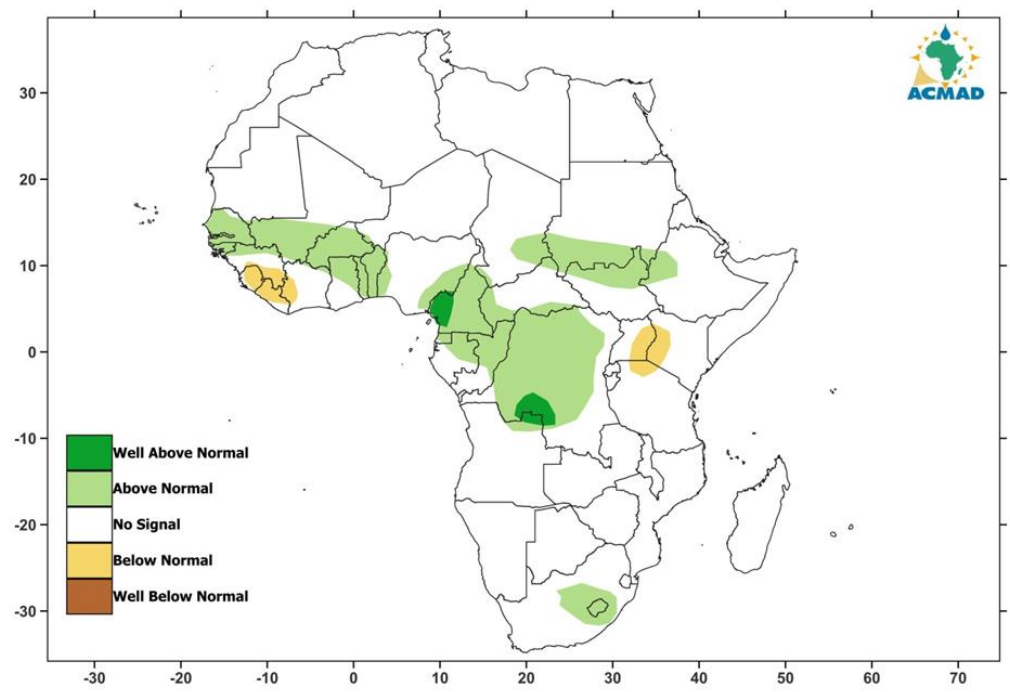
2. Status of Drivers

3. Dynamical Model Forecast : Week 1 and 2

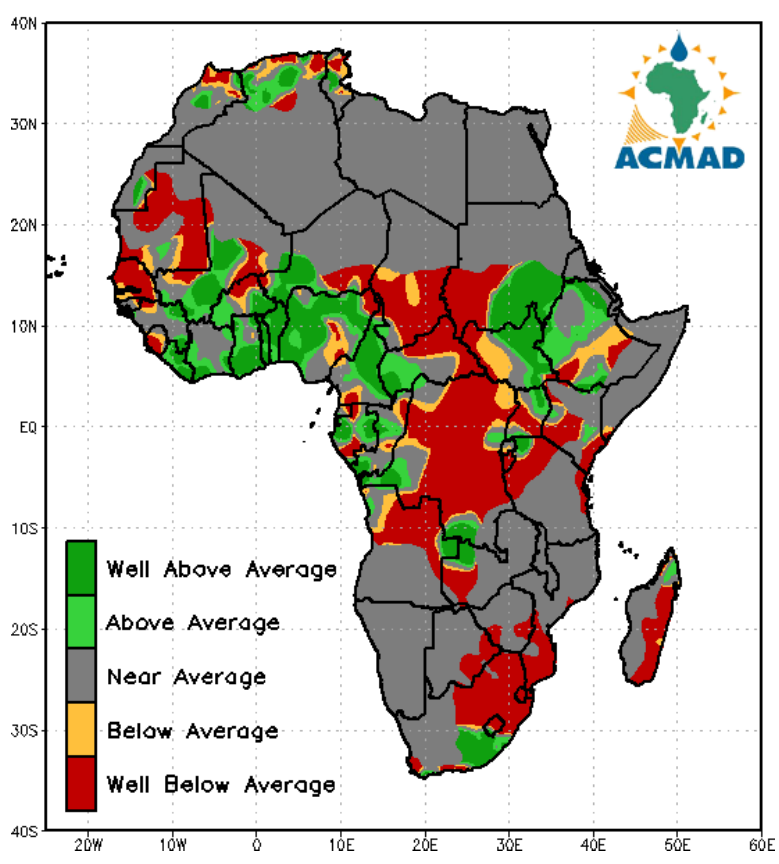
4. Week 1 and 2 Outlook

Forecast Verification

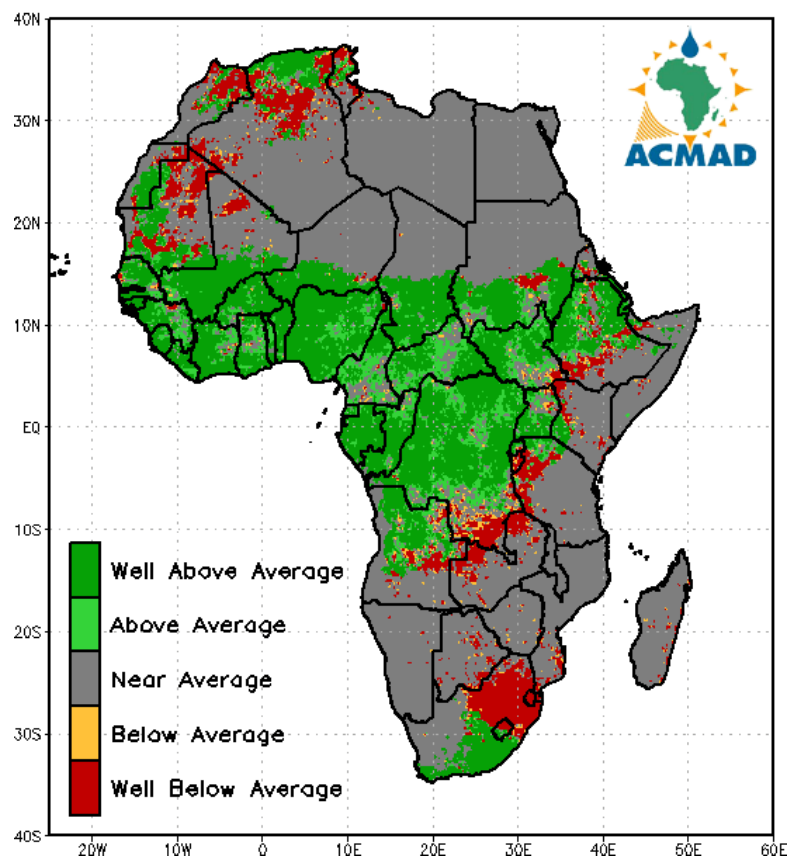
PRCIP FCST WEEK1 21-27 SEPTEMBER 2022



CPC-Uni 7day Precipitation in Percent of Average (%)
Period: 25Sep2022 to 01Oct2022



ARC2 7day Precipitation in Percent of Average (%)
Period: 25Sep2022 to 01Oct2022



Mean Sea Level Pressure (MSLP) – Obs & Anom.

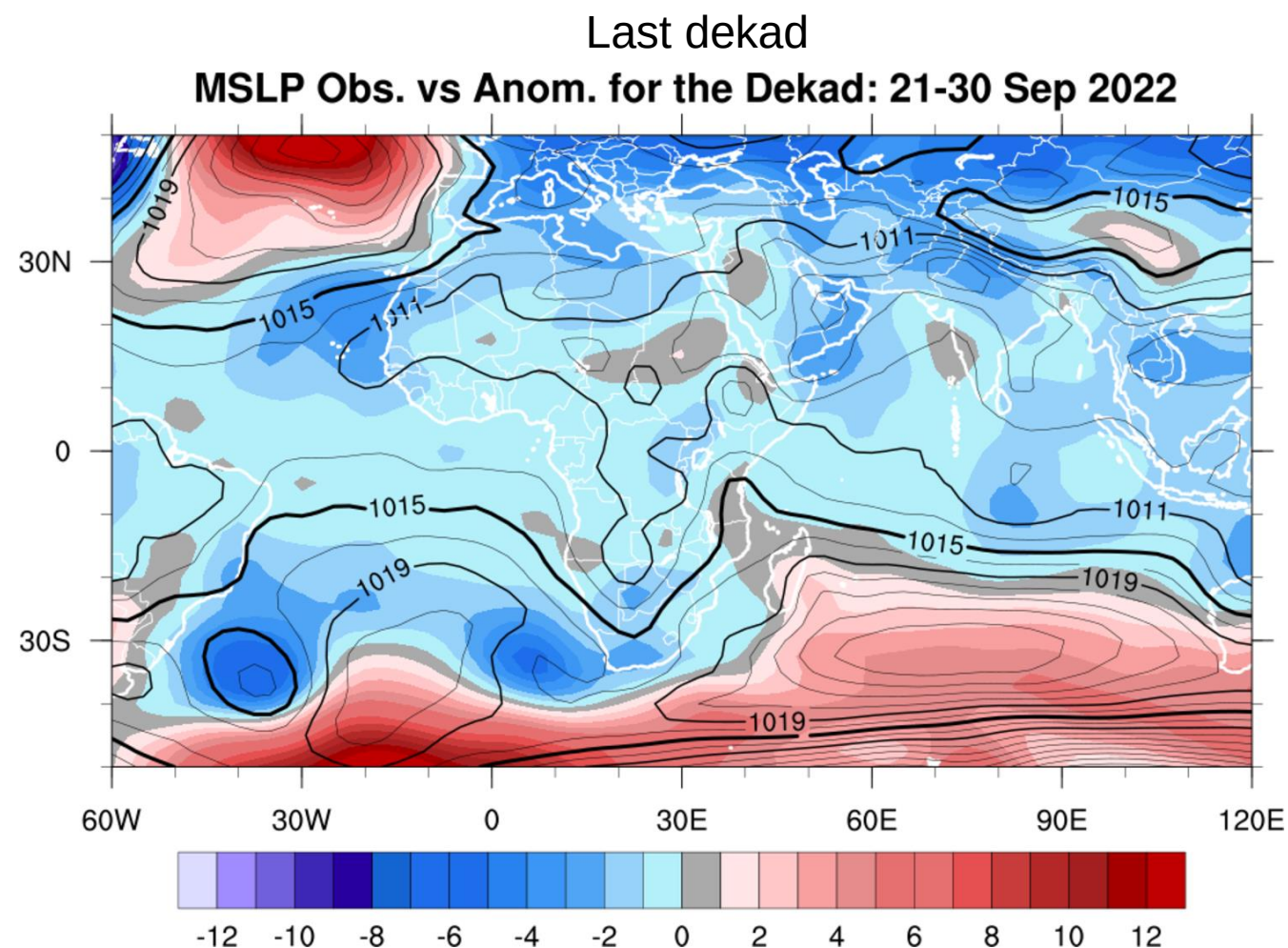
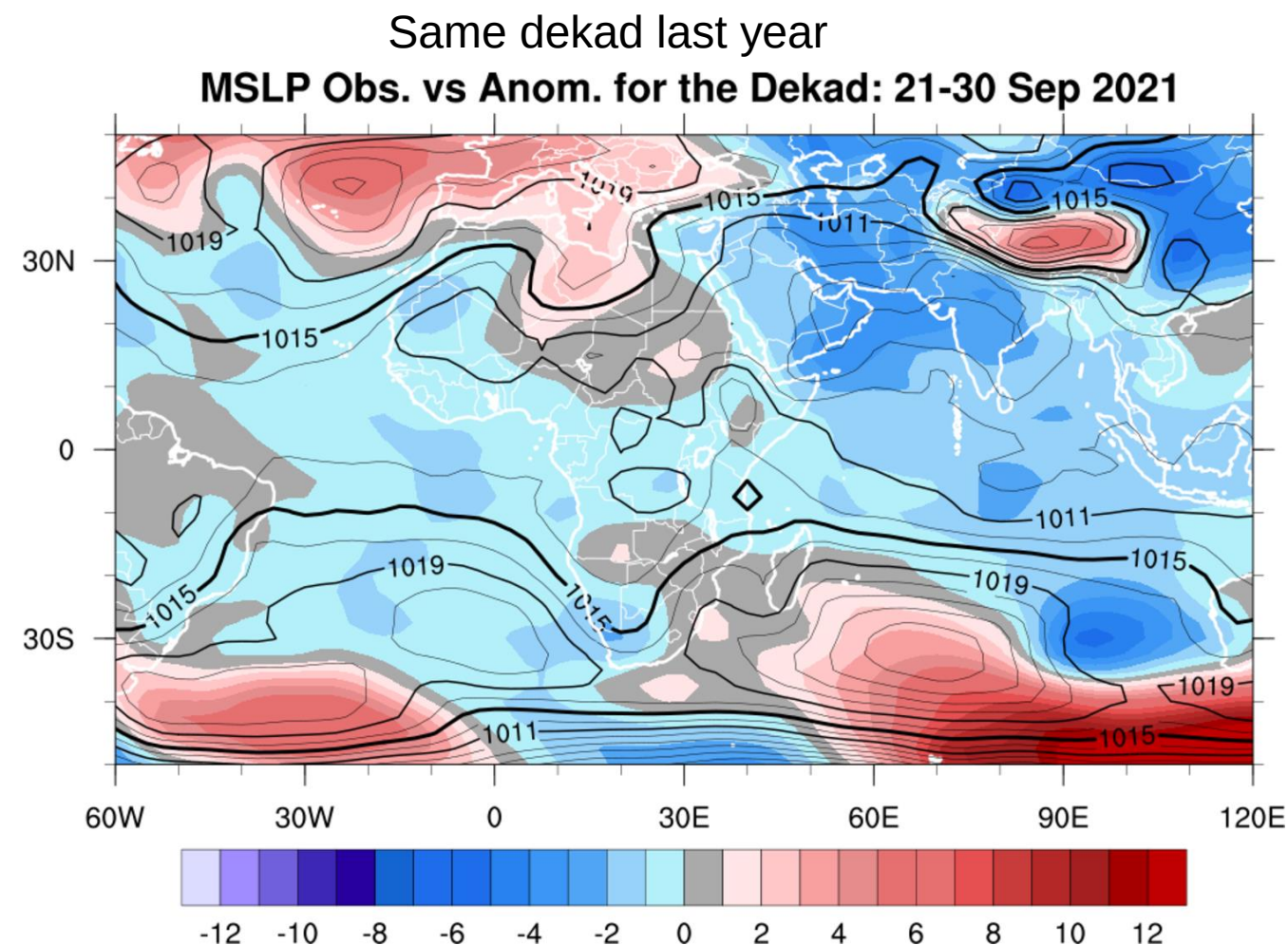


Figure 5: MSLP observation and anomaly

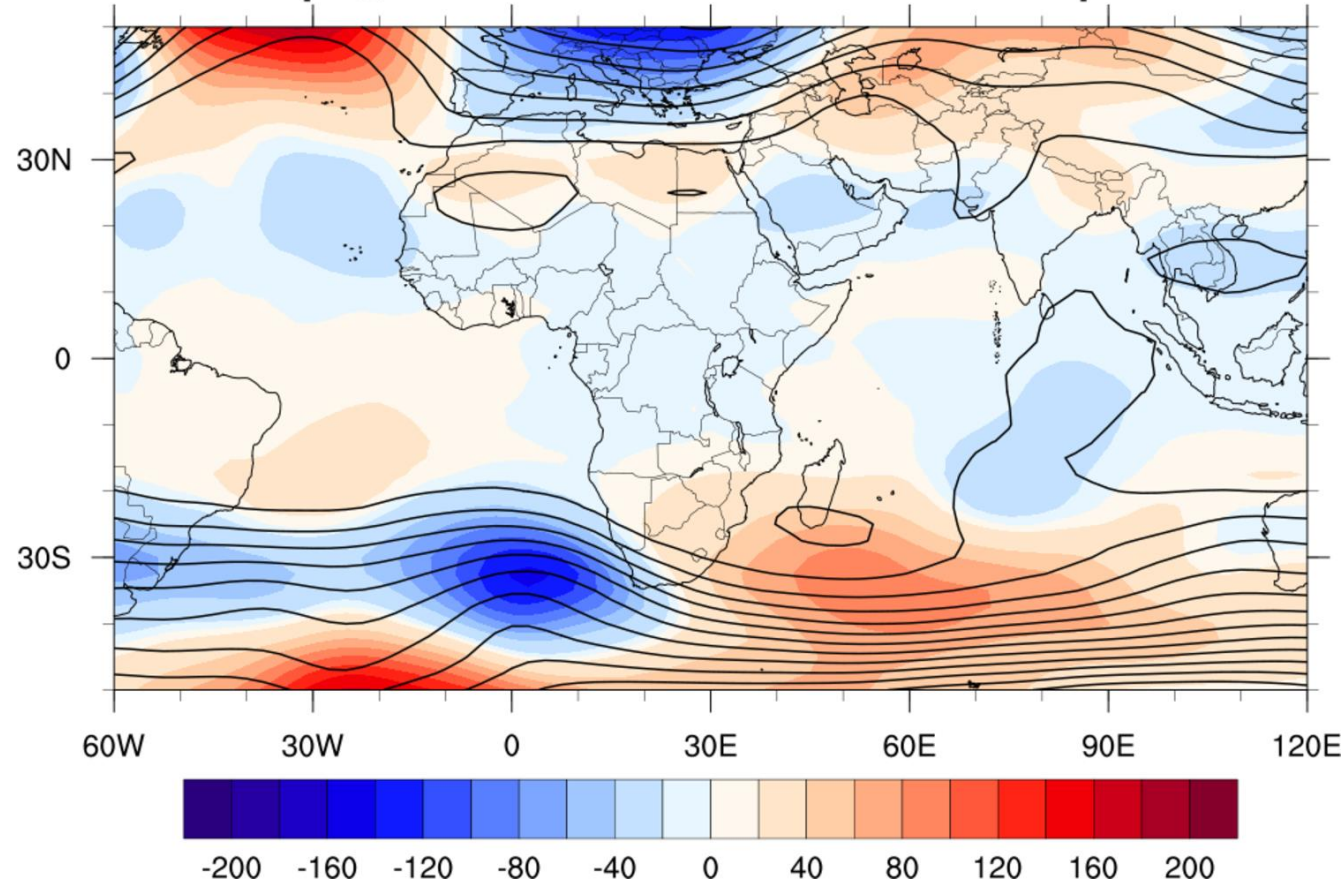
Data source:

<http://iridl.ldeo.columbia.edu/expert/SOURCES/NOAA/NCEP-NCAR/CDAS-1/DAILY/Intrinsic/MSL/pressure>

500 hPa Geopotential Height (Z500) – Obs vs Anom.

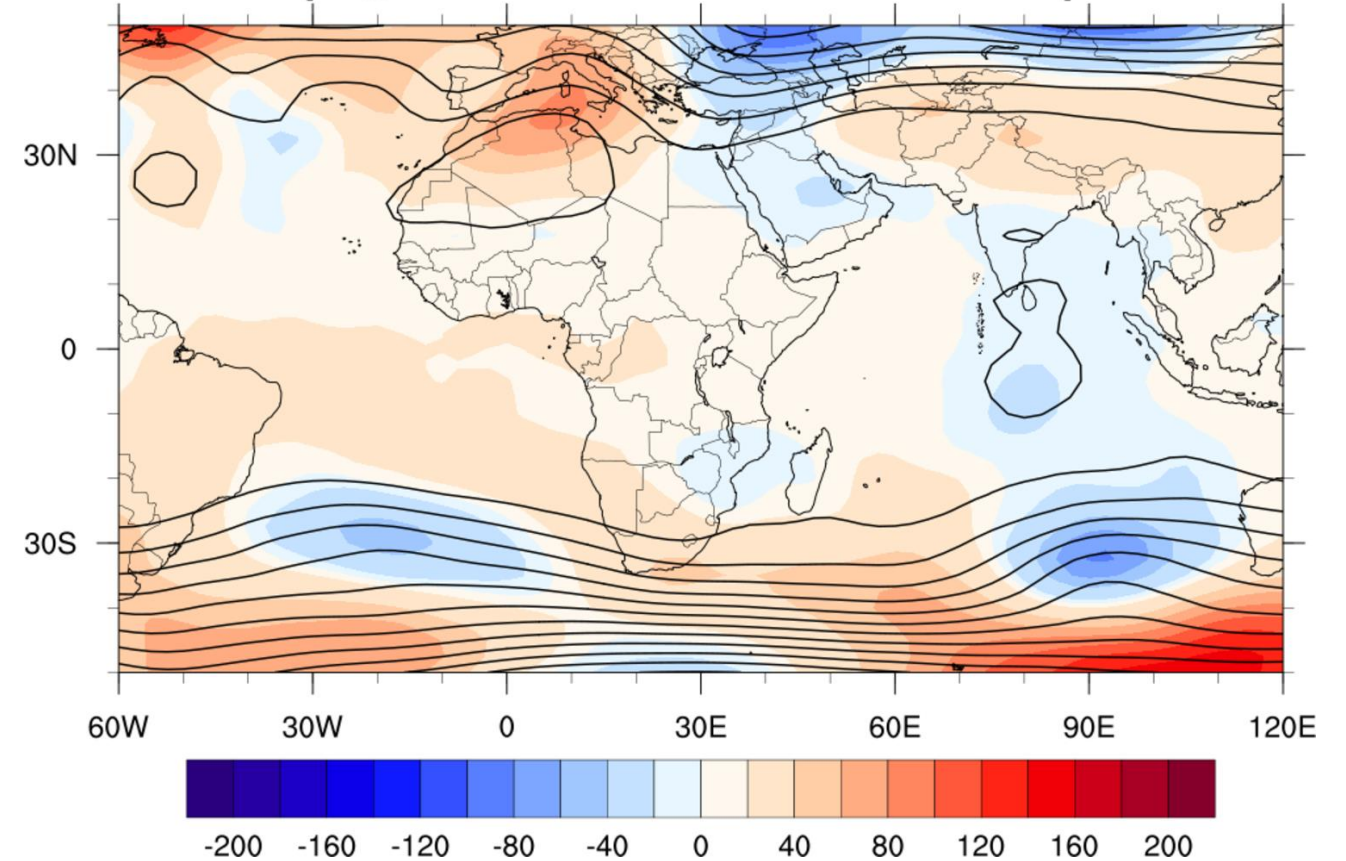
Last dekad

Geopt @500hPa and Anom. / Dek: 21-30 Sep 2022



Same dekad last year

Geopt @500hPa and Anom. / Dek: 21-30 Sep 2021



Estimated Cumulative Precipitation in % of average for the last Dekad

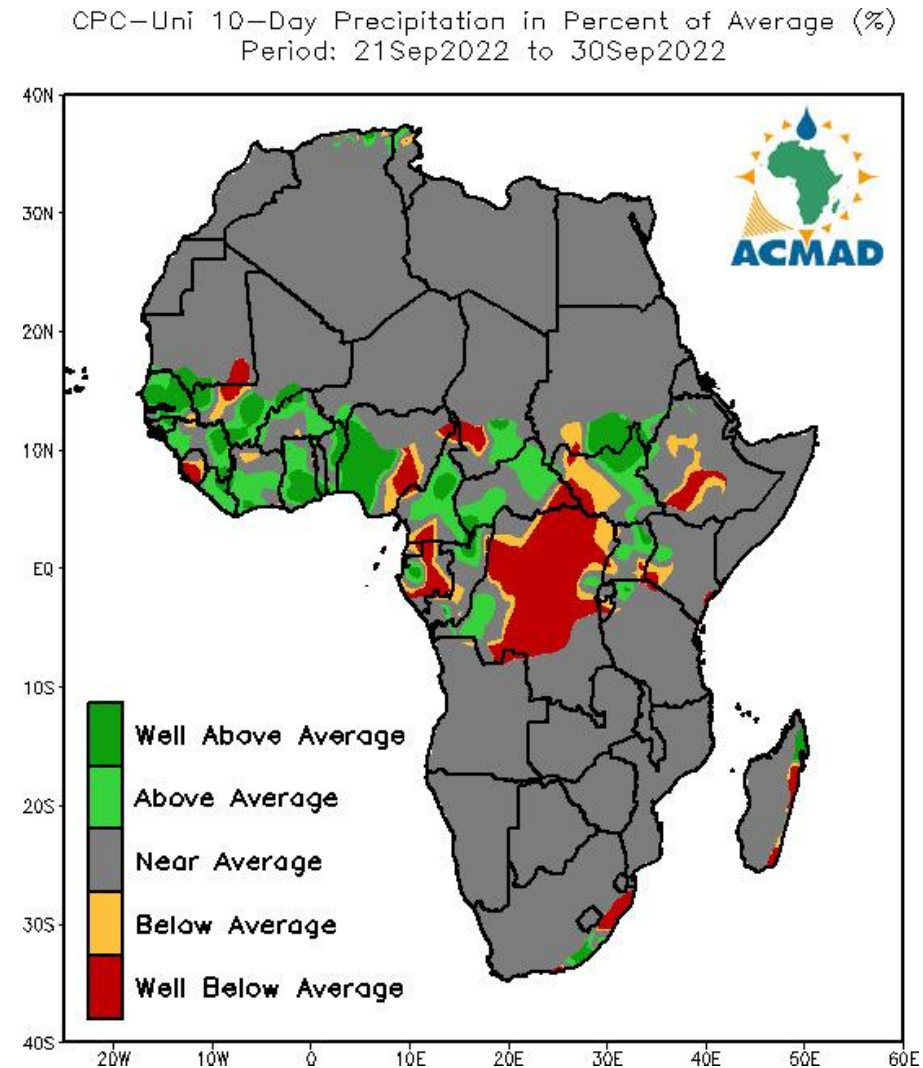


Figure 1: This map displays decadal average precipitation in percent of average

Temporal and Spatial Change of % of Average Precip for the Last Four Dekads

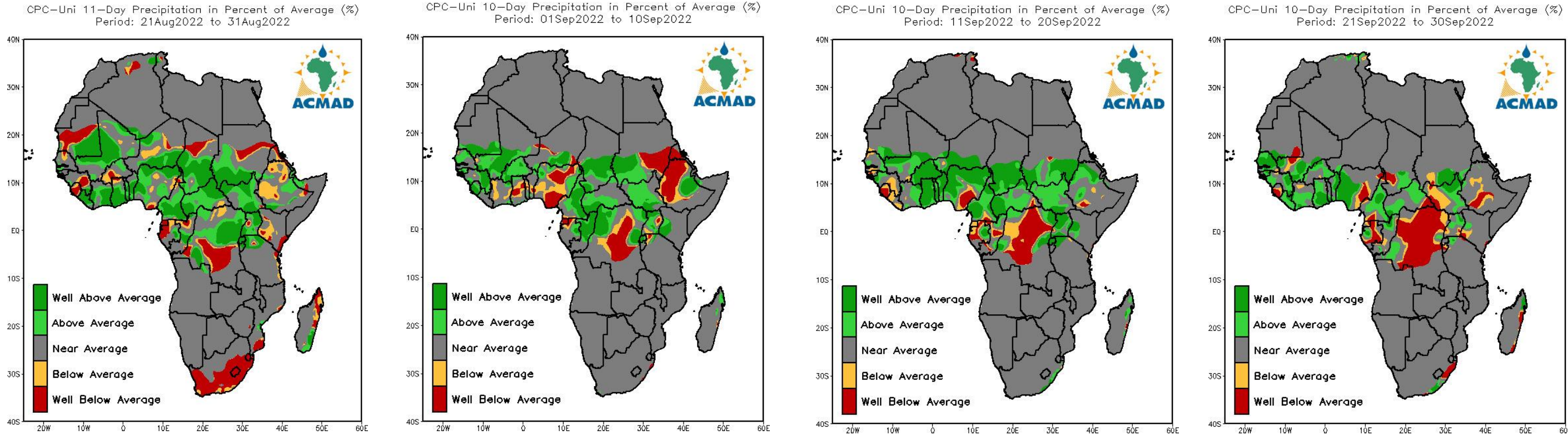


Figure 2: This maps display decadal average precipitation in percent of average

Start of Agricultural Season – Current and Outlook

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

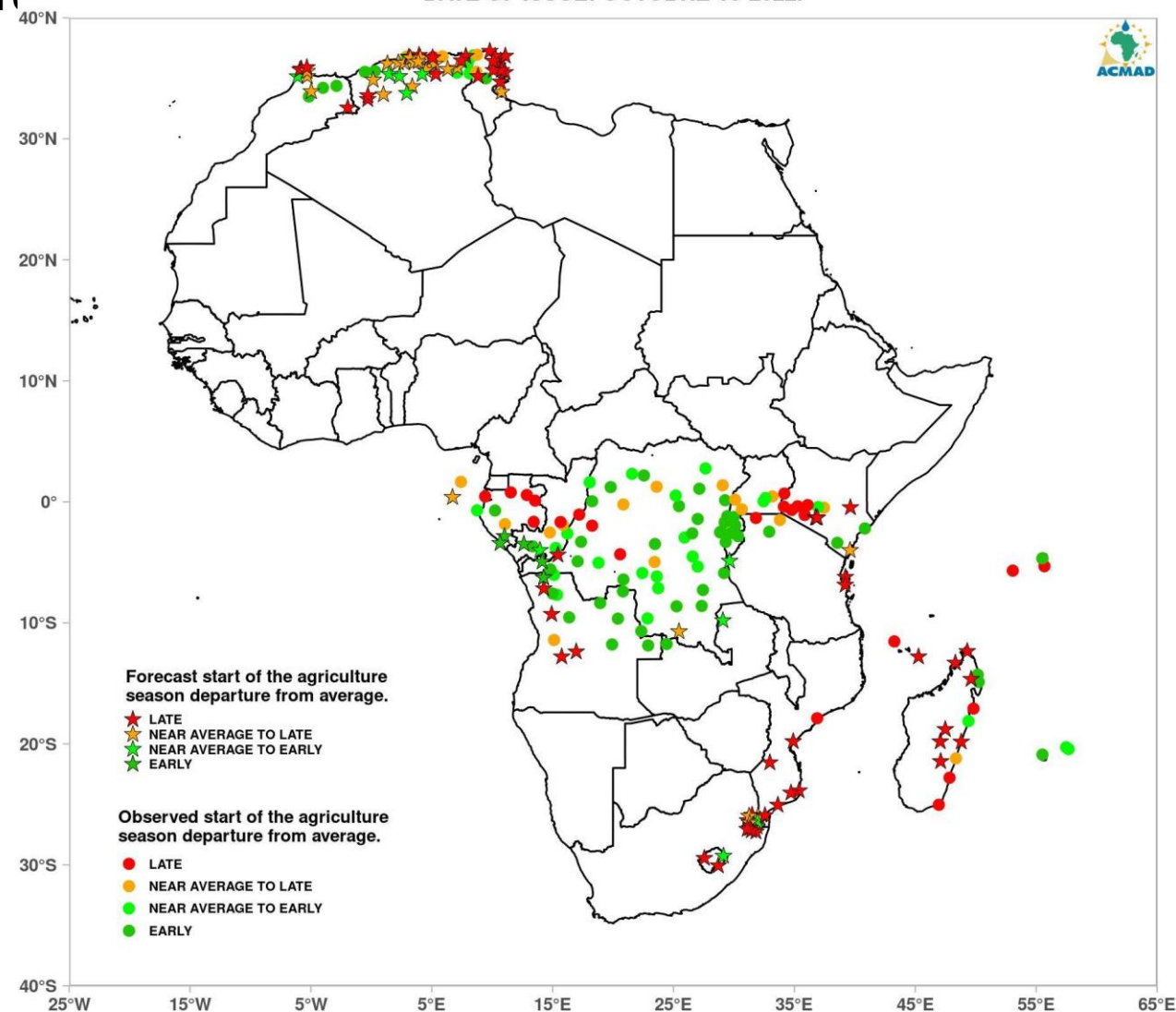
MONITORING PERIOD: JULY-DECEMBER 2022.

