

Monthly Climatological Report September 2022 in Tunisia

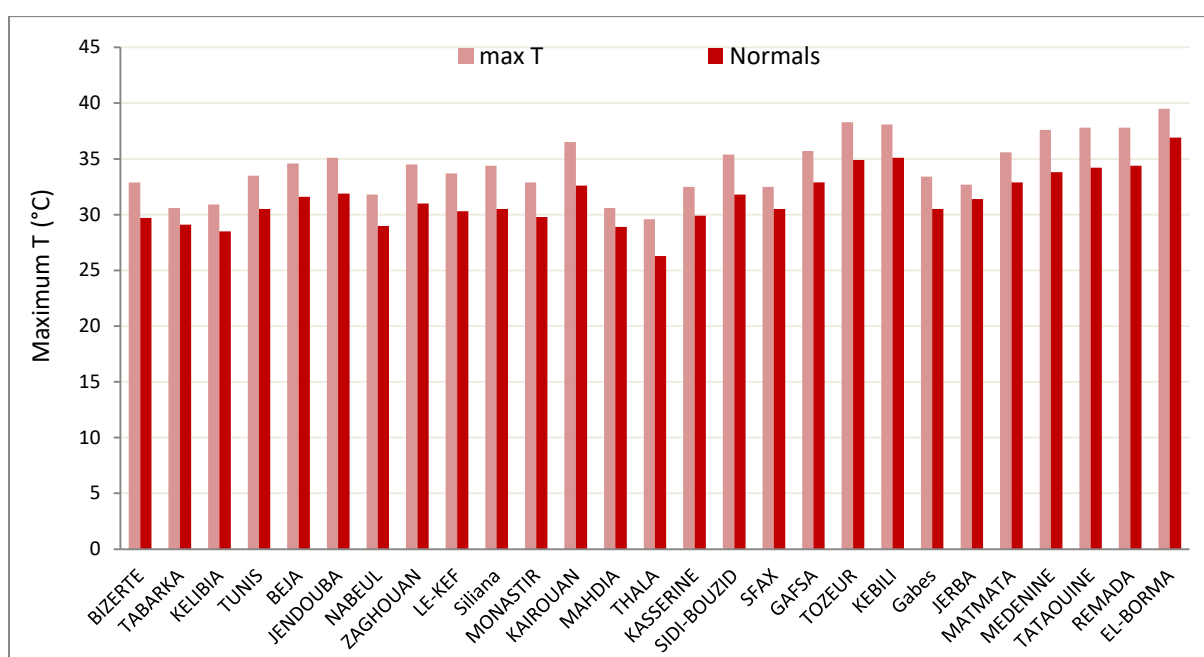
The warmest month of September since 1950

During September 2022, most regions of Tunisia witnessed an increase in temperature and it was noticeable, especially during the period from 3 to 9 September, when new records for temperature were recorded in some regions, especially on the fifth day of the month. The average temperature was above the reference rates in all regions, and the general average of the temperature was 28.6°C, and it exceeded the reference rate by a difference of +2.7 °C, making September of this year considered **the hottest** month of September since 1950.

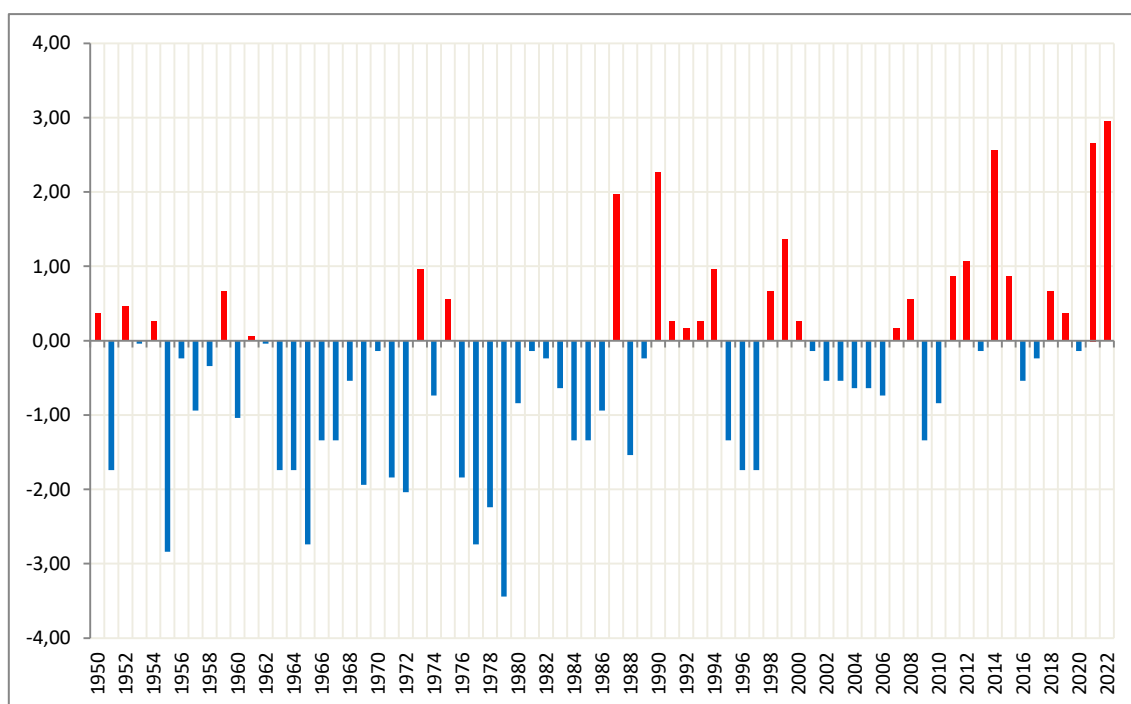
With regard to rainfall, most regions witnessed a decrease in the amount of rain in September to varying degrees. In total (27 main stations), the decrease amounted to **30%**.

