

Climatological Report for September 2021 in Tunisia

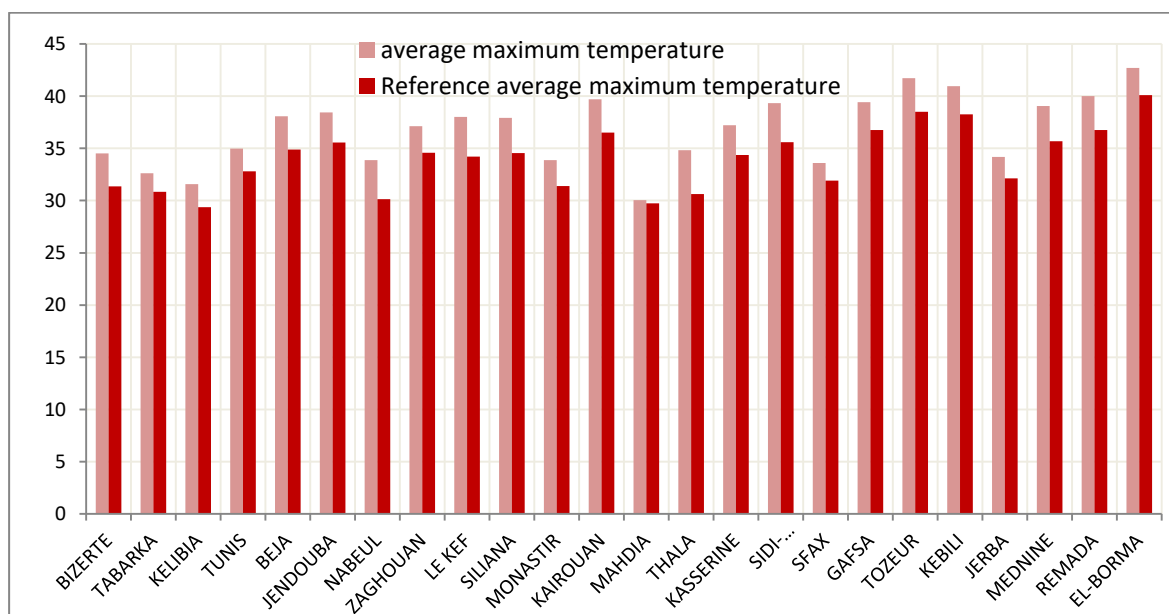
Hottest september on record since 1950

During september 2021, Tunisia has known an extension of summer and the temperature continued to rise in all regions. the temperature rates were higher than the reference rates (1981-2010) in all stations (24 main stations) and the average of the mean temperature during this month was 28.4 °C, while the reference rate for the same stations was 25.4 °C. The average of mean temperature in September 2021 exceeded the reference rate by a significant difference of (+3.0) °C, which ranks September 2021 **the hottest since 1950**.