OUTLOOK VALIDITY PERIOD: OCTOBRE 05 TO OCTOBRE 19 2022 .

DATE OF ISSUE: OCTOBRE-05-2022.

Current Yr

the same time



OLR Anomalies

During the passed 3 Dekads

Positive OLR anomalies (suppressed convection and precipitation) were located over the central and western tropical Pacific Ocean. Negative OLR anomalies (enhanced convection and precipitation) were observed over Indonesia.

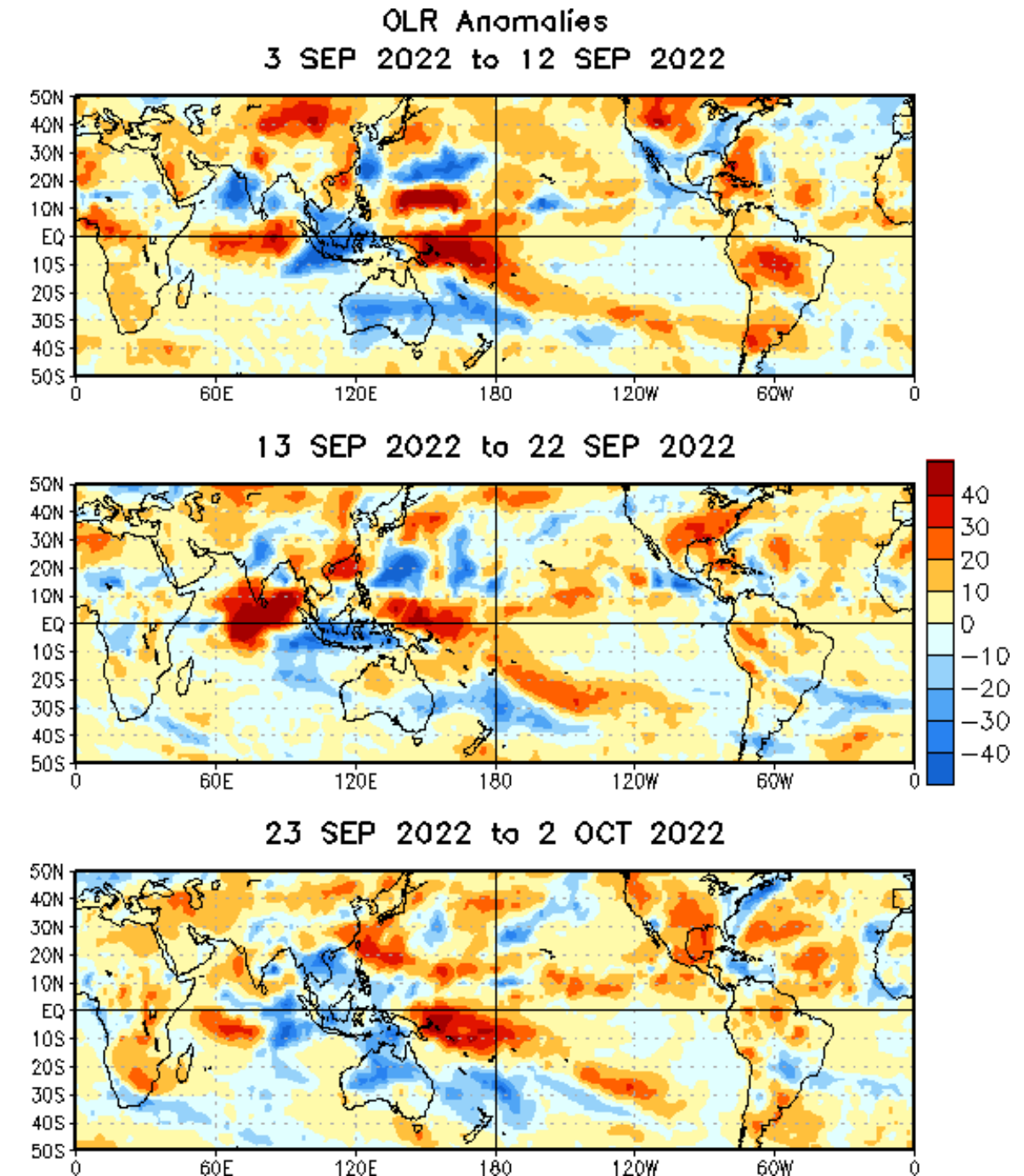
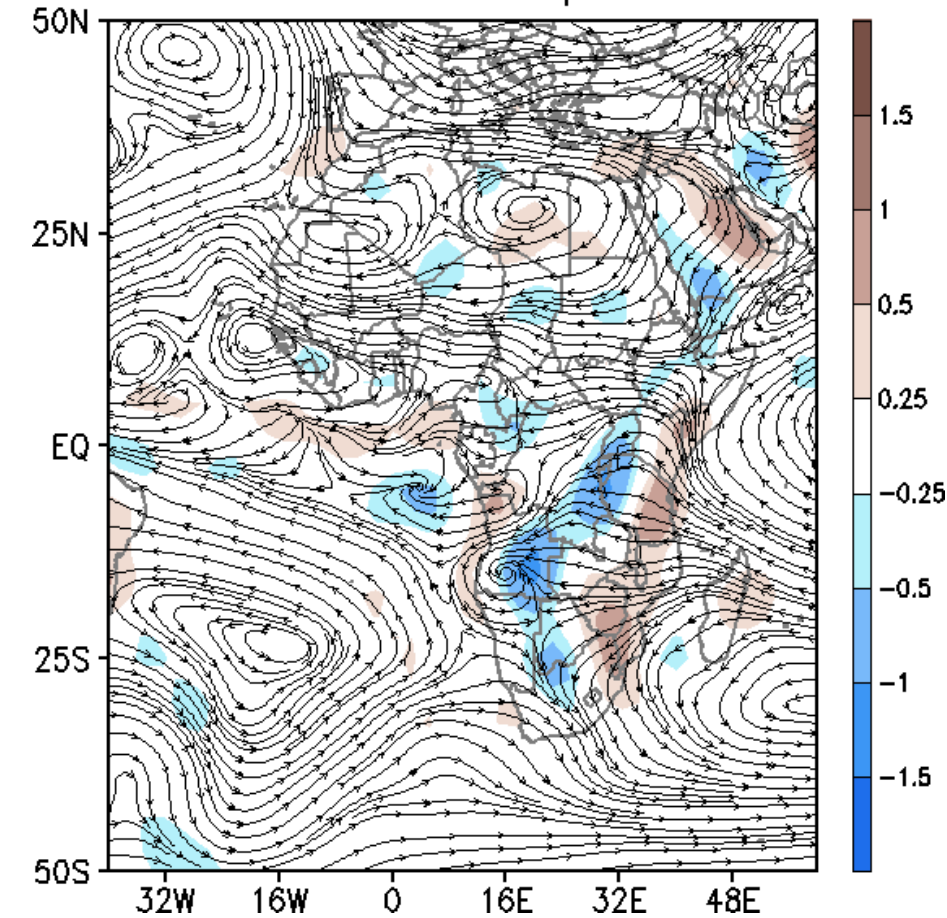


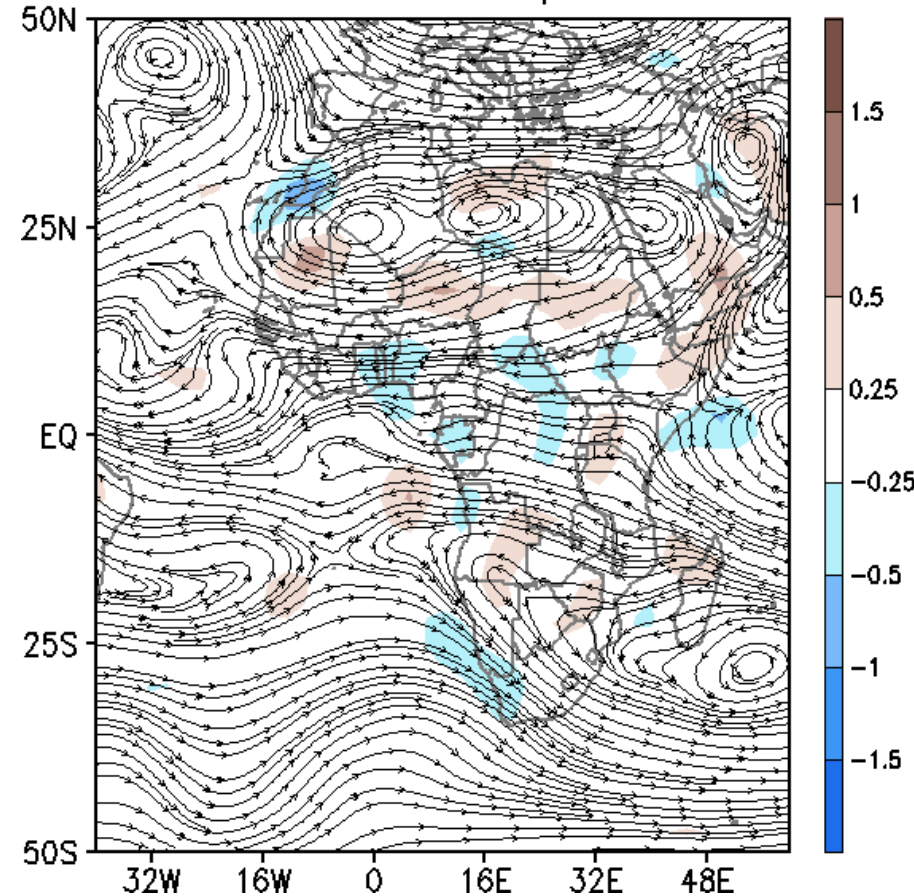
Figure 4: Past 3 weeks OLR anomalies

Wind Anomalies for the last 7 day period 850hpa, 700hpa and 200hpa

CDAS 850hPa Divergence and Wind Tot.
Dekad: 21–30 Sep 2022



CDAS 700hPa Divergence and Wind Tot.
Dekad: 21–30 Sep 2022



CDAS 200hPa Divergence and Wind Tot.
Dekad: 21–30 Sep 2022

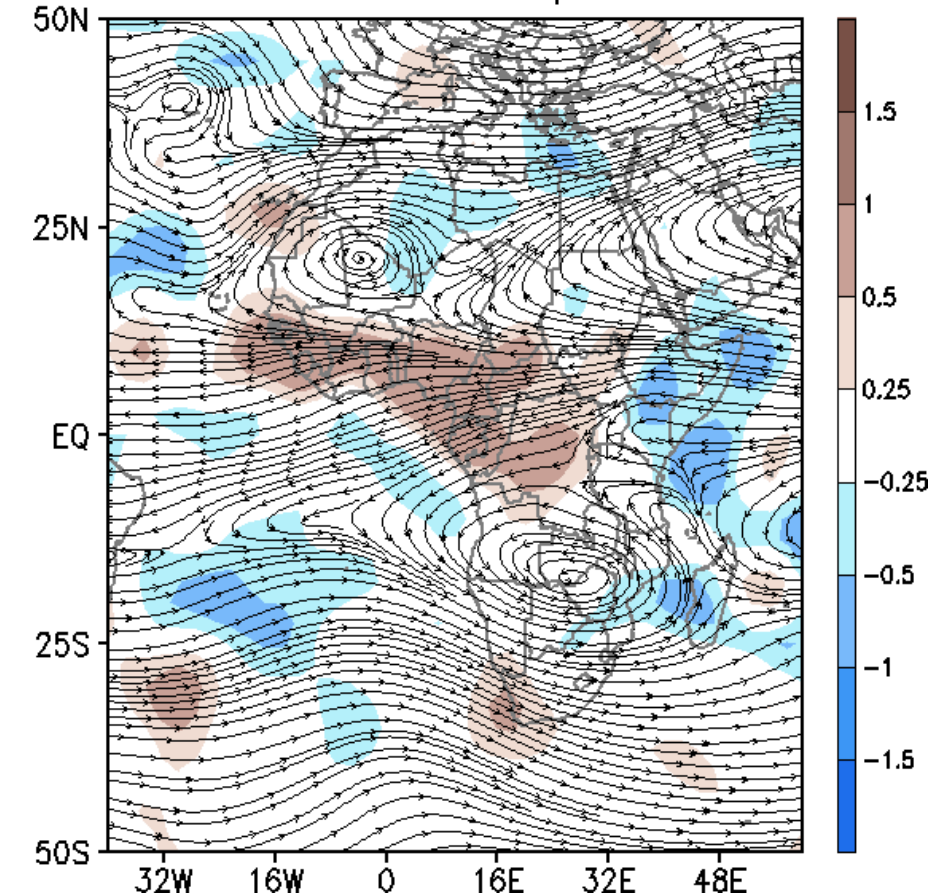


Figure 7: Wind anomalies for 850hpa, 700hPa and 200hpa

<https://www.cpc.ncep.noaa.gov/products/international/africa/africa.shtml>

[Climate Prediction Center - African Desk: SWFDP GFS FORECASTS \(noaa.gov\)](https://www.cpc.ncep.noaa.gov/products/international/africa/africa.shtml)

Relative Humidity (RH) Anomalies at 850hpa and 700hpa for the last Dekad

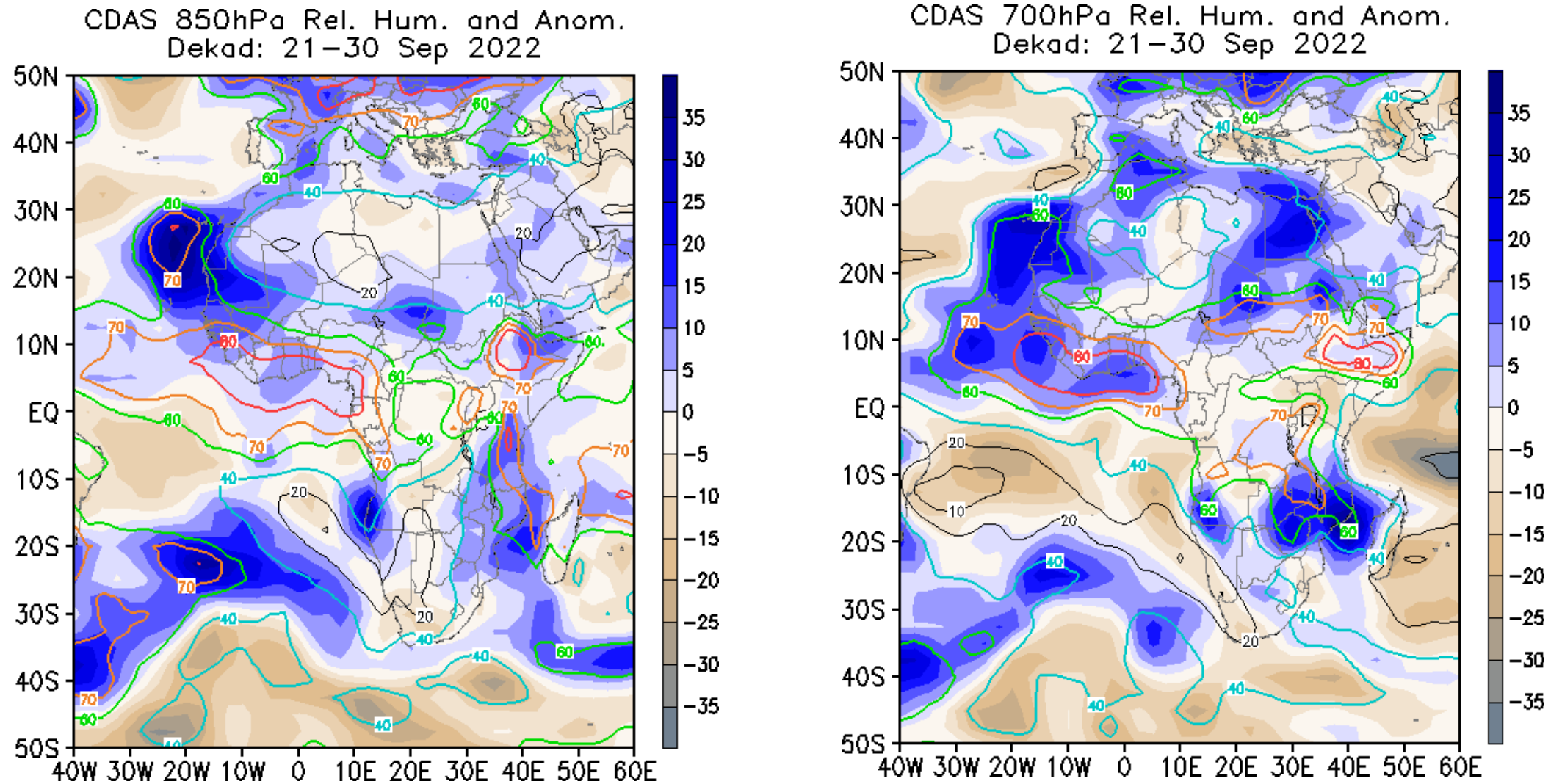
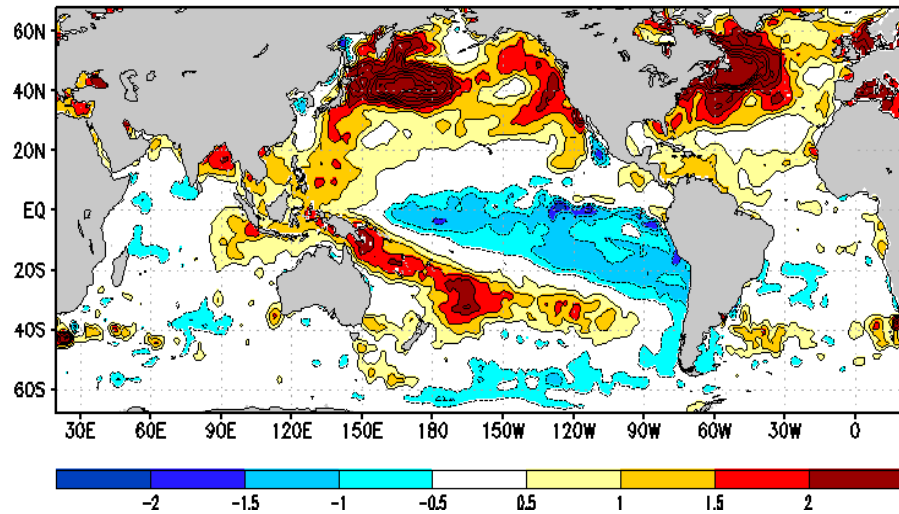


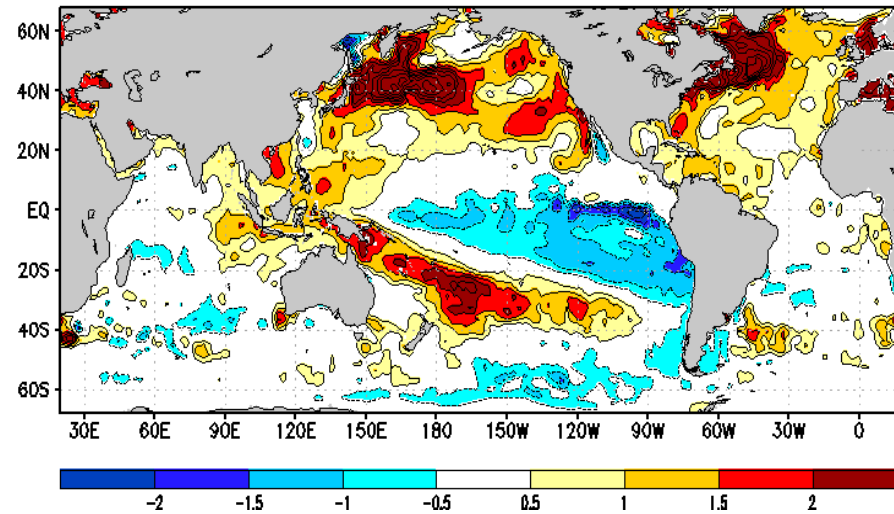
Figure 8: Relative Humidity Anomaly at 850hPa (left) and 700hPa (right)

Weekly Sea Surface Temperature Anomaly during the last four weeks

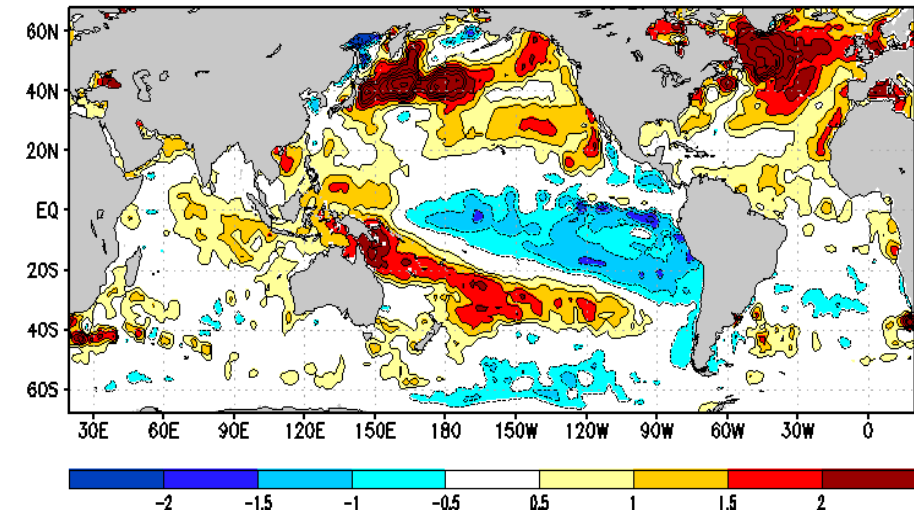
SST Anom. for the Week From 04Sep2022 to 10Sep2022



SST Anom. for the Week From 11Sep2022 to 17Sep2022



SST Anom. for the Week From 18Sep2022 to 24Sep2022



SST Anom. for the Week From 25Sep2022 to 01Oct2022

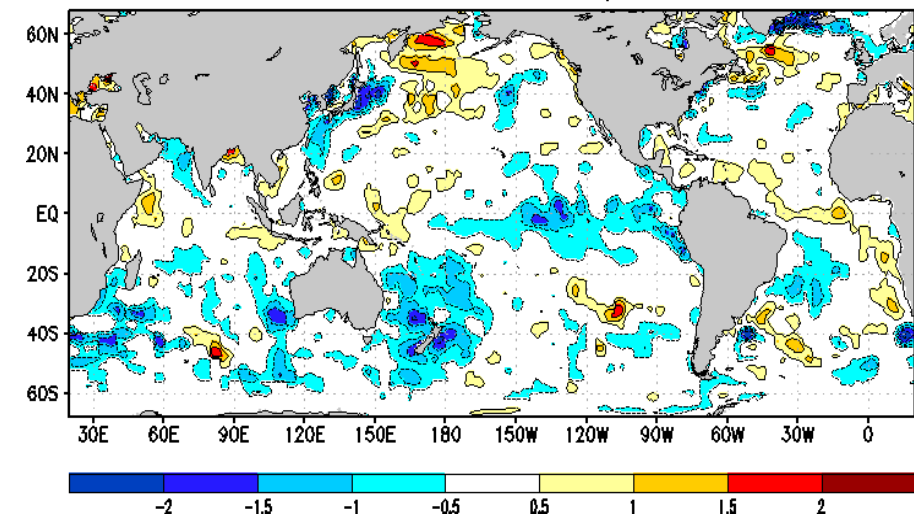


Figure 9: Maps display weekly sea surface temperature anomalies over the globe for last four weeks

<https://psl.noaa.gov/map/clim/sst.shtml>

http://iridl.ldeo.columbia.edu/maproom/Global/Ocean_Temp/Weekly_Anomaly.html

http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/CDD/ClimateBulletin_TN/OBS_SST_ANOM/weekly/sst_anom_Week1.png

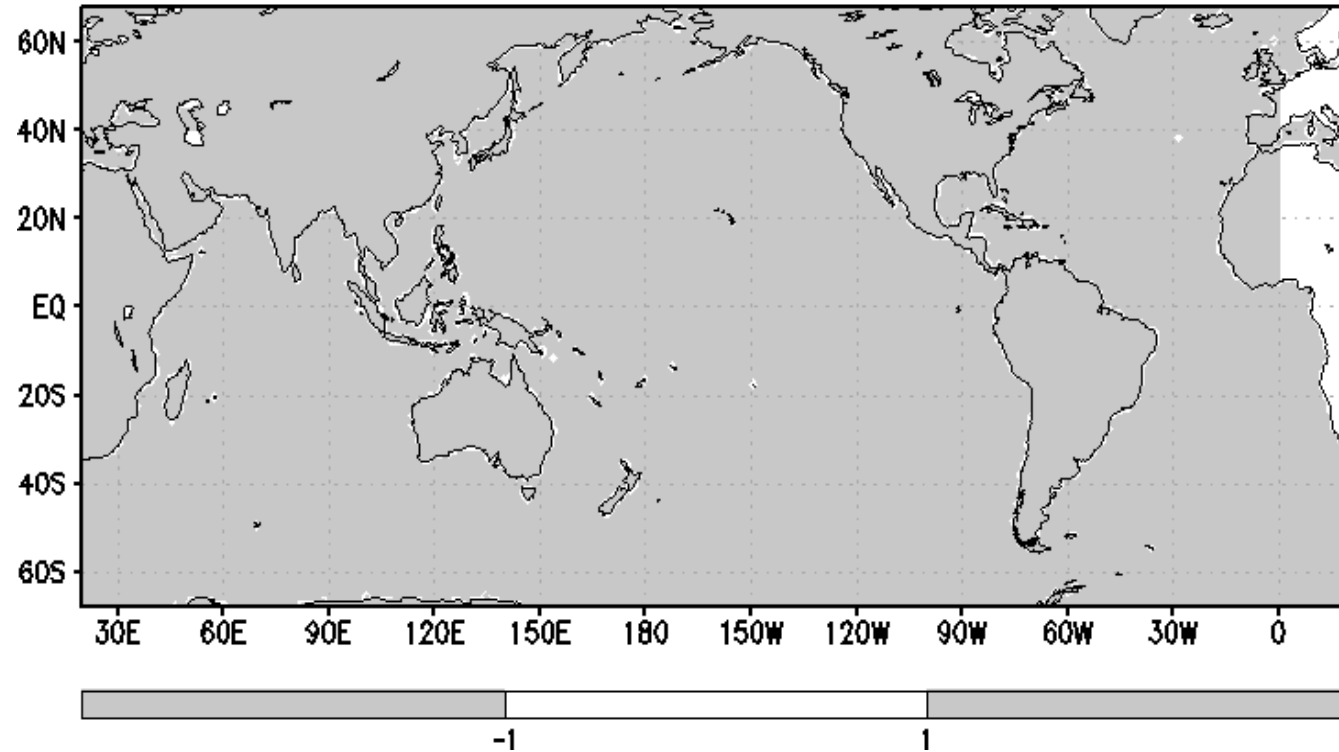
http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/CDD/ClimateBulletin_TN/OBS_SST_ANOM/weekly/sst_anom_Week2.png

http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/CDD/ClimateBulletin_TN/OBS_SST_ANOM/weekly/sst_anom_Week3.png

http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/CDD/ClimateBulletin_TN/OBS_SST_ANOM/weekly/sst_anom_Week4.png