Maximum temperature:

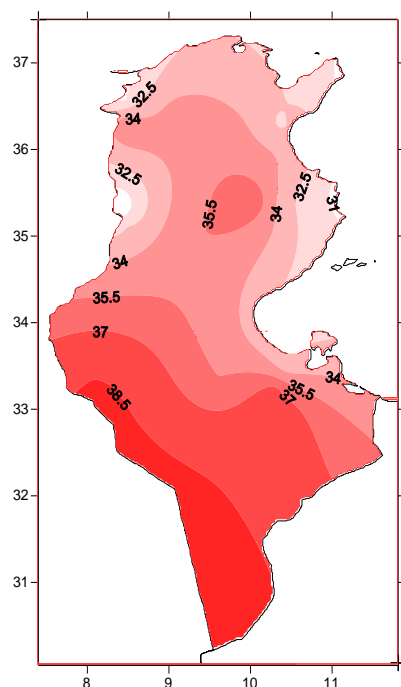
The maximum temperatures ranged from 29.6 degrees in Thala to 39.5 degrees in El Borma all of which were above the reference rates, with differences between +1.3 °C in Djerba and +3.9 °C in Kairouan. The absolute maximum temperature reached 44.5 °C in Tataouine on September 05, 2022. As for the general average (27 main stations), it reached 34.4 °C, and it exceeded the reference rate (31.5 °C) with a significant difference of +2.9 °C.



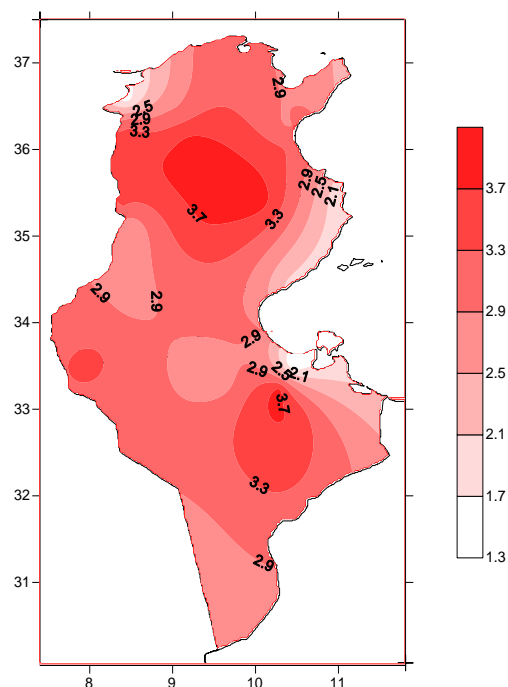
Comparison of maximum and normal temperatures for the month of September



**Deviation from normal (1991-2020) maximum temperatures
since 1950: Month of September**



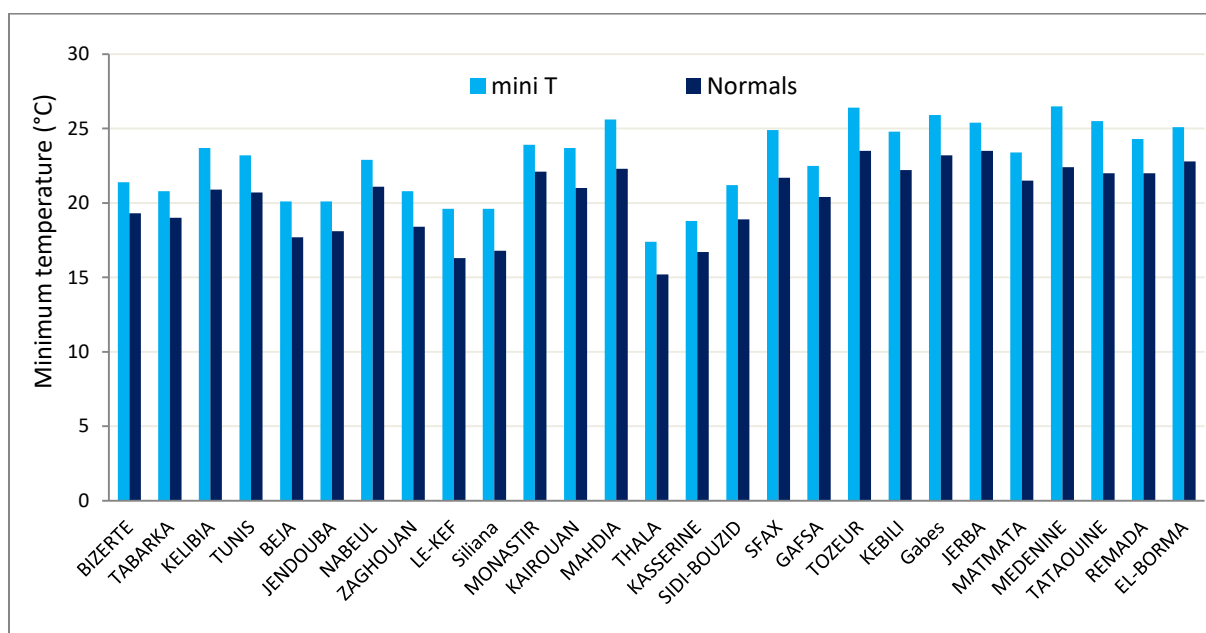
Maximum temperature in (°C)