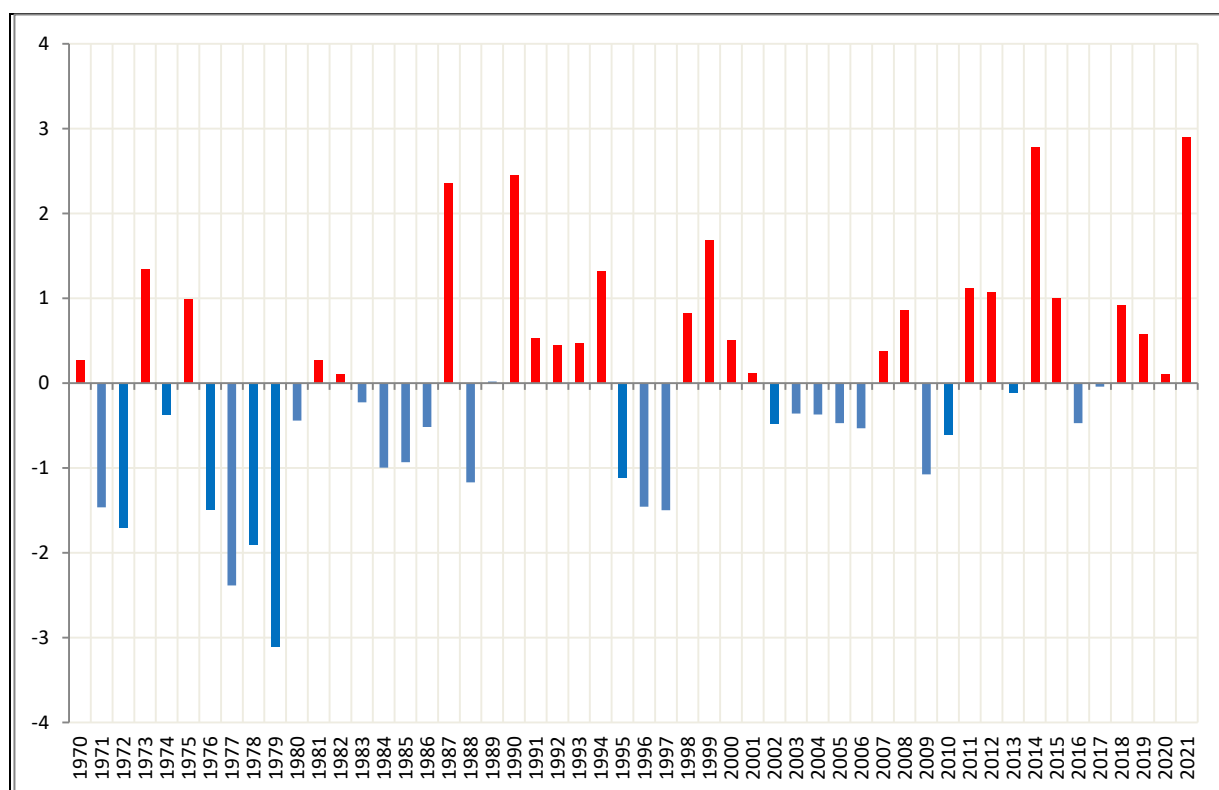
Regarding rainfall, the total of September of this year in all the main stations amounted to 276.7 millimeters and was less than the reference total (847.2 millimeters), and the decrease was 67.3 percent, and September 2021 ranks **among the driest months**, unlike September 2020 which was the most rainy since 1950 with a total of 1410.9 millimeters.

- Maximum temperature:

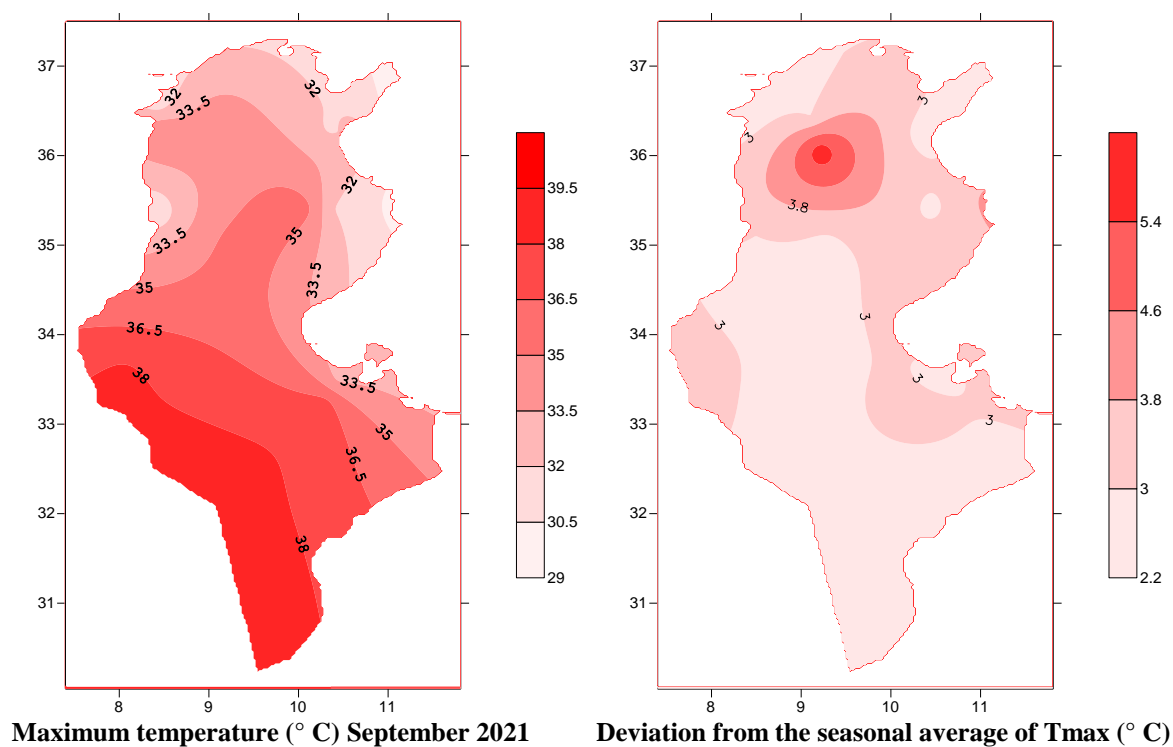
The maximum temperature witnessed a noticeable increase in the cost of the regions, and the absolute maximum reached 45.2 °C on September 01, 2021. The averages ranged from 30.1 °C in Mahdia to 39.2°C in El-Borma and it was above the reference rates, and the difference ranged from (+1.1) °C in Mahdia to (+4.5) °C in Thala. As for the general average of the maximum temperature, it reached 34.0 °C and it exceeded the reference rate with a significant difference of (+2.9) °C.



