

## Monthly Climatological Report of December 2022 in Tunisia

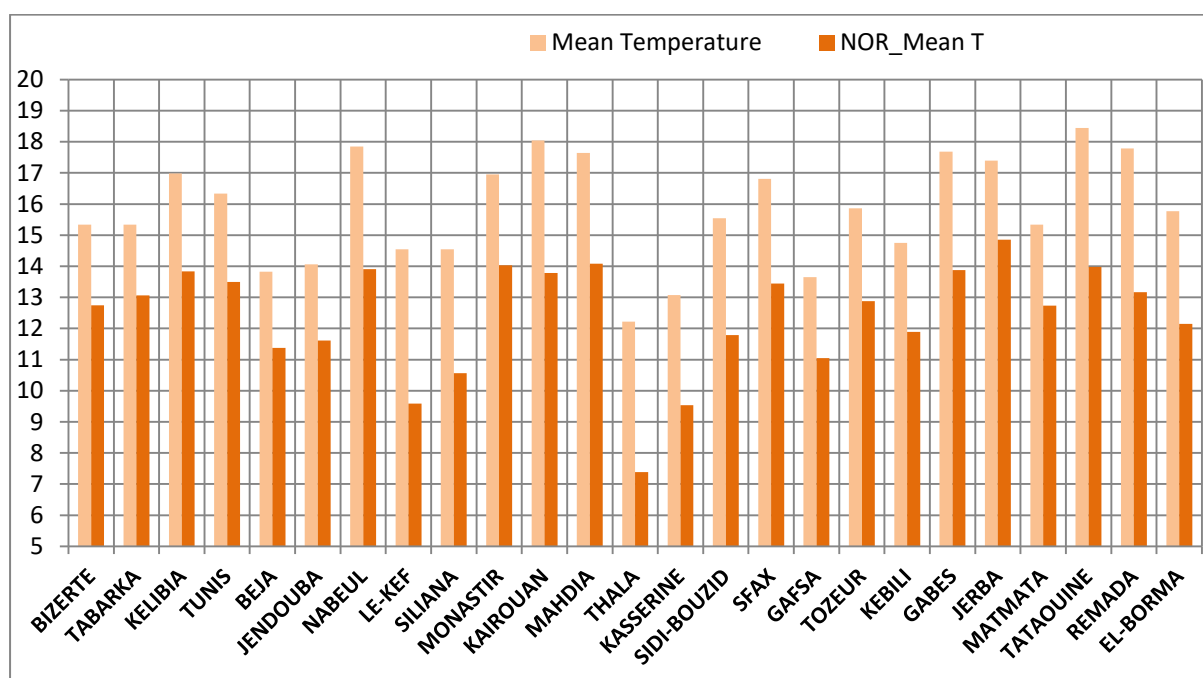
### ( the hottest and the driest December since 1950 )

December 2022 was marked by a remarkable and exceptional rise in temperature in most regions. The average temperature exceeded the benchmark by +3.4 degrees, making December this year the **hottest** December since 1950.

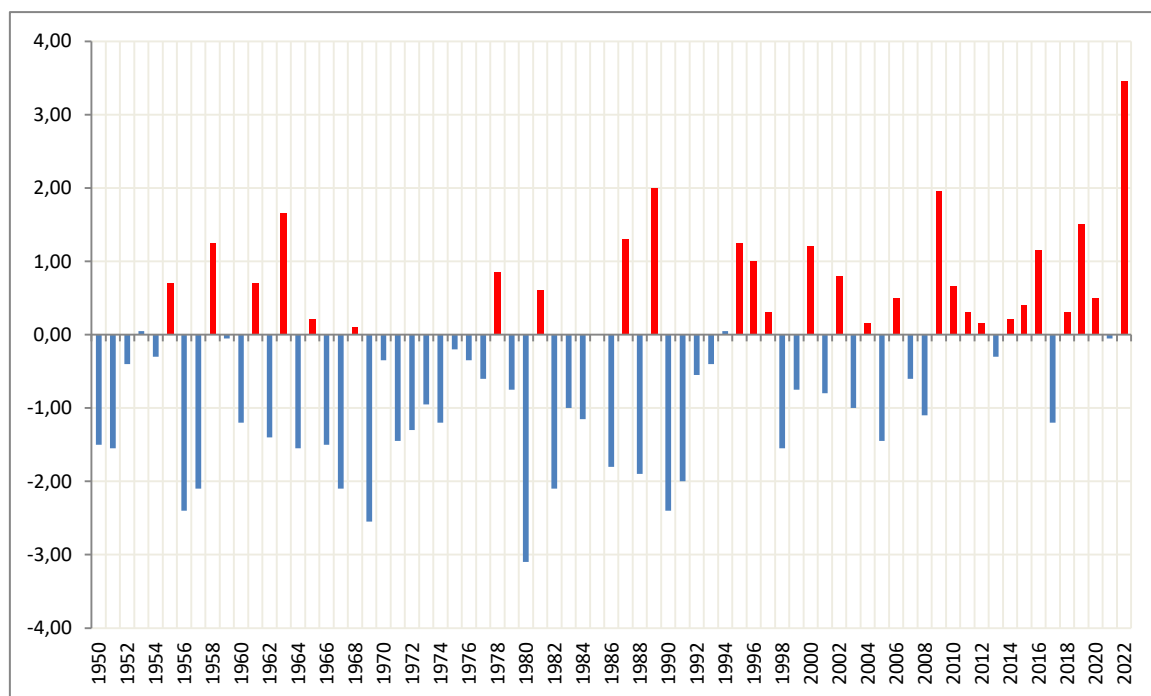
With regard to rain, and after the dry autumn season that it witnessed in most regions, the decrease in the amount of rain continued during the month of December, as the total amount (25 main stations) for the month reached 135.7 millimeters, while the reference rate for the same stations was 1050.5 millimeters and thus the percentage of the decrease in general reached 87 % of which ranks December 2022 the driest month of December since 1950.