Last Month's Sea Surface Temperatures (SST) Observed

SST Anom. for Sep2022



SST Anom. for the Week From 04Sep2022 to 01Oct2022

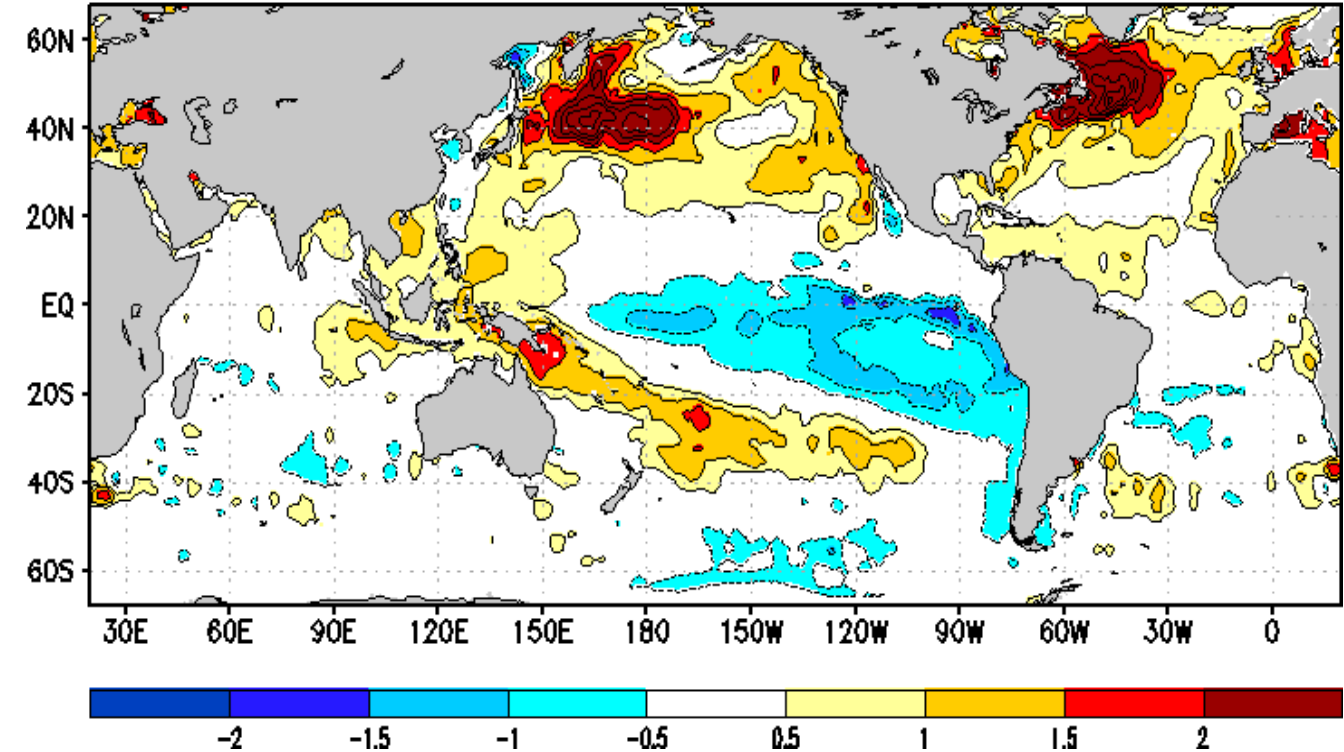


Figure 10 : Maps display monthly sea surface temperature anomalies over the globe.

<https://psl.noaa.gov/map/clim/sst.shtml>

http://iridl.ldeo.columbia.edu/maproom/Global/Ocean_Temp/Anomaly.html

http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/CDD/ClimateBulletin_TN/OBS_SST_ANOM/weekly/sst_anom_4Weeks.png

http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/CDD/ClimateBulletin_TN/OBS_SST_ANOM/monthly/mth_ano_vs_9120/sst_anom_last-Month.png

1. Climate Monitoring

2. Status of Drivers

- ENSO - Obs and Forecast
- Current 200 hPa Velocity Potential
- MJO – Current Status and Forecast
- Weekly PWAT – Current Status and Forecast
- Dekadal 200 hPa VP and Tropical waves
- Dekadal Stream Function and Tropical Waves

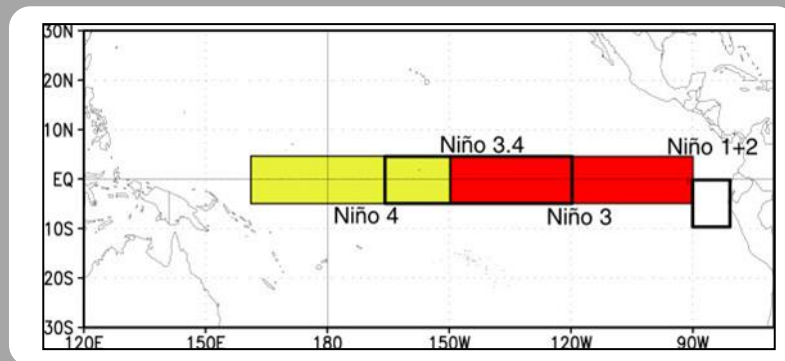
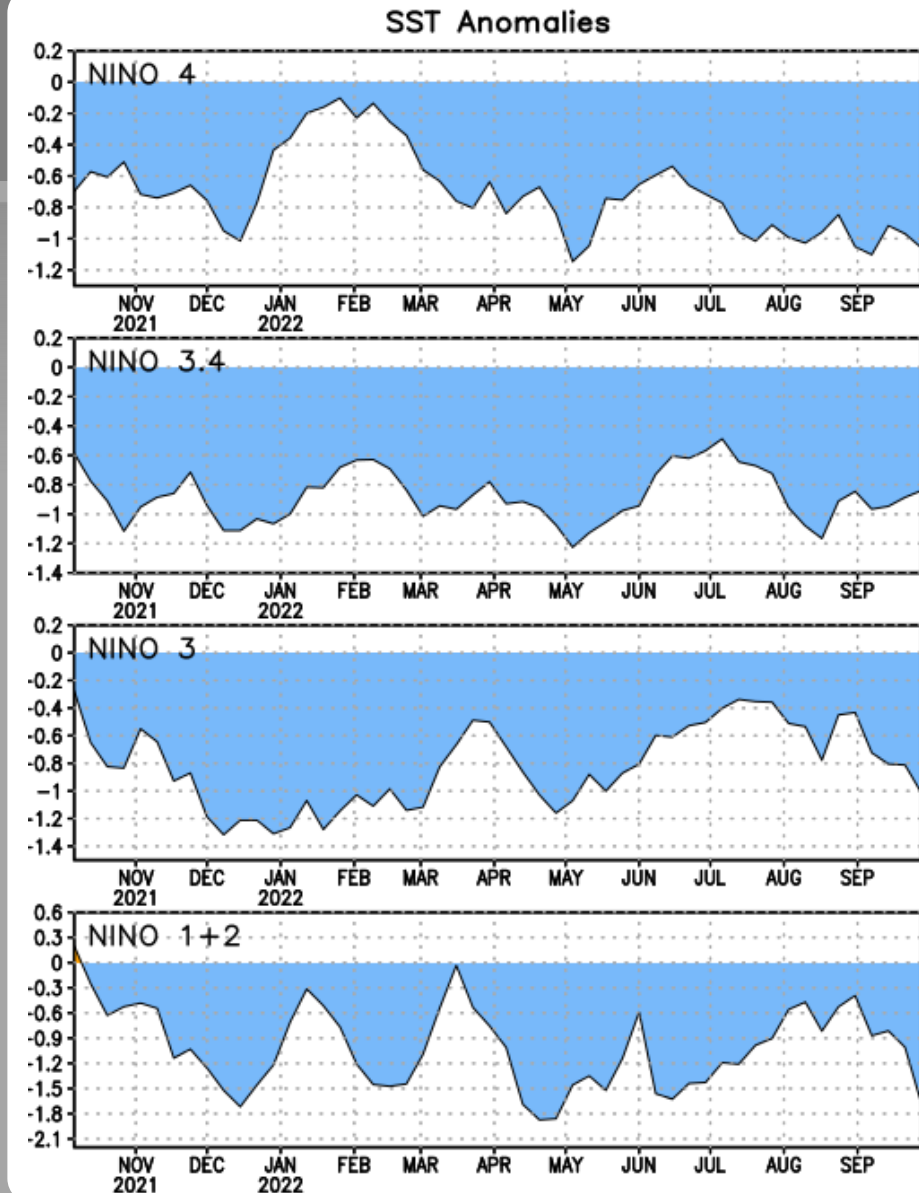
3. Dynamical Model Forecast : Week 1 and 2

4. Week 1 and 2 Outlook

Niño Region SST Departures (°C) Recent Evolution

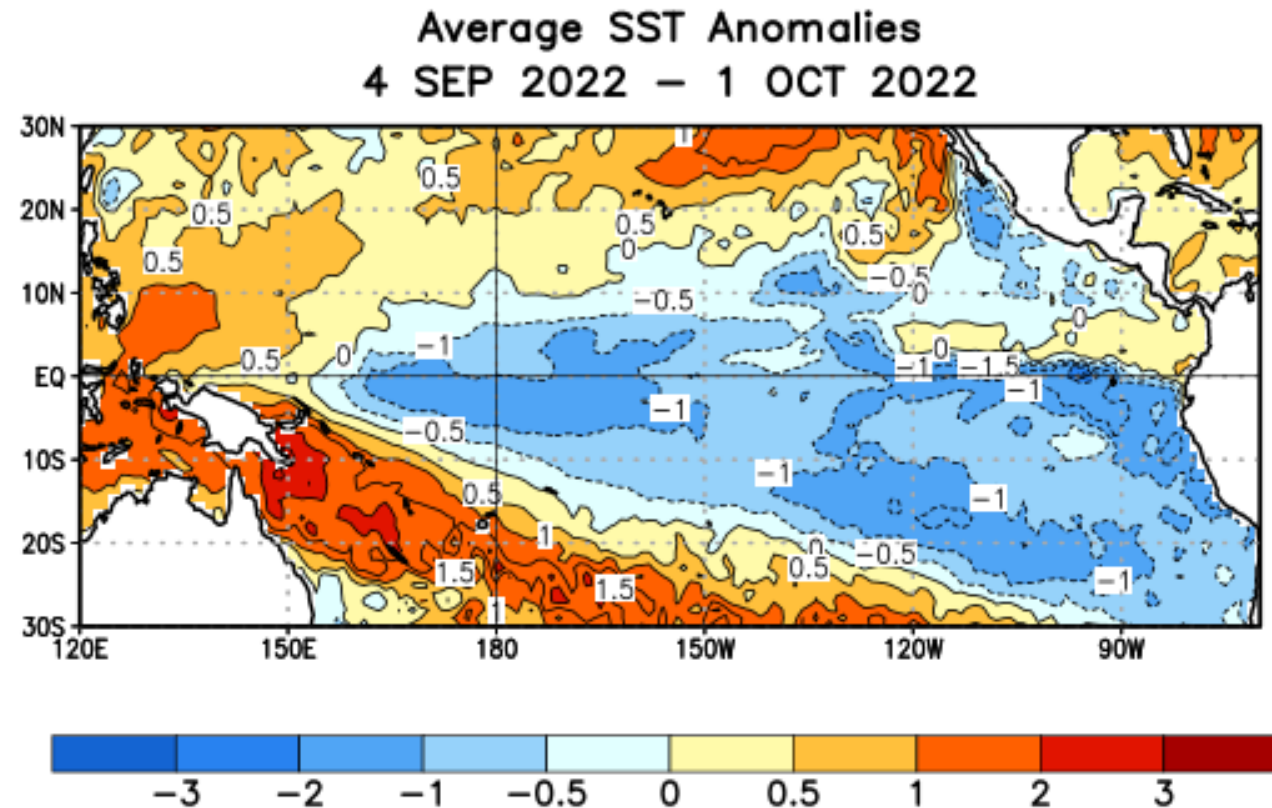
The latest weekly SST departures are:

Niño 4	-1.1°C
Niño 3.4	-0.8°C
Niño 3	-1.0°C
Niño 1+2	-1.7°C



SST Departures (°C) in the Tropical Pacific During the Last Four Weeks

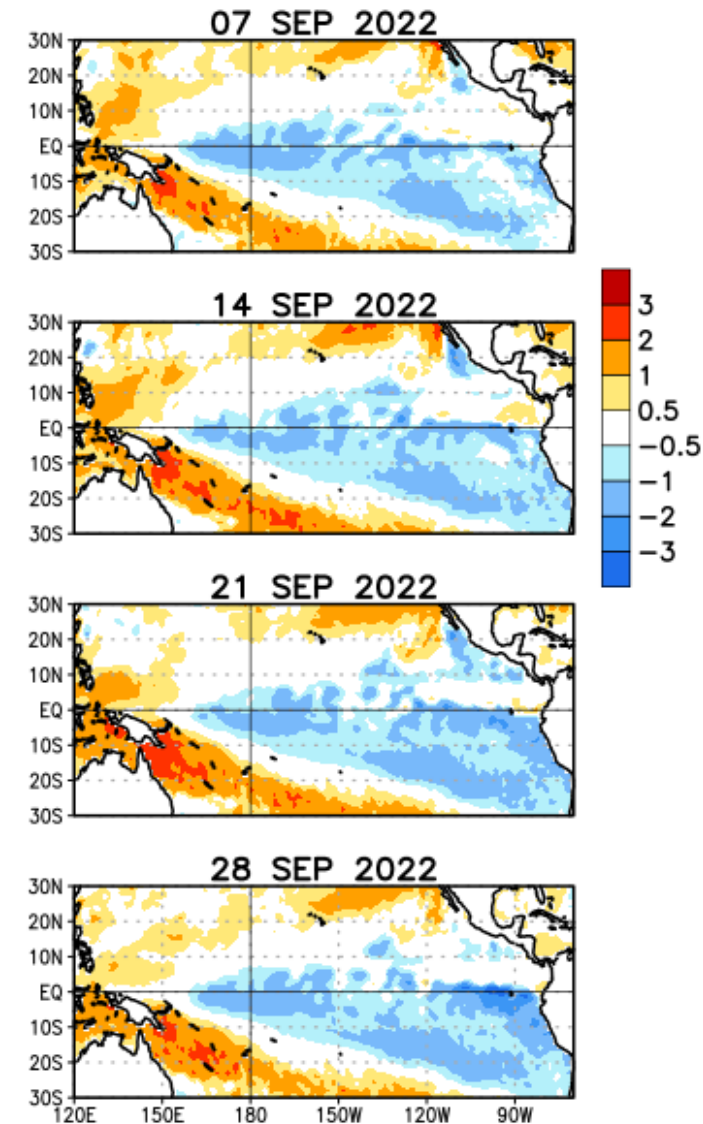
In the last four weeks, equatorial SSTs were below average across most of the Pacific Ocean.



Weekly SST Departures during the Last Four Weeks

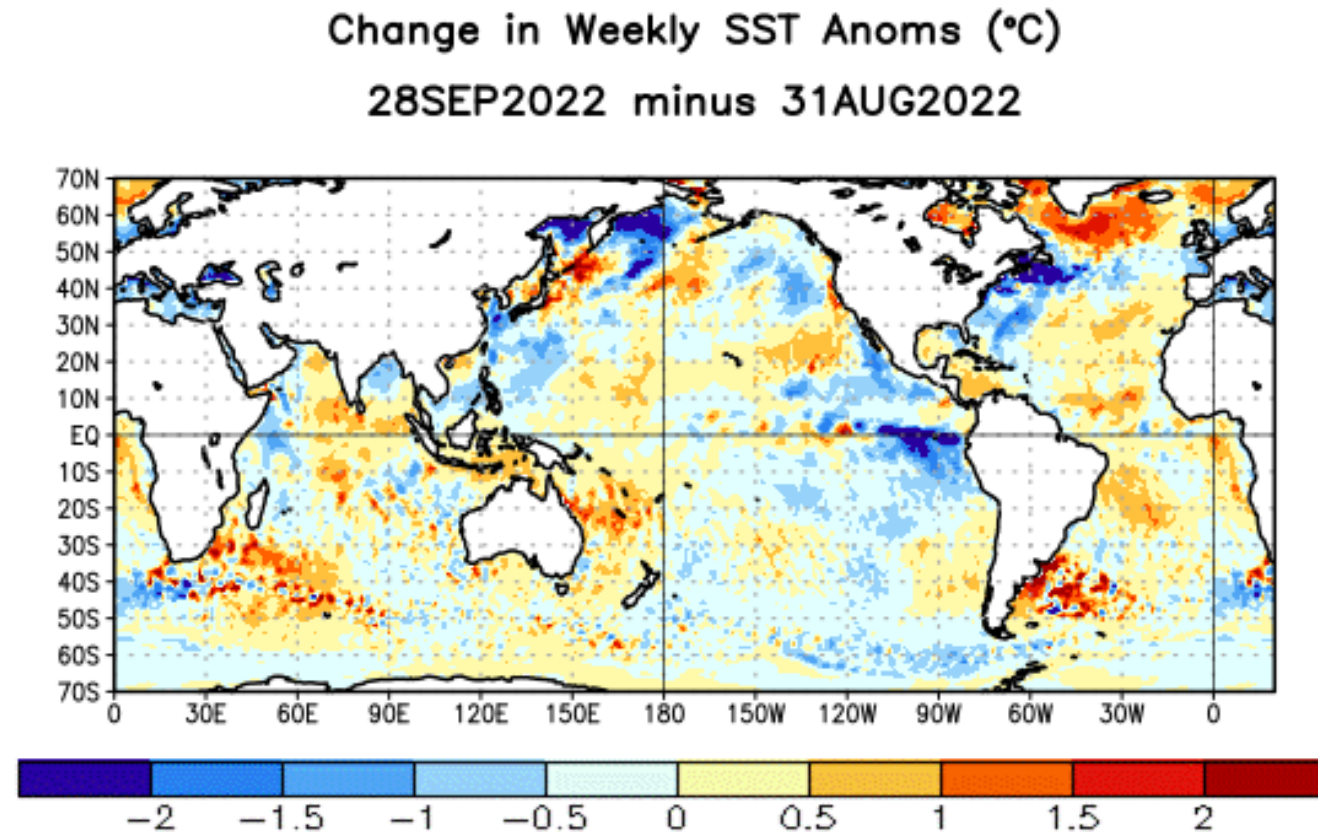
During the last 4 weeks, negative SST anomalies have strengthened in the eastern equatorial Pacific Ocean.

Weekly SST Anomalies (DEG C)



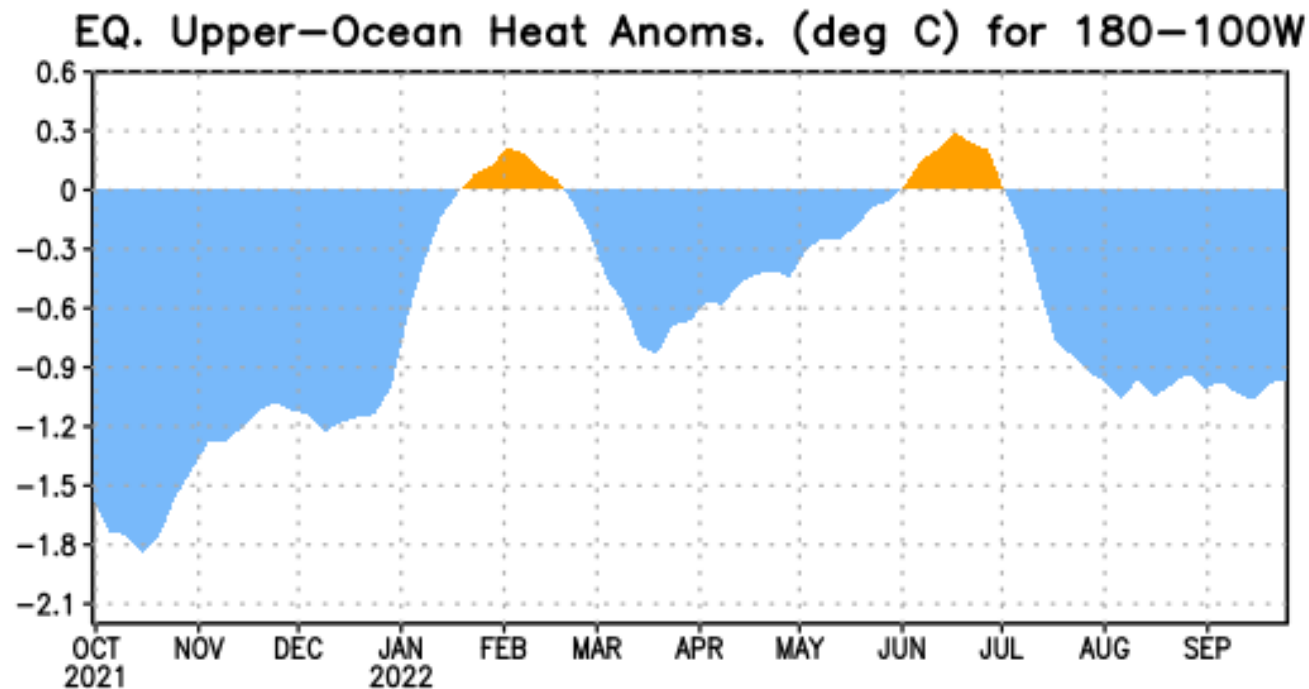
Change in Weekly SST Departures over the Last Four Weeks

During the last four weeks, negative changes in equatorial SST anomalies were observed in the eastern Pacific Ocean.



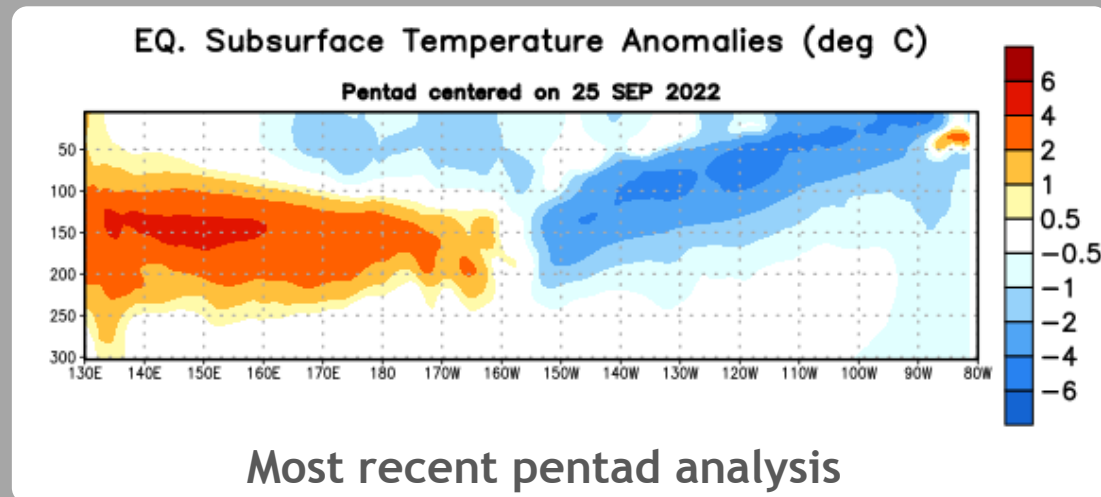
Central and Eastern Pacific Upper-Ocean (0-300 m) Weekly Average Temperature Anomalies

During February 2022 through mid-March, subsurface temperature anomalies decreased and were negative. From mid-March to mid-June, subsurface temperature anomalies increased from negative to positive. Anomalies decreased from mid-June through July and have remained negative.

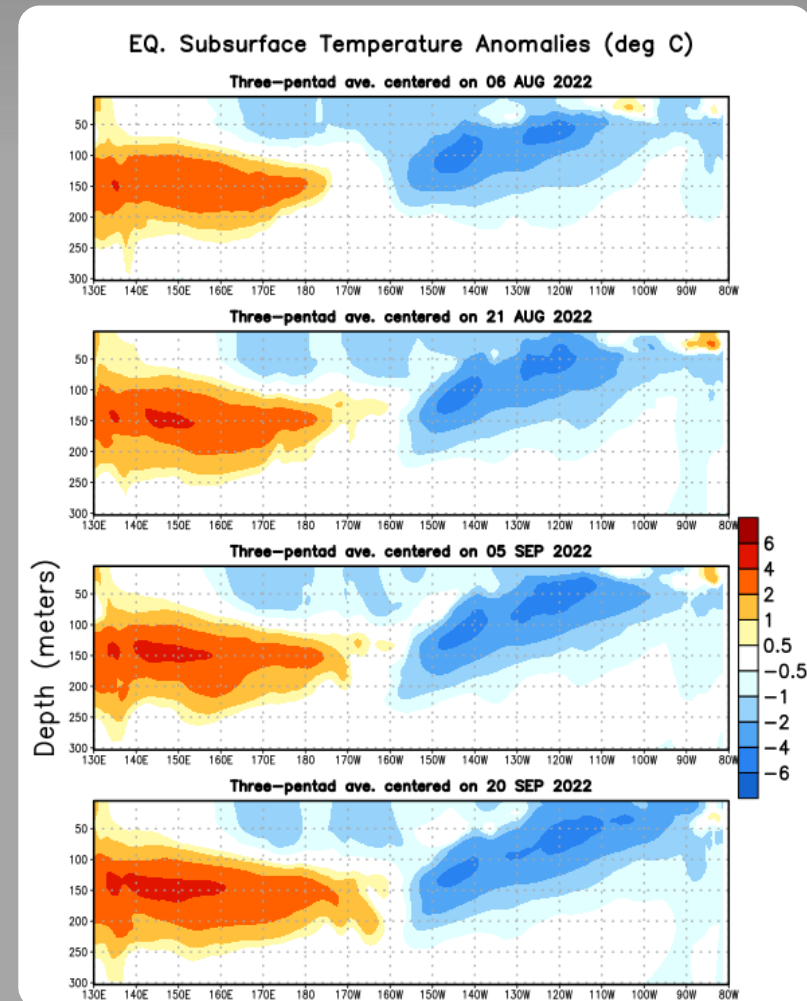


Sub-Surface Temperature Departures in the Equatorial Pacific

During the last two months, negative subsurface temperature anomalies persisted near the surface and at depth in the eastern and east-central Pacific.



Positive subsurface temperature anomalies have persisted, at depth, in the western and central Pacific Ocean.