Comparison of maximum temperatures (september 2021) to september norml (1981-2010)

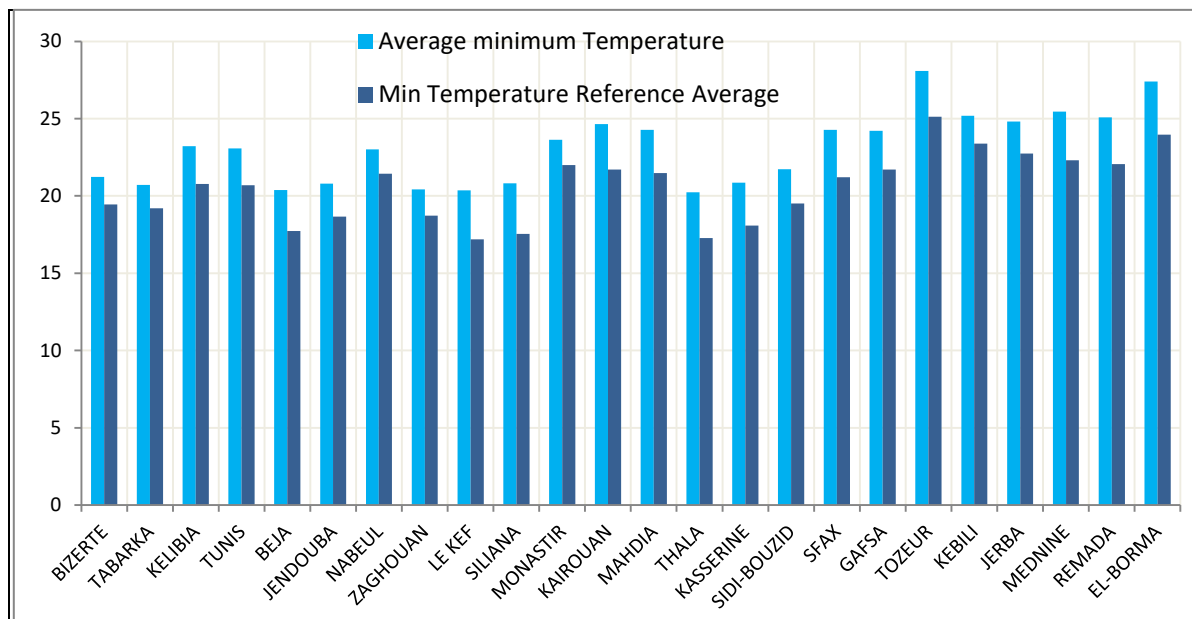


*Deviation from the seasonal reference average (1981-2010)
maximum temperature (September 1970 to 2021)*

