

## Monthly Climatological Report of October 2022 in Tunisia

(second driest month of October)

During October 2022, most regions of Tunisia witnessed a rise in temperature, as the general average temperature (27 main stations of the National Meteorological Network of the Institute) reached 23.3 degrees, exceeding the reference rate (1991-2020) by 1.4 degrees, which made this month ranked first Eighth for the hottest month of October since 1950.

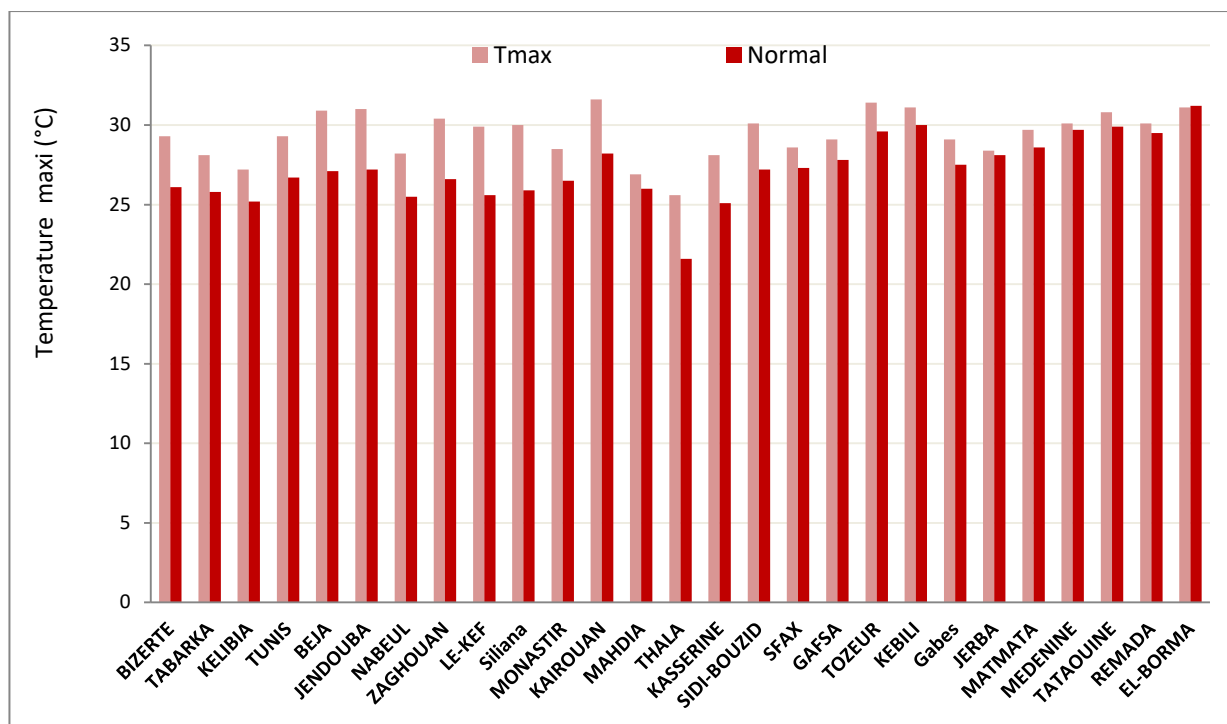
Regarding rainfall, the total for this month of October (27 main stations) was 92.8mm representing only 9% of the normal for the month (835mm) with a deficit of 90% which classifies the month of October of this year the 2nd driest year after October 1960 (62.1mm).

### - Maximum temperature:

The maximum temperature rates ranged from 25.6 degrees in Thala to 31.6 degrees in Kairouan, and were much above the reference rates in most regions, with differences ranging from +0.3 °C in Djerba to +4.3 °C in Kef, with the exception of El Borma, where the average reached 31.1 °C and was slightly lower than the reference average by a slight difference of -0.1 °C. As for the general average (27 main stations) for the maximum temperature, it reached 29.4 °C and it exceeded the reference average for the same stations (27.2 °C) by a difference of (+2.2 °C). It should be noted that four stations recorded new record rates during the month of October 2022.

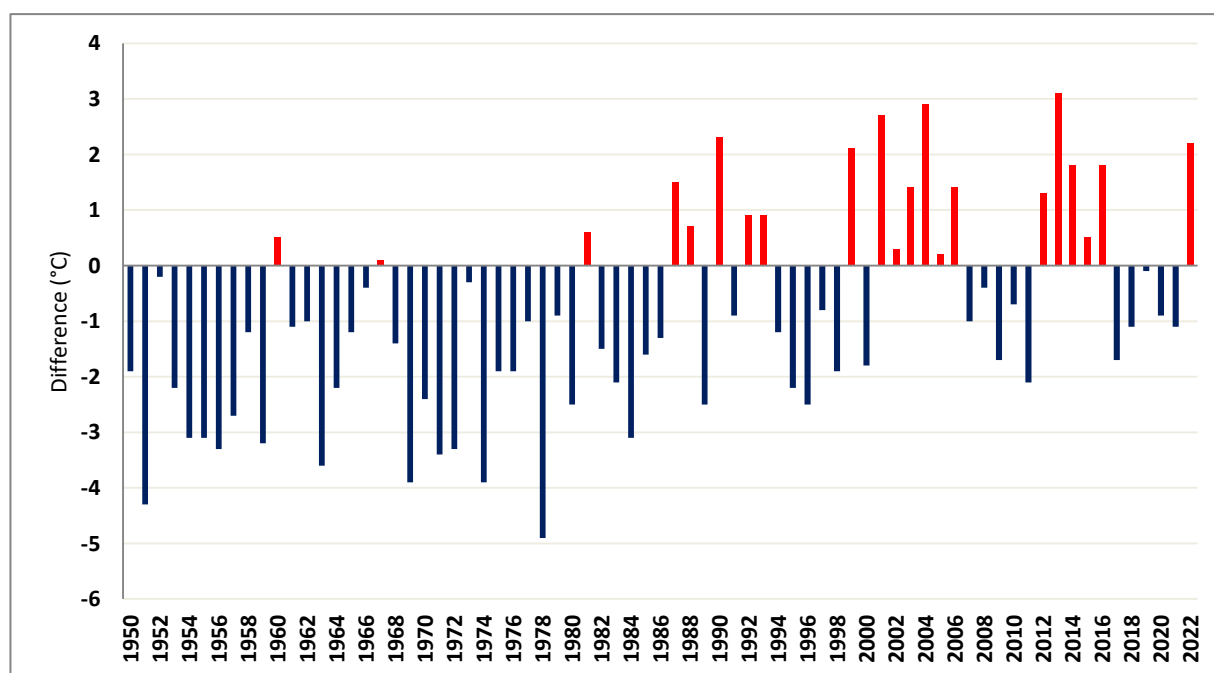
#### New records of the monthly average maximum temperatures of October 2022:

Station	New Record	New Record	Date
Bizerte	29.3	29.2	October 2001
Kef	29.9	29.7	October 2013
Siliana	30	29.7	October 2004
Kairouan	31.6	30.6	October 2004



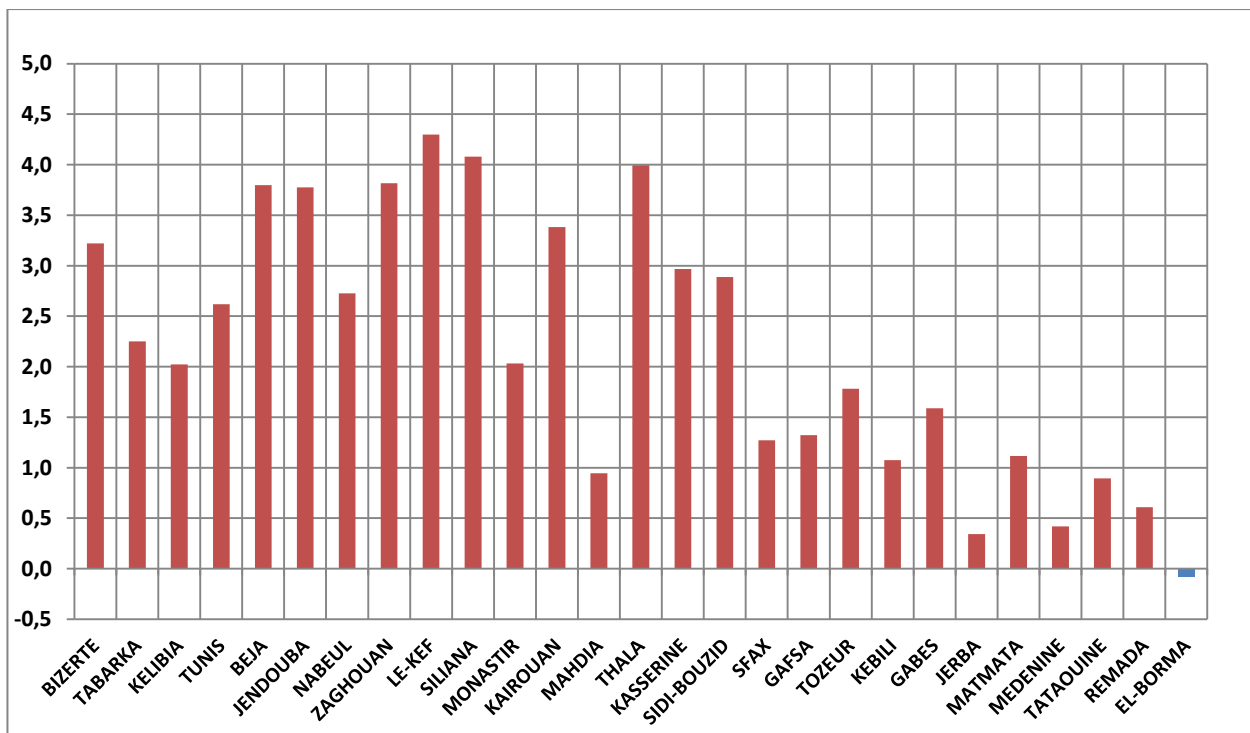
Comparison of the average maximum temperature of October 2022

with the reference rates (1991-2020)



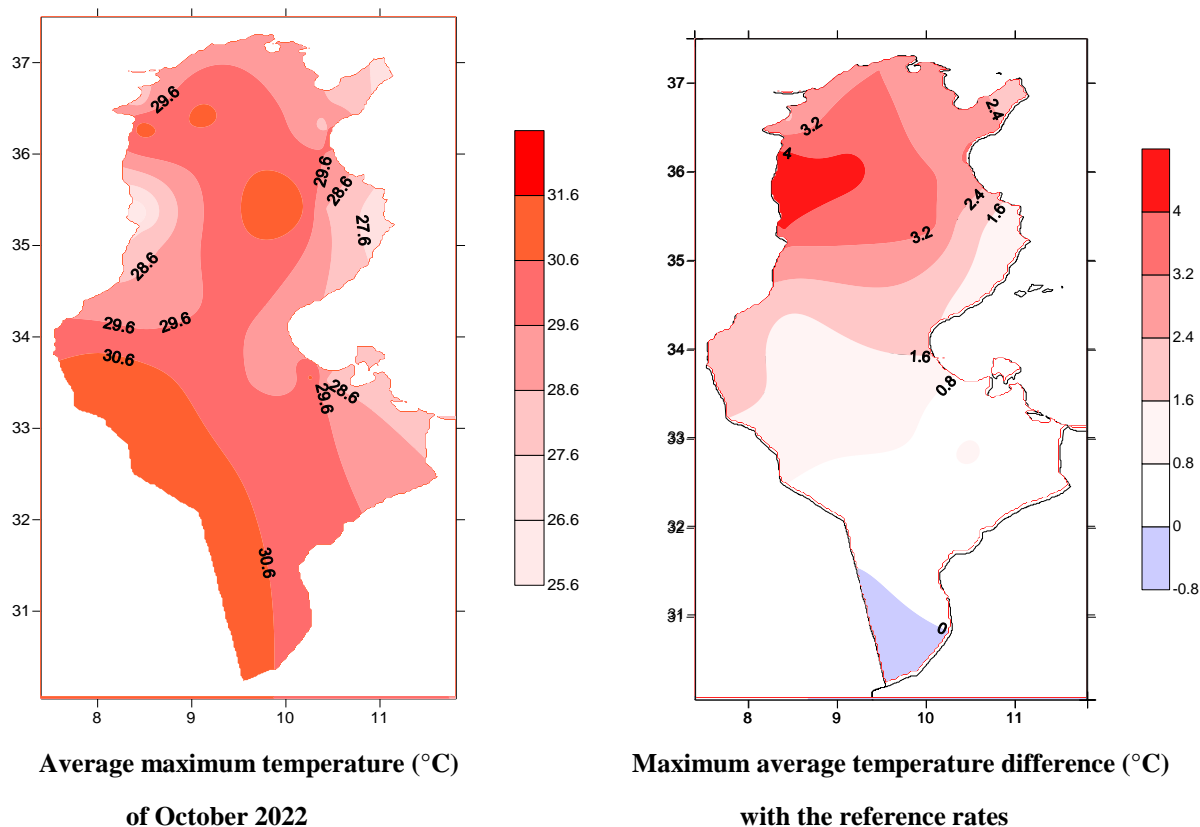
The difference in the average maximum temperature during the month of October