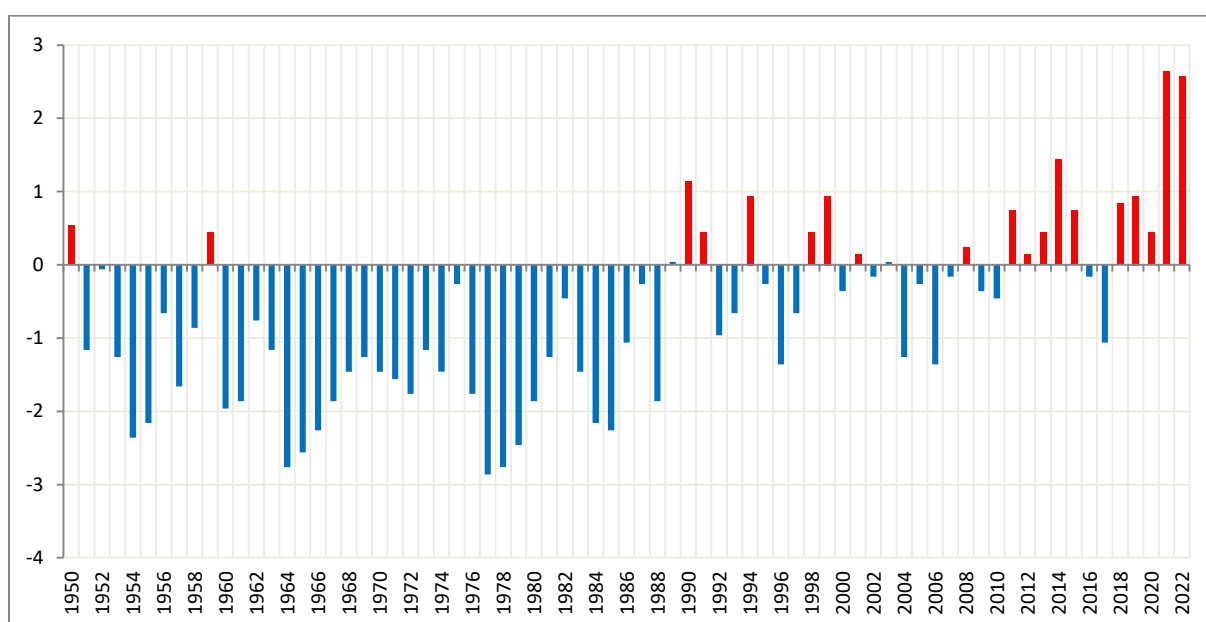
Deviation from normal of Tmax in (°C)

- Minimum temperature :

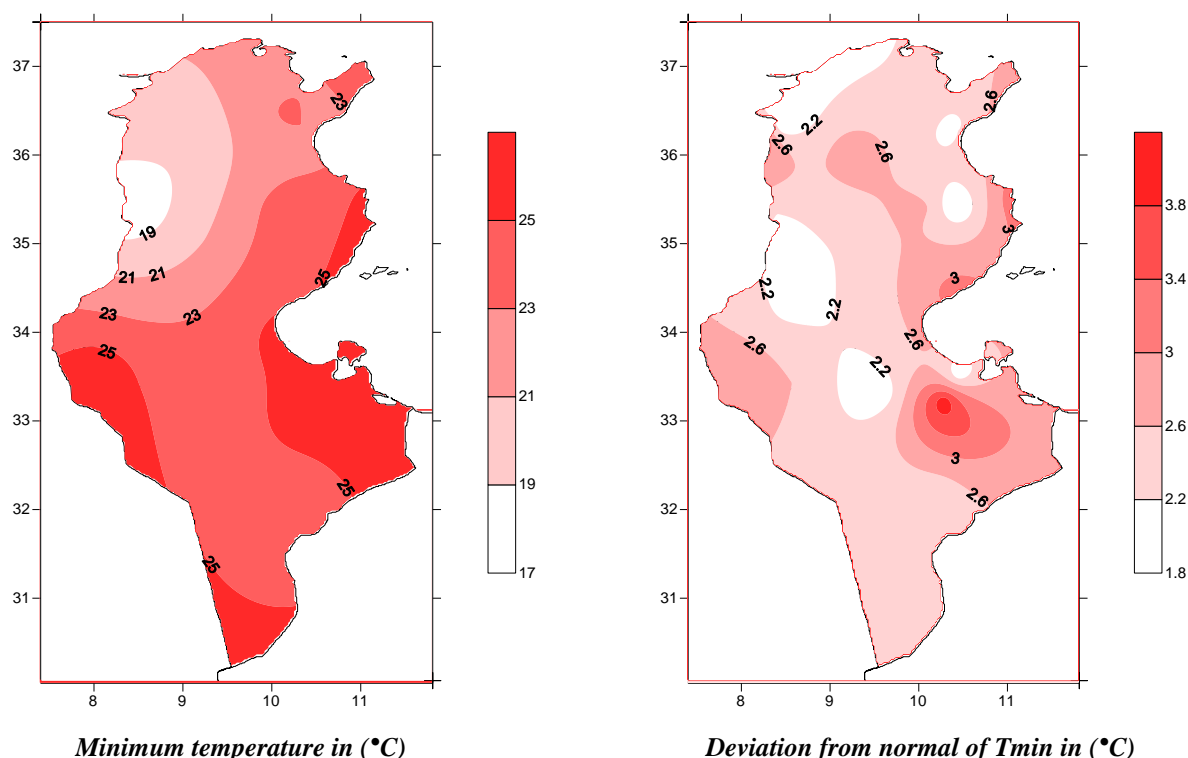
The average minimum temperature ranged between 17.4 °C in Thala and 26.5 °C in Medenine, all of which were above the reference rates. The differences ranged from +1.8 °C in Tabarka, Nabeul and Monastir to +4.1 °C in Medenine. The absolute minimum temperature was 12.3 °C in Thala on September 23, and the general average minimum temperature was 22.9 °C, and it was above the reference average (20.3 °C), with a difference of +2.6 °C.