6-Days Infra-Red (IR) 200hpa and Velocity Potential Anomaly

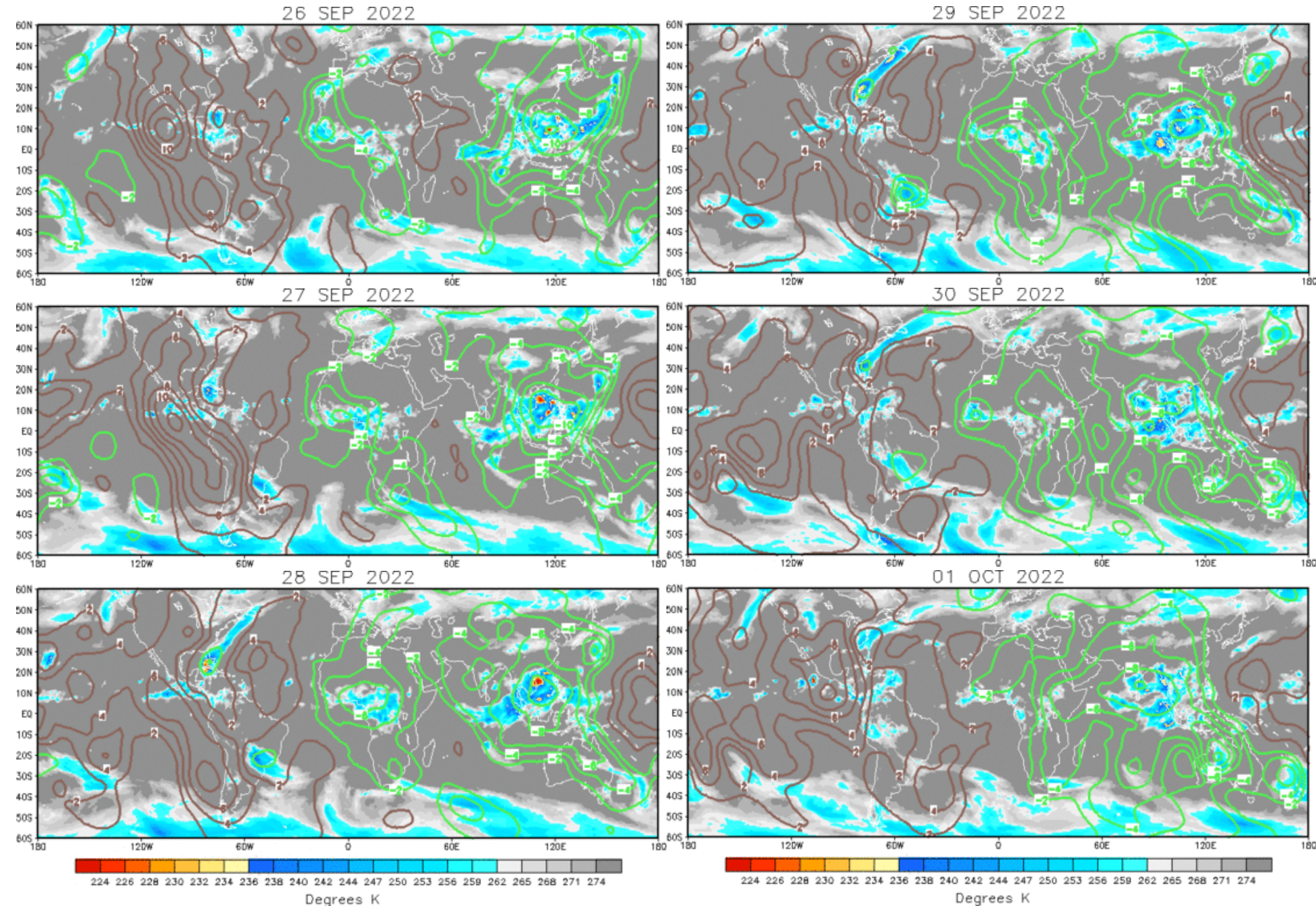


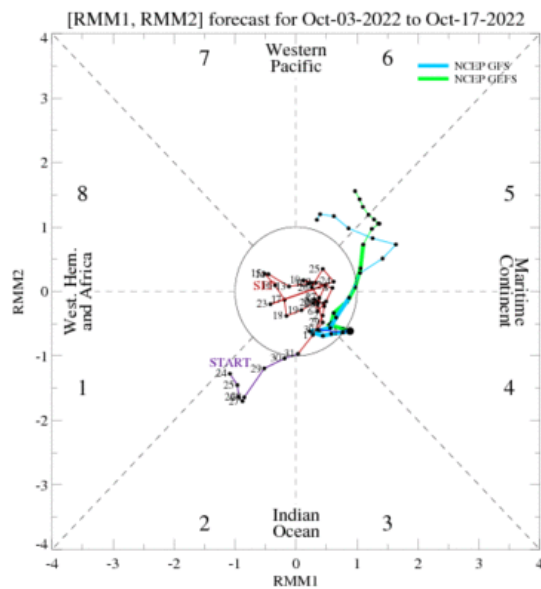
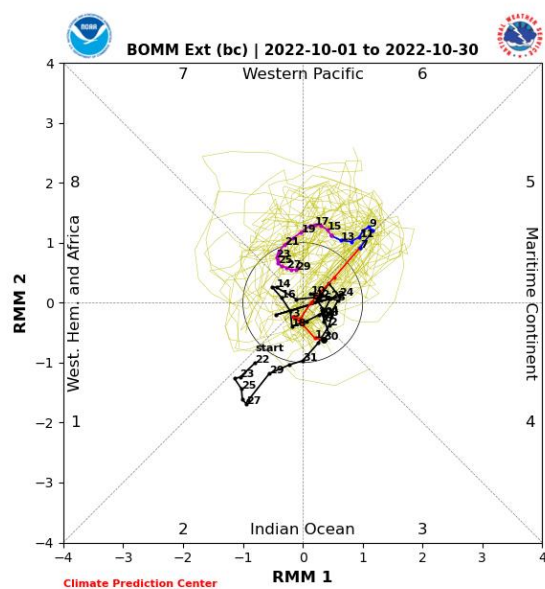
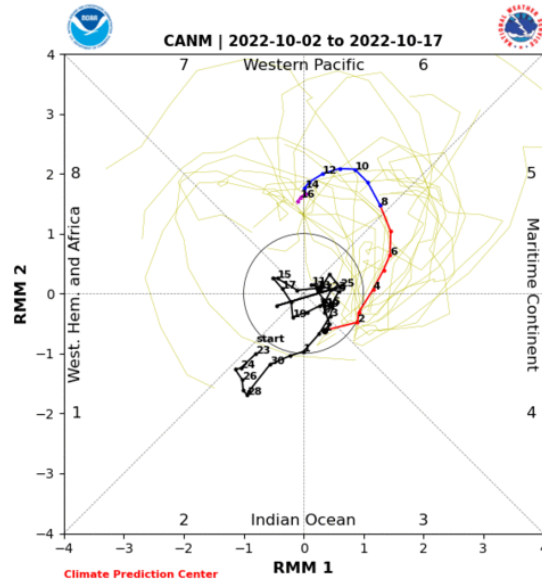
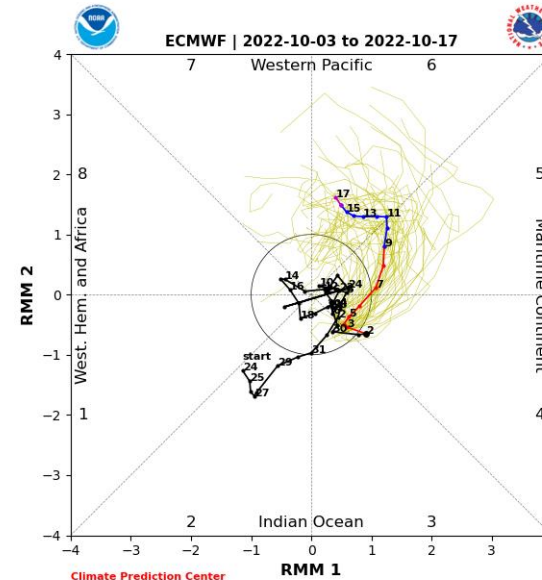
Figure 12: IR image and Velocity Potential anomalies

https://www.cpc.ncep.noaa.gov/products/precip/CWlink/vpotgifs/am_ir_monthly_6.gif
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/vpotgifs/am_ir_monthly_5.gif
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/vpotgifs/am_ir_monthly_4.gif
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/vpotgifs/am_ir_monthly_3.gif
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/vpotgifs/am_ir_monthly_2.gif
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/vpotgifs/am_ir_monthly_1.gif

MJO – Current Status and Forecast

Add BoM, UKMet and DWD

Ensemble GFS Phase Diagram



Operational CFSv2 Phase Diagram

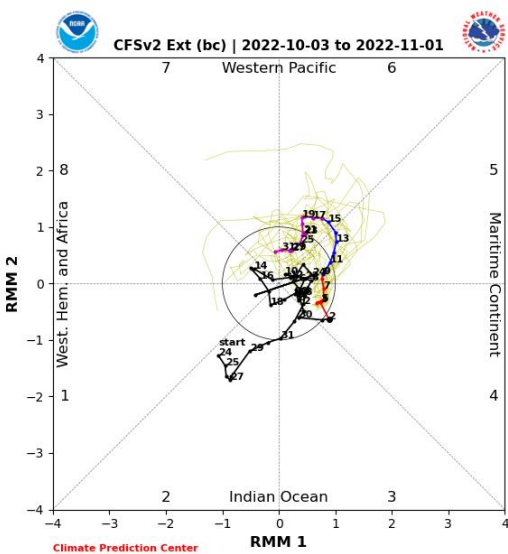
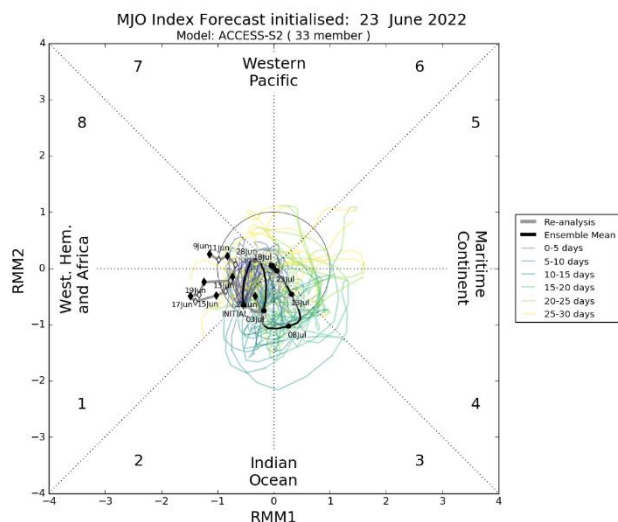
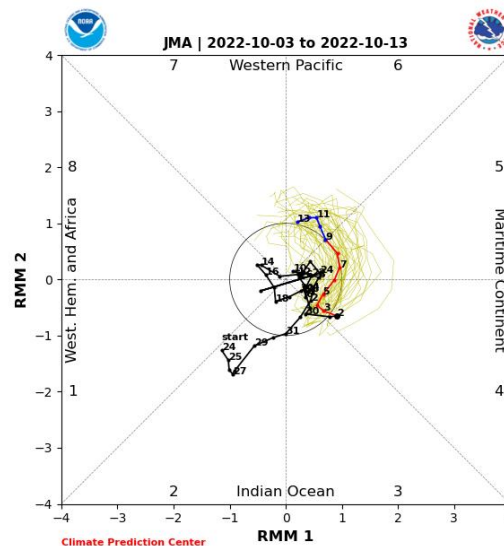


Figure 14: MJO RMM Forecasts from ECMWF, NCEP and UK Met Office, JMA

https://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/CLIVAR/clivar_wh.shtml
<https://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/mjo.shtml>
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/CLIVAR/CANM_phase_20m_small.gif
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/combphase_noCFSsmall.gif
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https://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/CLIVAR/JMAN_phase_51m_small.gif
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/CLIVAR/ECMF_phase_MANOM_51m_small.gif
https://www.cpc.ncep.noaa.gov/products/precip/CWlink/MJO/CLIVAR/BOMM_phase_MANOM_33m_small.gif

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

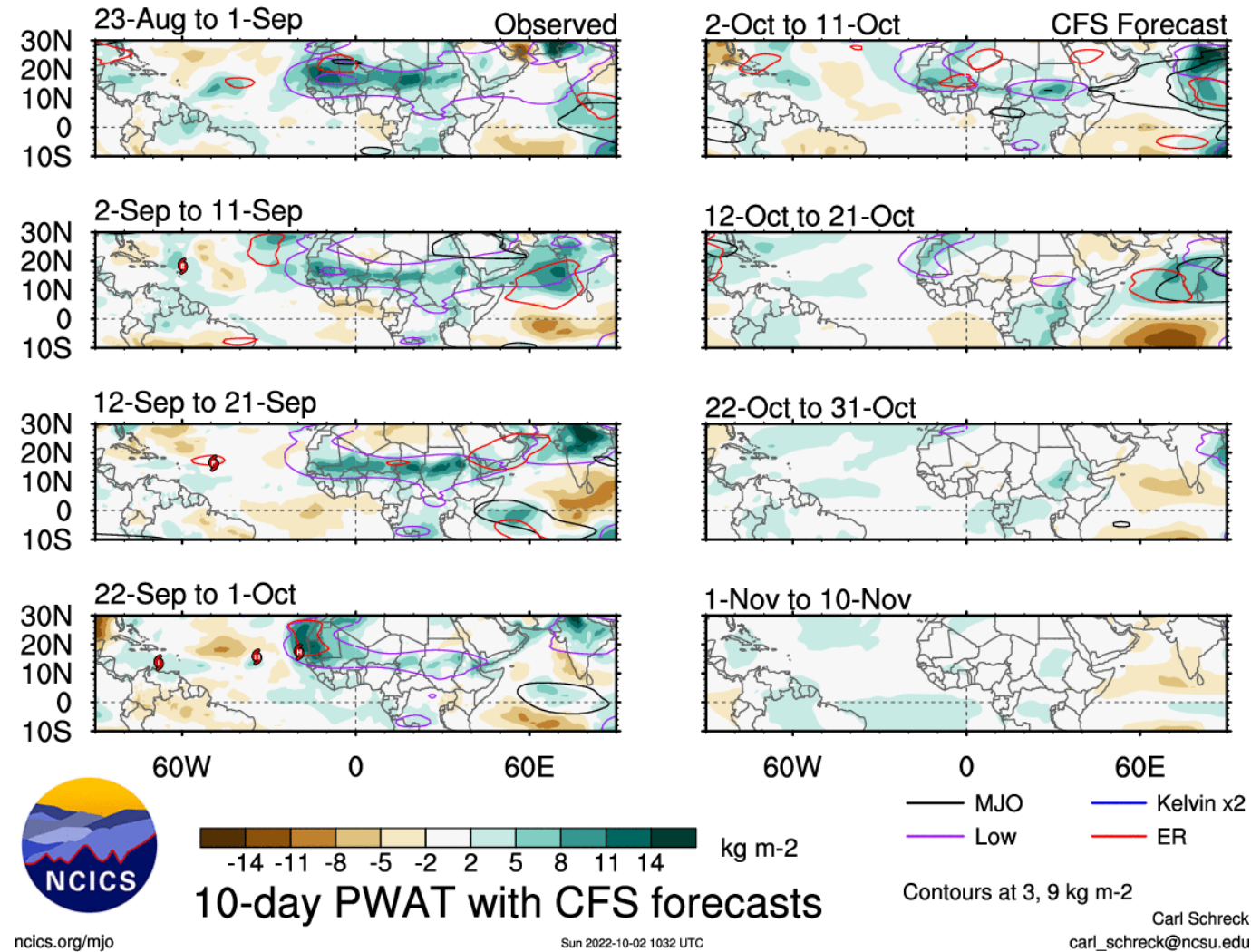


Figure 7a: Africa

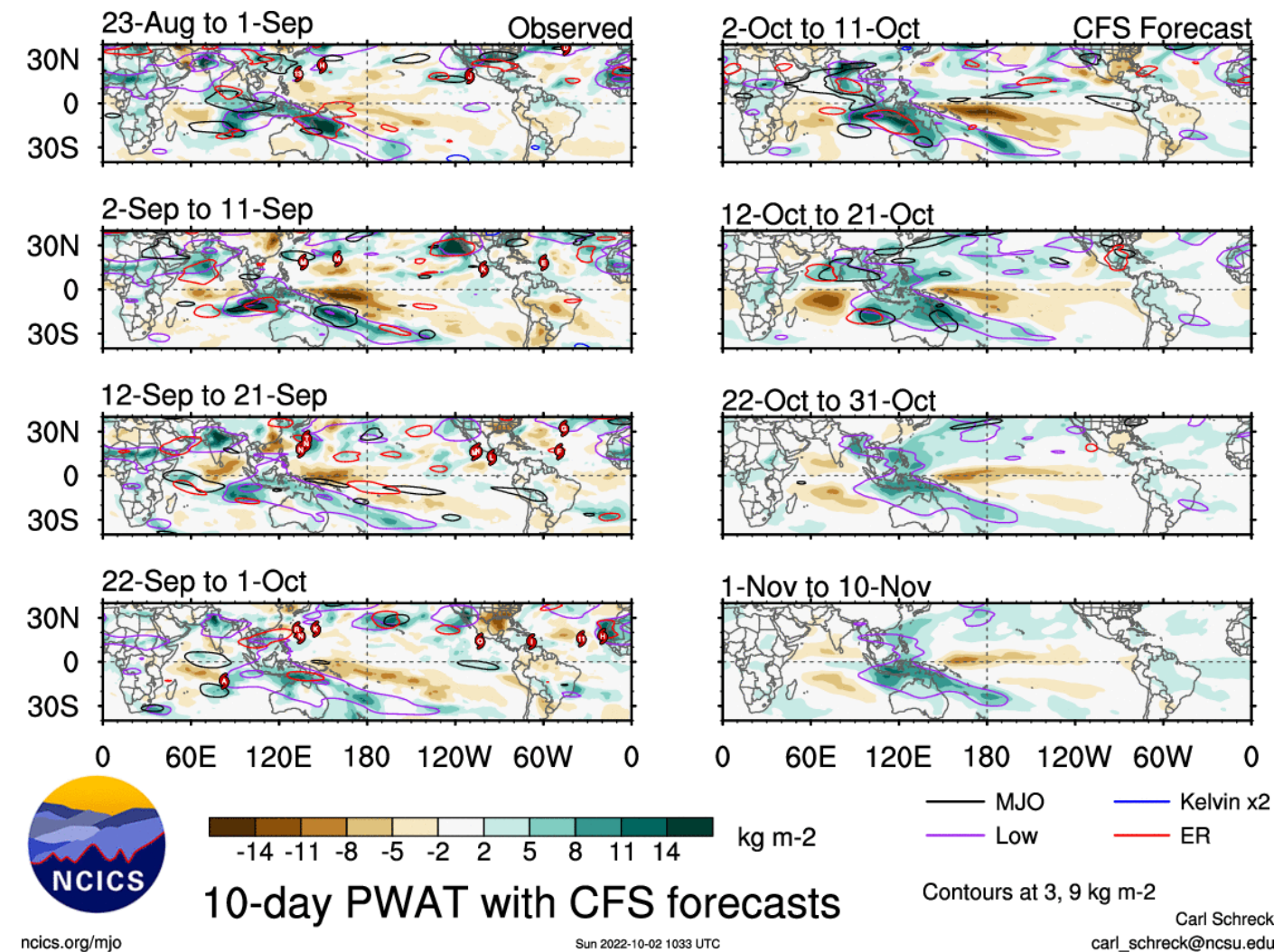


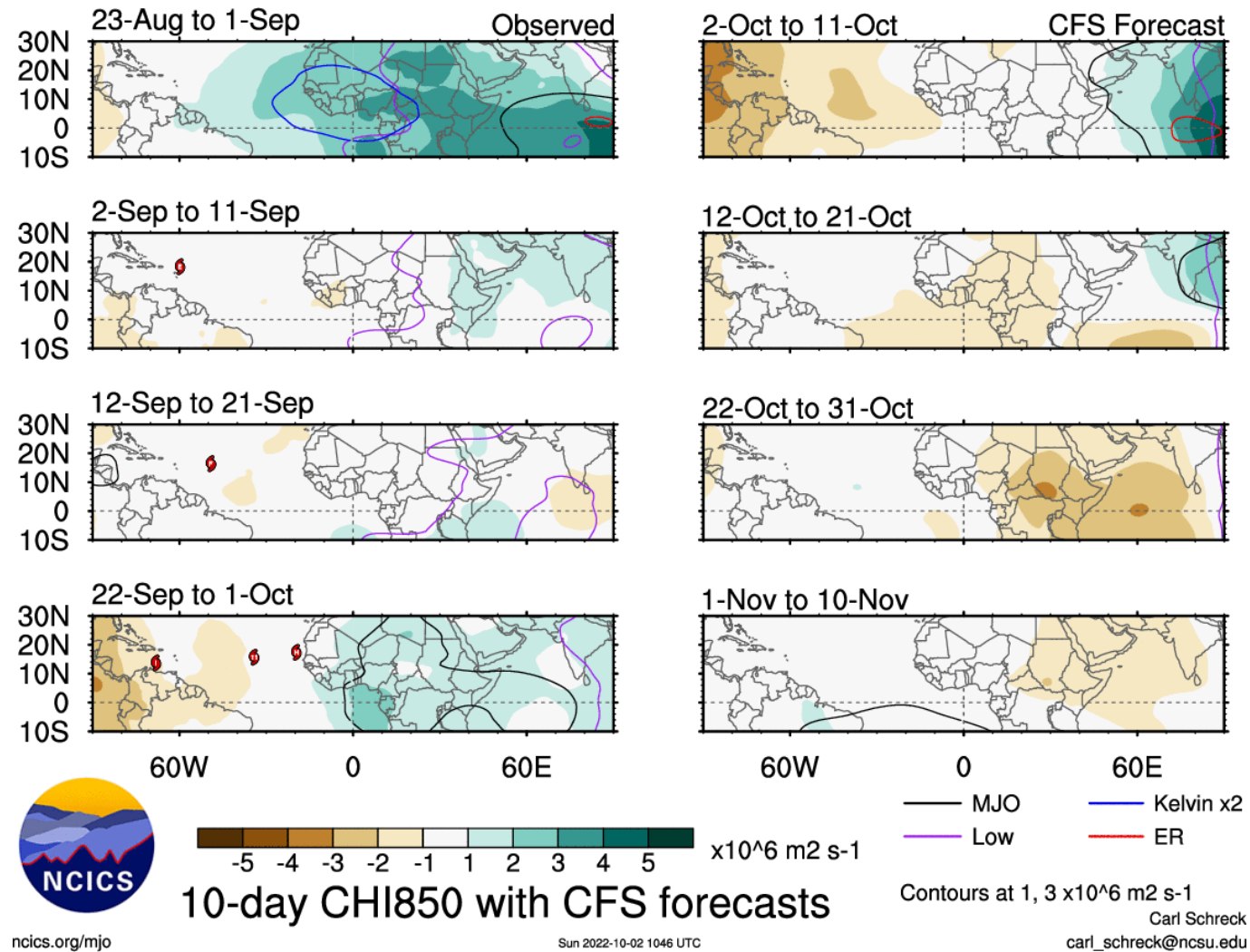
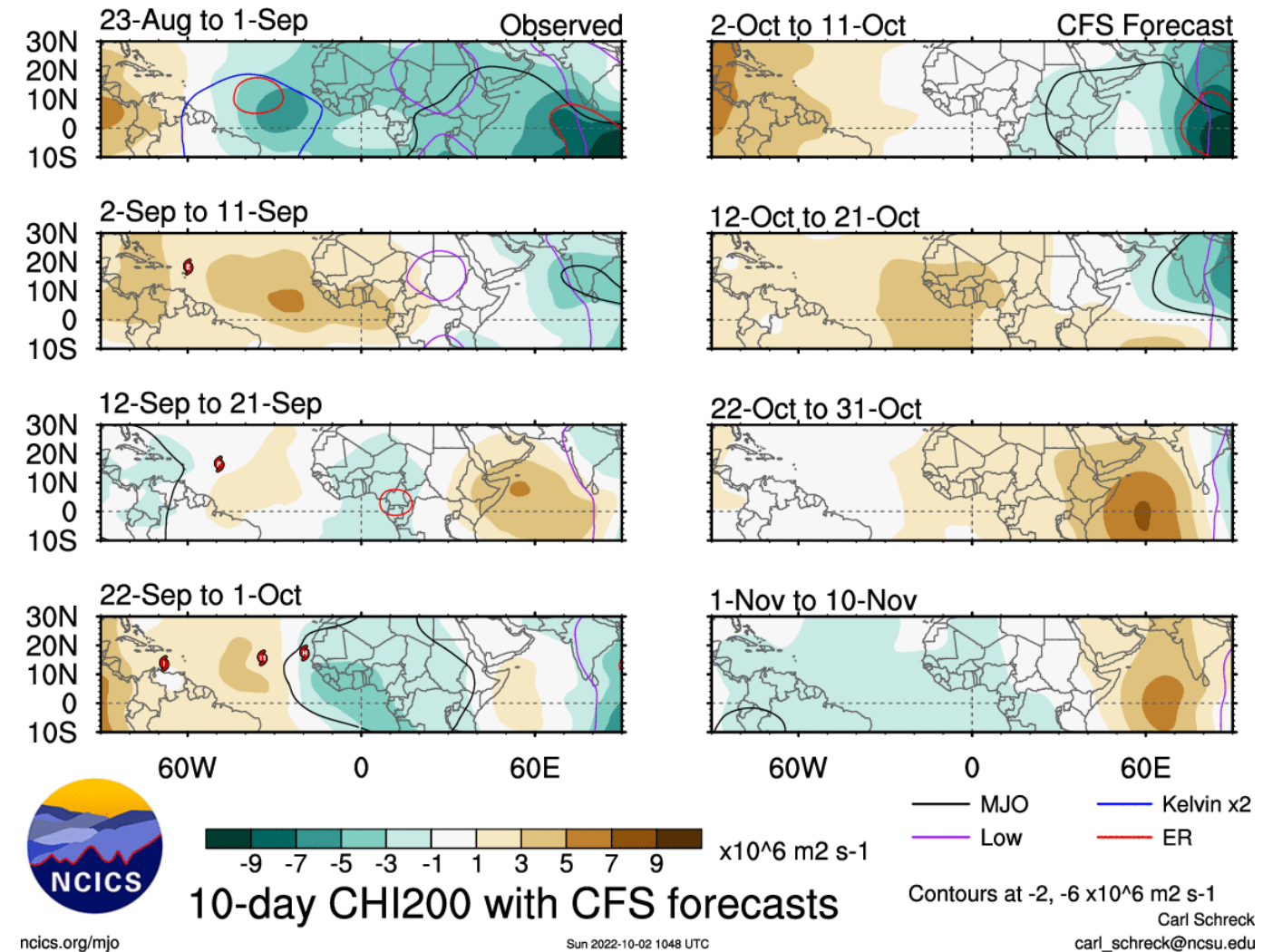
Figure 7b: Global

Figure 17: Past four week Precipitable Water and Outlooks

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

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

Dekadal Velocity Potential Anomalies – Obs and Fcst

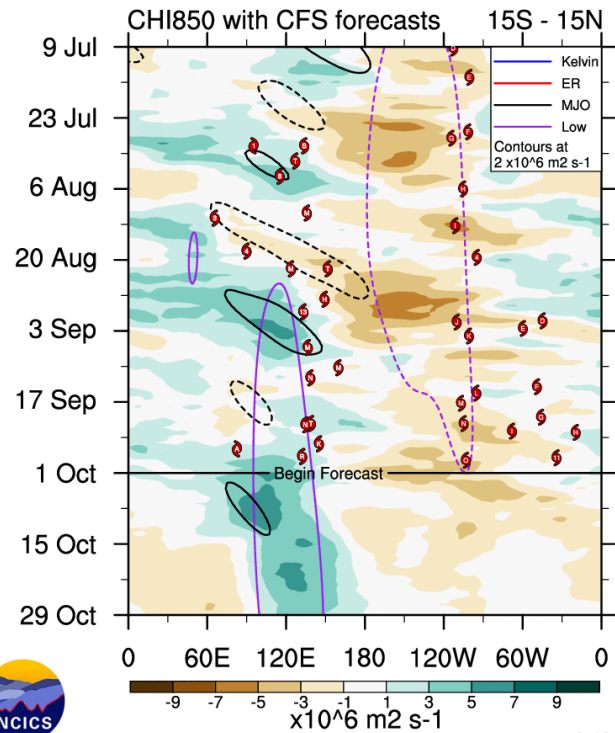
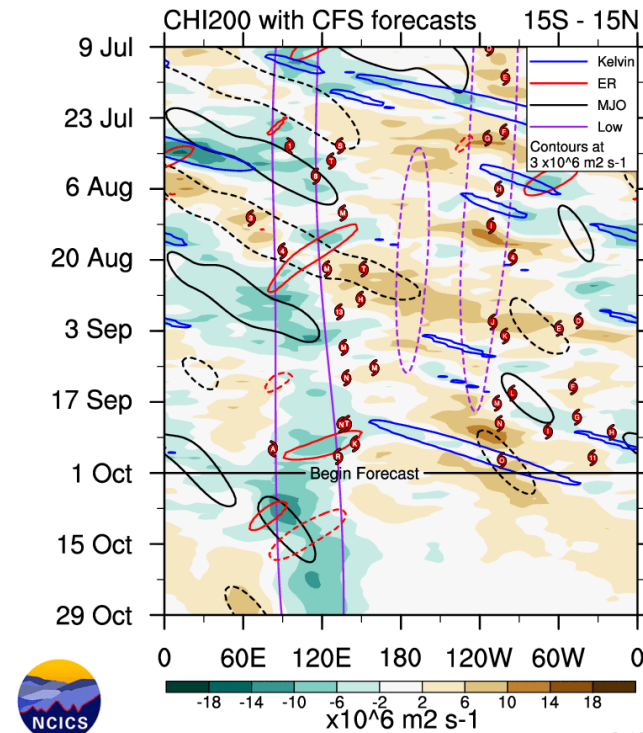
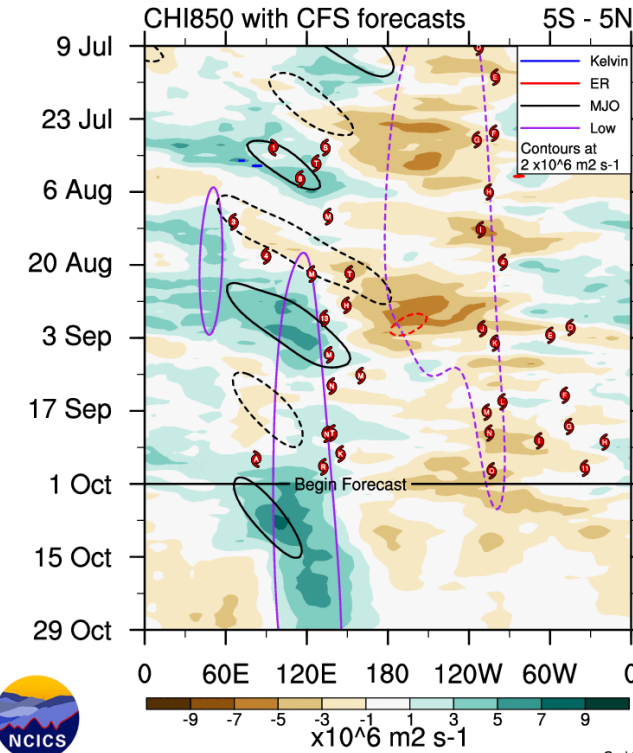
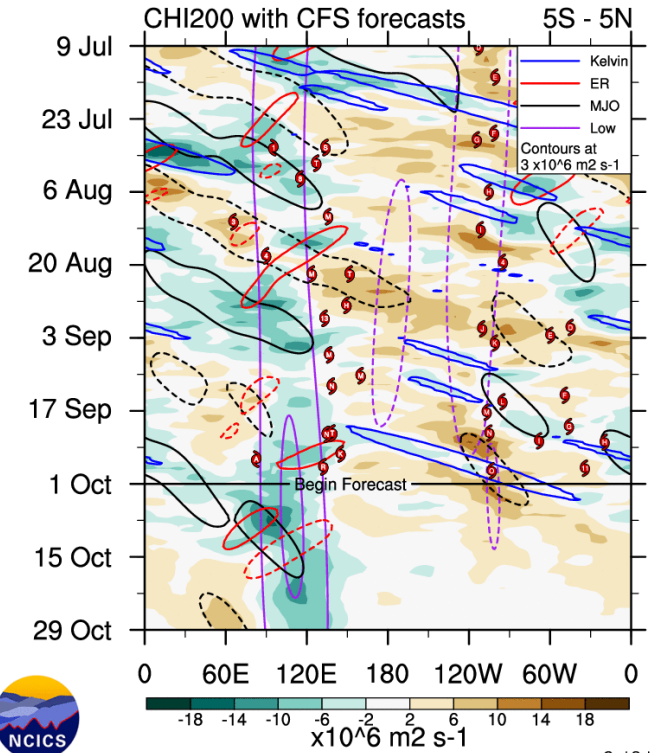


