MEDCOF-21

RCC-NA North Africa

Climate Monitoring report

October 2023

- DRAFT -

Temperature

Fig.1 shows the monthly trend in anomaly air temperature in degrees Celsius of October since 1979 until 2023. For each year, the positive anomaly is indicated by the red vertical bars and the negative anomaly is indicated by the blue vertical bars. The black line tracks the changes in the trend over time.

For October 2023, mean temperature of North Africa region was above the 1981-2010 normal by +0.3°C. The warming trend rate was about 0.4°C per decade.

Monthly Regional Land Temperature Anomalies for October from 1979 to 2023

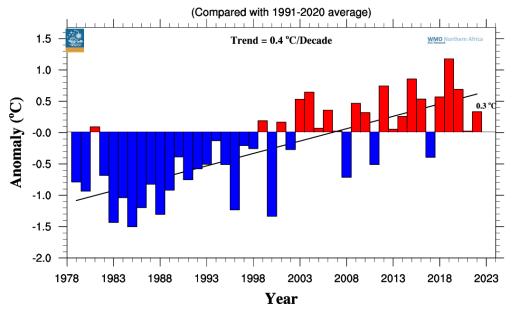


Figure 1: Monthly mean temperature anomaly for North Africa region for October 2023 with trend relative to 1991-2020

Precipitation

October 2023 was mainly drier than normal in the RAI North Africa domain. Large parts in the domain have received only less than 60% of the normal precipitation (1991-2020 reference period), particularly Tunisia, North Algeria and Morocco. It was slightly wetter than normal over the eastern part of the domain including east of libya and Egypt (but total precipitation are less than 20mm over these regions)

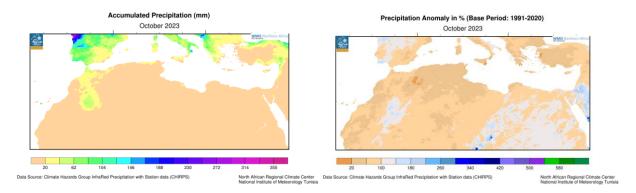


Figure 3: Left: Total precipitation; Right: Absolute anomalies of precipitation in the RAI-NA Region (North Africa)

Data from NCDC (National Climate Data Centre NOAA – reference 1991-2020)

https://www.meteo.tn/en/climate-monitoring-watch

Soil Moisture:

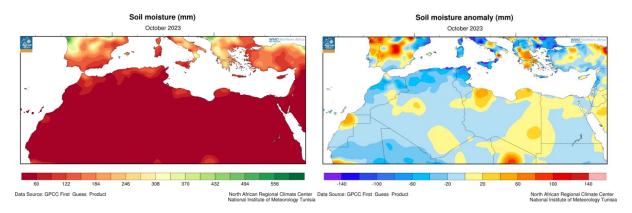


Figure 4: October 2023 soil moisture, left: monthly total, right: monthly anomalies with reference period: 1981-2010.

In October 2023, soil moisture anomalies were slightly above normal over the extreme north and the east of Libya, and over the center of Morocco. The north and center of Tunisia, north of Algeria and north of Morocco had below normal soil moisture. Elsewhere anomalies were close to normal.

References:

WMO RA I RCC Node on Climate Monitoring Website with monitoring results:

https://www.meteo.tn/en/climate-monitoring-watch