#### - Mean temperatures:

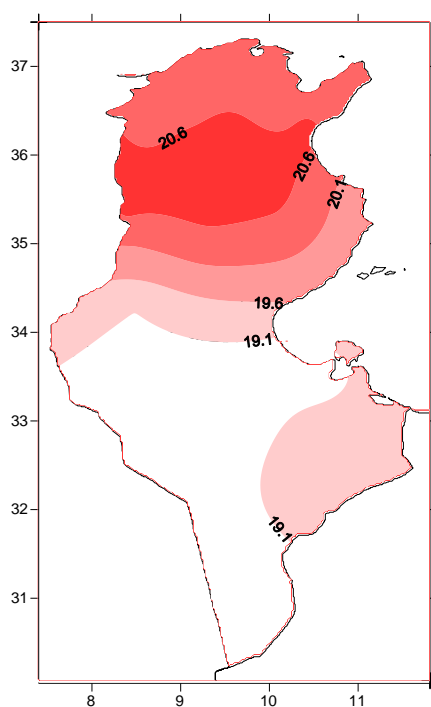
The average of mean temperatures ranged between 12.3 degrees in Thala and 18.5 degrees in Tataouine, and were above the reference rates (1991-2020) in all regions, as the differences ranged from +2.3 degrees in Tabarka to 5.2 degrees in Kef. As for the overall average temperature (25 main stations), it reached 15.8 degrees, exceeding the reference average (12.4), with a significant difference of +3.4 degrees, which classified December 2022 as the hottest month since 1950.



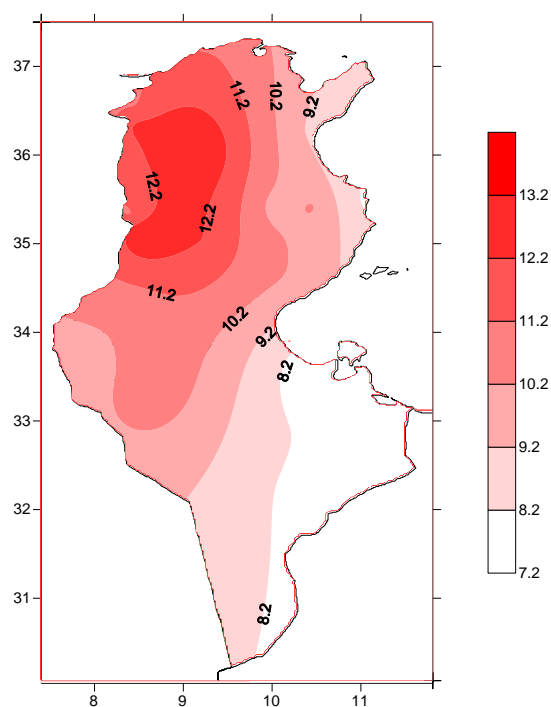
Comparison of mean temperatures (December 2022) with reference rates (1991-2020)



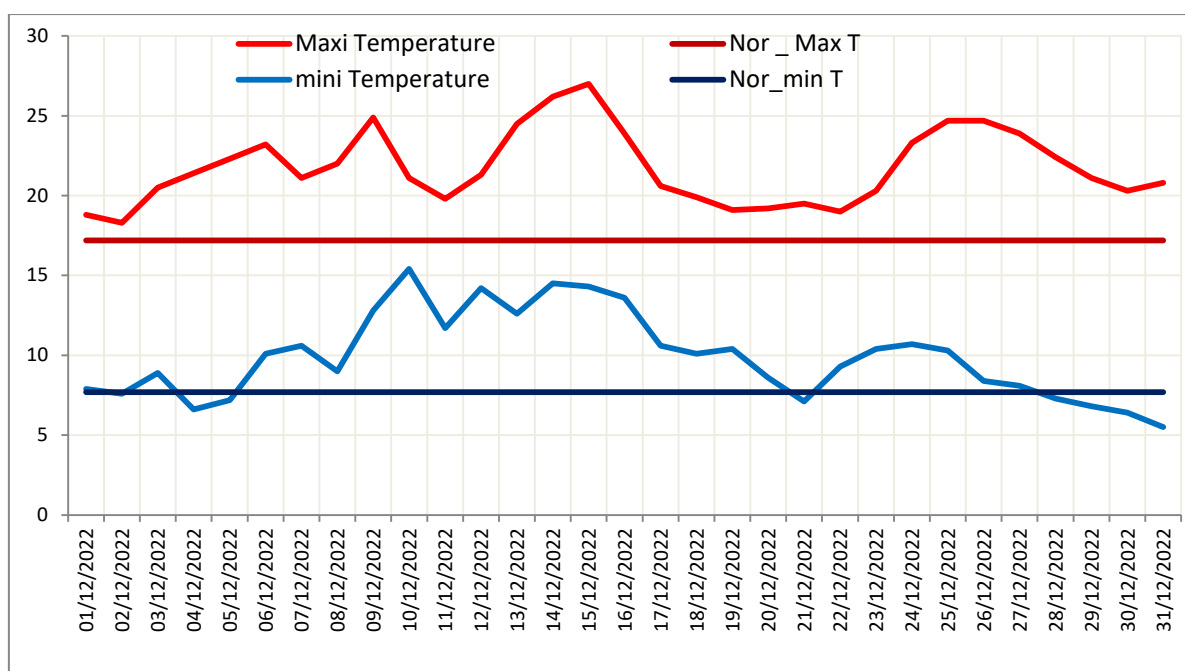
The difference in the average temperature during December relative  
to the reference rate (1991-2020) since 1950



Mean temperatures (°C)  
during December 2022



Average temperature difference  
about the reference rate (1991-2020)



