1. Drought Monitoring

1.1 Products

Those products are contain in the drought bulletin that is generated by month,

1.1.1 Percentage of Average

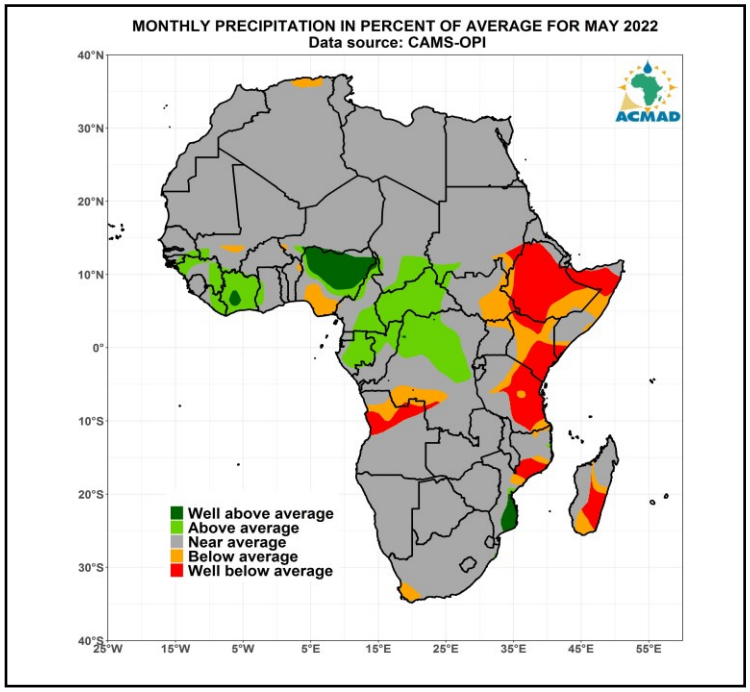
An example of the products: Precipitation in percentage of average of May 2022.

Data source link:
http://iridl.ldeo.columbia.edu/SOURCES/.NOAA/.NCEP/.CPC/.CAMS_OPI/.v0208/.mean/.prcp/Y/-40/0.5/40/GRID/X/25/0.5/55/GRID/T/(%20May%202020)/VALUES/31/mul/

The applied formula is: (X_i/M)*100)

X: Given month cumulative of the year i

M: Climatology of the Month (average from 1981-2010)



1.1.2 Soil Moisture Anomaly

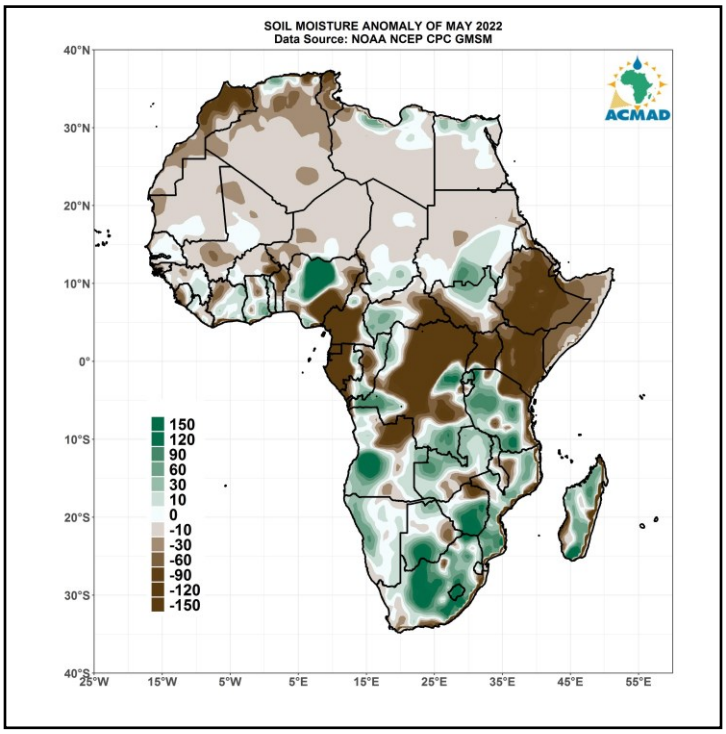
An example of the products: Soil Moisture Anomaly for May 2022.

Data source link:
http://iridl.ldeo.columbia.edu/expert/expert/SOURCES/.NOAA/.NCEP/.CPC/.GMSM/.w/Y/-40/0.5/40/GRID/X/25/0.5/55/GRID/T/(%20May%202020)/VALUES/

The applied formula is: (S_i -M)

S_i: Given month soil moisture of the year i

M: Climatology of the month (average from 1981-2010)



1.1.3 Standardized Precipitation Index (SPI)

An example of the products: SPI for March-April-May 2022.

Data source link:

http://iridl.ldeo.columbia.edu/SOURCES/.IRI/.Analyses/.SPI/.SPI-CAMSOPI_3-Month/X/-25/0.5/55/GRID/Y/-40/0.5/40/GRID/T/

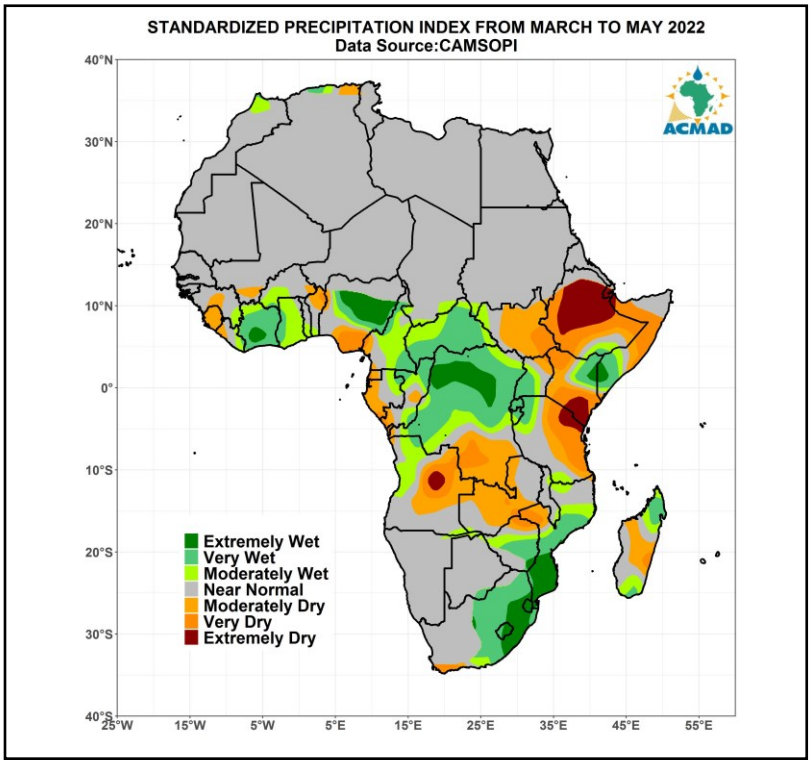
The applied formula is: (X_i -M)/SD

X_i: Given month precipitation cumulative of the year i

M: Climatology of the month (average from 1981-2010)

SD: Standard deviation of the month (from 1981-2010).

We normalize the SPI using percentage of average correction principle



1.1.4 Drought Index

By combing the three parameters above we come we this map that show the state of drought