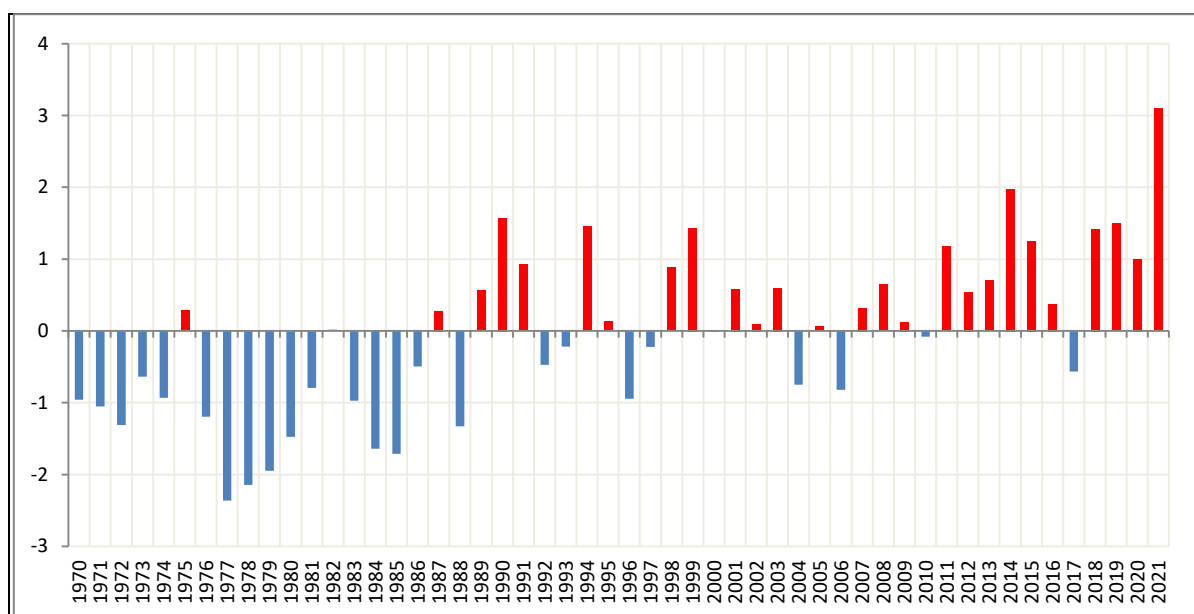


- Minimum temperature

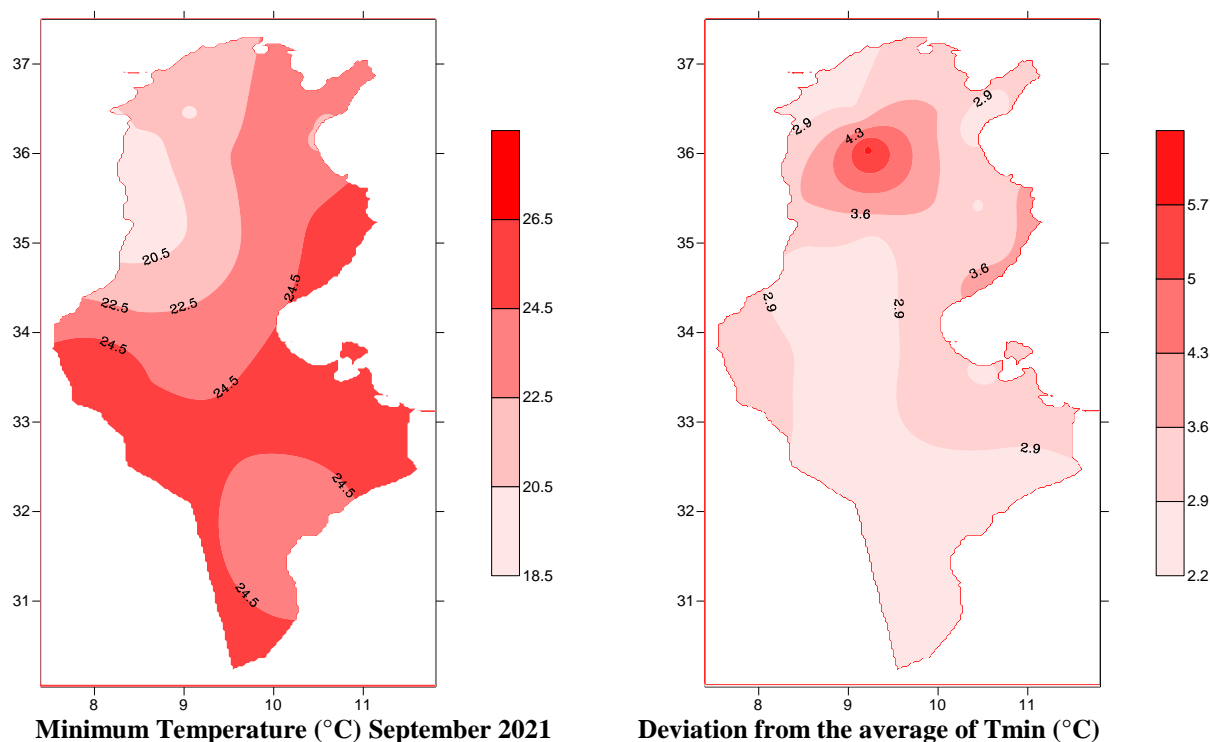
The minimum temperature rates were also high and ranged between 18.5°C in Thala and 26.5°C in Tozeur, and it was above the reference rates, with a difference ranging from (+2.2) degrees in Nabeul to (+5.6) degrees in Siliana. The absolute minimum temperature reached (31.7) degrees in Medenine on September 10, 2021. The general average of minimum temperature was 22.8°C, and it was above the reference average (19.7 degrees) with a significant difference of (+3.1)°C.