#### Daily evolution of temperatures in Tunisia compared to the reference rates for December (1991-2020)

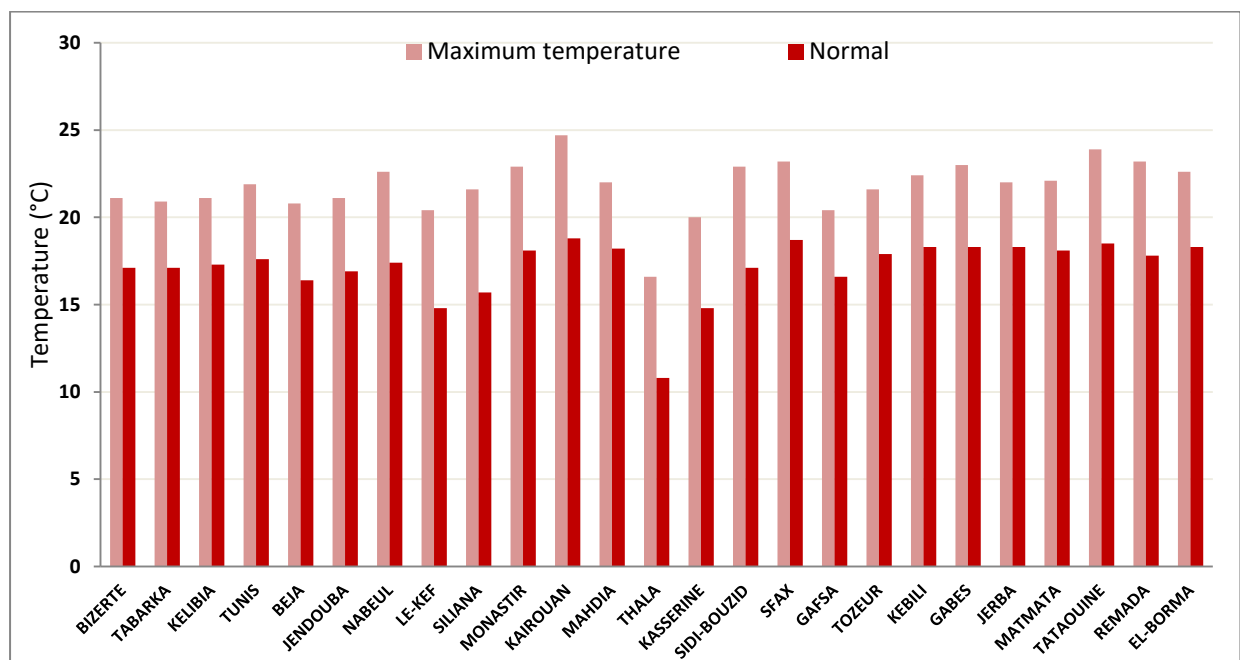
During the month of December 2022, temperatures were exceptionally high in all regions, as they significantly exceeded the reference rates until the sixteenth day of the month. Starting from the eighteenth day of the month, the temperature decreased relatively without falling below the reference rate, then the temperature rose again until the date 28 of the month.

#### - Maximum temperature :

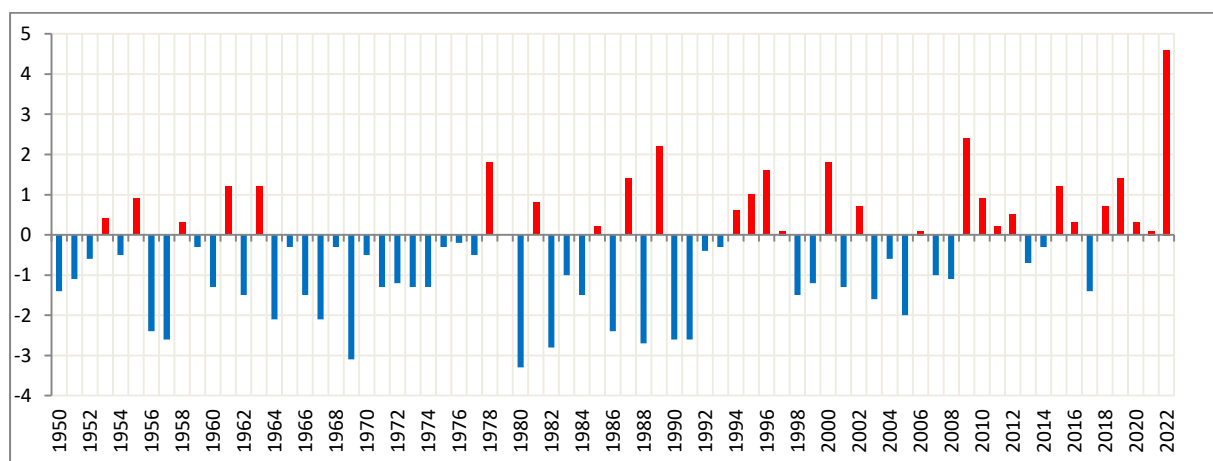
The maximum temperature was high in all regions, especially during the period from 13 to 16 December of the month. New records have been set for some stations, as shown in the following table:

Station	New Record °C	Date	Old Record °C	Date
Monastir	30,1	12/15/2022	29,7	12/30/2009
Sfax	28,7	12/14/2022	28,6	12/01/2010
Kebili	29,4	12/15/2022	28,9	12/01/2010
Matmata	29,5	12/15/2022	29,0	12/04/2000
Jerba	30	12/15/2022	28,6	12/02/2004