relative to the reference average (1991-2020) since 1950



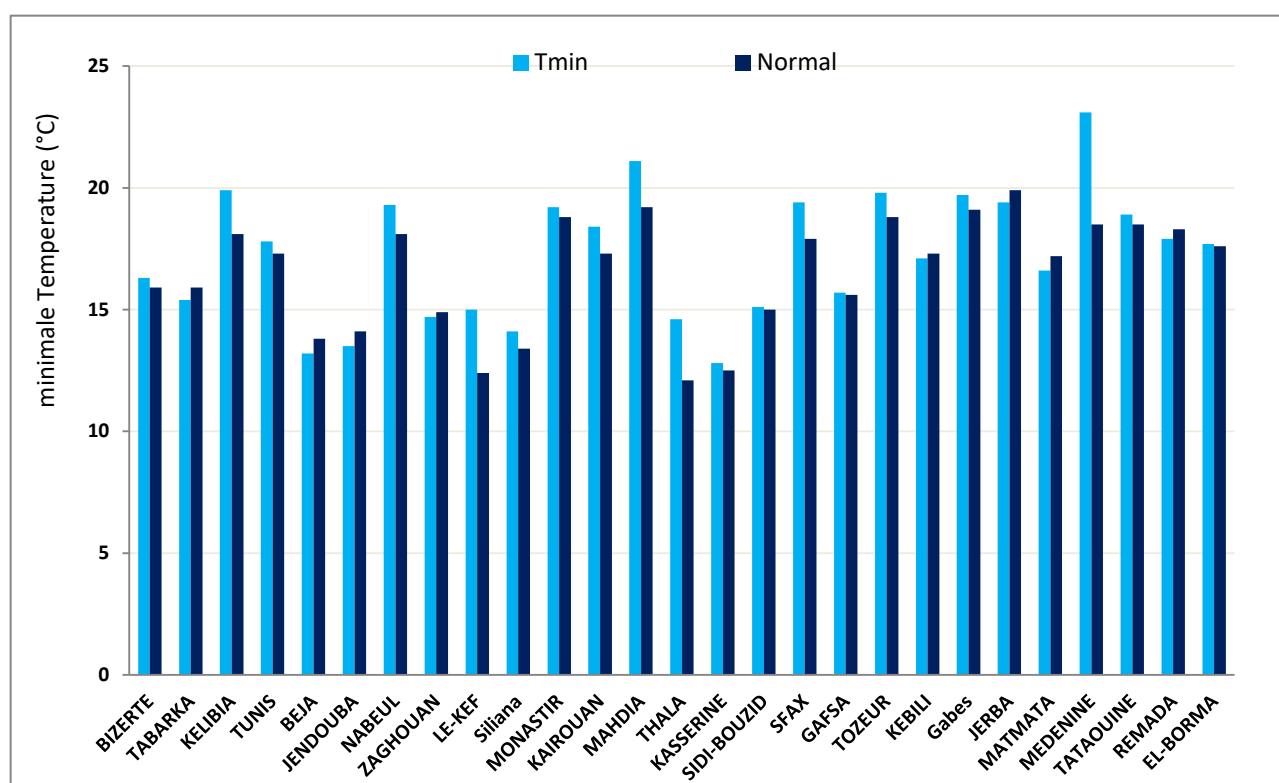
The difference in the average maximum temperature of October  
relative to the reference average (1991-2020) in each station

### - Geographical distribution of maximum temperature:

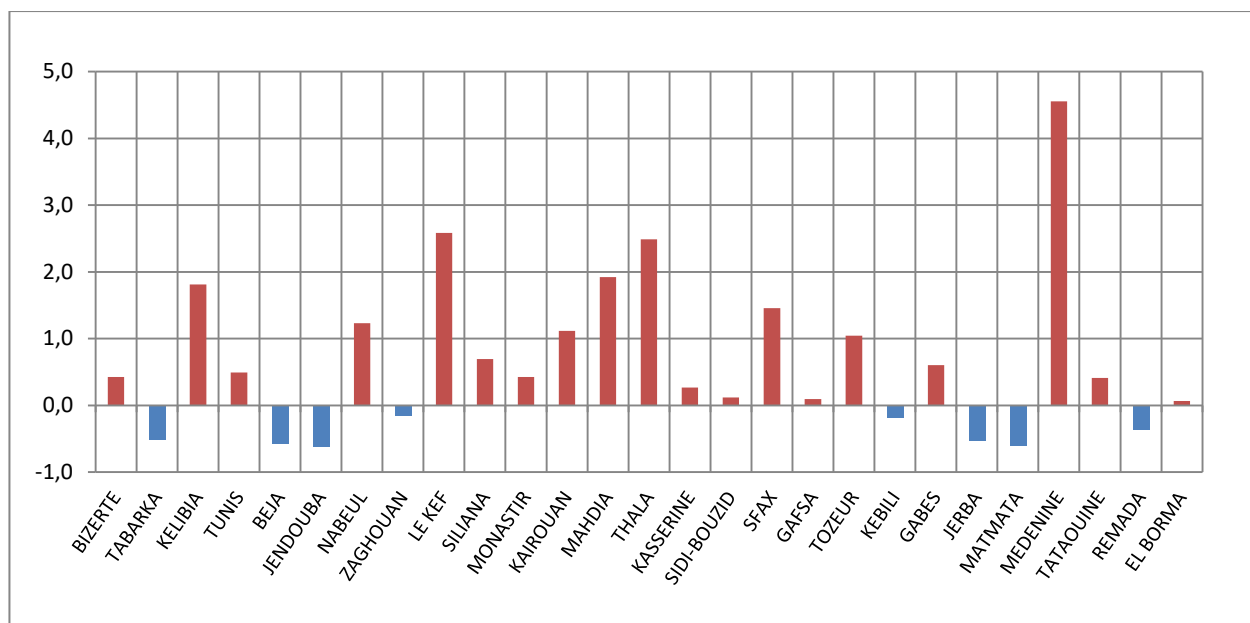


## - Minimum temperature:

Minimum temperatures ranged between 12.8 °C in Kasserine and 23.1 °C in Medenine, and were above the reference rates in most regions, and the differences ranged from +0.1 °C in Gafsa, Sidi Bouzid and El Borma to +4.6 °C in Medenine, with the exception of Beja, Jendouba, Tabarka, Zaghouan, Kebili, Matmata and Djerba, where the rates were lower than averages. The reference differences ranged from -0.2 °C in Zaghouan and Kebili to -0.6 °C in Beja, Jendouba and Matmata. The absolute minimum temperature was 7.4 °C in Kasserine on October 30, 2022. As for the average minimum temperature, it was 17.2 °C, which was above the reference average (16.6 °C) by a difference of +0.7 °C.