Comparison of minimum temperatures (September 2021) to September normal (1981-2010)

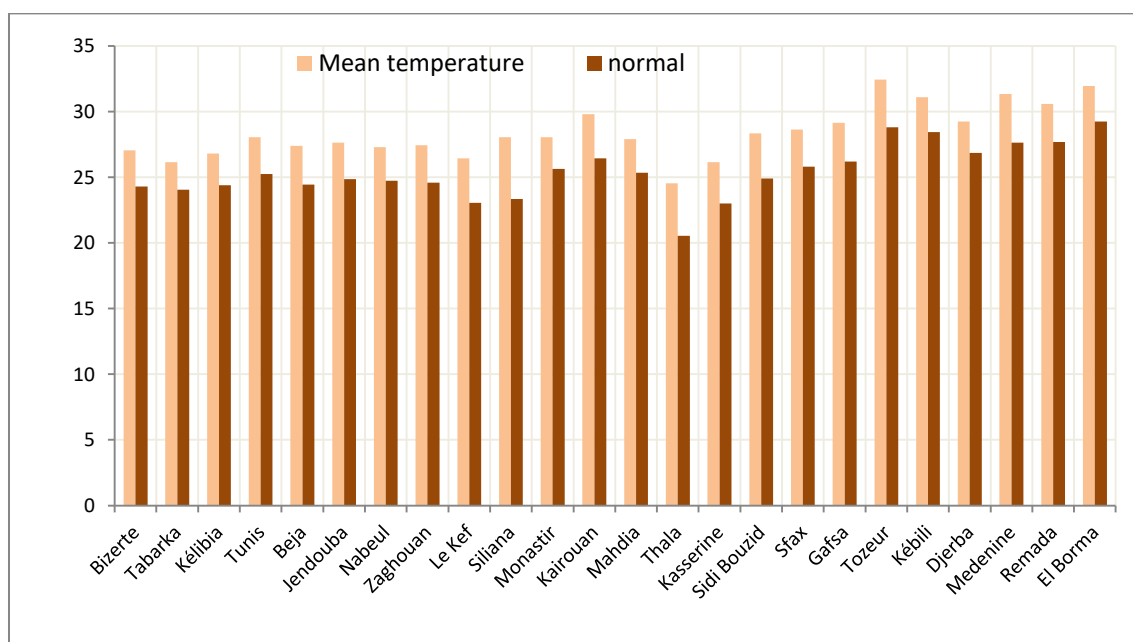


Deviation from the seasonal reference average (81-2010)
minimum temperature (September 1970 to 2021)