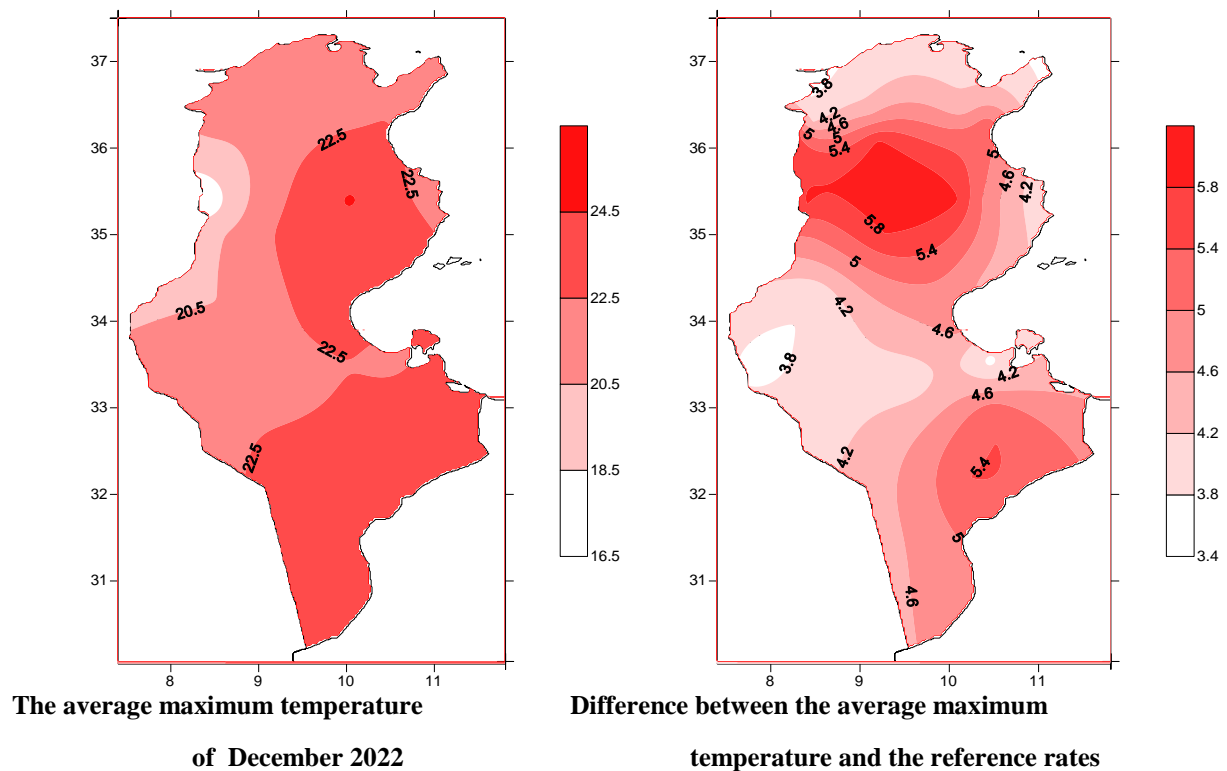
As for the average maximum temperatures, they ranged from 16.7 degrees in Thala to 24.7 degrees in Kairouan, and were above the reference rates in all regions, where the differences ranged from +3.7 degrees in Tozeur and Jerba to +4.7 degrees in Kef. The absolute maximum temperature reached 30.1 degrees in Monastir on December 15, 2022. As for the general average (25 main stations), the maximum temperature reached 21.8 degrees, exceeding the reference average + degrees, which made December 2022 classified as ranked first in the hottest months of December in Tunisia since 1950.



**Comparison of the average maximum temperature on Decembre 2022  
with the reference rates (1991-2020)**



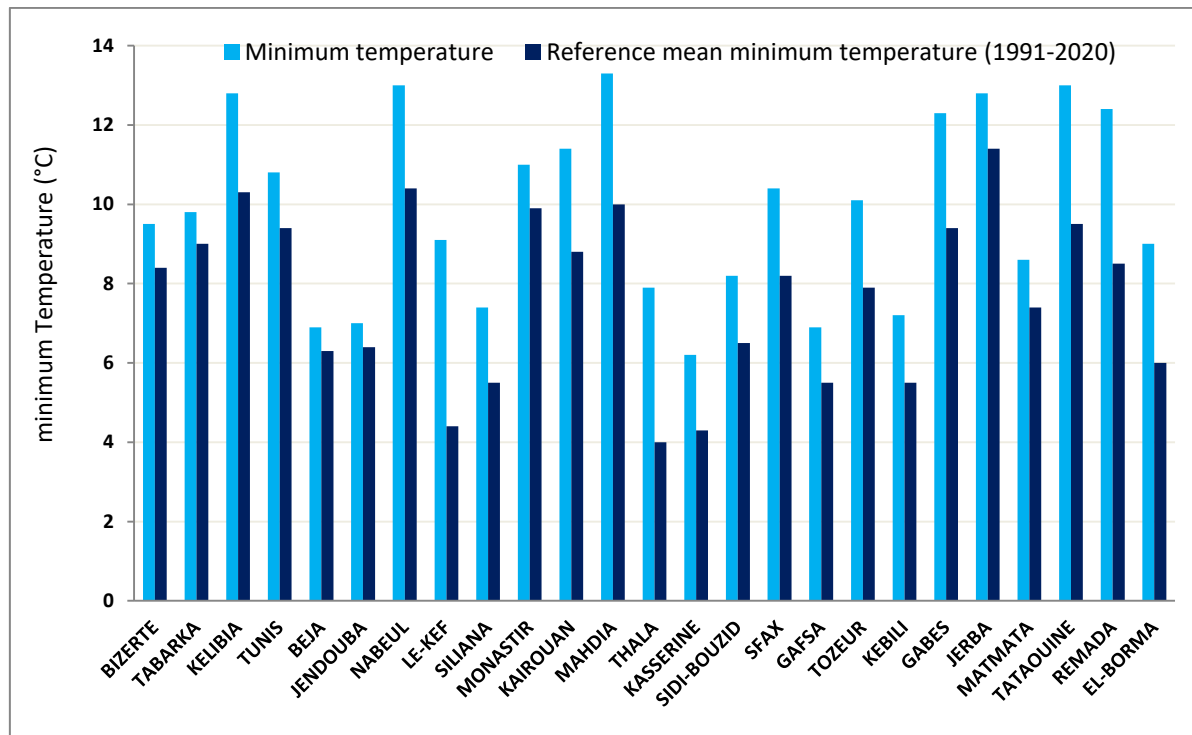
**The difference in the mean maximum temperature during December  
relative to the reference rate (1991-2020) since 1950**