<https://ncics.org/pub/mjo/v2/map/chi850.cfs.all.global.10.png>
<https://ncics.org/pub/mjo/v2/map/chi200.cfs.all.global.10.png>
<https://ncics.org/pub/mjo/v2/map/chi850.cfs.all.africa.10.png>
<https://ncics.org/pub/mjo/v2/map/chi200.cfs.all.africa.10.png>

Figure 18a and b: Past four week and month velocity potential

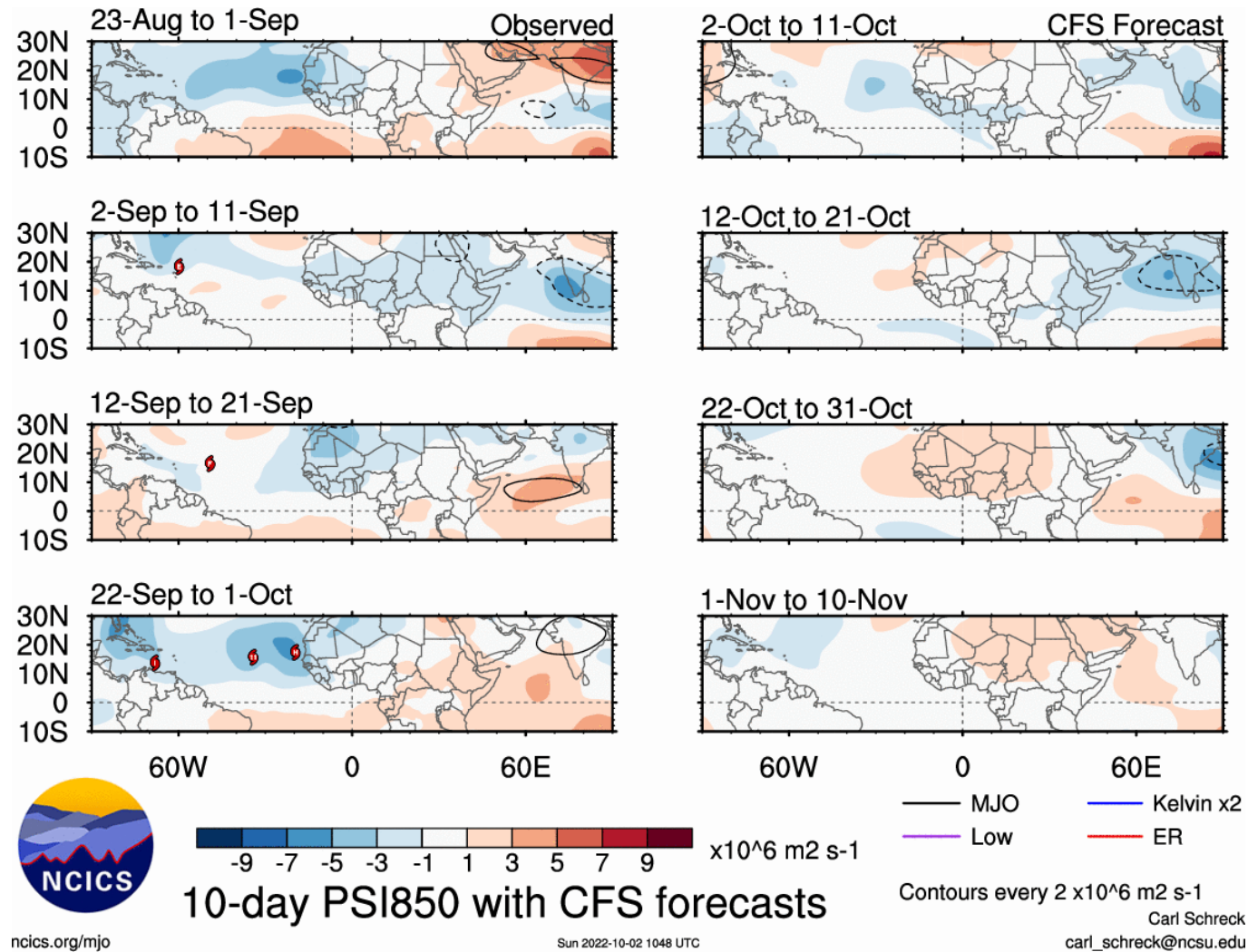
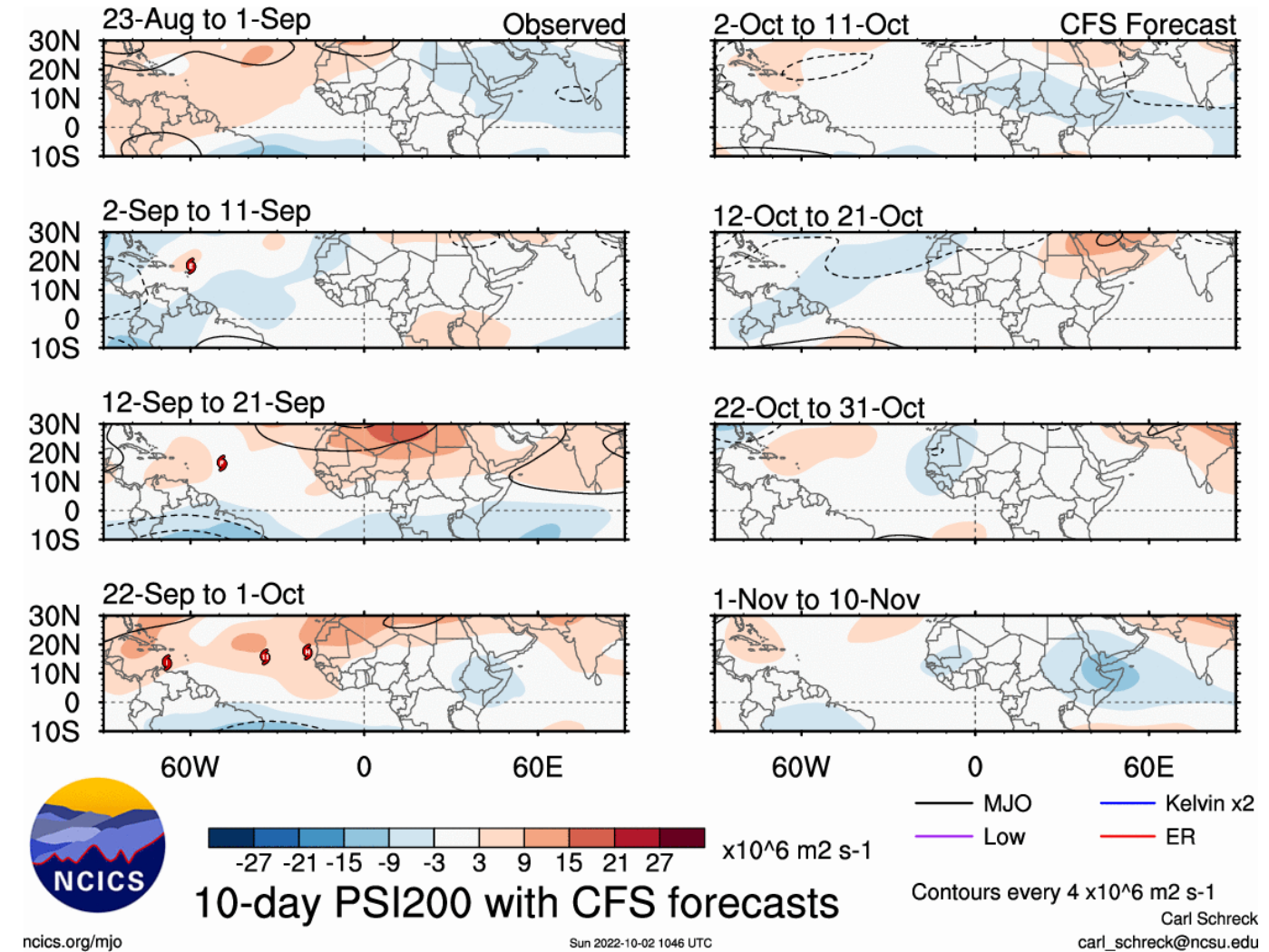
Dekadal Velocity Potential Anomalies – Obs and Fcst: Hovmoller diagram

Average Anomalies in the band 15S-15N



<https://ncics.org/pub/mjo/v2/hov/chi850.cfs.wide.png>
<https://ncics.org/pub/mjo/v2/hov/chi200.cfs.wide.png>
<https://ncics.org/pub/mjo/v2/hov/chi850.cfs.eqtr.png>
<https://ncics.org/pub/mjo/v2/hov/chi200.cfs.eqtr.png>

Dekadal Stream Function Anomalies – Obs. and Fcst



<https://ncics.org/pub/mjo/v2/map/psi850.cfs.all.global.10.png>
<https://ncics.org/pub/mjo/v2/map/psi200.cfs.all.global.10.png>
<https://ncics.org/pub/mjo/v2/map/psi850.cfs.all.africa.10.png>
<https://ncics.org/pub/mjo/v2/map/psi200.cfs.all.africa.10.png>

Figure 18a and b: Past four week and month velocity potential

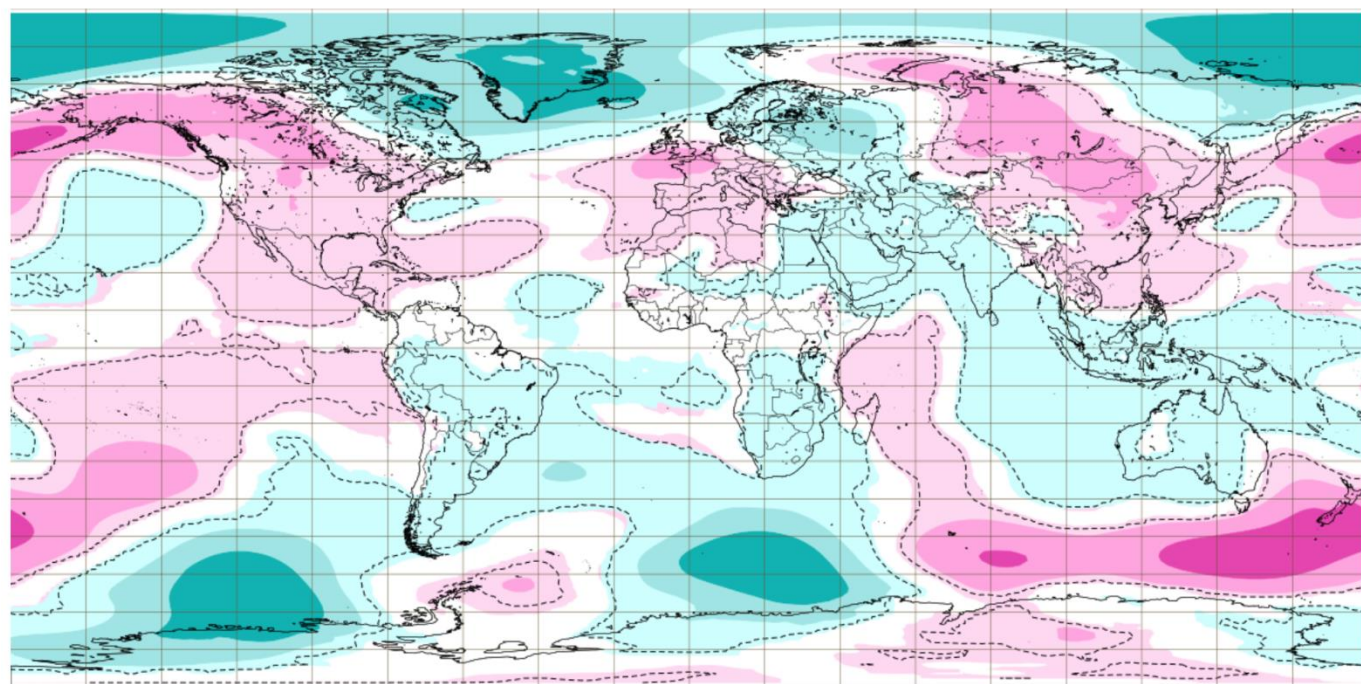
1. Climate Monitoring
2. Status of Drivers
- 3. Dynamical Model Forecast : Week 1 and 2**
4. Week 1 and 2 Outlook

Mean Sea Level Pressure (MSLP) Forecast – Week 1 and 2

Add plot for GFS, BoM, ECMWF, UKMet and DWD

Mean sea level pressure: Weekly mean anomalies

Base time: Thu 29 Sep 2022 Valid time: Mon 03 Oct 2022 - Mon 10 Oct 2022 (+264h) Area : Global

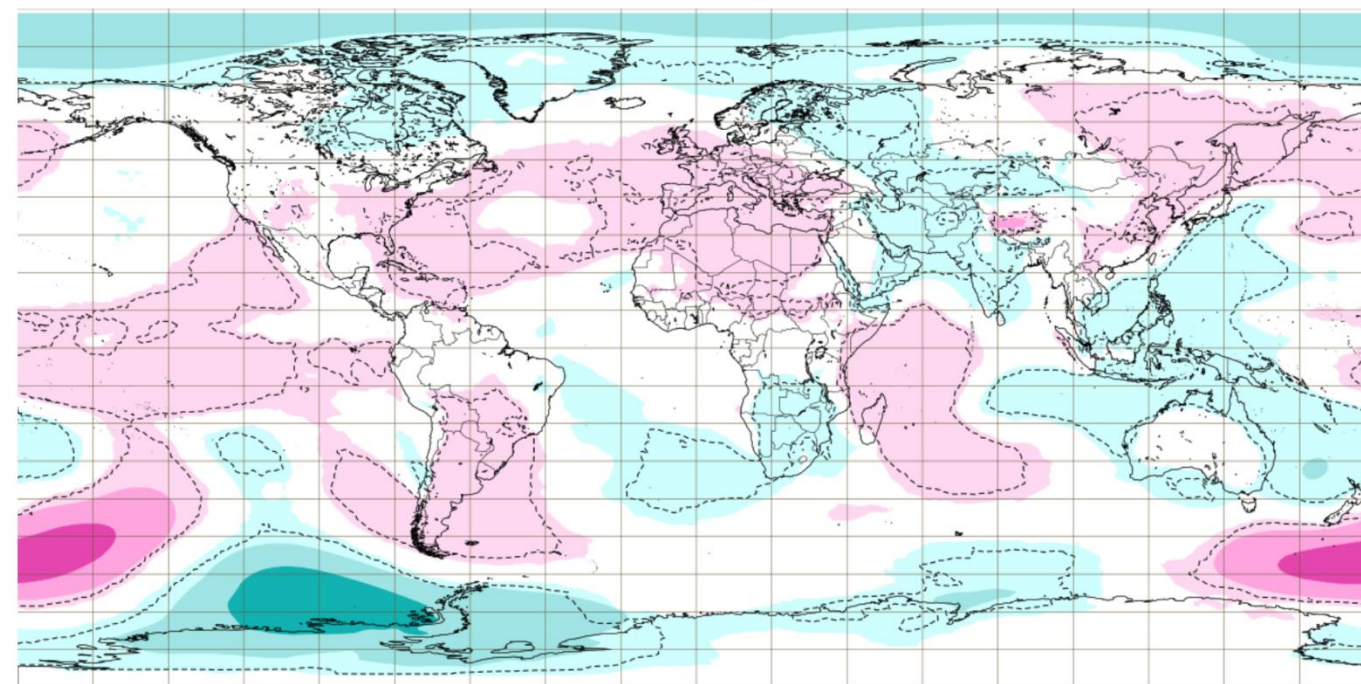


Extended range: MSLP weekly mean anomaly, significance level: 10 % (Pa)

<-40 -40 -20 -10 -5 0 5 10 20 40 >40

Mean sea level pressure: Weekly mean anomalies

Base time: Thu 29 Sep 2022 Valid time: Mon 10 Oct 2022 - Mon 17 Oct 2022 (+432h) Area : Global

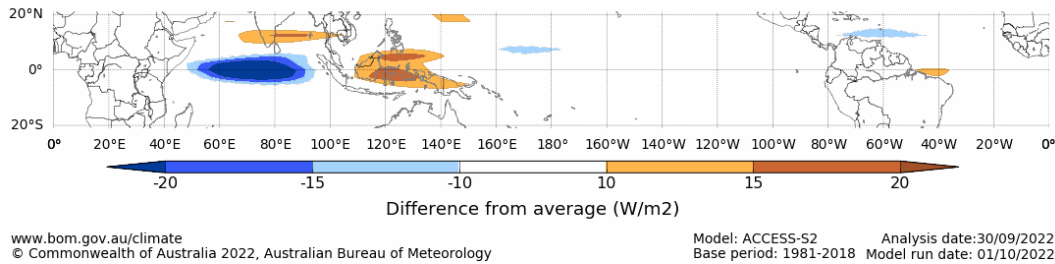


Extended range: MSLP weekly mean anomaly, significance level: 10 % (Pa)

<-40 -40 -20 -10 -5 0 5 10 20 40 >40

MJO

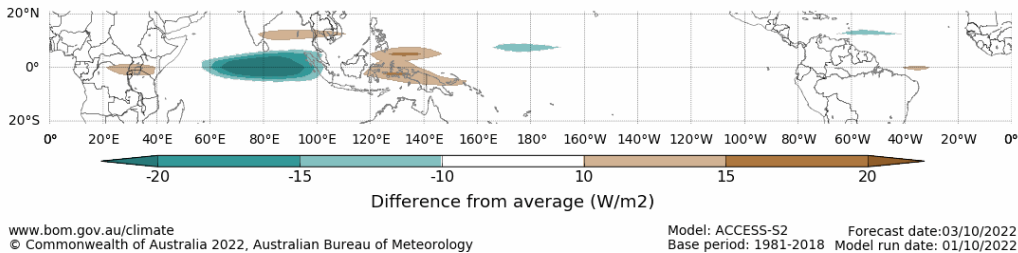
Observed



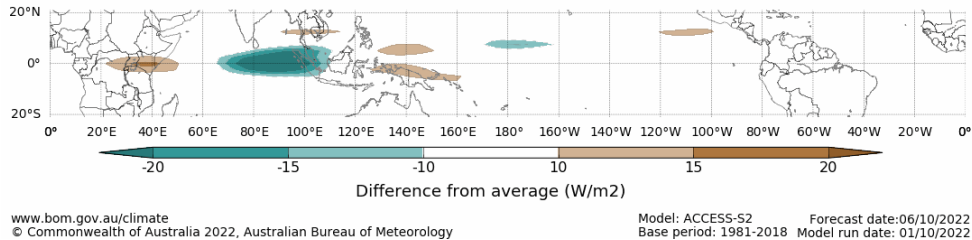
MJO is anticipated to be weak Impact during the first week parts of East African, but weak in the second week.