Comparison of minimum and normal temperatures for the month of September

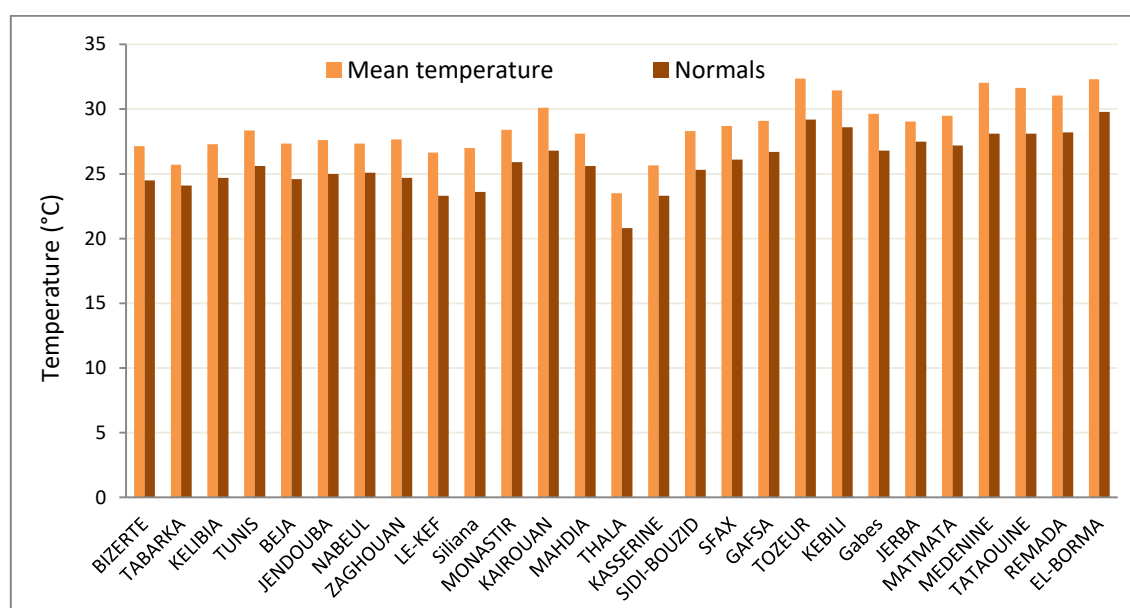


**Deviation from normal (1991-2020) minimum temperatures
since 1950: Month of September**

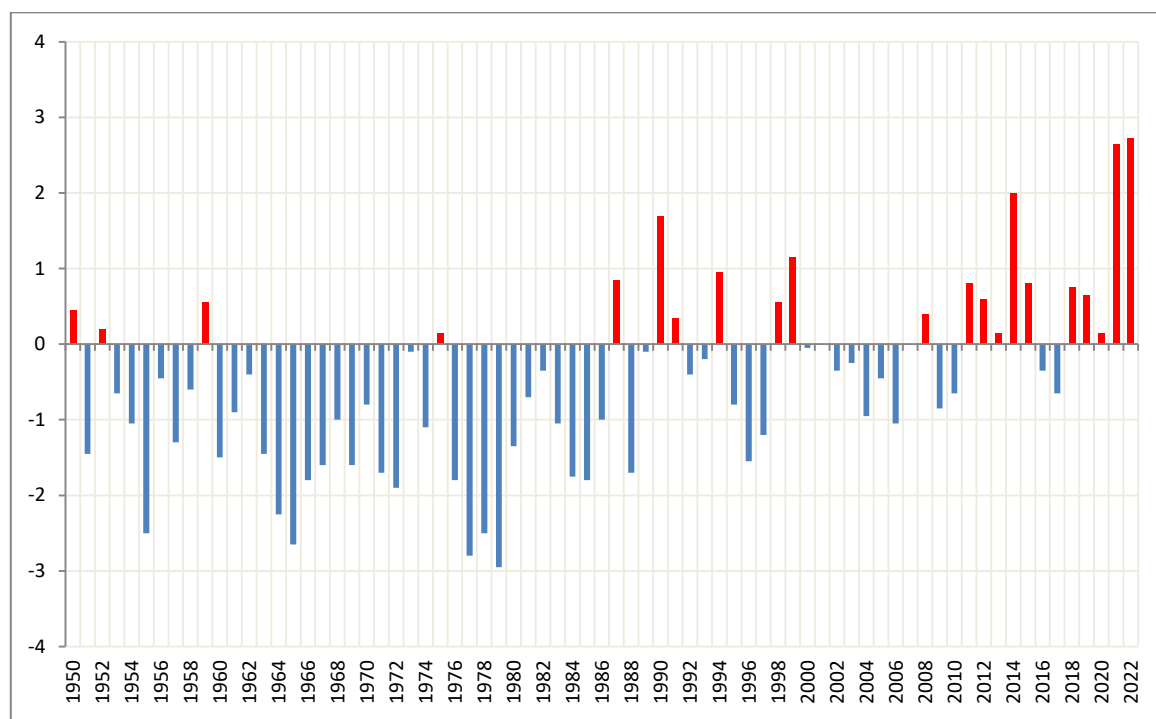


- Mean temperature :

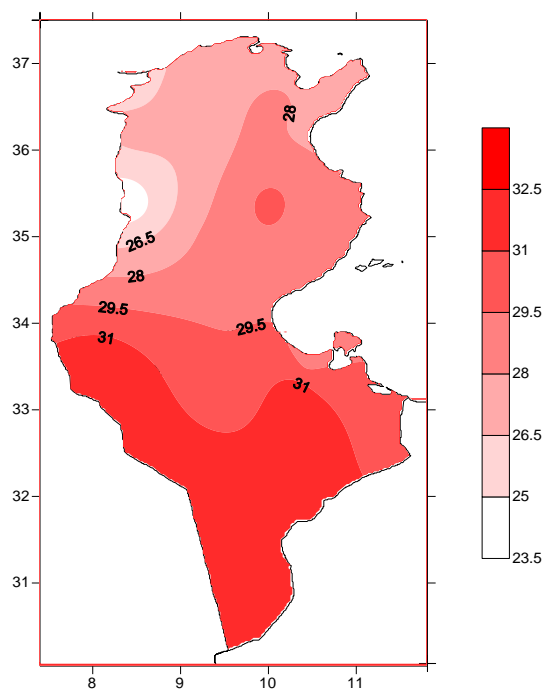
As for the average temperatures, they ranged between 23.5 °C in Thala and 32.4 °C in Tozeur, all of which were above the reference rates in all regions, and