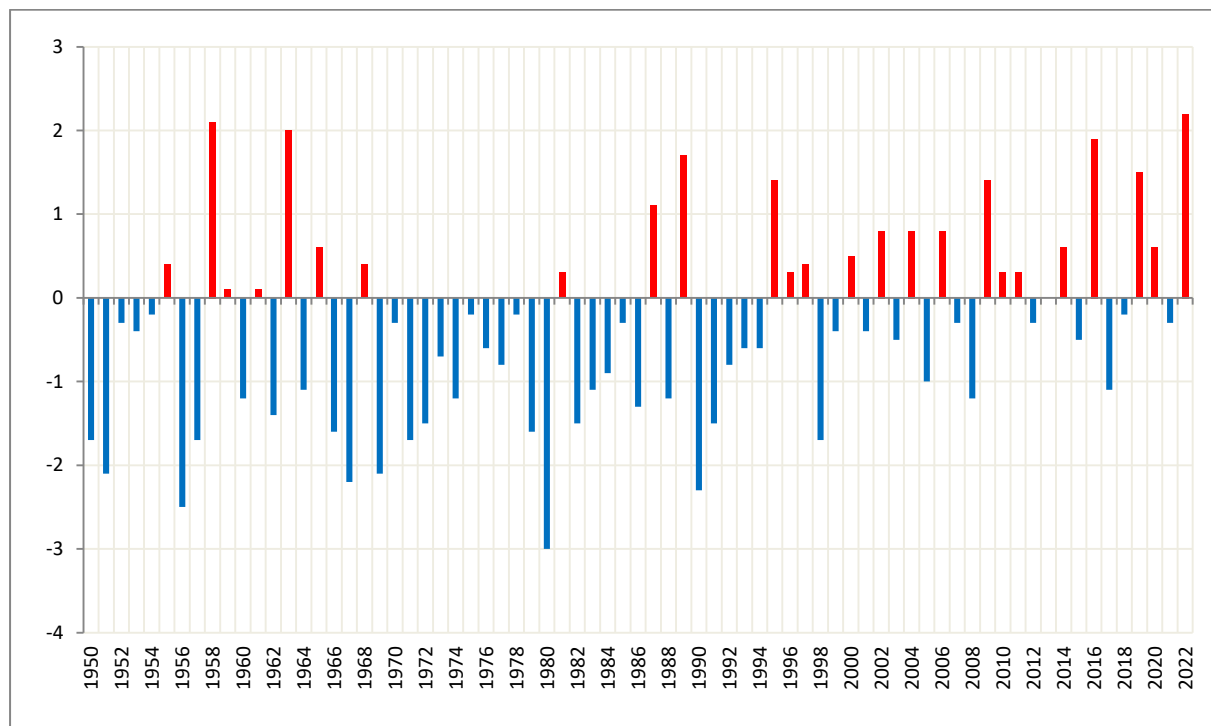
#### - Minimum temperature:

The minimum temperature rates were also high, and ranged from 6.2 degrees in Kasserine to 13.3 degrees in Mahdia, and were above the reference rates in most regions, where the differences ranged from +0.6 degrees in Tozeur and Jerba to +3.9 degrees in Thala and Remada. The absolute minimum temperature reached 0.1 degrees in Beja and Kasserine on December 30, 2022. As well as 0.1 degrees in Jendouba on December 31, 2022.

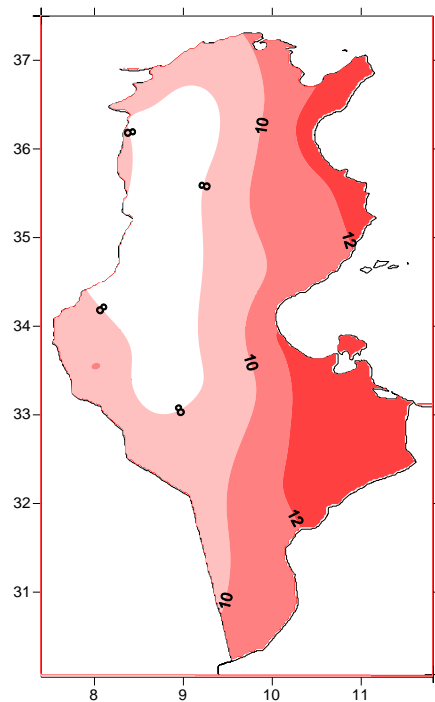
As for the average minimum temperature, it was 9.8 degrees, which was above the reference average (7.7 degrees) by a difference of +2.1 degrees.



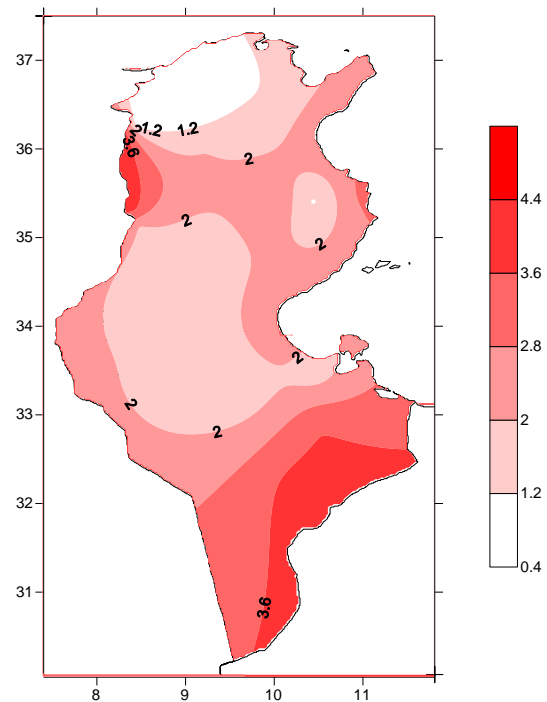
Comparison of the average minimum temperature of December 2022  
with the reference rates (1991-2020)



The difference in the mean minimum temperature during December  
relative to the reference rate (1991-2020) since 1950