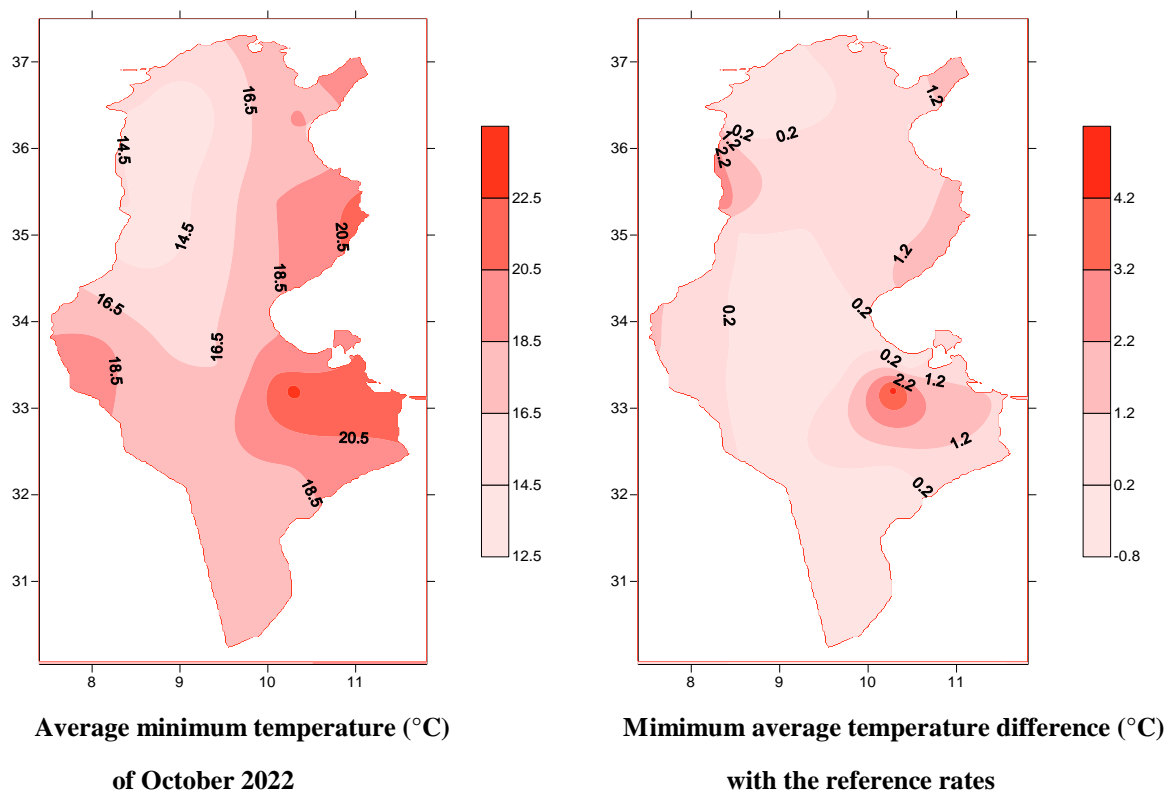


Comparison of the average minimum temperature for the month of October 2022  
with the reference rates (1991-2020)



**The difference in the average minimum temperature of October  
relative to the reference average (1991-2020) since 1950 at each station**

