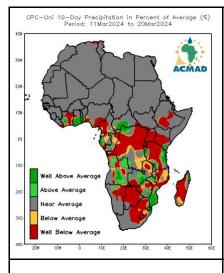
Scripts used to generate products for the 10-days Bulletin

Software involved: grads(.gs), NCL(.ncl) and R

| Products | Description | Script filename, and dependencies |
|--|--|--|
| MSLP Obs. vs Anom. for the Dekad: 11-20 Mar 2024 | Observed Mean Sea Level Pressure (MSLP) during last dekad (Tot & Anom). This is a map of last dekad mean sea level pressure (contour) and anomalies (shaded) for the globe with respect to the 1991-2020 climatology Data Sources: NCEP, ERA5 | Main script: Script_MSLP_Dekadal_Bul.sh Dependency (for plotting): template_plot_mslp_for_decadal.ncl |
| MSLP Obs. vs Anom. for the Dekad: 11-20 Mar 2023 | Same as above, but for the same dekad one year ago. Data Sources: NCEP, ERA5 | |
| Geopt @500hPa and Anom. / Dek: 11-20 Mar 2024 | Observed 500 hPa Geopotential Height during last dekad (Total & Anomalies). This is a map of last dekad 500 hPa Geopotential Height (contour) and anomalies (shaded) for the globe with respect to the 1991- 2020 climatology. Data Sources: NCEP, ERA5 | Main script: Script_GEOPT_Dekadal_Bul.sh |
| Geopt @500hPa and Anom. / Dek: 11-20 Mar 2023 30N 30N 30N 0 30E 60E 90E 120E | Same as above, but for the same dekad one year ago. Data Sources: NCEP, ERA5 | Dependency (for plotting): template_plot_geopt_for_decadal.ncl |

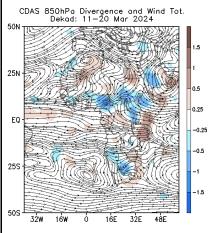


Data Sources: ARC2, RFE2, CHIRPS, TAMSAT, CPC-Unified

Main script:

Script GEOPT Dekadal Bul.sh

Dependency (for plotting): template_plot_geopt_for_decadal.ncl



Observed Wind Anomaly (Div and Tot) at 850, 700 and 200 hPa.

These products show wind divergence and total anomalies at 850, 700 and 200 hPa. They make it possible to: -examine the intensity of the West African monsoon at different levels. - to track the the position of Tropical EasterlyJet and Subtropical Jet - identify deep convective areas

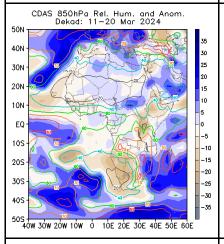
Data Sources: NCEP, ERA5

Main script:

Script_WND_Dekadal_Bul.sh

Dependency (for plotting):

template_plot_wind_for_decadal.gs src_file/color_cpt.gs src_file/xcbar_cpt.gs src_file/WMO_basemap.shp



Observed Relative Humidity Anomaly at 850 and 700 hPa. Last dekad observed Relative Humidity and anomalies at 850 and 700 hPa.

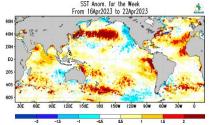
Data Sources: NCEP, ERA5

Main script:

Script RHUM Dekadal Bul.sh

Dependency (for plotting):

template_plot_rhum_for_decadal.gs src_file/color_cpt.gs src_file/xcbar_cpt.gs src_file/WMO_basemap.shp



Weekly SST Anomaly during the last four weeks.

SST anomaly maps displaying the departures from average for the last 04 weeks

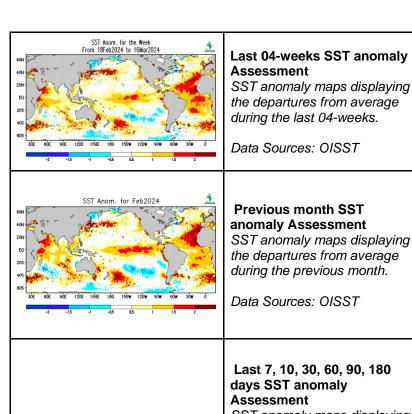
Data Sources: OISST

Main script:

Script plot Weekly SST.sh

Dependency (for plotting):

plot_weekly_sst_anom.gs src_file/acmad_sst_colors.gs



Last 04-weeks SST anomaly

SST anomaly maps displaying the departures from average during the last 04-weeks.

src_file/xcbar_cpt.gs src_file/lpoly_mres.asc

Main script:

Script_plot_Monthly_SST.sh

Dependency (for plotting):

plot_monthly_sst_Anom.gs src_file/acmad_sst_colors.gs src file/xcbar cpt.gs src file/lpoly mres.asc

Last 7, 10, 30, 60, 90, 180

SST anomaly maps displaying the departures from average during the defined periods

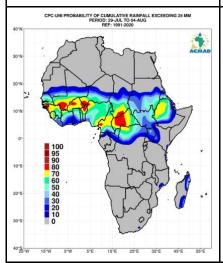
Data Sources: OISST

Main script:

Script plot sst Anom rev.sh

Dependency (for plotting):

plot sst anom rev.gs src_file/acmad_sst_colors.gs src_file/xcbar_cpt.gs src file/lpoly mres.asc



Frequency of occurrence of precipitation beyond 25, 50, 75 or 100mm during upcoming week 1 & 2

The frequencies are computed over the climatological period i.e. 1991-2020.

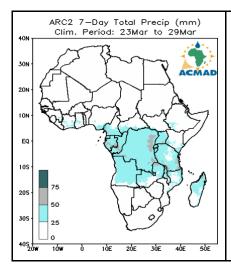
Data Sources: ARC2, RFE2, CHIRPS, TAMSAT, CPC-

Unified

Main script:

Script_GEOPT_Dekadal_Bul.sh

Dependency (for plotting): template plot geopt for decadal.ncl



Precip Climo for the upcoming week 1, week 2, 10 days

Total precipitation climo mean for the upcoming week 1, week2 and 10-days

Data Sources: ARC2, RFE2, CHIRPS, TAMSAT, CPC-Unified

Main script:

run_precip_climo_plot_next_days.sh

Dependency (for plotting):

src_file/template_climo_cpcuni.gs src_file/template_climo_arc2.gs src_file/acmad_RR_colors.gs src_file/AFR_adm2.shp src_file/AFR_adm1.shp