The average minimum temperature  
of December 2022



Difference between the average minimum  
temperature and the reference rates

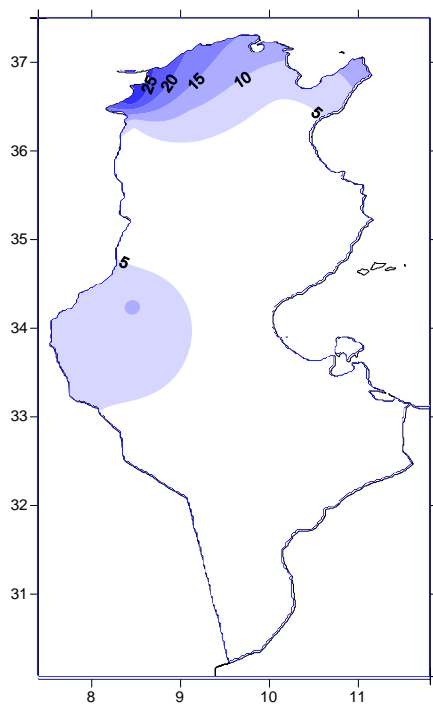
#### - Rain:

In terms of total rainfall, the month of December 2022 ranked first in the driest December months since 1950, as it witnessed a noticeable decrease in the amounts of rain in most regions, and the percentage of the decrease in the northern regions ranged from 56% in Tebarsouk ( Beja ) to 96% in Nabeul and Siliana.

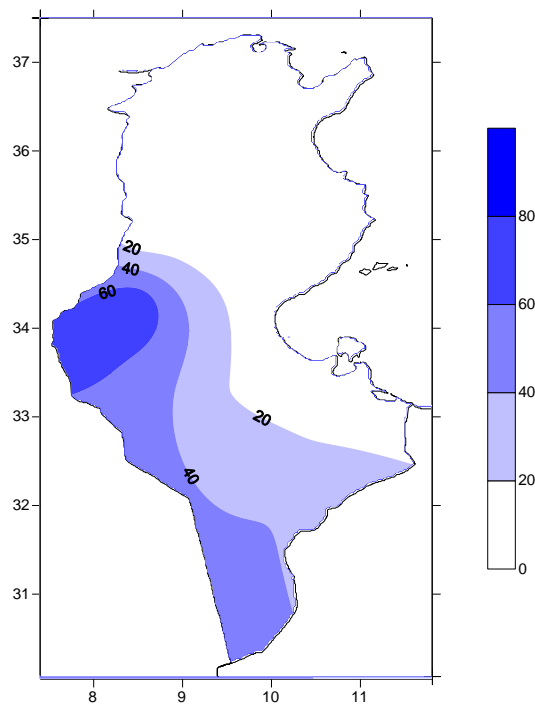
The central regions also witnessed a noticeable decrease in the amounts of rain in most regions, and the decrease ranged from 91% in Tala to 100% in Enfidha, Ouslatia, Meknes and Kasserine.

As for the southern regions, the deficiency was also noticeable, as the percentage of deficiency ranged from 37% in Gafsa to 97% in Jerba.

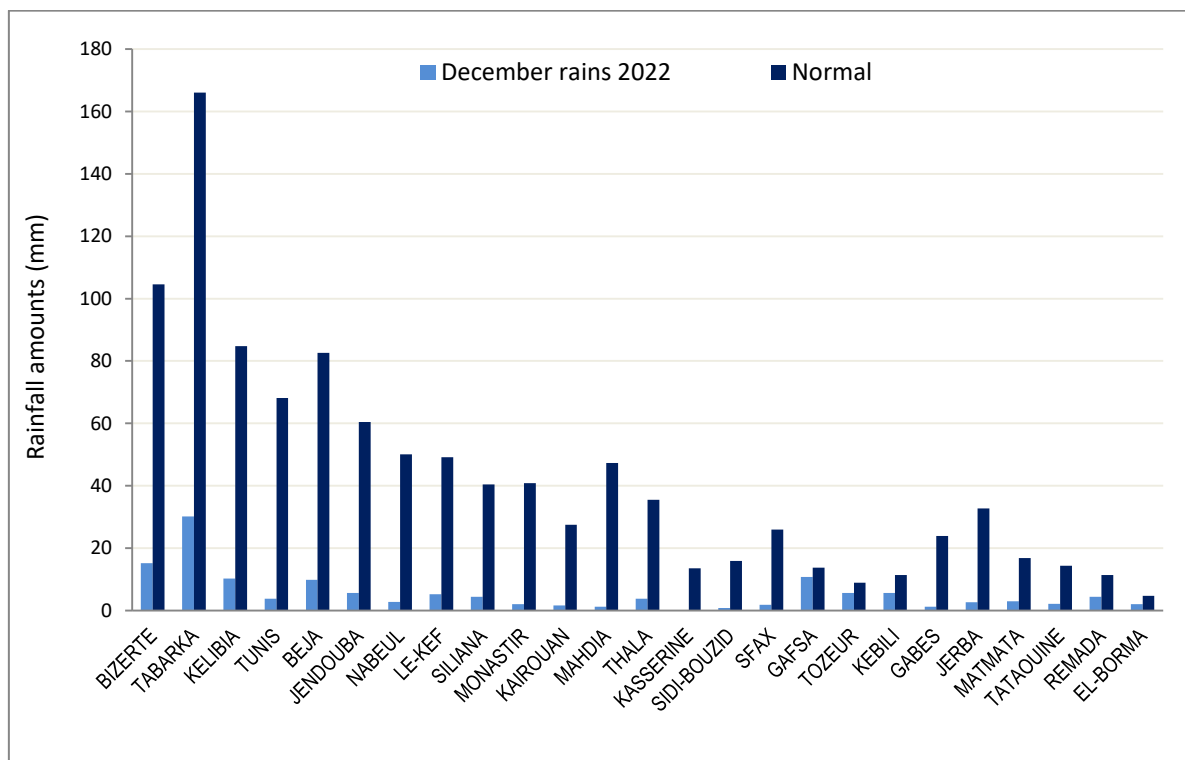
As for the general total (25 main stations) for the month, it amounted to 135.7 millimeters, while the reference rate for the same stations was 1050.5 millimeters, and the total decrease reached 87%, which classifies December 2022 as the driest month in December since 1950.