### -Geographical distribution of minimum temperature :

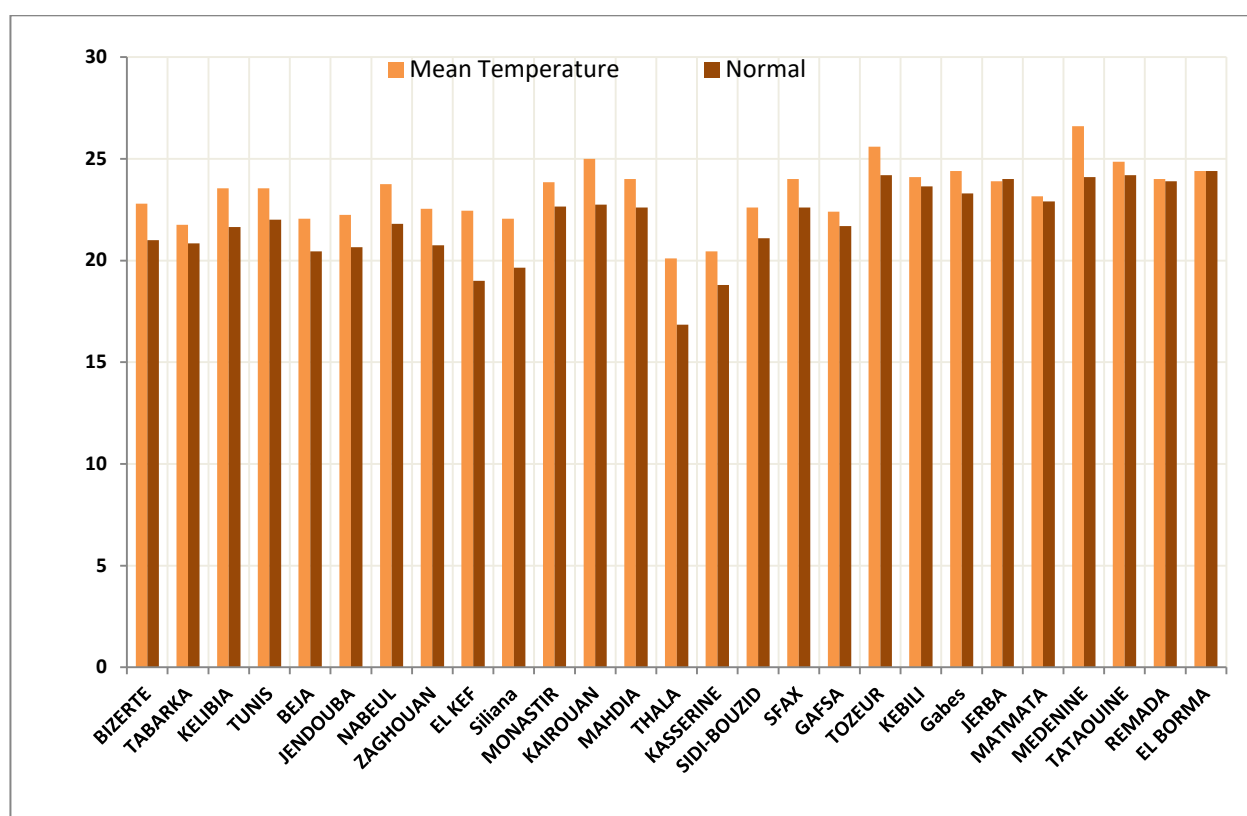


## Mean temperature:

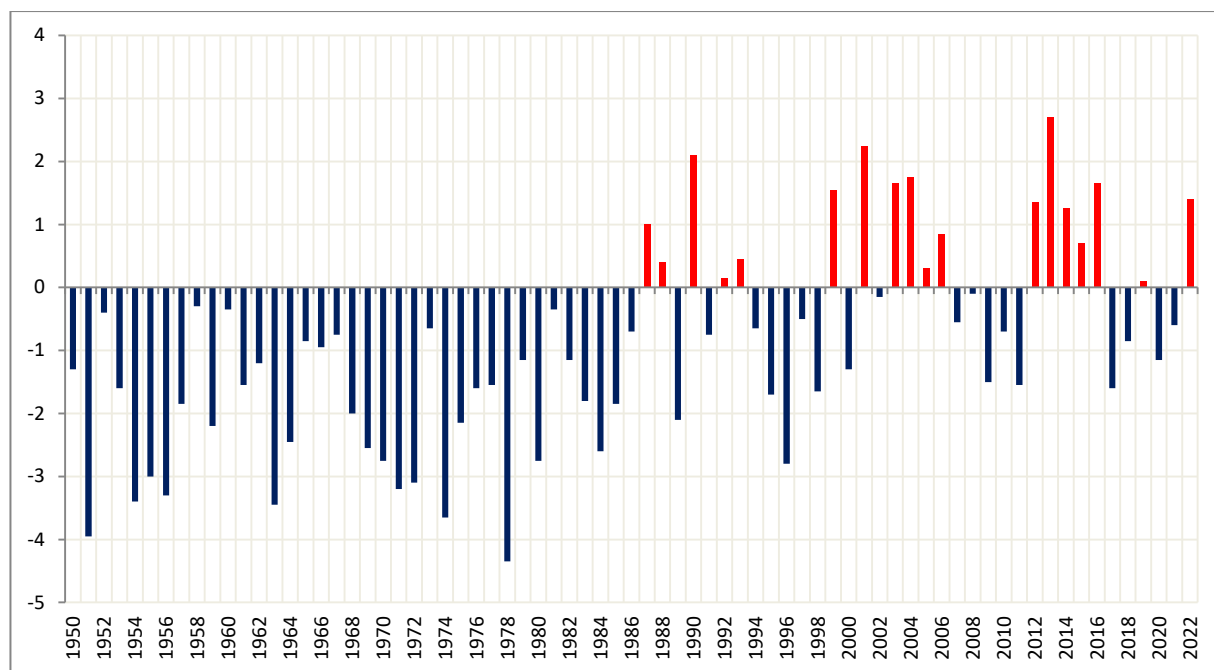
Data by region:

At the regional level, with the exception of Djerba and El Borma, mean temperatures exceeded the reference rates, and the differences ranged from +0.1 °C in Ramada to +3.5 °C in Kef.

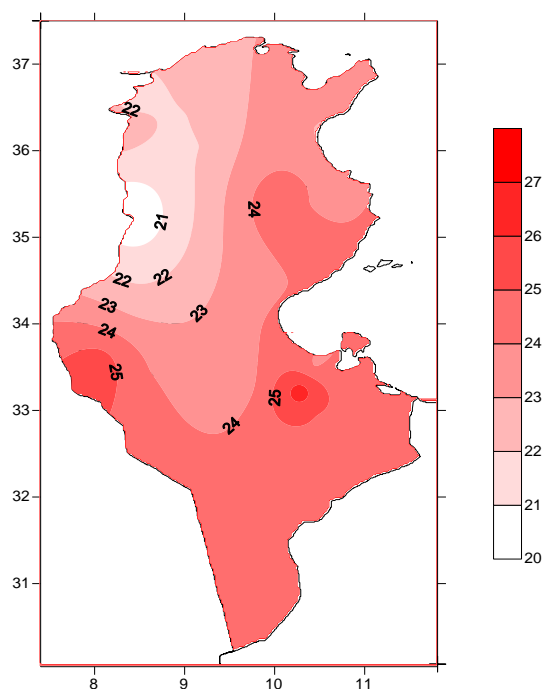
A new average temperature record for the month of October was recorded in El Kef, when it reached 24.1 °C, while the old record for this station was 23.1 °C on October 2013.



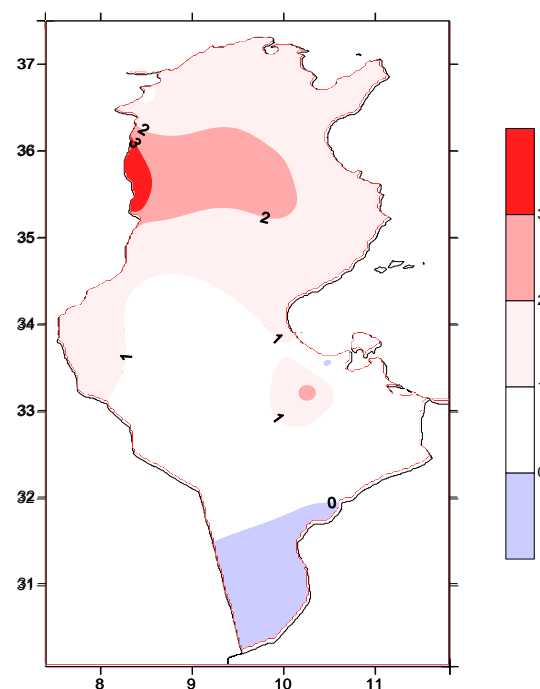
Comparison of the average temperatures of October 2022 with the reference rates (1991-2020)