the differences ranged from +1.6 °C in Tabarka and Djerba to +4.0 °C in Medenine. The overall average temperature was 28.6 °C above the reference average (25.9 °C), and the difference was +2.7 °C, making September 2022 the **hottest month of September** since 1950.



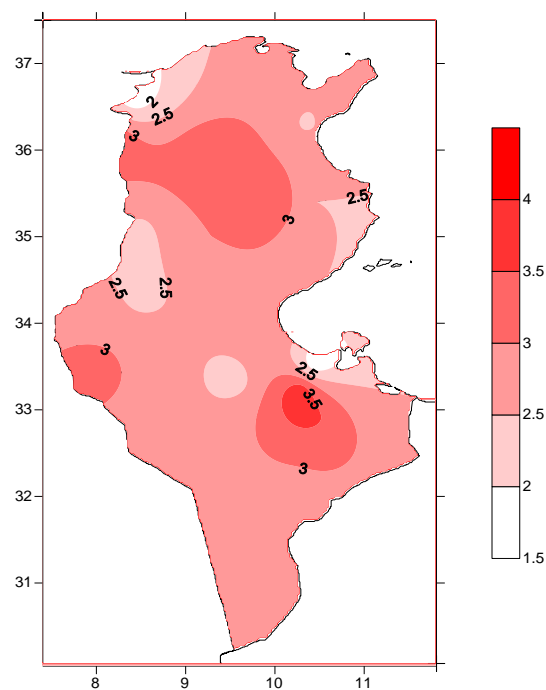
Comparison of mean and normal temperatures for the month of September



Deviation from the(1991-2020) normal of mean temperatures
since 1950 : Month of September