Week 1

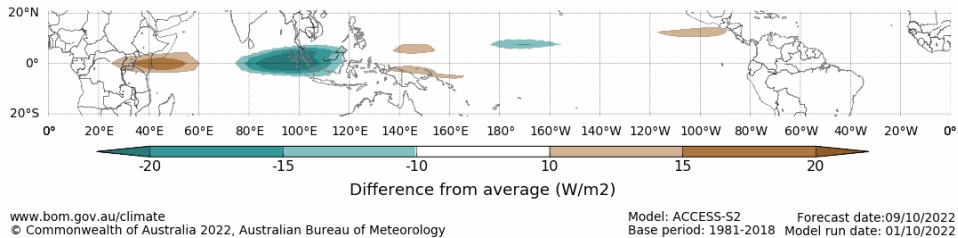
D = 0



D = +3

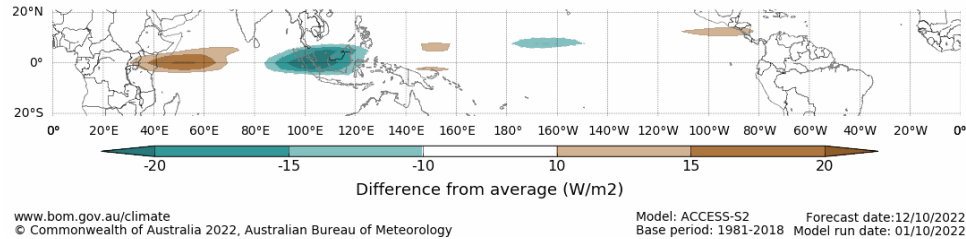


D = +6

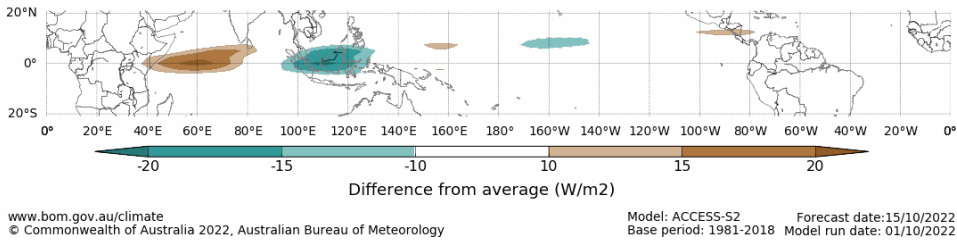


Week 2

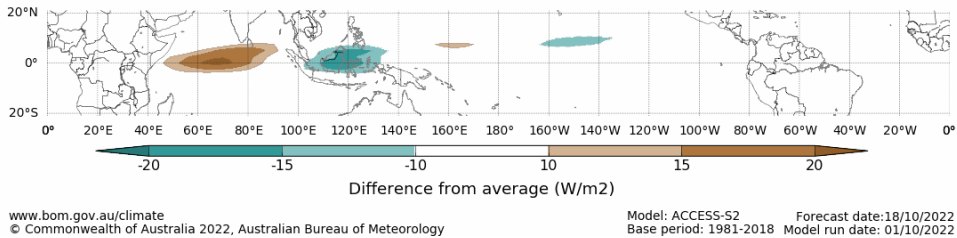
D = +9



D = +12



D = +15

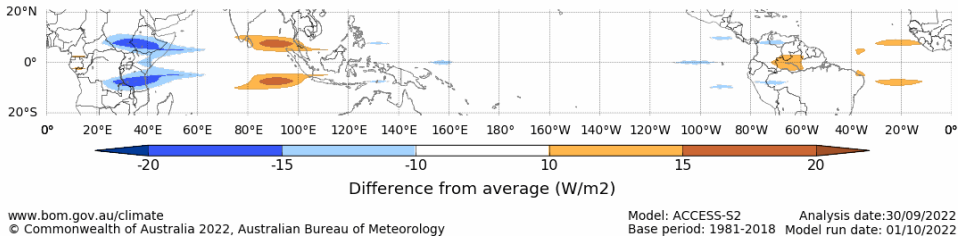


Observed

Text

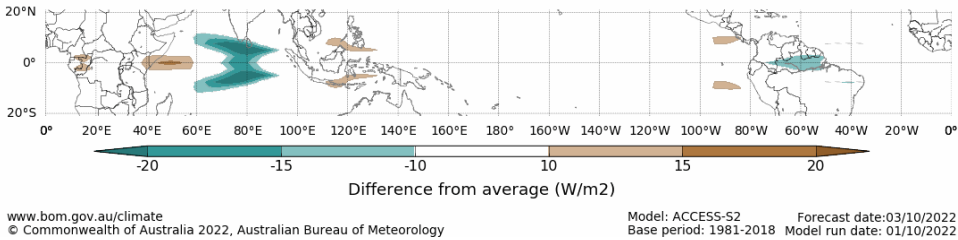
Kelvin

D = -3



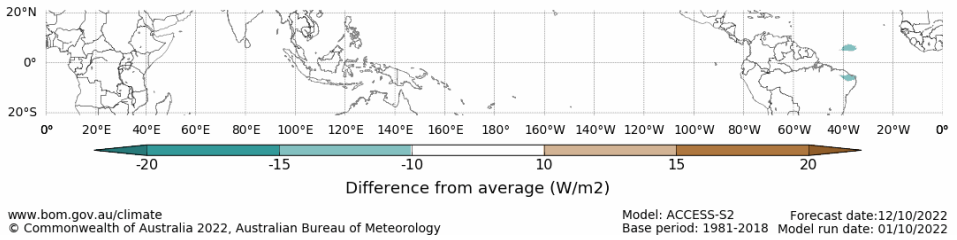
Week 1

D = 0

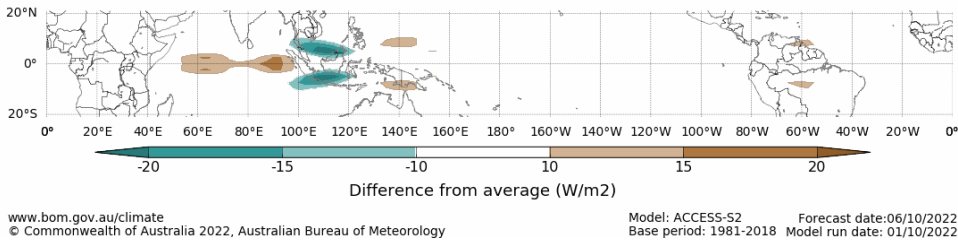


Week 2

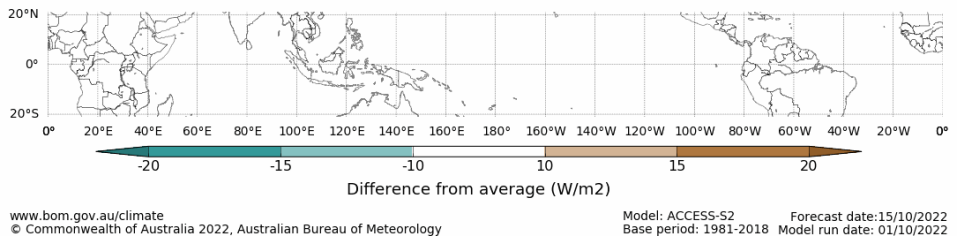
D = +9



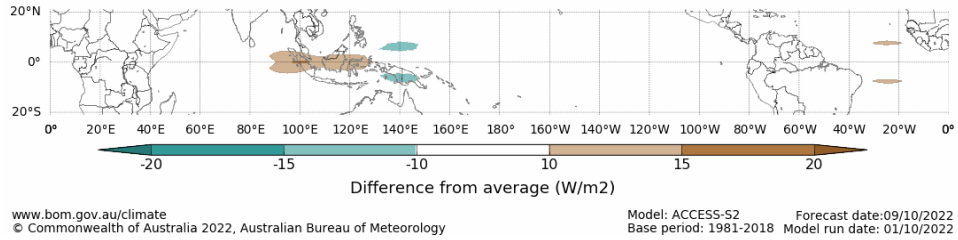
D = +3



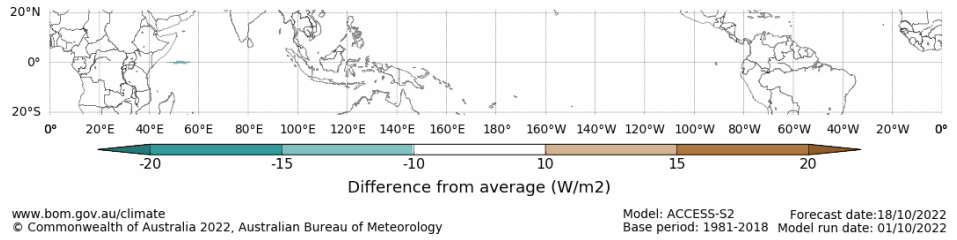
D = +12



D = +6



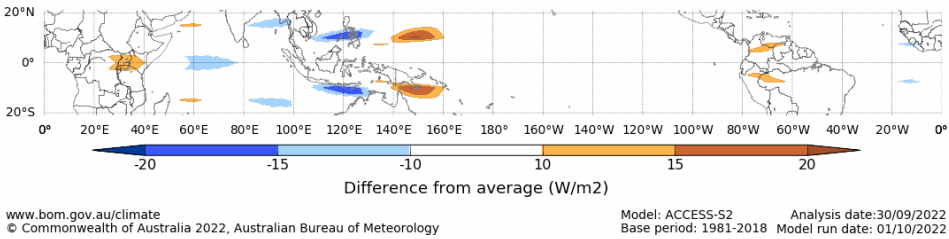
D = +15



Observed

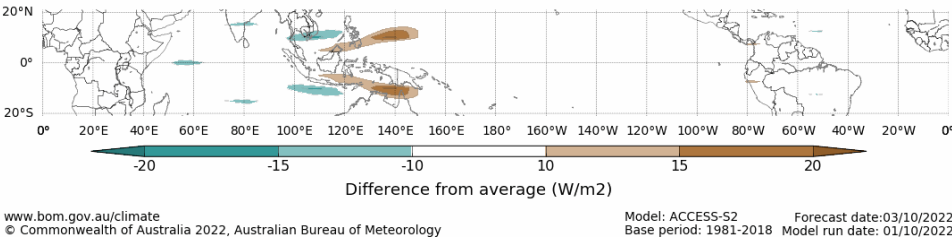
Rossby

Text



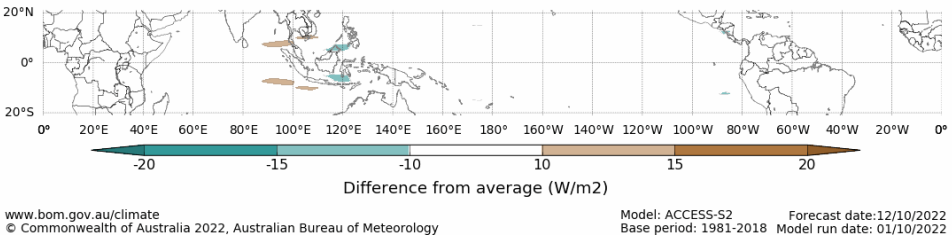
Week 1

D = 0

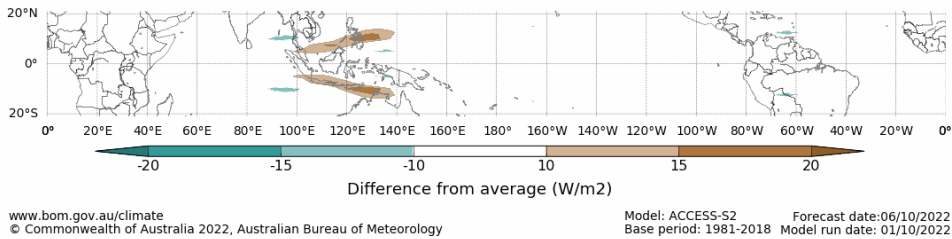


Week 2

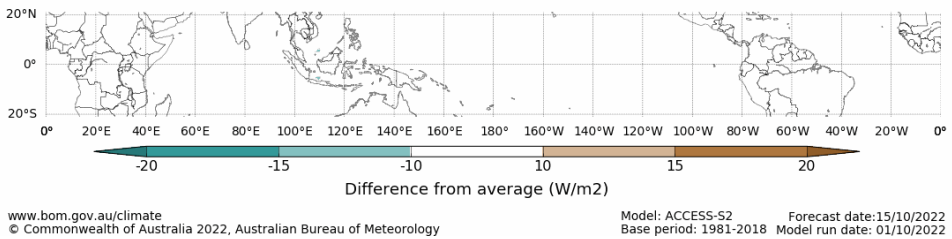
D = +9



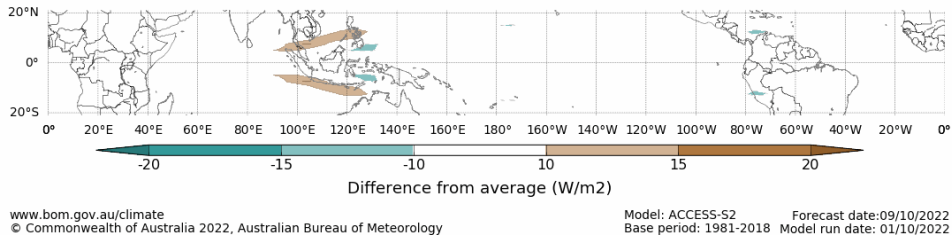
D = +3



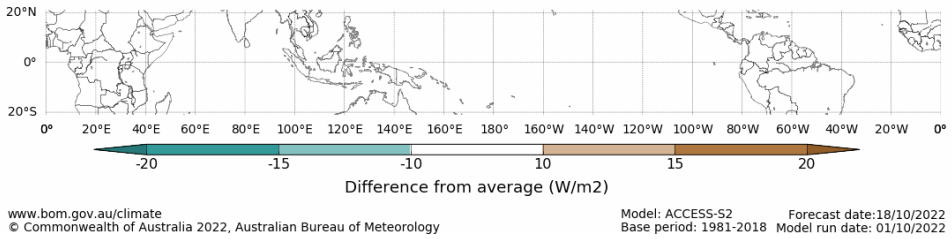
D = +12



D = +6

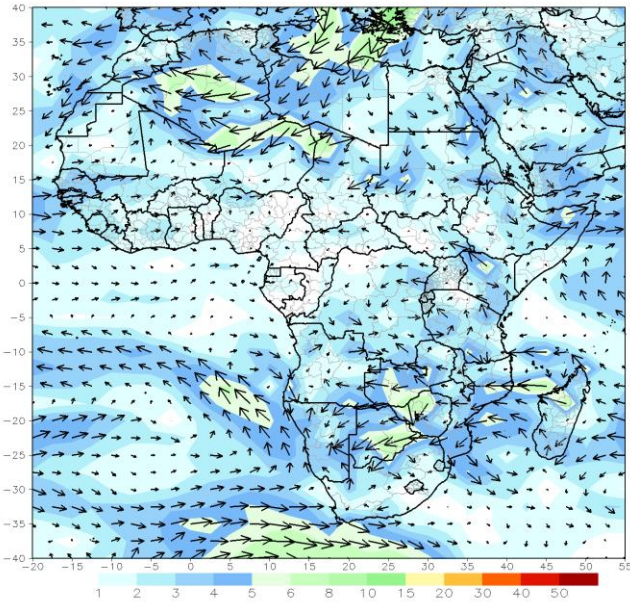


D = +15

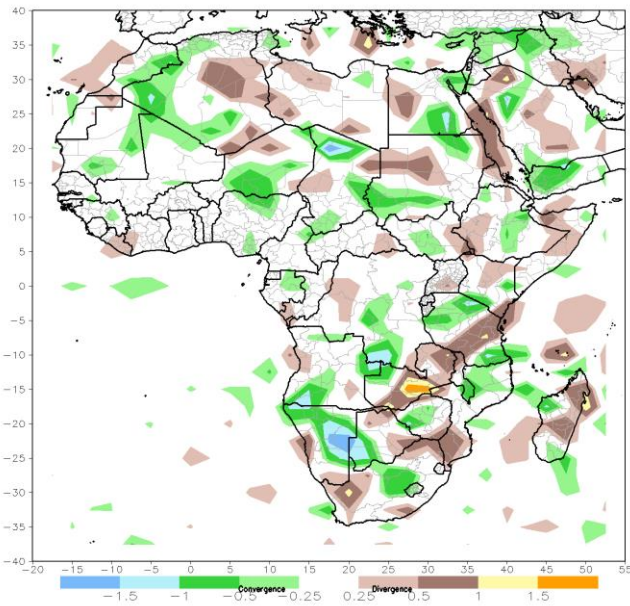


Wind Anomalies and divergence Forecast @ 850, 700, 200 hPa - Week1

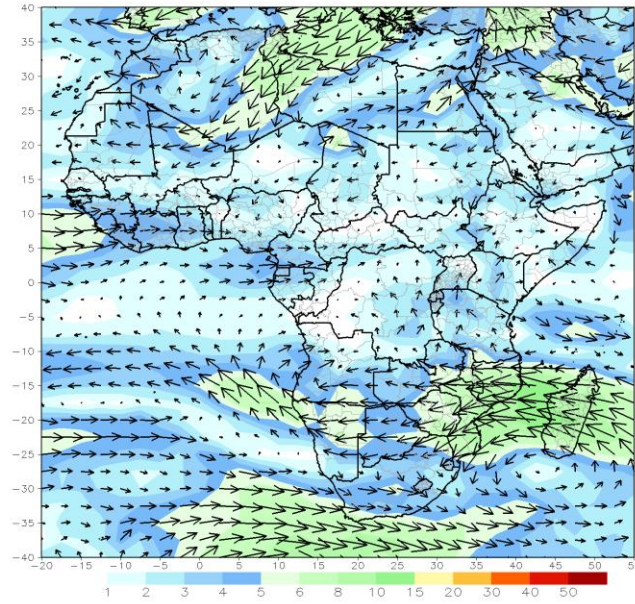
GFS 850mb week1 Mean Vector Wind Anomaly (m/s)
Period: 18z03Oct2022 - 18z09Oct2022



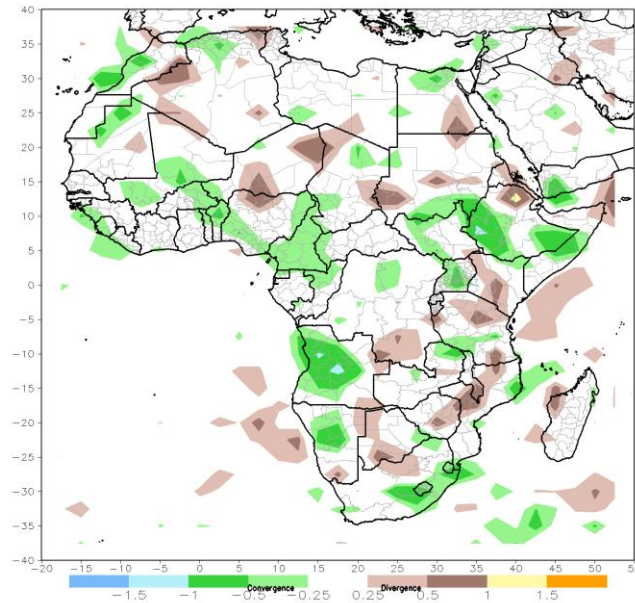
GFS 850mb week1 Mean Divergence Anomaly ($10 \times 10^{-5} / s$)
Period: 18z03Oct2022 - 18z09Oct2022



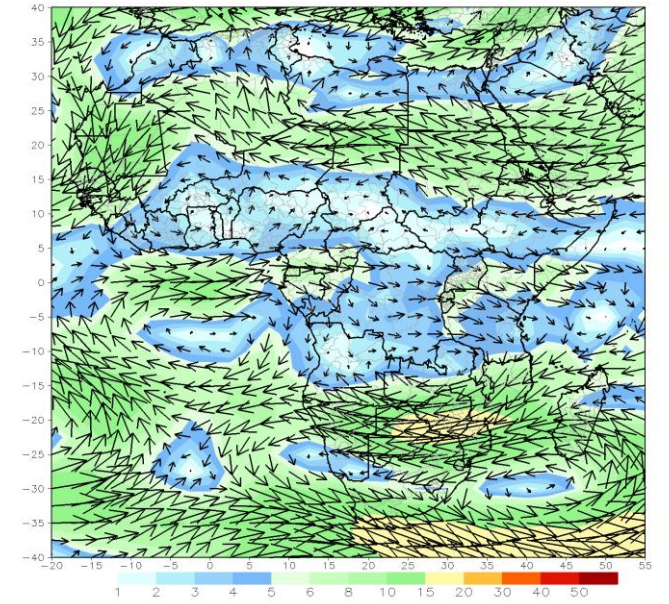
GFS 700mb week1 Mean Vector Wind Anomaly (m/s)
Period: 18z03Oct2022 - 18z09Oct2022



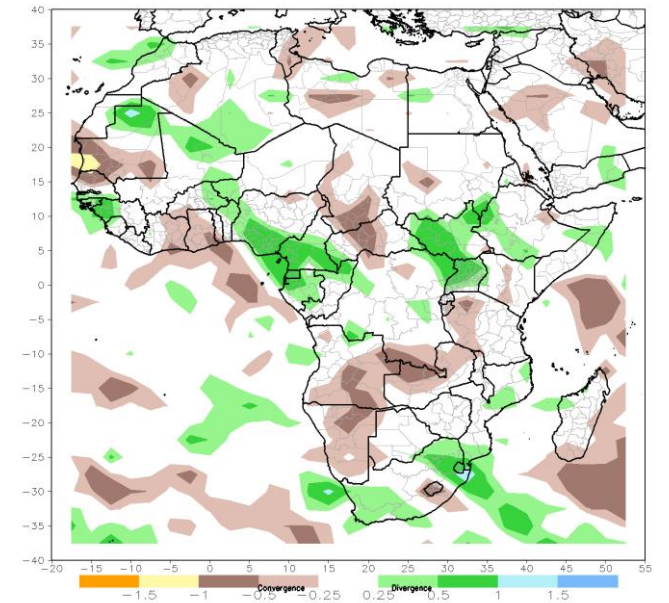
GFS 700mb week1 Mean Divergence Anomaly ($10 \times 10^{-5} / s$)
Period: 18z03Oct2022 - 18z09Oct2022



GFS 200mb week1 Mean Vector Wind Anomaly (m/s)
Period: 18z03Oct2022 - 18z09Oct2022

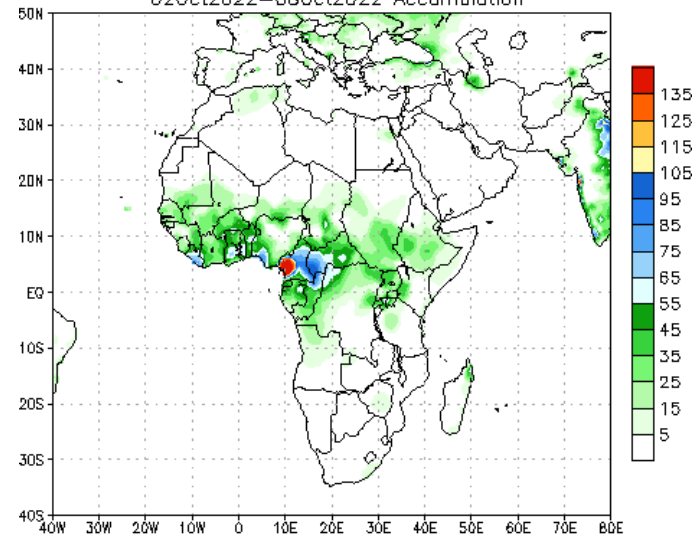


GFS 200mb week1 Mean Divergence Anomaly ($10 \times 10^{-5} / s$)
Period: 18z03Oct2022 - 18z09Oct2022



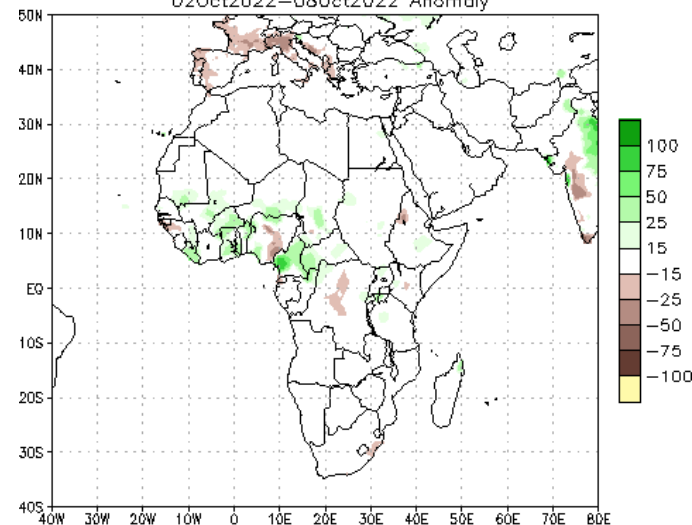
NCEP/GFS Bias-Corrected Precipitation Ensemble Forecast - Week 1

NCEP GFS Ensemble Forecast 1–7 Day Precipitation (mm)
from: 02Oct2022
02Oct2022–08Oct2022 Accumulation



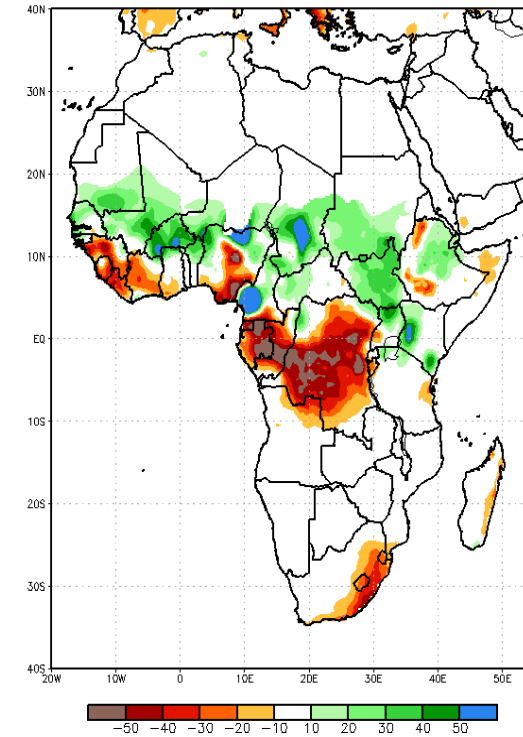
Bias correction based on last 30-day forecast error

NCEP GFS Ensemble Forecast 1–7 Day Precipitation (mm)
from: 02Oct2022
02Oct2022–08Oct2022 Anomaly

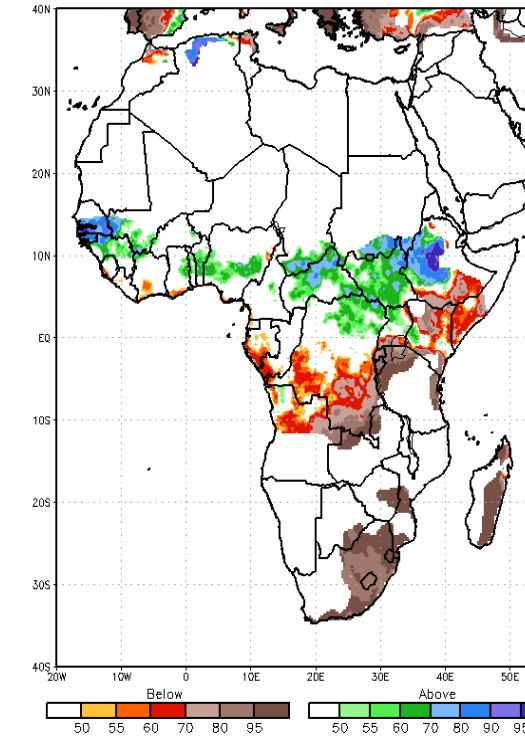


Bias correction based on last 30-day forecast error
CPC Unified Precip Climatology (1991–2020)

GEFS Week 1 Forecast (Valid: October 03, 2022 – October 09, 2022)
Anomaly in mm (bias corrected)



GEFS Week 1 Forecast (Valid: October 03, 2022 – October 09, 2022)
Wet(>120%) and Dry(<80%) Probability



GEFS Week 1 Forecast (Valid: October 03, 2022 – October 09, 2022)
Wet(>150%) and Dry(<50%) Probability

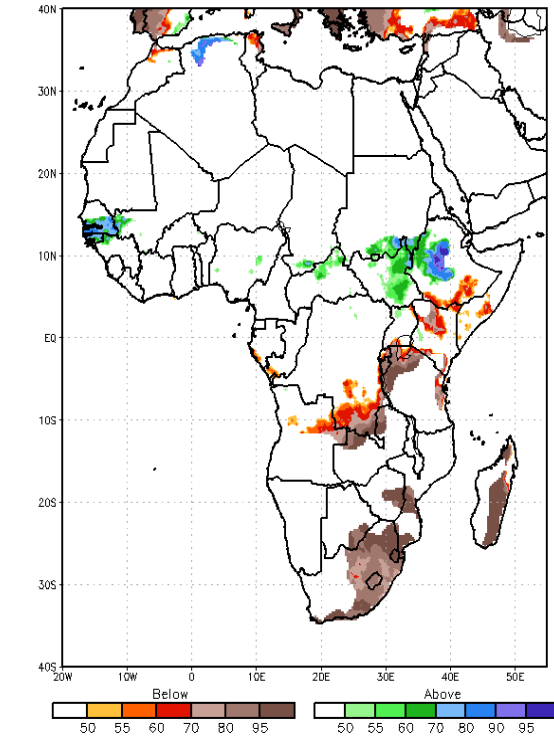


Figure 26: NCEP/GFS Précipitation and Anomaly forecast.

https://www.cpc.ncep.noaa.gov/products/Precip_Monitoring/Figures/GFS/AF_curr.p.gfs1a.gif
https://www.cpc.ncep.noaa.gov/products/Precip_Monitoring/Figures/GFS/AF_curr.p.gfs1b.gif
https://www.cpc.ncep.noaa.gov/products/international/gefs_bc/gefs_afr_wk1_bc_precip.png
https://www.cpc.ncep.noaa.gov/products/international/gefs_bc/gefs_afr_wk1_wdm_precip.png
https://www.cpc.ncep.noaa.gov/products/international/gefs_bc/gefs_afr_wk1_wde_precip.png

Precip>=25mm

Precip>=50mm

Precip>=75mm

Precip>=100mm

Week-1 Precipitation
Probability of Exceedance:
Forecast and Climo

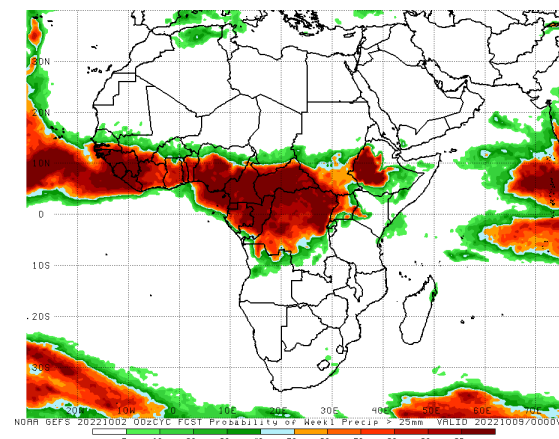
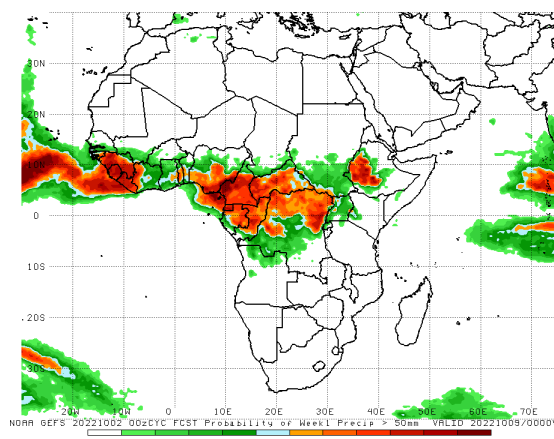
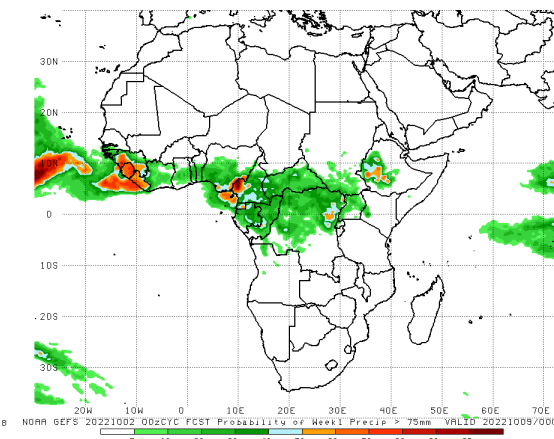
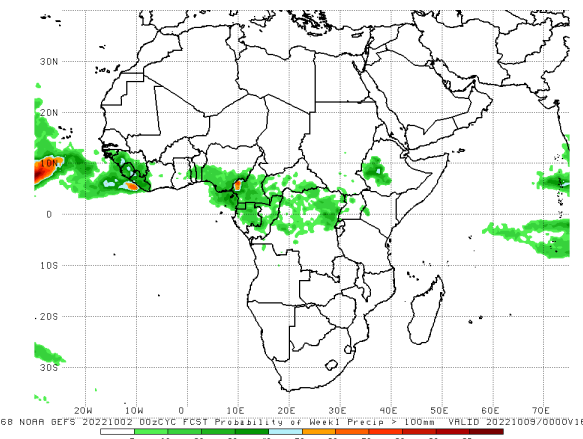
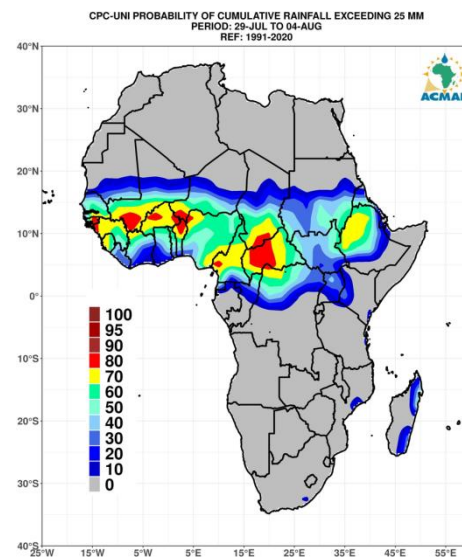
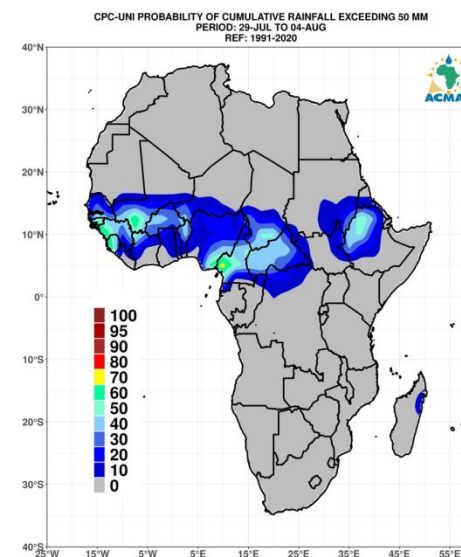
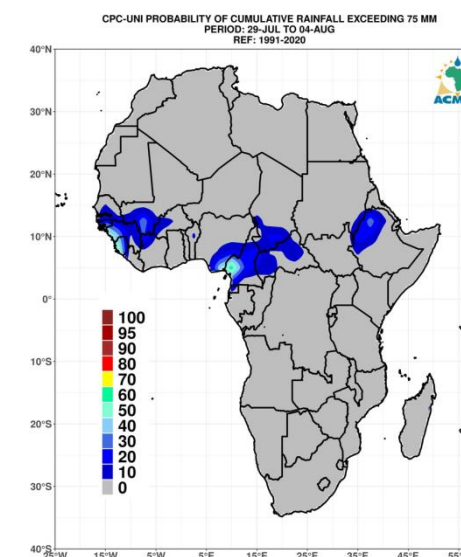
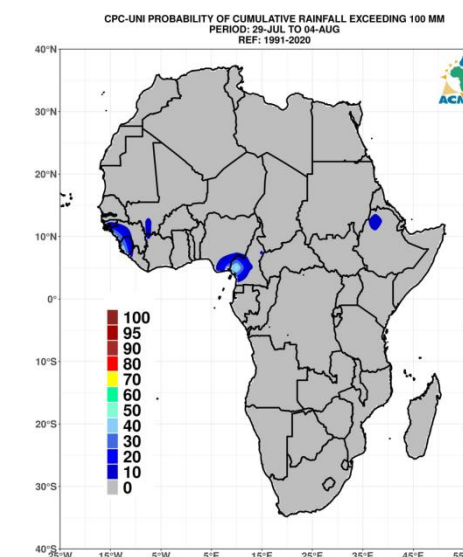