**The difference in the average temperature of October  
relative to the reference average (1991-2020) since 1950**

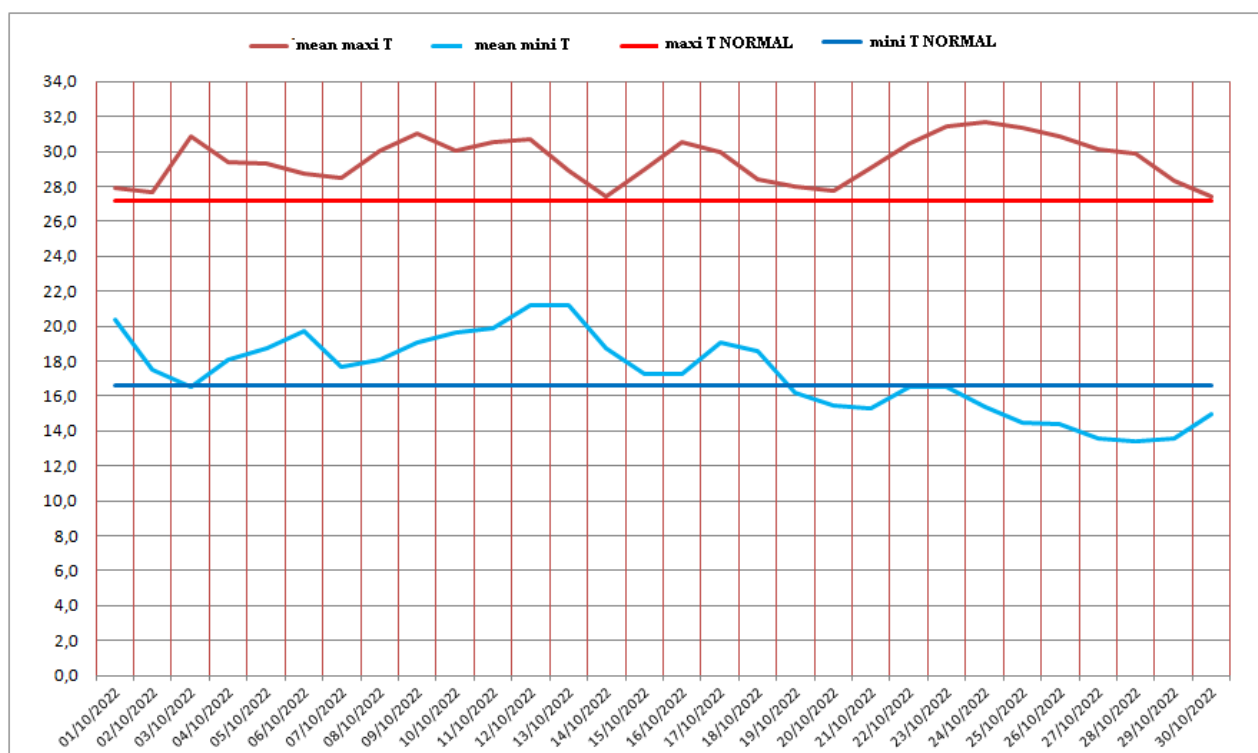


**Mean temperature (°C)  
for the month of October 2022**



**Mean temperature difference (°C)  
with reference rates (1991-2020)**

## -The daily development of the maximum and minimum temperatures during October 2022:



Daily evolution of the maximum and minimum temperatures during October 2022  
compared to the reference rates (1991-2020)

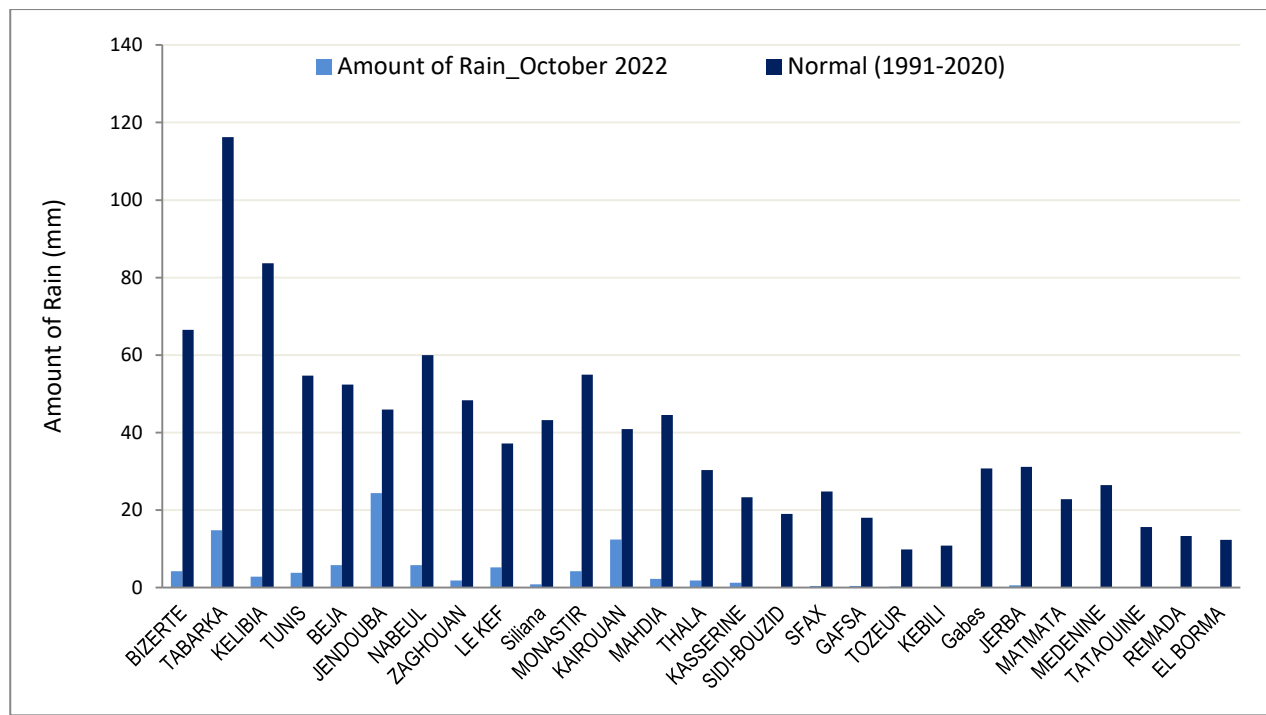
During the month of October 2022, the average daily maximum and minimum temperatures were higher than normal. While the daily minimum temperatures witnessed a relative decrease during the last decade of the month.