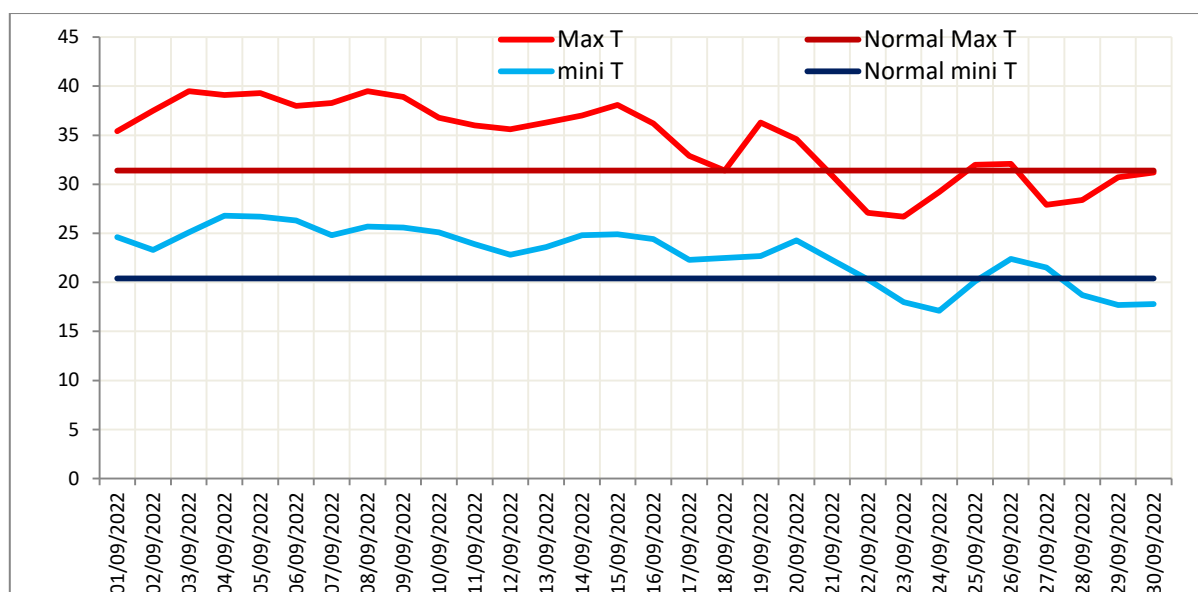


Average mean temperature (°C)



(mean T) 's deviation from normal (°C)

- Daily evolution of the maximum and minimum temperatures during August 2022 :



Evolution of daily temperatures compared to normal of September

During the first half of September 2022, the temperature was high, and most regions witnessed a remarkable rise in temperature, especially during the period from 3 to 9 September, and the absolute maximum temperature reached 44.5°C in Tataouine on 05 September 2022, and new records were recorded in some regions, as shown in the following table :

Station	New record for maximum temperature (°C)	Date	Old record for maximum temperature (°C)	date
Kasserine	40.7	09/05/2022	40.3	09/03/1998
Sidi Bouzid	42.9	09/05/2022	41.3	09/11/2008

The minimum temperature also increased significantly in many regions during the first half of the month:

Station	New record minimum temperature * (°C)	date
Bizerte	27.1	09/15/2022
Kelibia	27.7	09/03/2022
Nabeul	27.1	09/06/2022
Mahdia	28.4	09/15/2022

minimum temperature * : the highest minimum temperature.

As for the second half of the month, it was characterized by a gradual decrease in temperature, and the rates were lower than the reference rate, especially in the last days of the month.

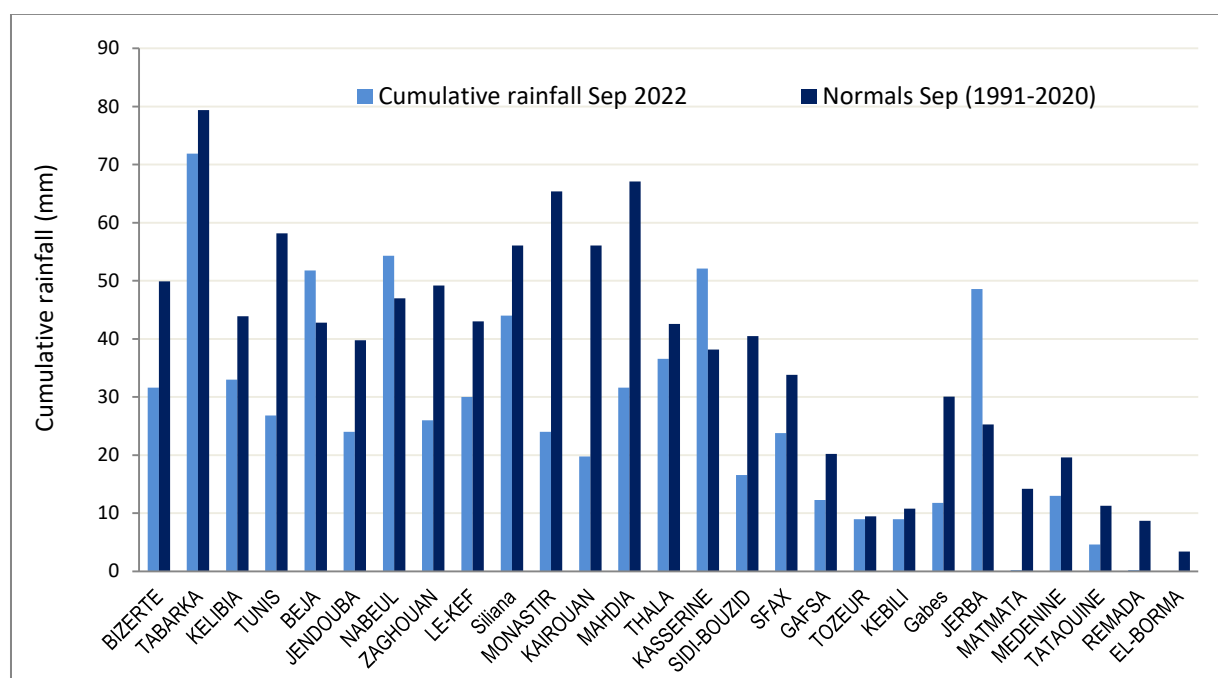
- Rainfall:

Regarding the rainfall for the month of September 2022, the total amount of rainfall witnessed an increase in most regions of the north, ranging from 11% in Tabarka to 112% in Haouaria - Nabeul, with the exception of Tunis, Zaghouan, Bizerte, Kelibia, Jendouba, Kef and Siliana, which recorded a decrease ranging from 14% in Siliana to 52% in Tunis.