Figure 27: Week1 Precipitation Total Exceedance Probabilities

https://www.cpc.ncep.noaa.gov/products/international/cpci/data/00/gefs_wk1_precip25mm_prob_africa.html

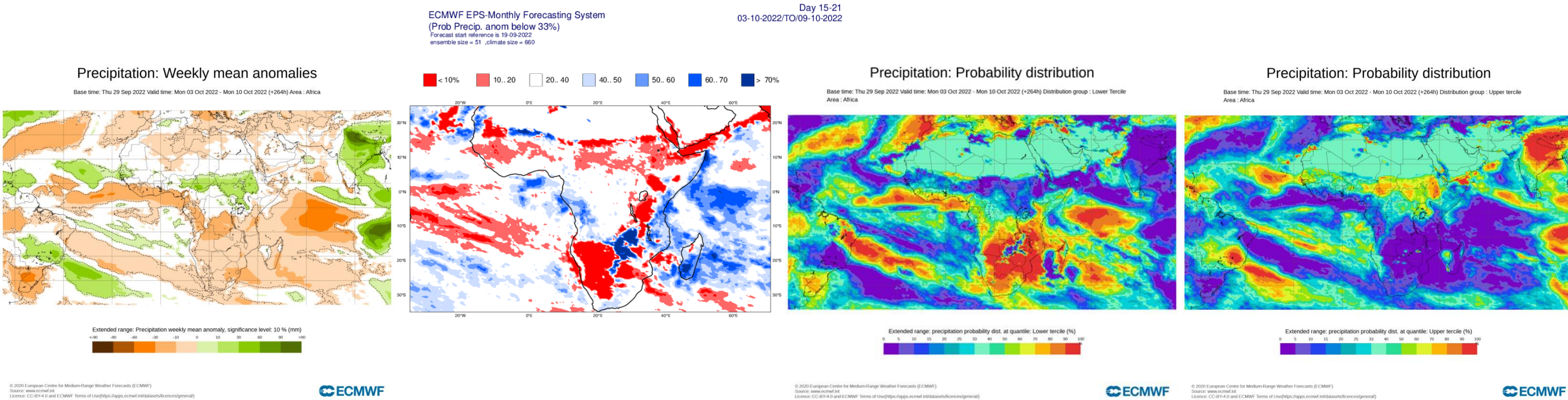
https://www.cpc.ncep.noaa.gov/products/international/cpci/data/00/gefs_wk1_precip50mm_prob_africa.html

https://www.cpc.ncep.noaa.gov/products/international/cpci/data/00/gefs_wk1_precip75mm_prob_africa.html

https://www.cpc.ncep.noaa.gov/products/international/cpci/data/00/gefs_wk1_precip100mm_prob_africa.html

http://154.66.220.45:8080/thredds/catalog/ACMAD/CDD/climatemonitoringservice/Probability_of_Exceedance/Weekly/Current/catalog.html

Probability Precipitation Forecasts from ECMWF for week 1 : weekly tercile at below 33% and above 66%



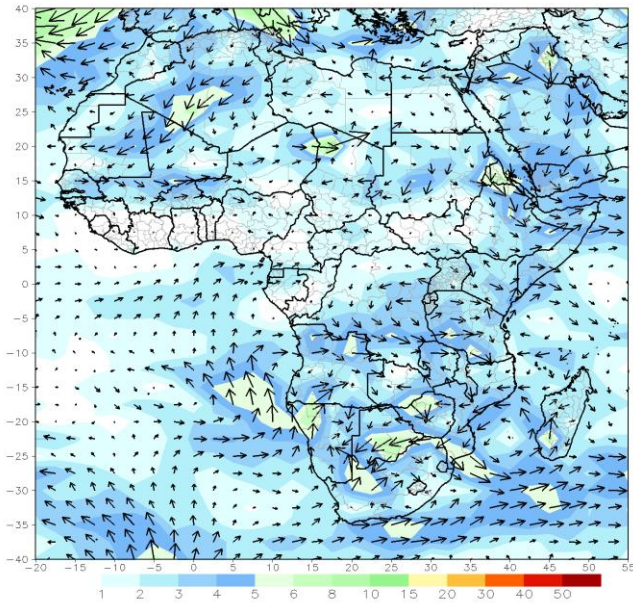
https://www.ecmwf.int/en/forecasts/charts/catalogue/mofc_multi_anomaly?facets=undefined&time=2019081500,408,2019090100&parameter=precipitation&area=Global

https://www.ecmwf.int/en/forecasts/charts/catalogue/mofc_multi_tercile?facets=undefined&time=2021110100,312,2021111400&parameter=precipitation&tercile=1&area=Africa

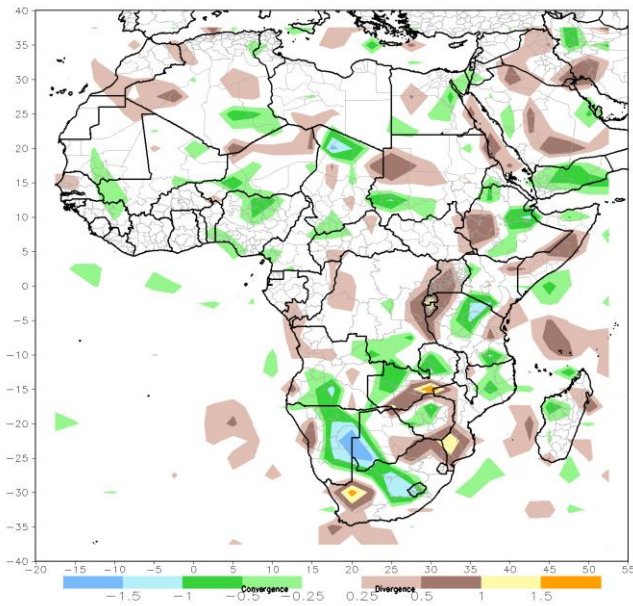
Figure 29: Weekly tercile probability forecast below 33%

Wind Anomalies and divergence Forecast @ 850, 700, 200 hPa – Week2

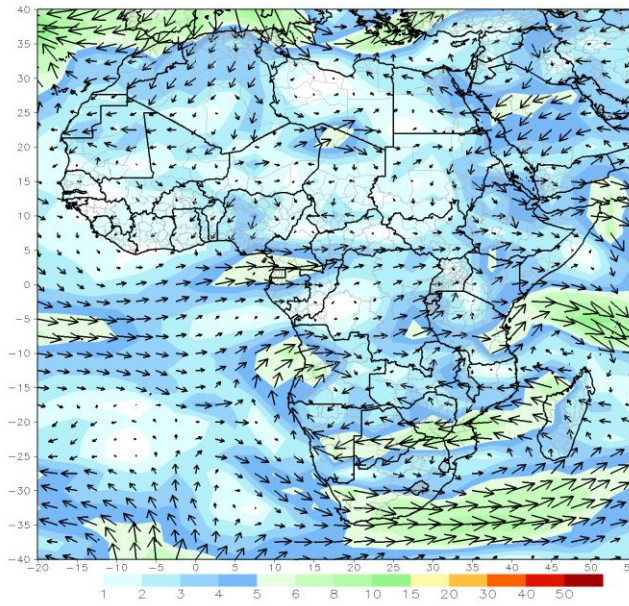
GFS 850mb week2 Mean Vector Wind Anomaly (m/s)
Period: 18z10Oct2022 – 18z16Oct2022



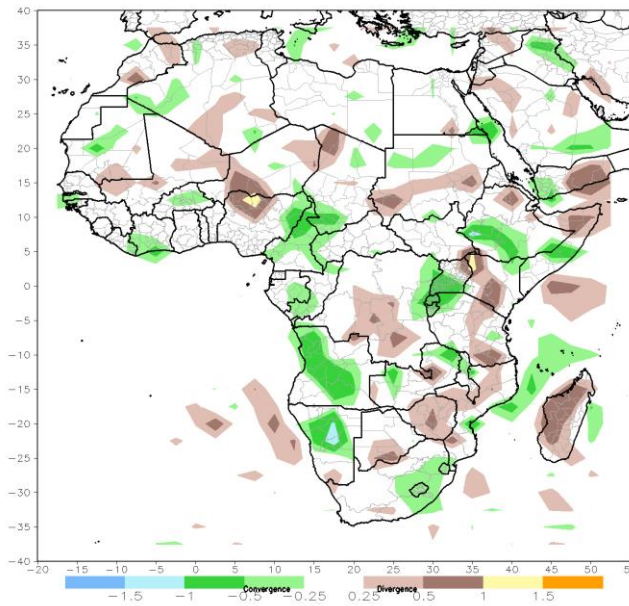
GFS 850mb week2 Mean Divergence Anomaly ($10 \times 10^{-5}/s$)
Period: 18z10Oct2022 – 18z16Oct2022



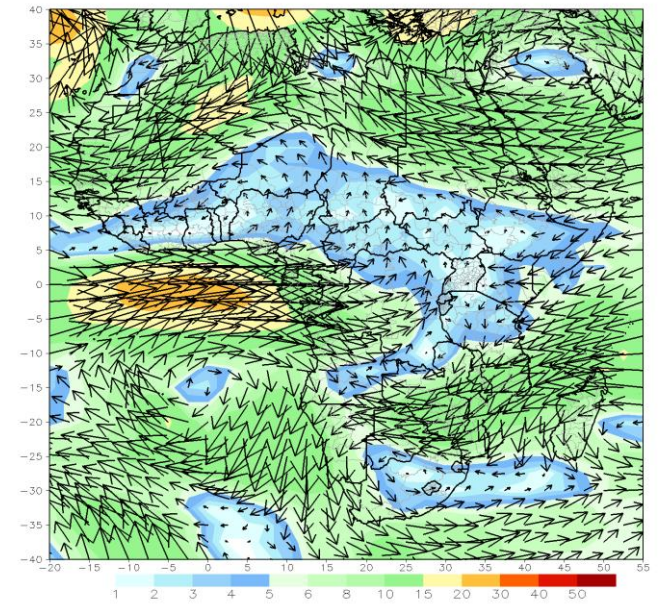
GFS 700mb week2 Mean Vector Wind Anomaly (m/s)
Period: 18z10Oct2022 – 18z16Oct2022



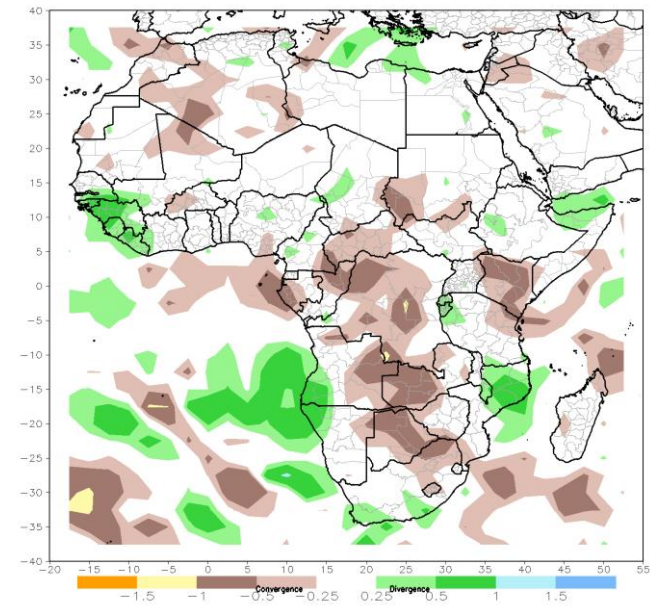
GFS 700mb week2 Mean Divergence Anomaly ($10 \times 10^{-5}/s$)
Period: 18z10Oct2022 – 18z16Oct2022



GFS 200mb week2 Mean Vector Wind Anomaly (m/s)
Period: 18z10Oct2022 – 18z16Oct2022

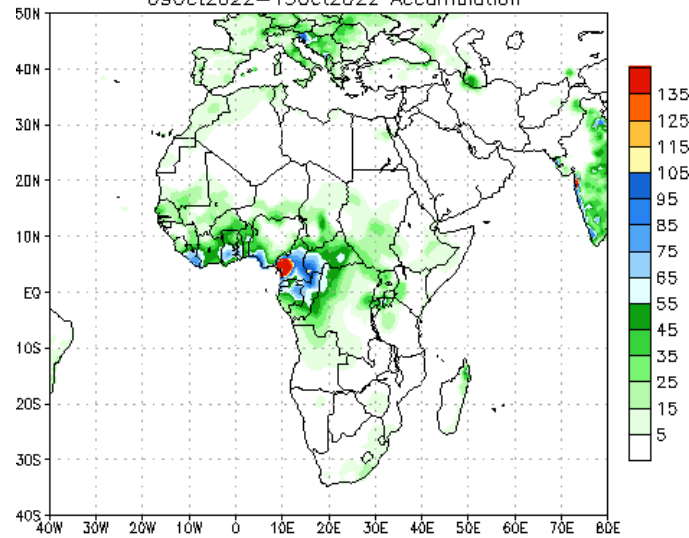


GFS 200mb week2 Mean Divergence Anomaly ($10 \times 10^{-5}/s$)
Period: 18z10Oct2022 – 18z16Oct2022



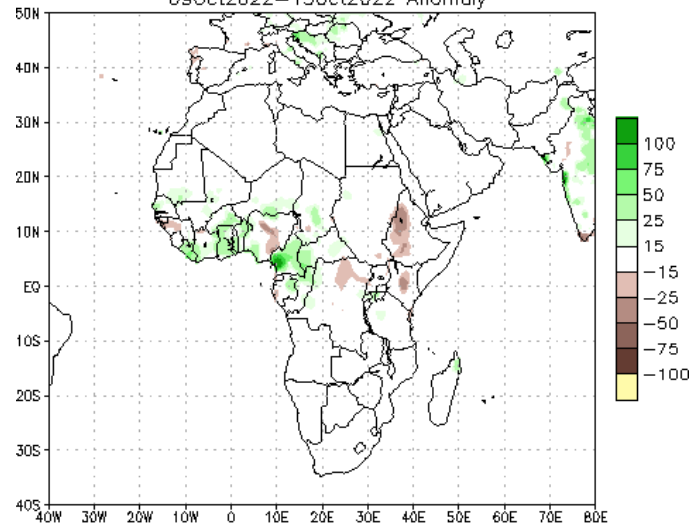
NCEP/GFS Bias-Corrected Precipitation Ensemble Forecast - Week 2

NCEP GFS Ensemble Forecast B-14 Day Precipitation (mm)
from: 020ct2022
09Oct2022-15Oct2022 Accumulation



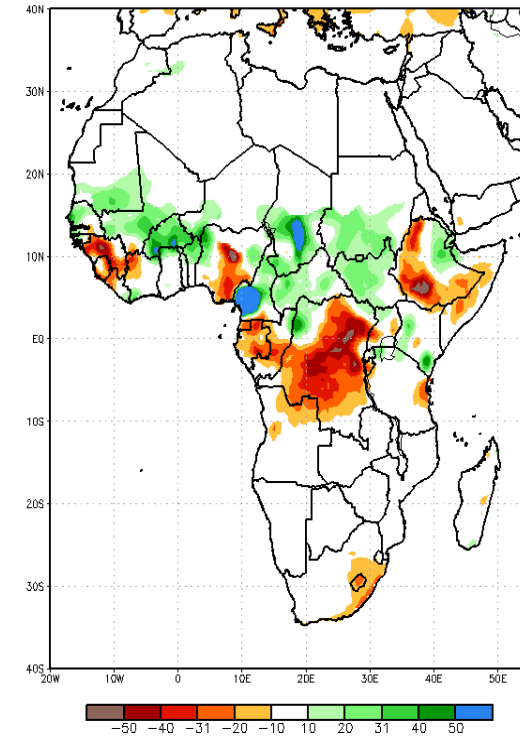
Bias correction based on last 30-day forecast error

NCEP GFS Ensemble Forecast B-14 Day Precipitation (mm)
from: 020ct2022
09Oct2022-15Oct2022 Anomaly

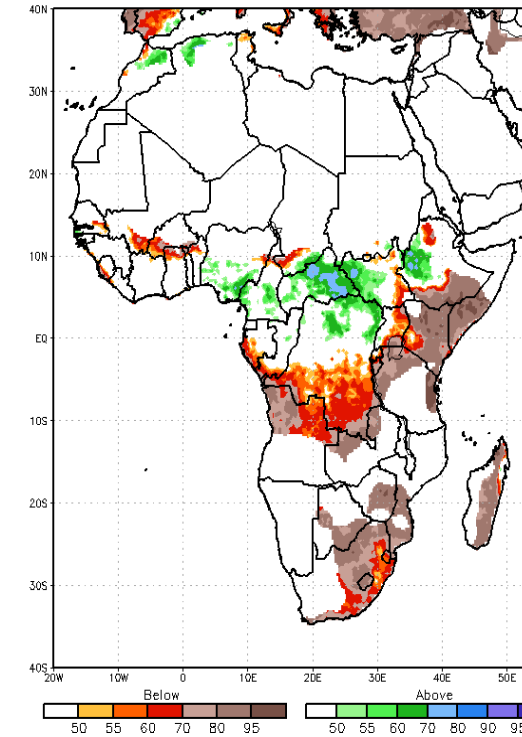


Bias correction based on past 30-day forecast error
CPC Unified Precip Climatology (1991-2020)

GEFS Week 2 Forecast (Valid: October 10, 2022 - October 16, 2022)
Anomaly in mm (bias corrected)



GEFS Week 2 Forecast (Valid: October 10, 2022 - October 16, 2022)
Wet(>120%) and Dry(<80%) Probability



GEFS Week 2 Forecast (Valid: October 10, 2022 - October 16, 2022)
Wet(>150%) and Dry(<50%) Probability

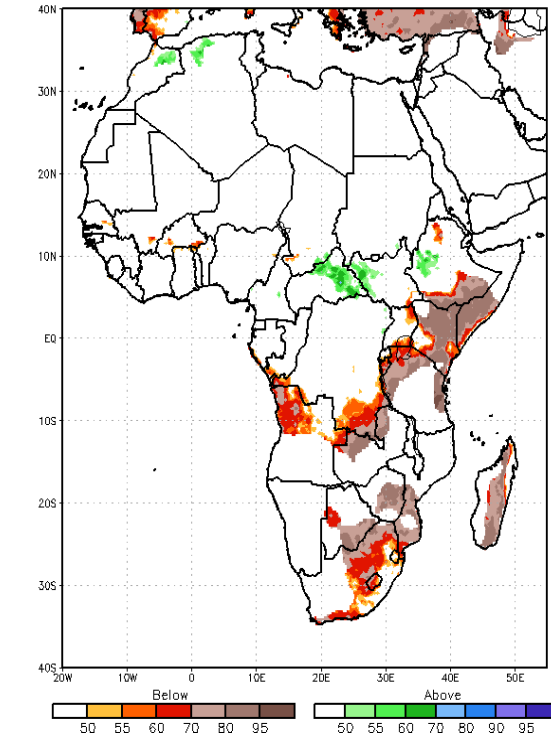


Figure 26: NCEP/GFS Précipitation and Anomaly forecast.

https://www.cpc.ncep.noaa.gov/products/Precip_Monitoring/Figures/GFS/AF_curr.p.gfs2a.gif
https://www.cpc.ncep.noaa.gov/products/Precip_Monitoring/Figures/GFS/AF_curr.p.gfs2b.gif
https://www.cpc.ncep.noaa.gov/products/international/gefs_bc/gefs_afr_wk2_bc_precip.png
https://www.cpc.ncep.noaa.gov/products/international/gefs_bc/gefs_afr_wk2_wdm_precip.png
https://www.cpc.ncep.noaa.gov/products/international/gefs_bc/gefs_afr_wk2_wde_precip.png

Precip>=25mm

Precip>=50mm

Precip>=75mm

Precip>=100mm

Week-2 Precipitation
Probability of Exceedance:
Forecast and Climo

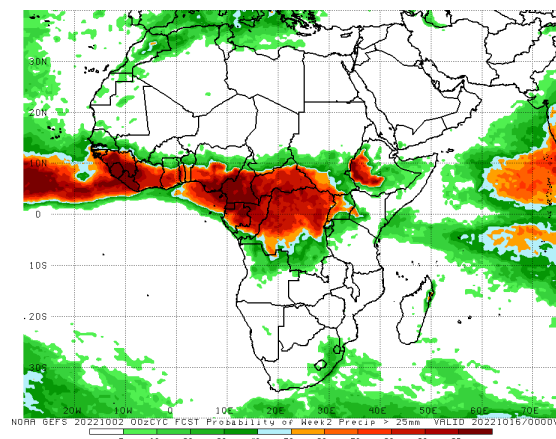
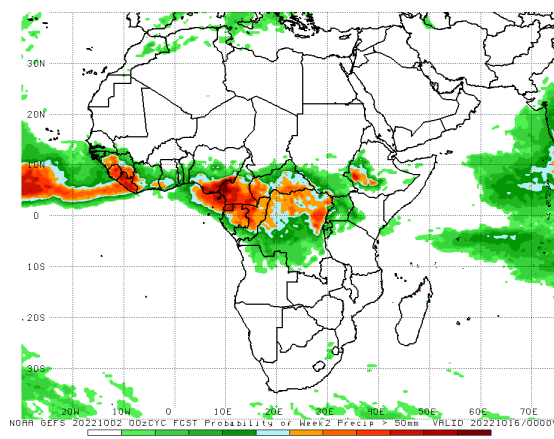
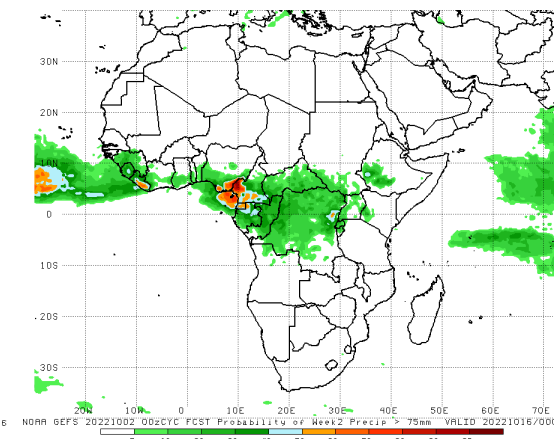
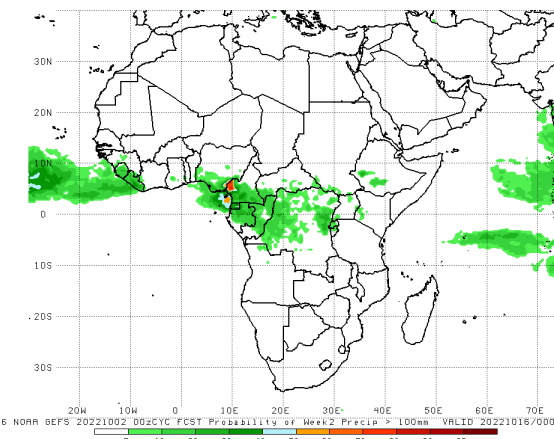
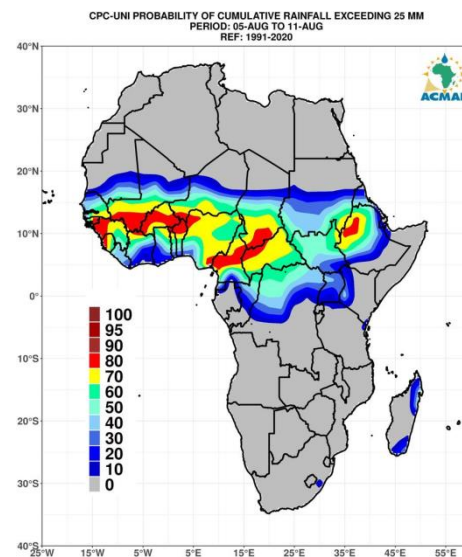
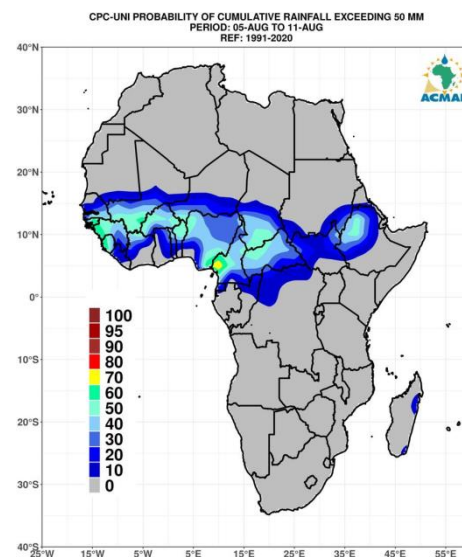
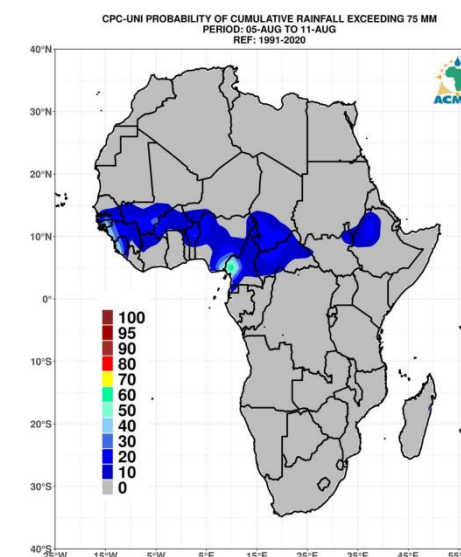
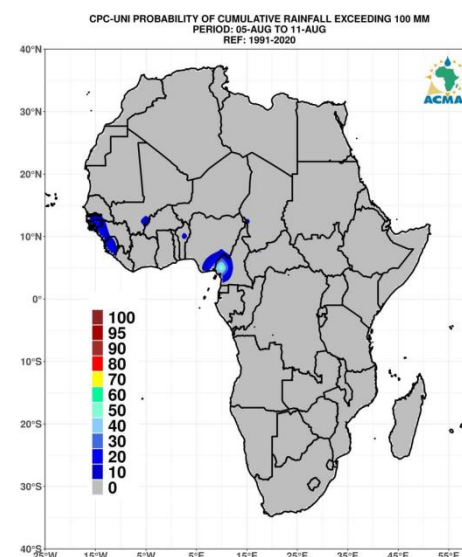


Figure 32: Week2 Precipitation Total Exceedance Probabilities

https://www.cpc.ncep.noaa.gov/products/international/cpci/data/00/gefs_wk1_precip25mm_prob_africa.html

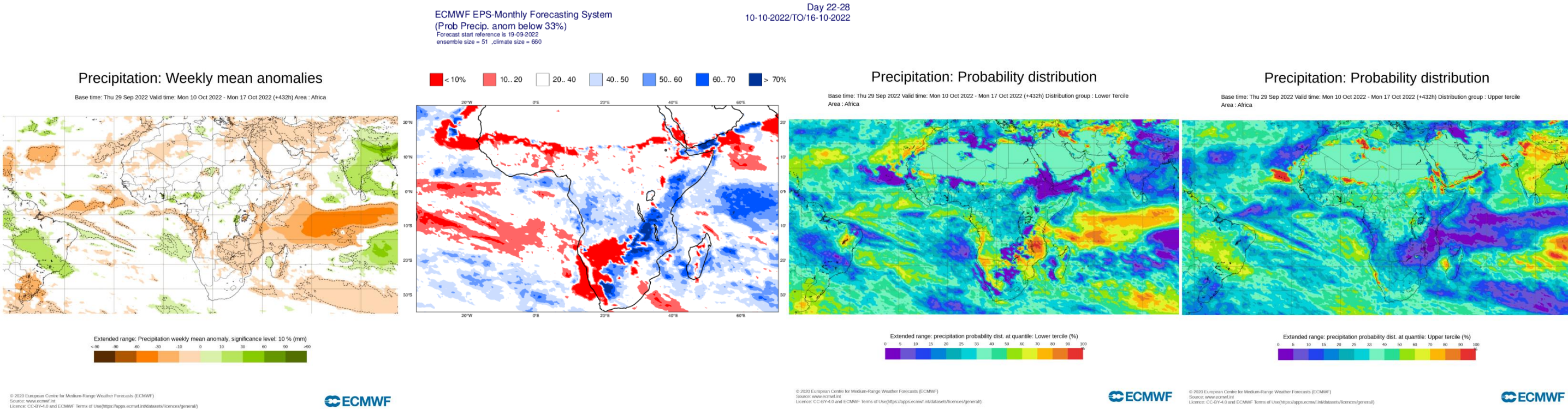
https://www.cpc.ncep.noaa.gov/products/international/cpci/data/00/gefs_wk1_precip50mm_prob_africa.html

https://www.cpc.ncep.noaa.gov/products/international/cpci/data/00/gefs_wk1_precip75mm_prob_africa.html

https://www.cpc.ncep.noaa.gov/products/international/cpci/data/00/gefs_wk1_precip100mm_prob_africa.html

http://154.66.220.45:8080/thredds/catalog/ACMAD/CDD/climatemonitoringservice/Probability_of_Exceedance/Weekly/Current/catalog.html