## - Precipitation :

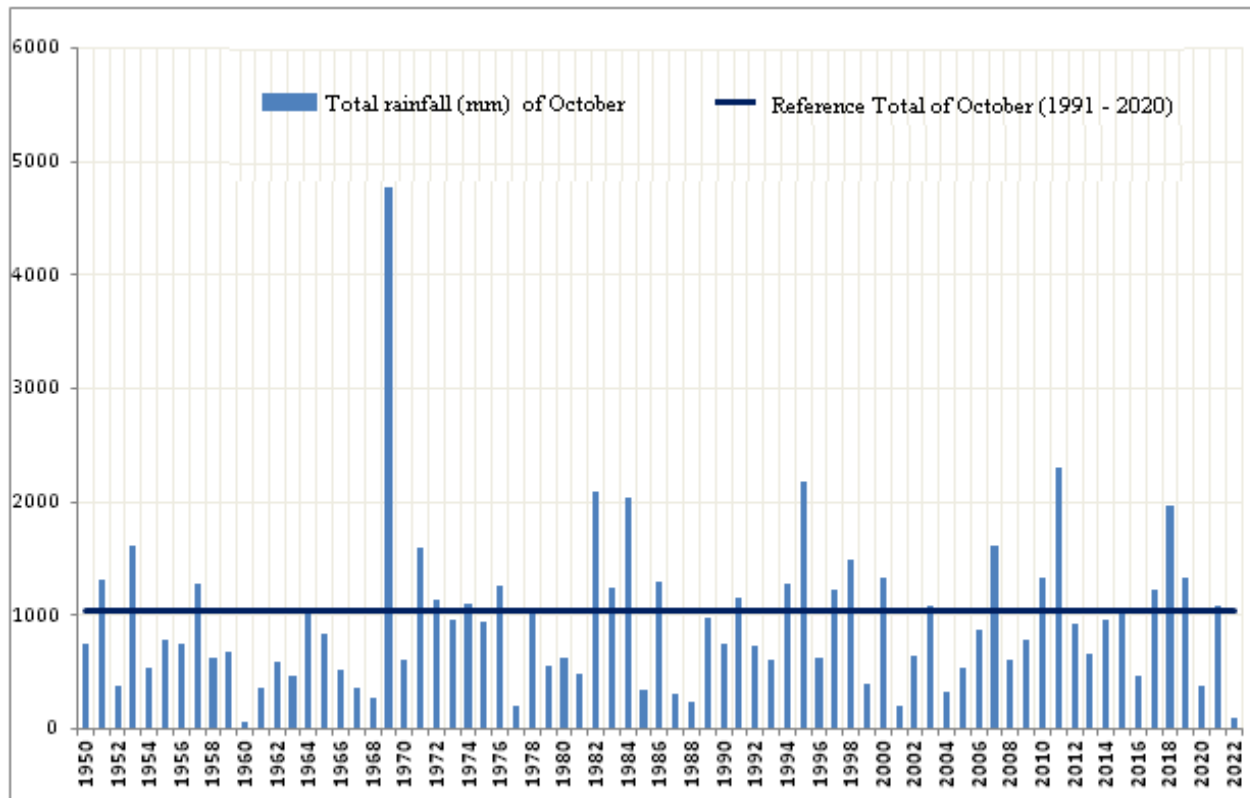
During the month of October 2022, the monthly total amount of precipitation (27 main stations) reached 92.8 mm, which represents only 9% of the reference total (1991-2020) for the month of October for the same stations.

Depending on the total amounts of precipitation recorded, the month of October 2022 is considered the driest month since 1990 and the second driest month of October since 1950 after October 1960.

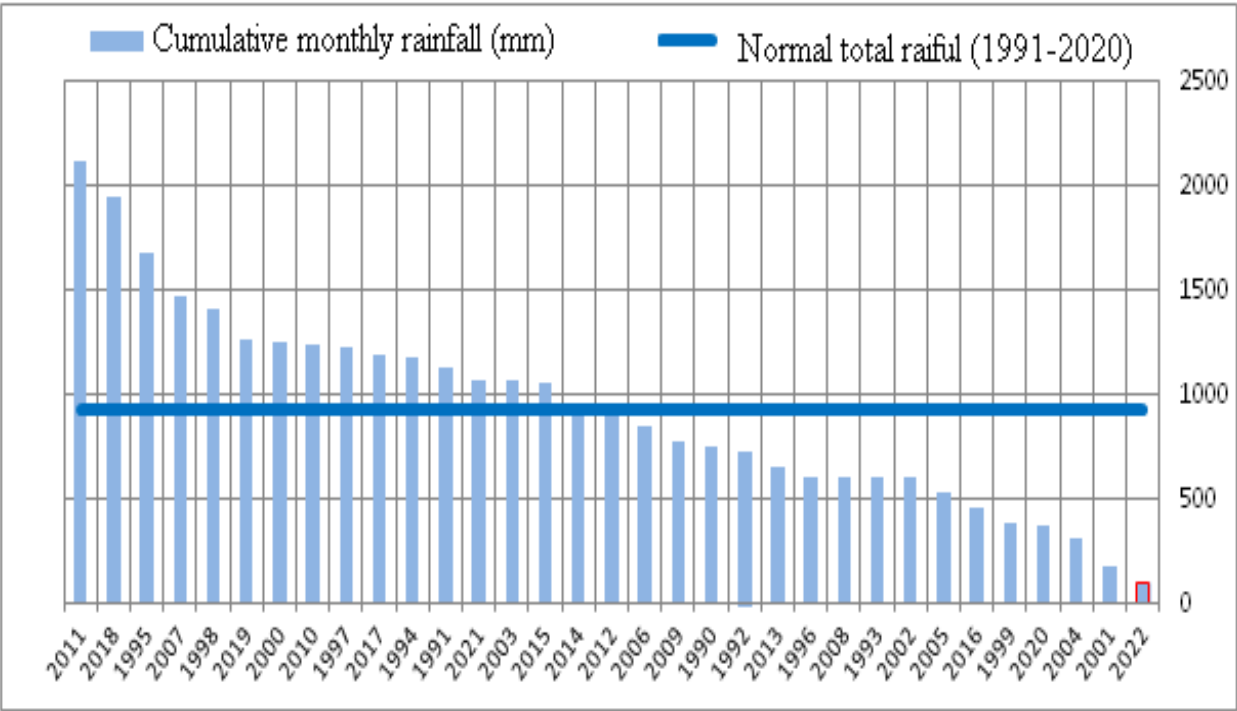




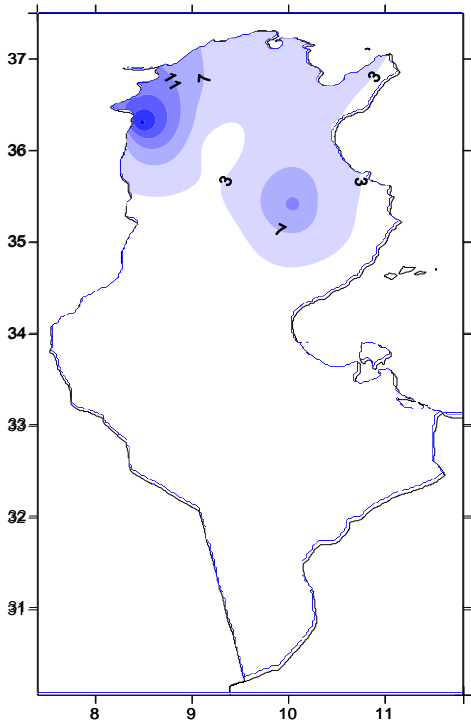
**Comparison of the total amounts of precipitation (mm) for the month of October 2022  
with the reference total (1991-2020)**