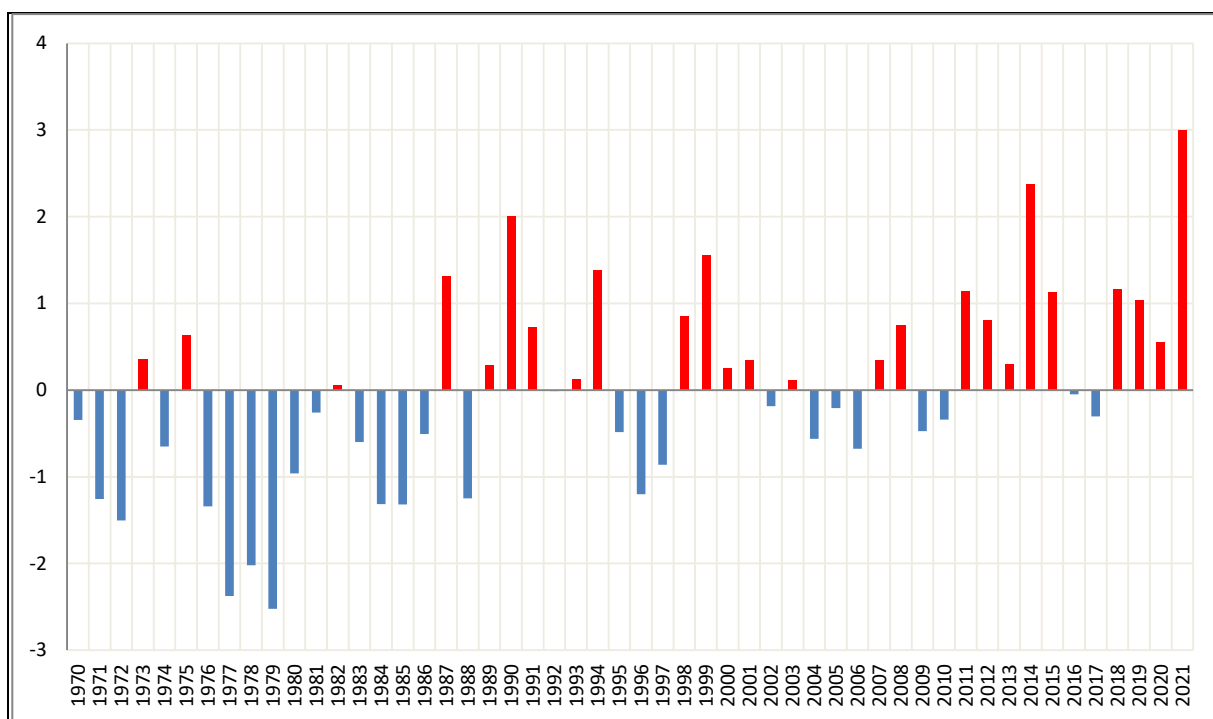


Mean temperature :

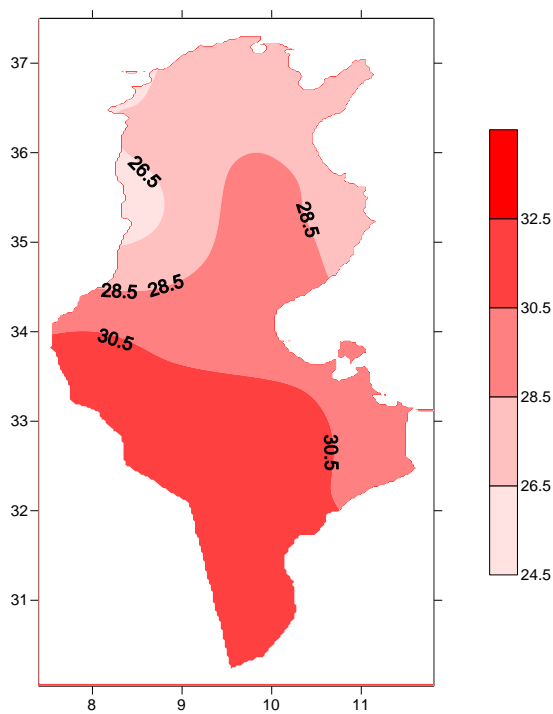
The average of the mean temperatures ranged between 24.6 °C in Thala and 32.5°C in Tozeur and all of them were above the reference rates in all stations. As for the general average of the mean temperature during the month of September, it reached 28.4 °C, and exceeded the reference rate for the same stations (25.4 degrees) with a significant difference of (+3.0) °C.