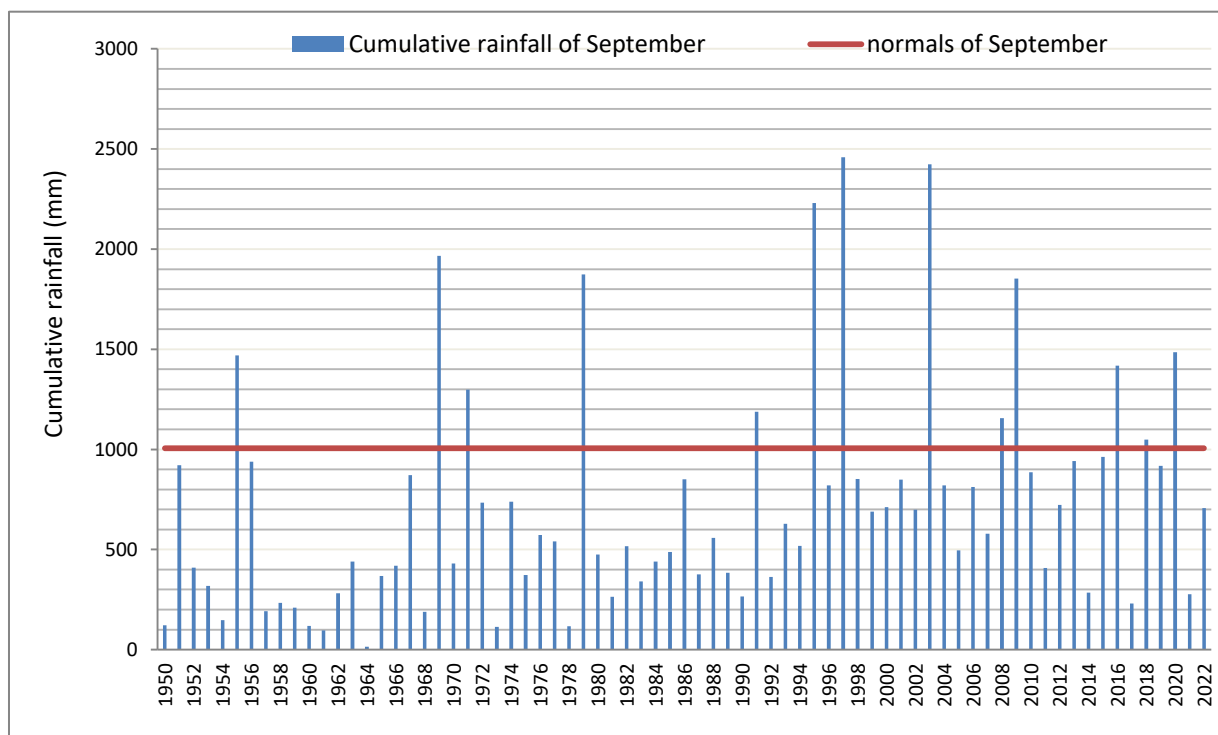
As for the central regions, they witnessed a decrease in the amount of rain in most regions, and the decrease ranged from 19% in Sousse to 55% in Kairouan, with the exception of Kasserine, where the total rainfall exceeded the reference total for the month by 36%.

In the southern regions, the total amount of rain exceeded the reference total in Kebli, Gabes and Djerba. The surplus ranged from 15% in Kebili to 131% in Djerba, and the surplus amounted to 33% in Gabes, while the rest of the south witnessed a decrease ranging from 4% in Sfax to 97% in Remada. It should be noted that the rains It didn't go down completely in September 2022.

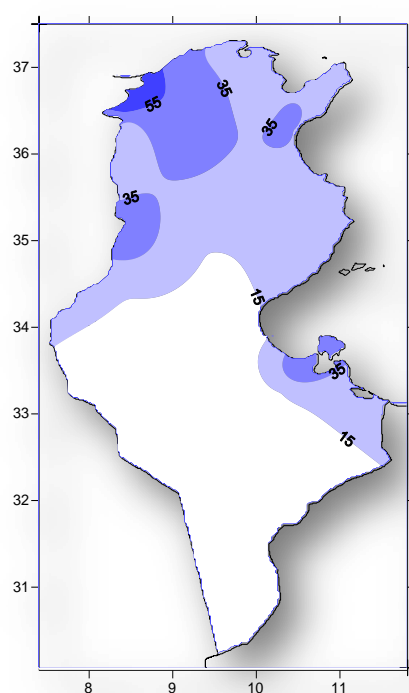
The total amount of rain total (27 main stations) for the month was 706.6 millimeters, while the reference rate for the same stations was 1006.1 millimeters, with a decrease of **30%**.