Probability Precipitation Forecasts from ECMWF for week 2 : weekly tercile at below 33% and above 66%



https://www.ecmwf.int/en/forecasts/charts/catalogue/mofc_multi_anomaly?facets=undefined&time=2019081500,408,2019090100&parameter=precipitation&area=Global

https://www.ecmwf.int/en/forecasts/charts/catalogue/mofc_multi_tercile?facets=undefined&time=202110100,312,2021111400&parameter=precipitation&tercile=1&area=Africa

Figure 34: Weekly tercile probability forecast below 33%

IRI SubX Precip Forecast : Week 1 and 2

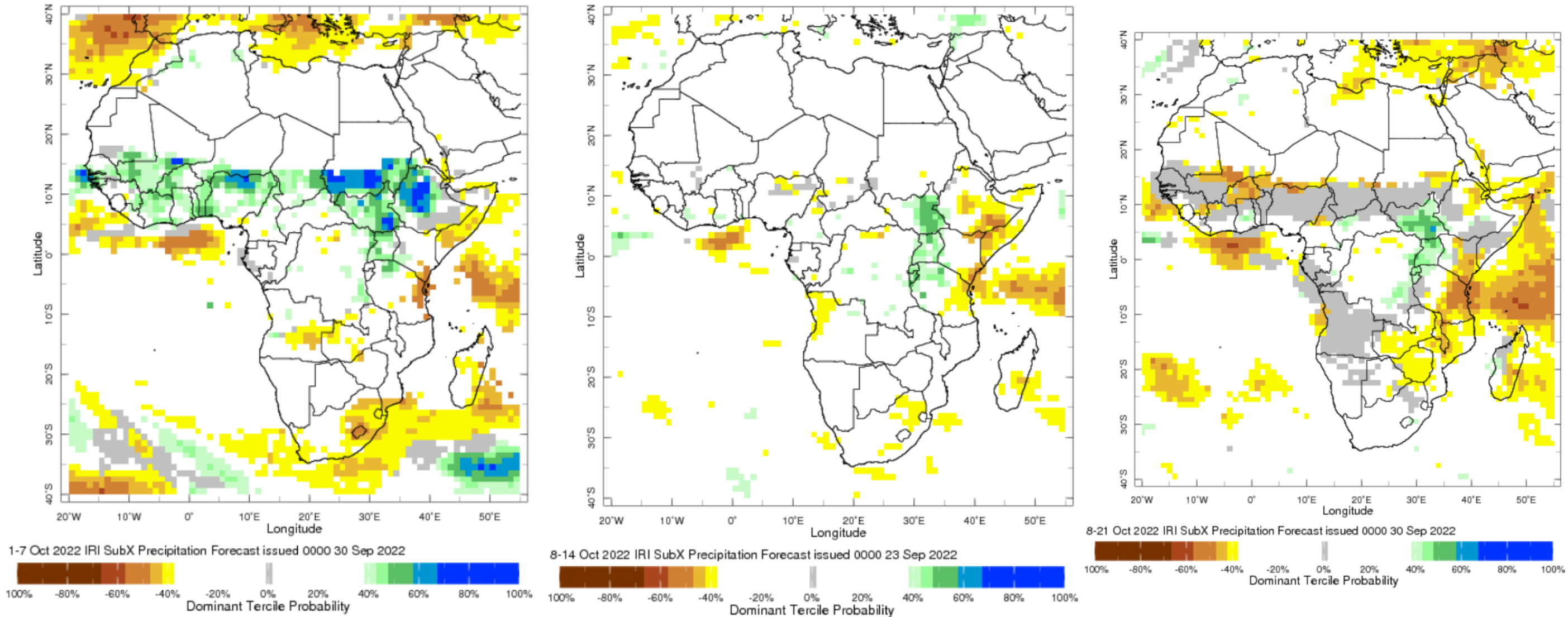
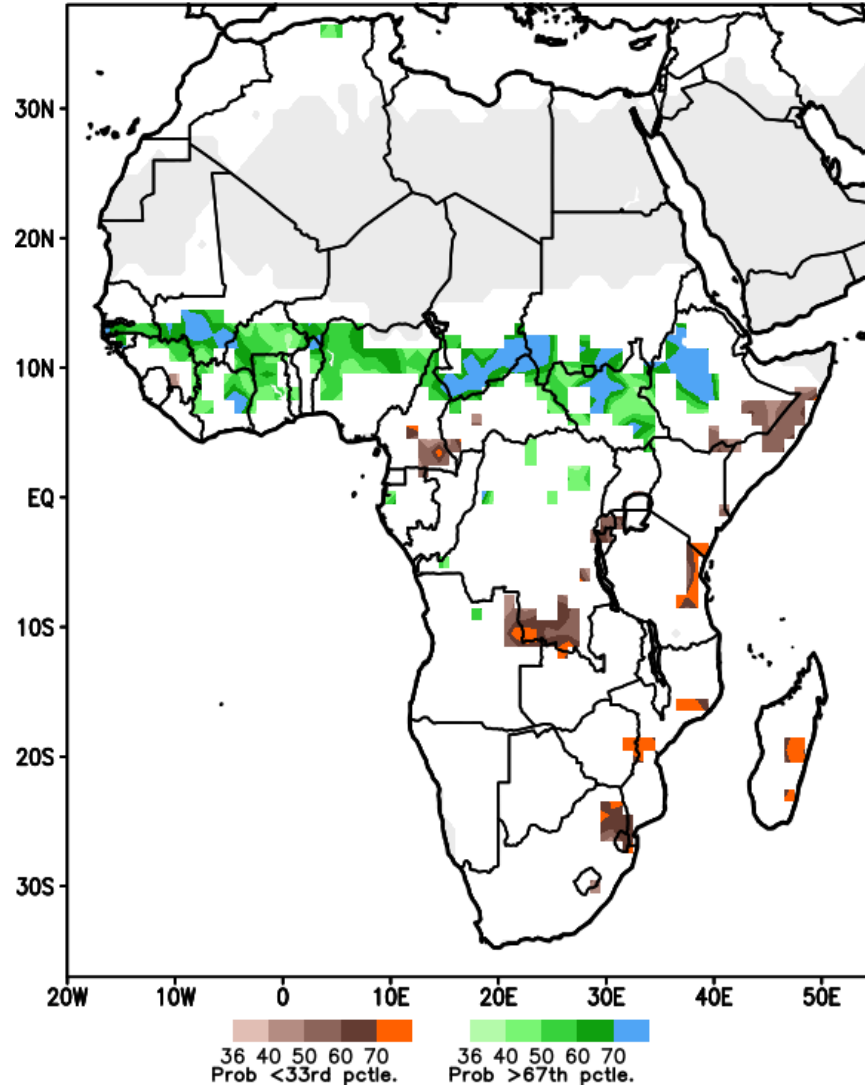


Figure 37: Precipitation and Anomaly forecast

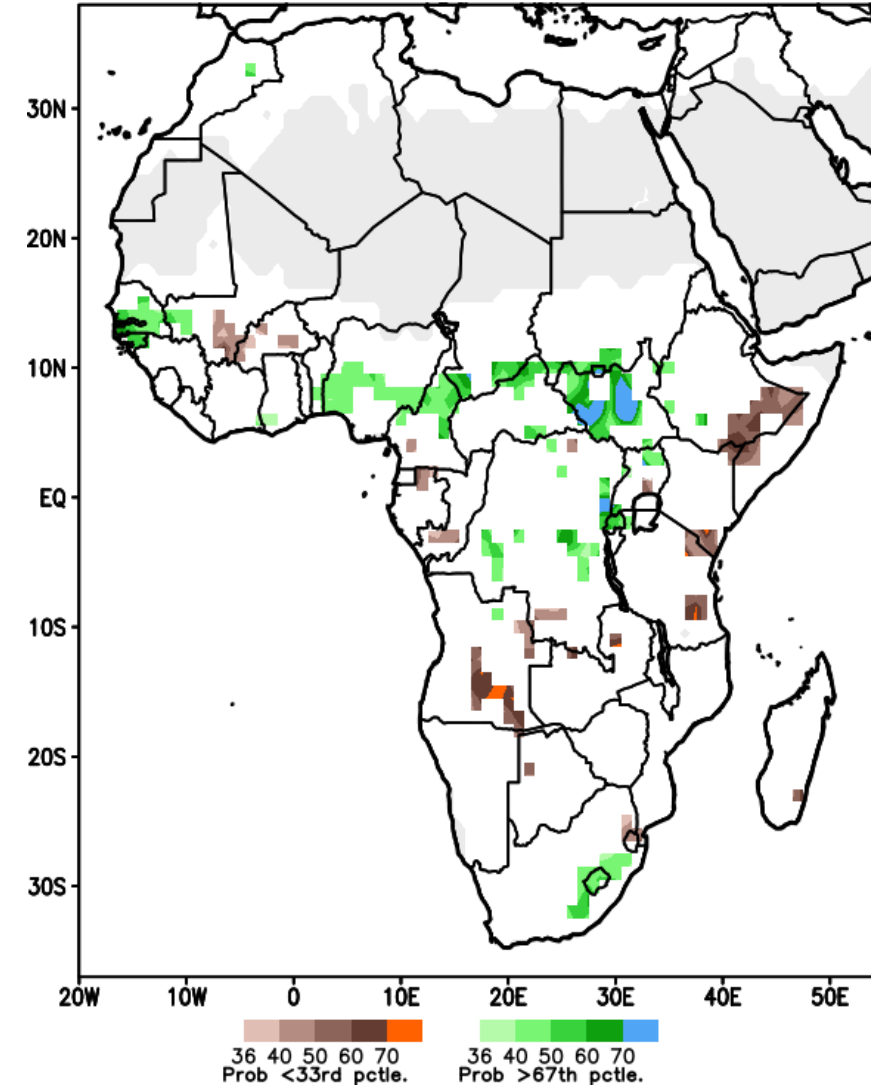
https://iridl.ldeo.columbia.edu/maproom/Global/ForecastsS2S/precip_subx.html?Set-Language=en&bbox=bb%3A-20%3A-40%3A55%3A40%3Abb&S=0000%205%20Feb%202021&region=bb%3A-2%3A30%3A-1%3A31%3Abb

Consolidated Ensemble Forecast: Week 1 and 2

CFS/ECMWF/ECCC/GEFS Correlation Weighted, Week1
Precip POE <33rd & > 67th Pctl., Valid:01Oct2022–07Oct2022



CFS/ECMWF/ECCC/GEFS Correlation Weighted, Week2
Precip POE <33rd & > 67th Pctl., Valid:08Oct2022–14Oct2022



https://ftp.cpc.ncep.noaa.gov/International/cons_precip/cons_wk1_afr_prpcp_33N67pct.png

https://ftp.cpc.ncep.noaa.gov/International/cons_precip/cons_wk2_afr_prpcp_33N67pct.png

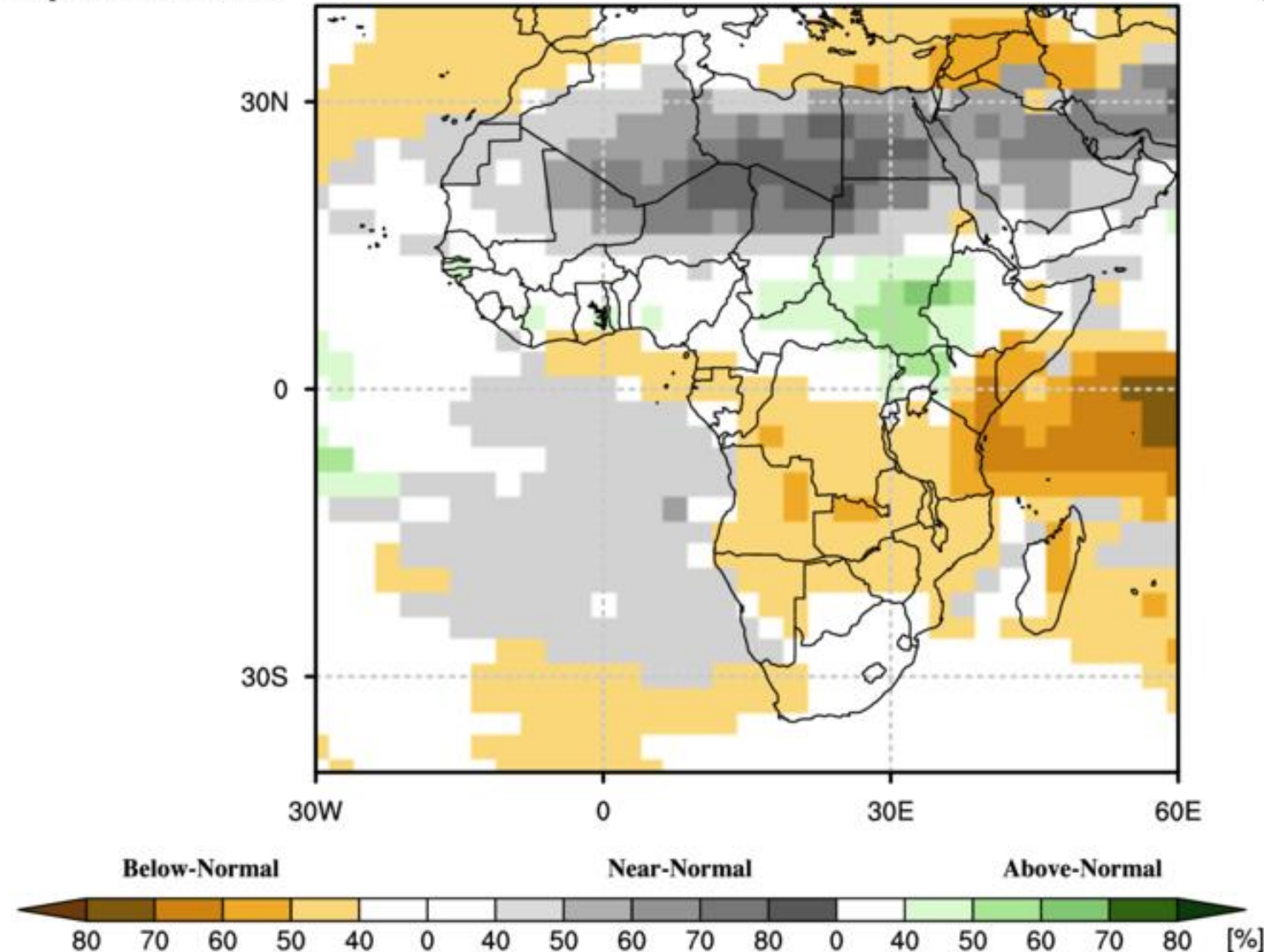
Monthly Forecast from WMO Lead Centre Multi-Model Ensemble

Probabilistic Multi-Model Ensemble Forecast

Beijing,CMCC,CPTEC,ECMWF,Exeter,Melbourne,Montreal,Moscow,Offenbach,Pretoria,Seoul,Tokyo,Toulouse,Washington

Precipitation : Oct2022

(issued on Sep2022)



The LCMM-level model set tells us that part of the Africa region will have average to higher than average rainfall.

Figure 35: Monthly Precipitation forecast

<https://www.wmolc.org/seasonPmmeUI/view?winName=PlotView1566209968309>



1. Climate Monitoring
2. Status of Drivers
3. Dynamical Model Forecast : Week 1 and 2
4. Week 1 and 2 Outlook

CLIMATOLOGY OF PRECIPITATIONS FOR UPCOMING 2 WEEKS

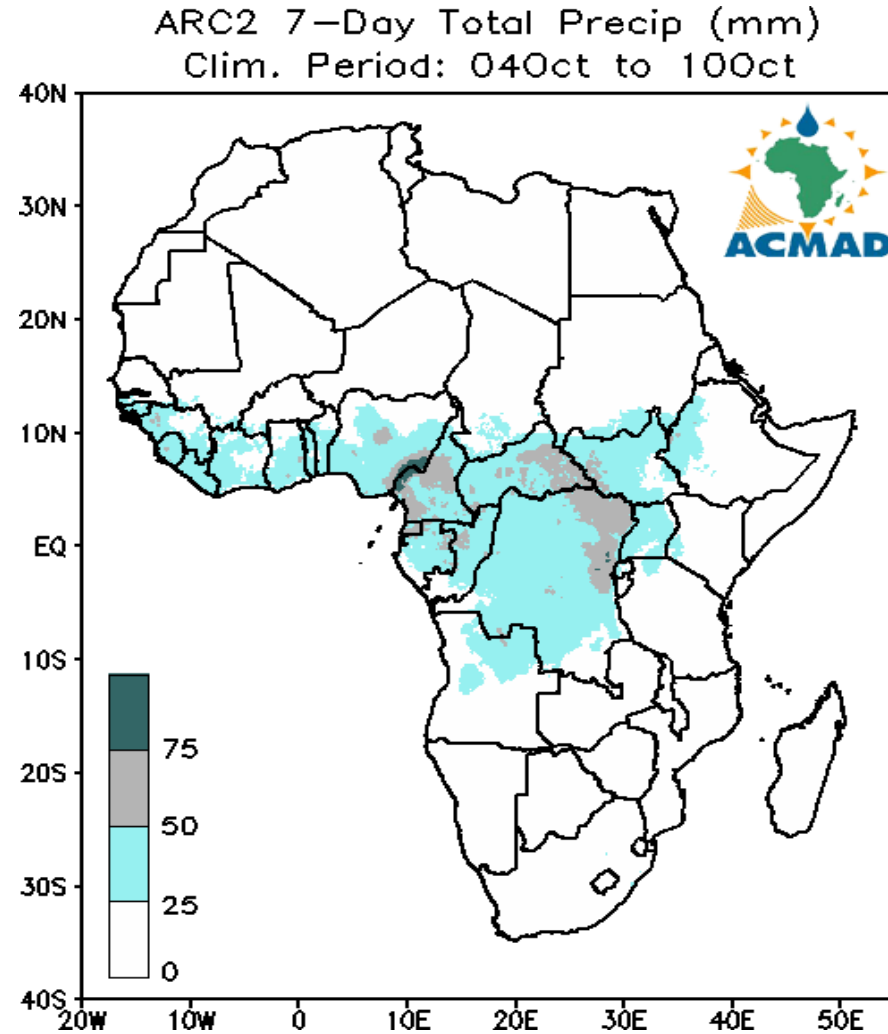
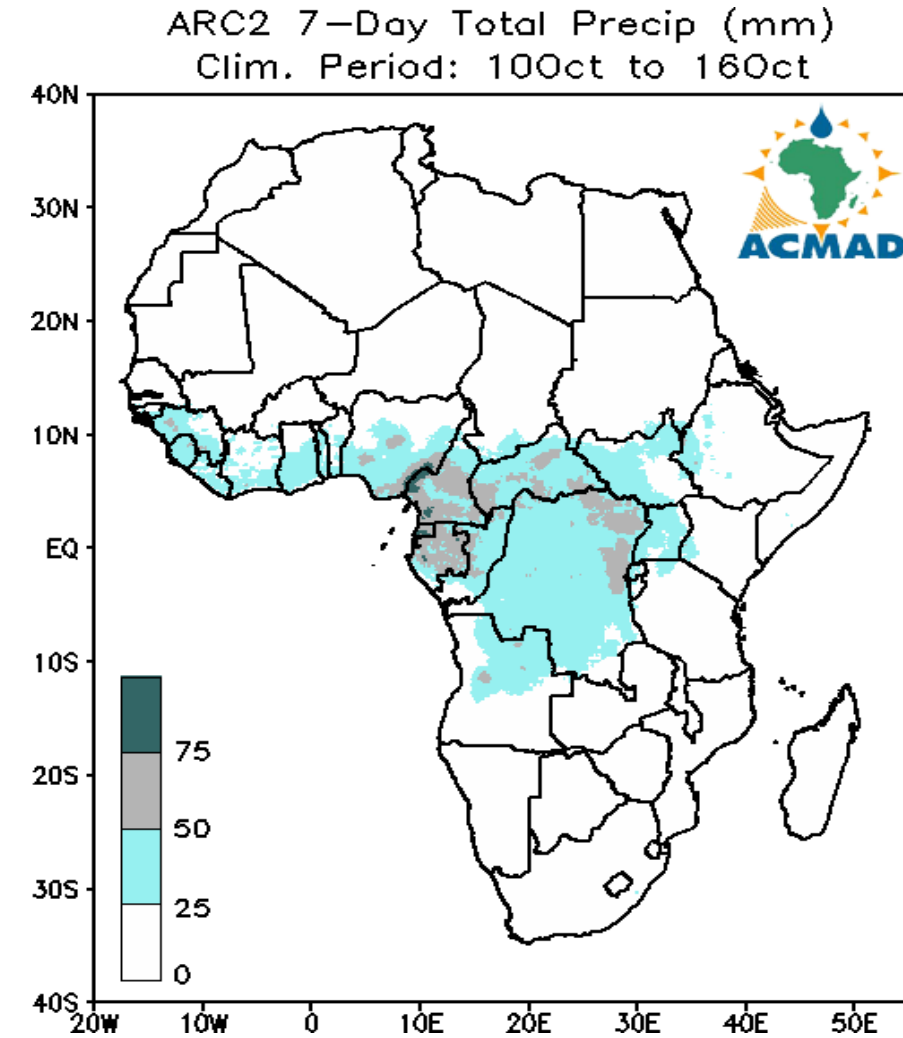


Figure 38: Climatology of Precipitation for week-1(left panel) and week-2 (right panel)

http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/CDD/ClimateBulletin_TN/Precip_Clim_Next_Days/current/Africa_ARC2_Climo_Wk1.png

http://sgbd.acmad.org:8080/thredds/fileServer/ACMAD/CDD/ClimateBulletin_TN/Precip_Clim_Next_Days/current/Africa_ARC2_Climo_Wk2.png

PRECIPITATIONS FORECAST FOR THE UPCOMING TWO WEEKS

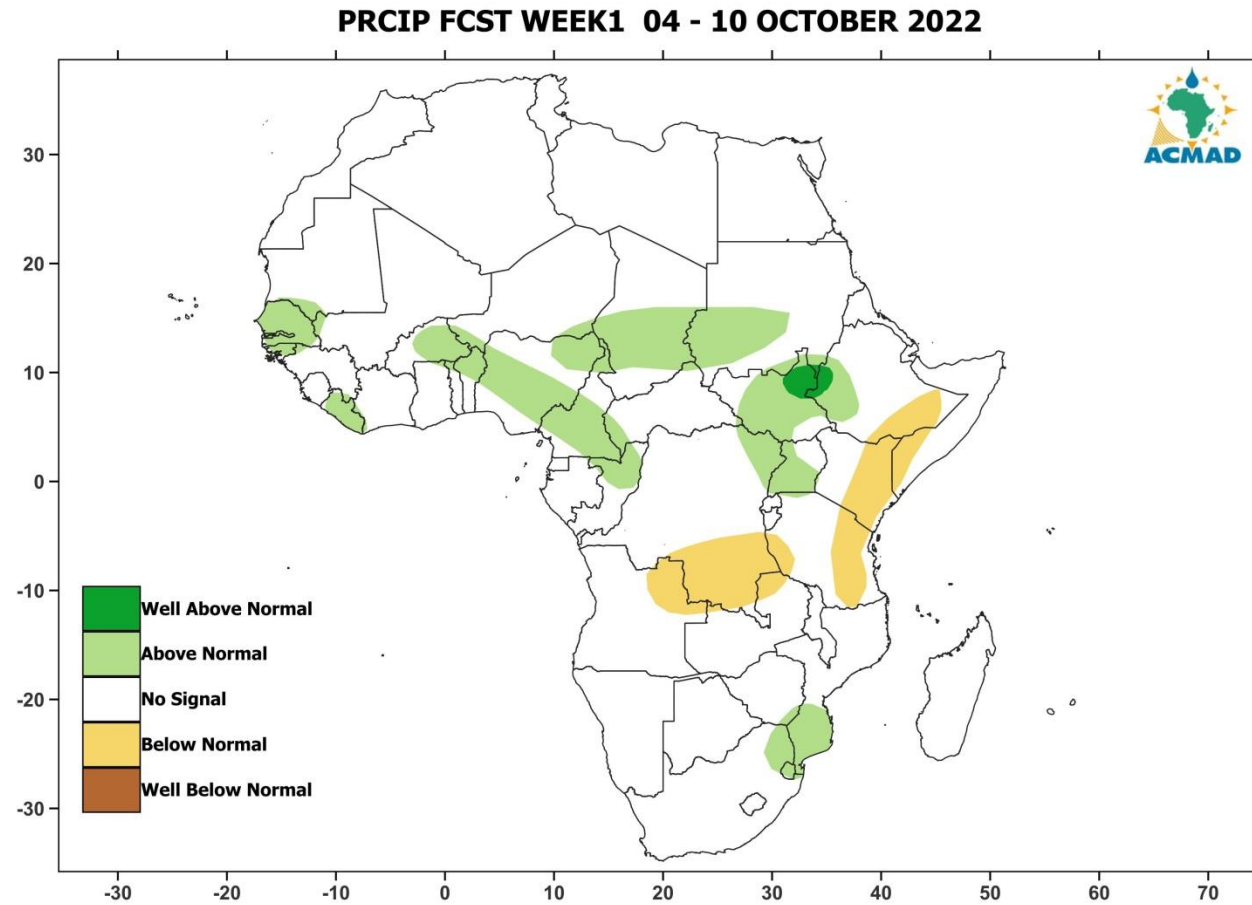
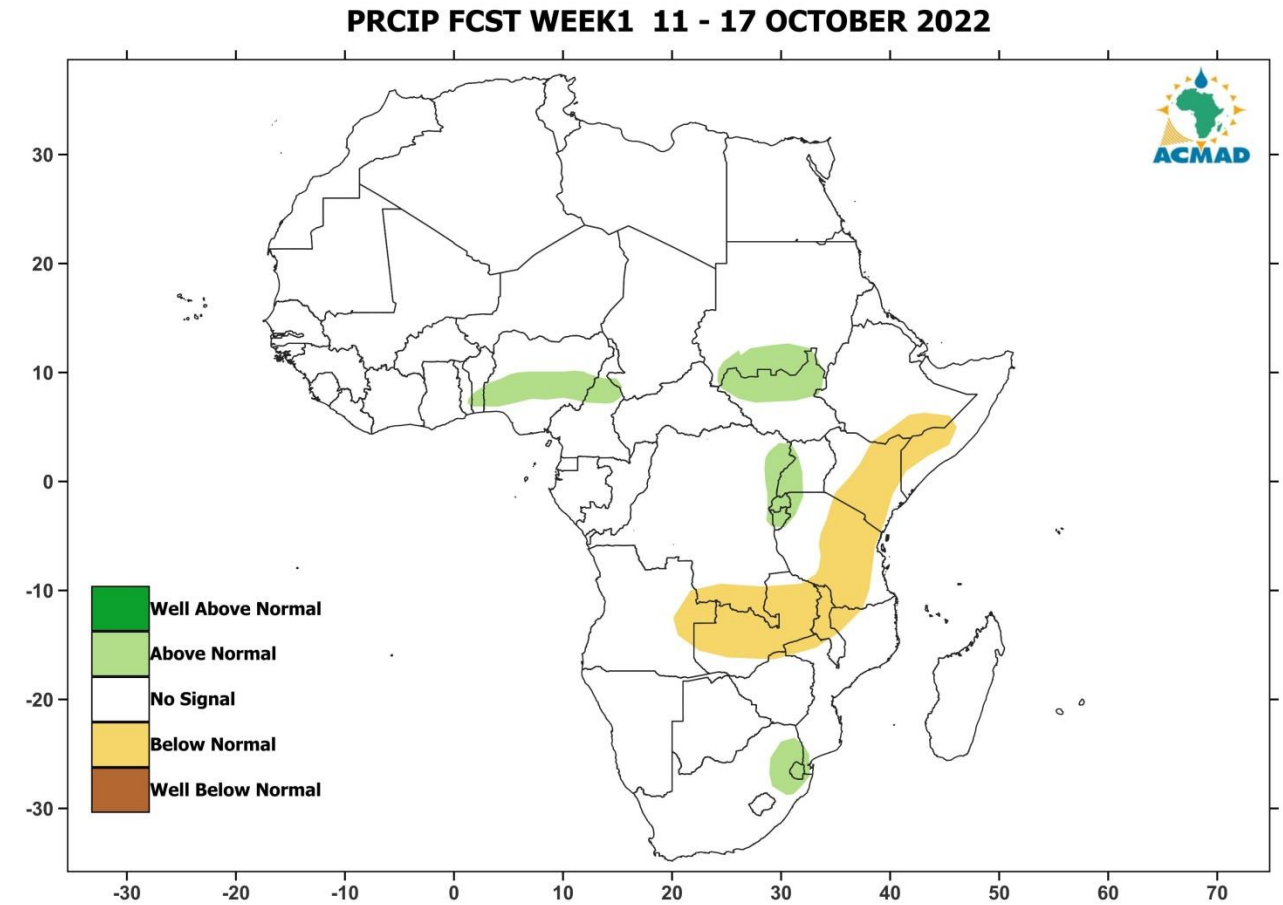


Figure 39: Precipitation Outlook for week-1 (left panel) and week-2 (right panel)