**Total rainfall amounts in the main stations  
for the month of Decembre 2022**

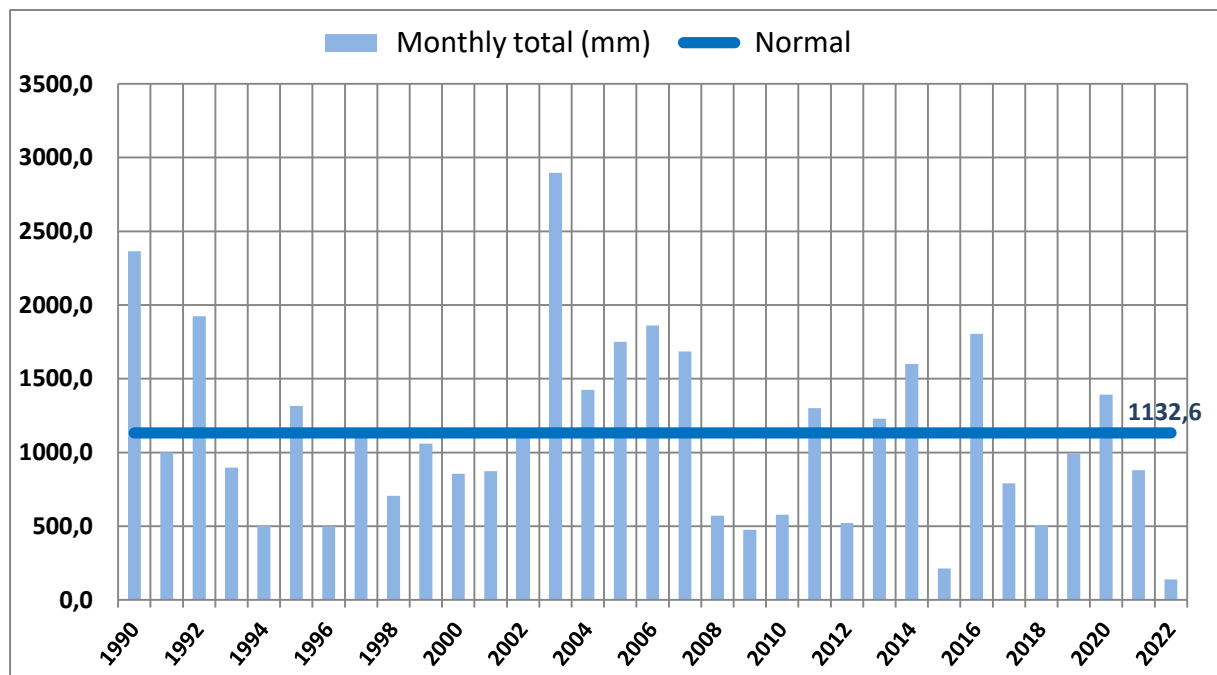


**Percentage of total rainfall of December 2022  
to the reference monthly total (1991-2020)**



**Comparison of the total amounts of rain (mm) of December 2022  
with the reference total (1991-2020)**





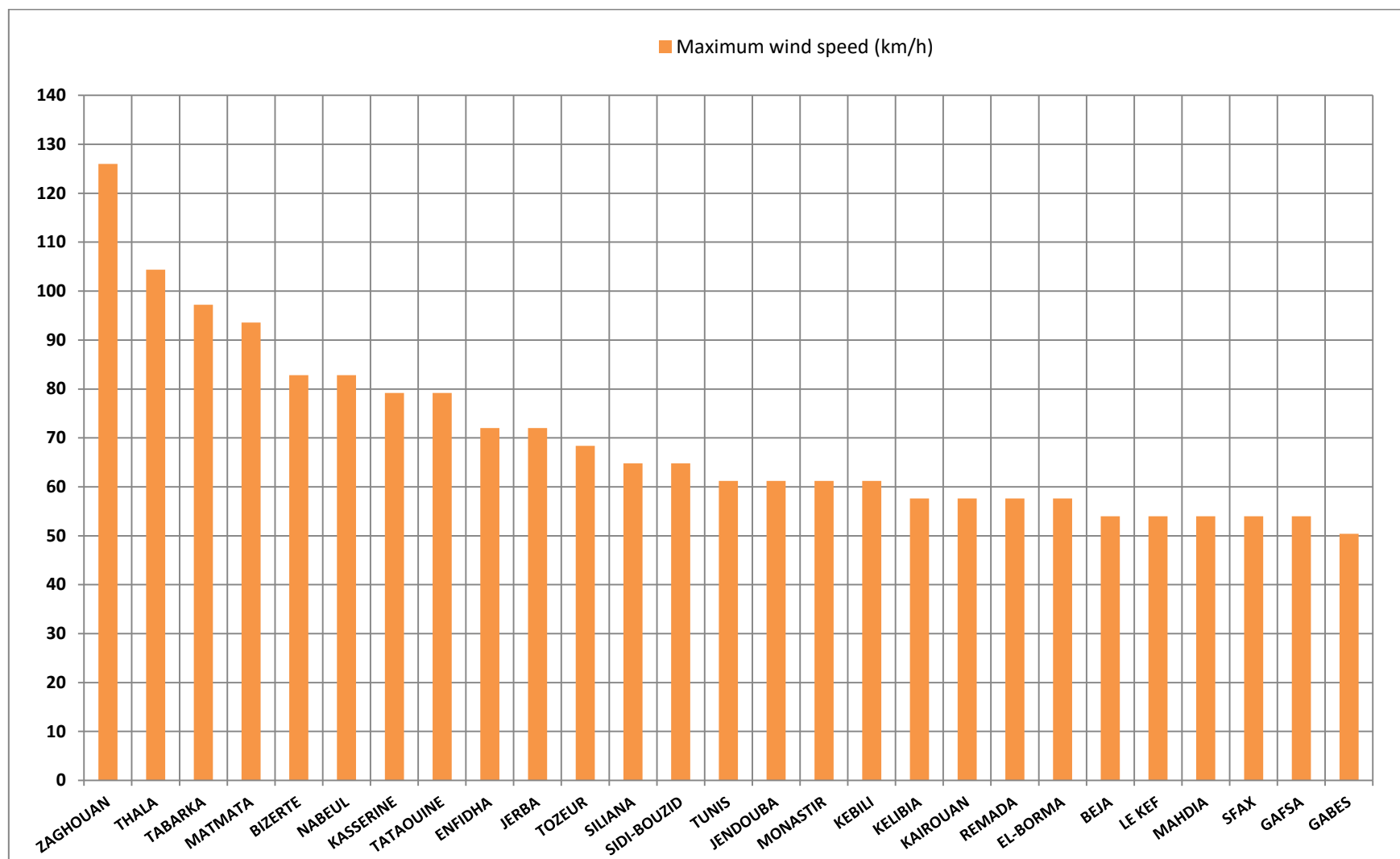
Total rainfall (mm) in all main stations for the month of December since 1950