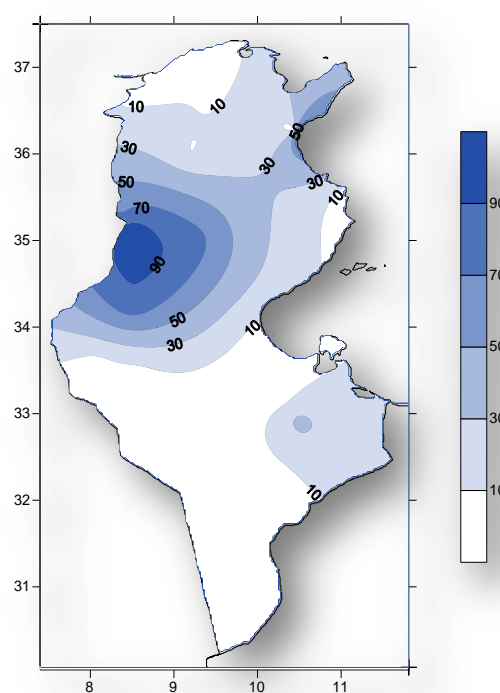
Comparison of monthly rainfall totals with to the reference normals of the accumulations _September



Cumulative monthly rainfall since 1950 in Tunisia: Month of September



Cumulative rainfall (mm)_September 2022



Ratio to normal (%)



- The winds :

With regard to winds, they were generally weak to moderate, and their speed increased during the days of 3, 4, 5 and 6 September 2022 in most directions. Its maximum speed ranged from 60 km / h in Sfax to 104 km / h in Siliana and Monastir, and its maximum was 108 km / h in Zaghouan on September 6, 2022.

The wind speed also increased on September 16 and 17 in the north regions, Enfidha, and southwest regions, where it was stirring dust and sand in Kebili, and its maximum speed ranged from 61 km / h in Beja to 83 km / h in Kebili, and its maximum reached 115 km / h in Nabeul on September 16, 2022.

The wind was also strong on September 20 and 23 in the southeast, with a maximum speed of 60 km/h in Tataouine and 65 km/h in Djerba-Medenine.

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



Figure no. 01

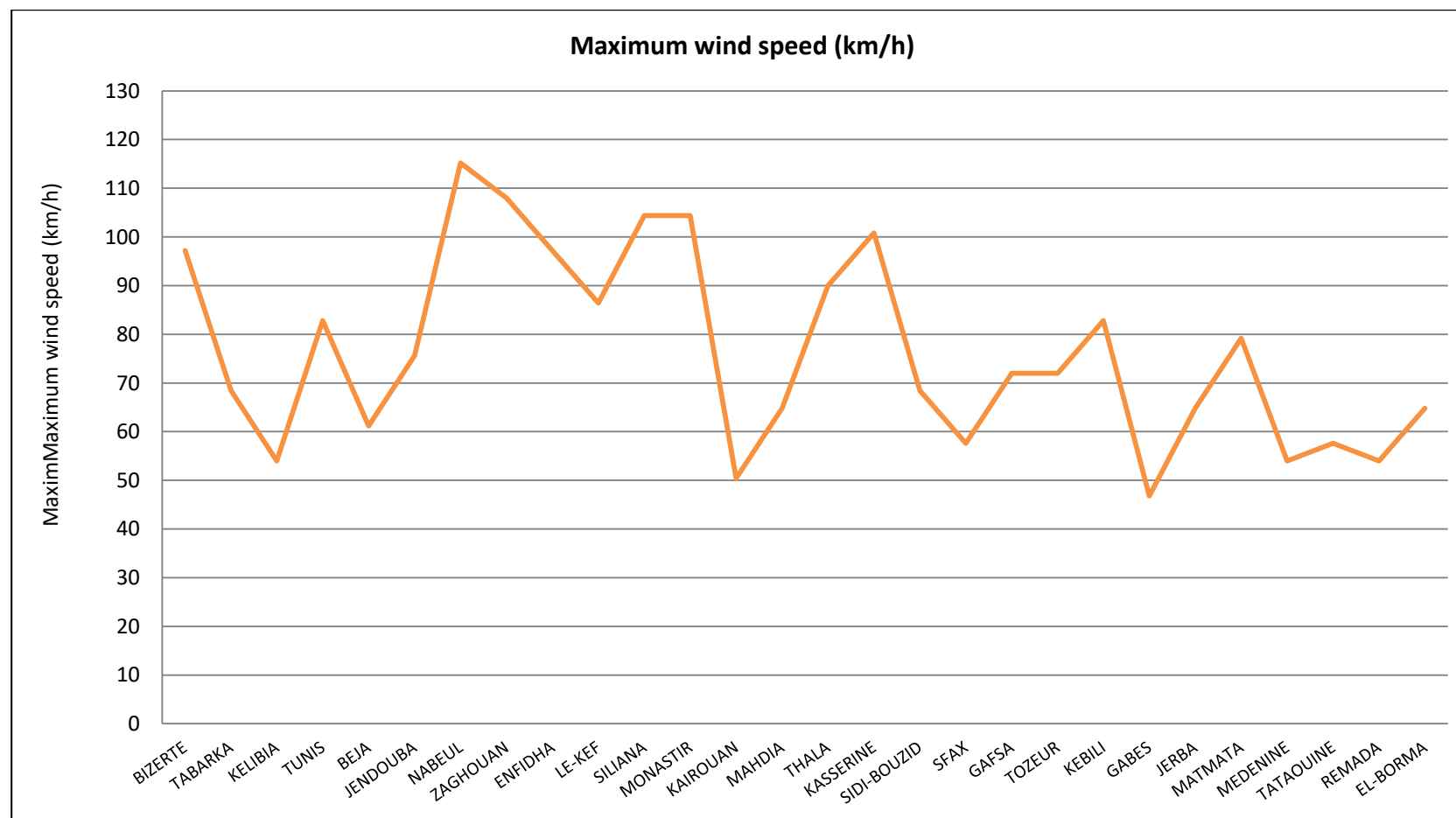




Figure no. 02