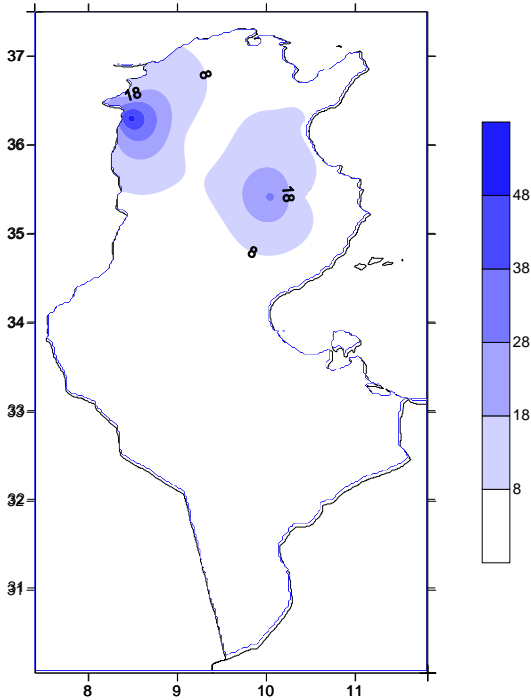
**Total rainfall (mm) in all main stations for the month of October since 1950**



Arrangement of total rainfall amounts for the month of October since 1990



Total rainfall in the main stations (mm)  
October 2022



Percentage of total rainfall of October 2022  
(%) to the reference monthly total

### - The winds :

The winds were generally weak and moderate, and their speed increased during the first day of October 2022 in most regions, and the maximum speed was uneven and ranged between 54 km / h in Tunis and 72 km / h in Nabeul.

The winds were also strong during the fifth day of the month in the southwestern regions, reaching 54 km/h in Tozeur and Kebili.

The winds were strong during the days of 8 and 9 October in the north and in the center, and the maximum speed ranged between 54 km / h in Beja and 65 km / h in Kasserine.

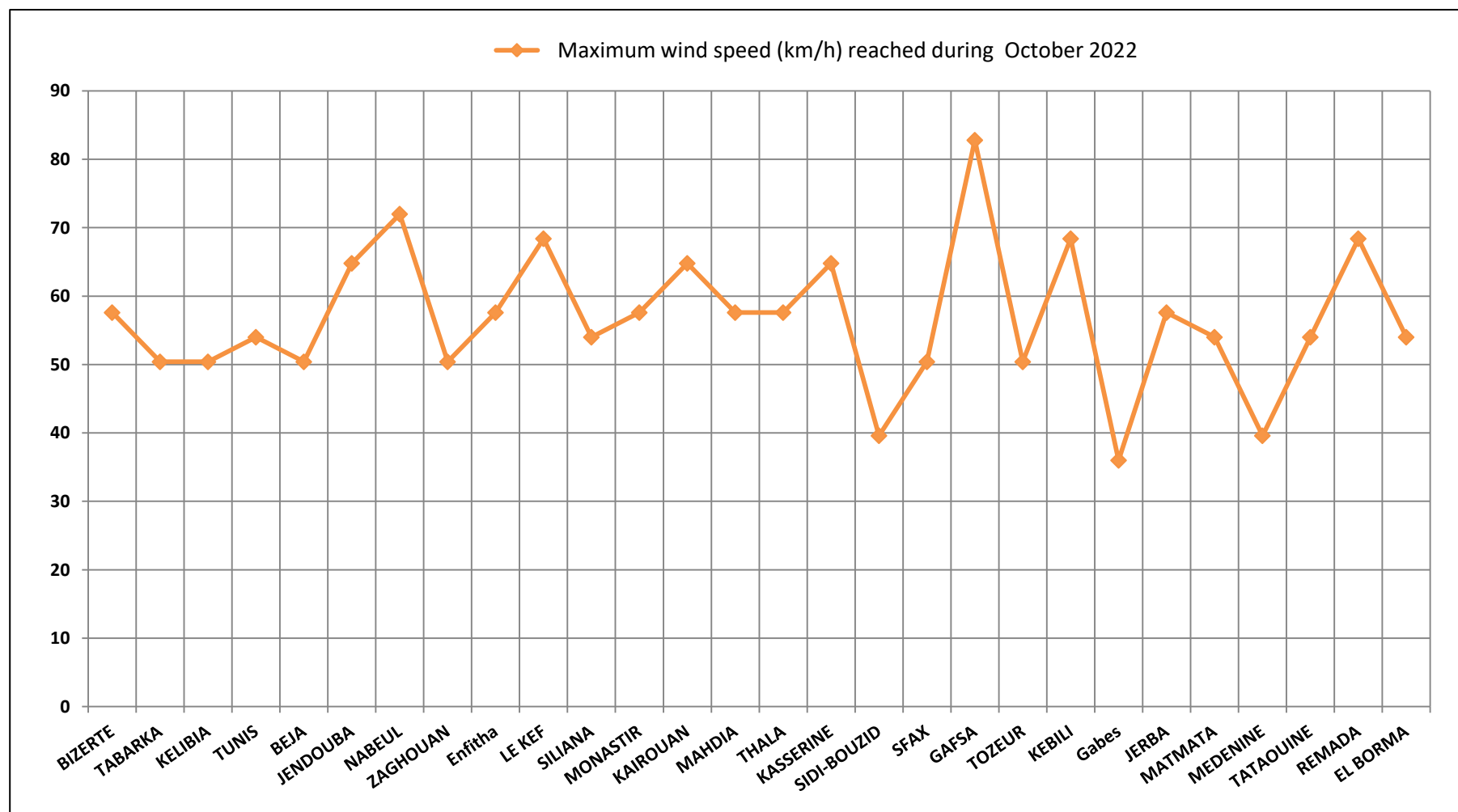
The winds were also strong during the days of 12, 13 and 14 October 2022 in most regions, and their maximum speed varied between 54 km / h in Tabarka and 79 km / h in Gafsa.

As for the second half of October 2022, it was characterized by stability in weather factors, and the winds were generally weak to moderate in most regions.

**(Fig n°01 and Fig n° 02) :**



Figure n° 01



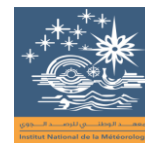


Figure n° 02