### - The winds :

As for the winds, they were generally weak to moderate, and their speed increased during the days of December 09 and 10, 2022 in most regions, and the maximum ranged from 60 km / h in Kebili to 97 km / h in Tabarka, and reached 104 km / h in Thala from the governorate of Kasserine and 126 km / h in Zaghouan . The wind speed also increased on the fourteenth day in the northern regions, and its maximum speed ranged from 60 km / h in Kelibia to 83 km / h in Bizerte. Winds were also strong on December 23 in the northeastern regions, with maximum speeds ranging between 58 km/h in Tunis and 65 km/h in Bizerte and Nabeul.

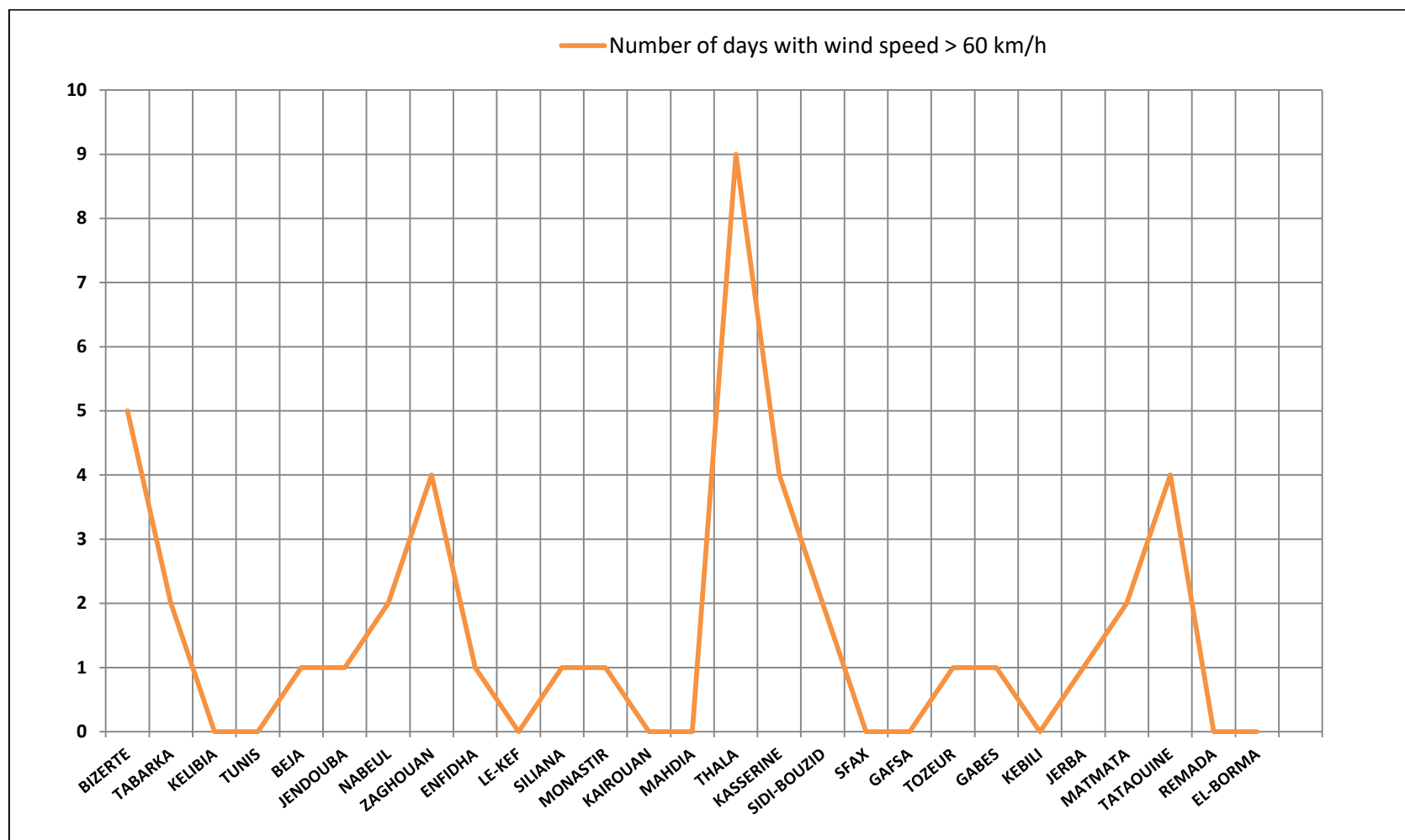
(Figure No. 01 and Figure No. 02) :

Figure No.01



*Arrangement of maximum wind speeds*

Figure No.02



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