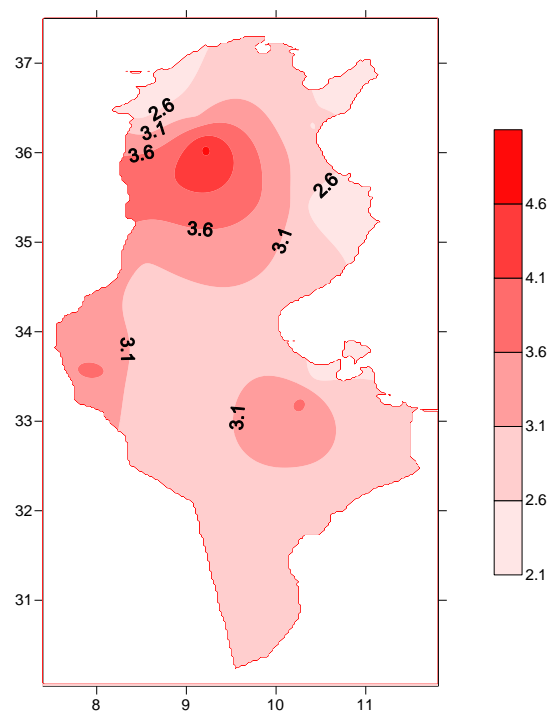
Comparison of mean temperatures (September 2021) to September norml (1981-2010)



Deviation from the September reference average (1981-2010)
mean temperature (September 1970 to 2021)



Mean temperature (°C) September 2021

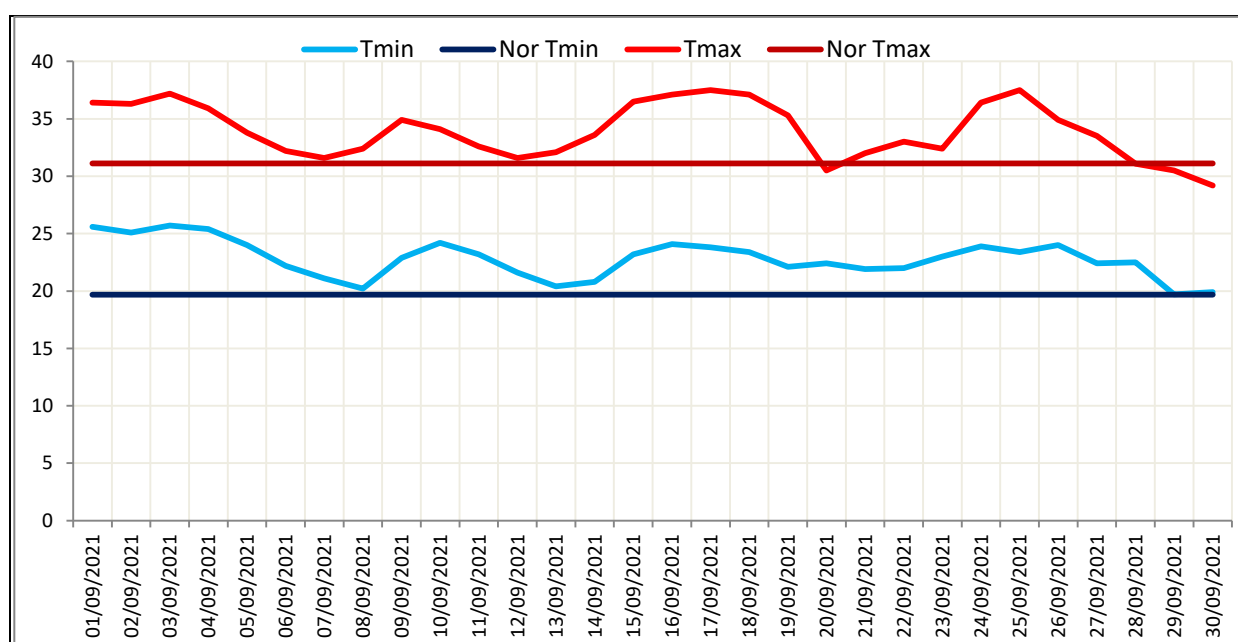


Deviation from the average of mean temperature (°C)

Daily Evolution of Temperatures:

Temperatures continued to be high and often above the reference rates throughout the month of September 2021. All regions of the country were affected by the high temperature and most regions experienced high temperatures, but they did not rise to new records.

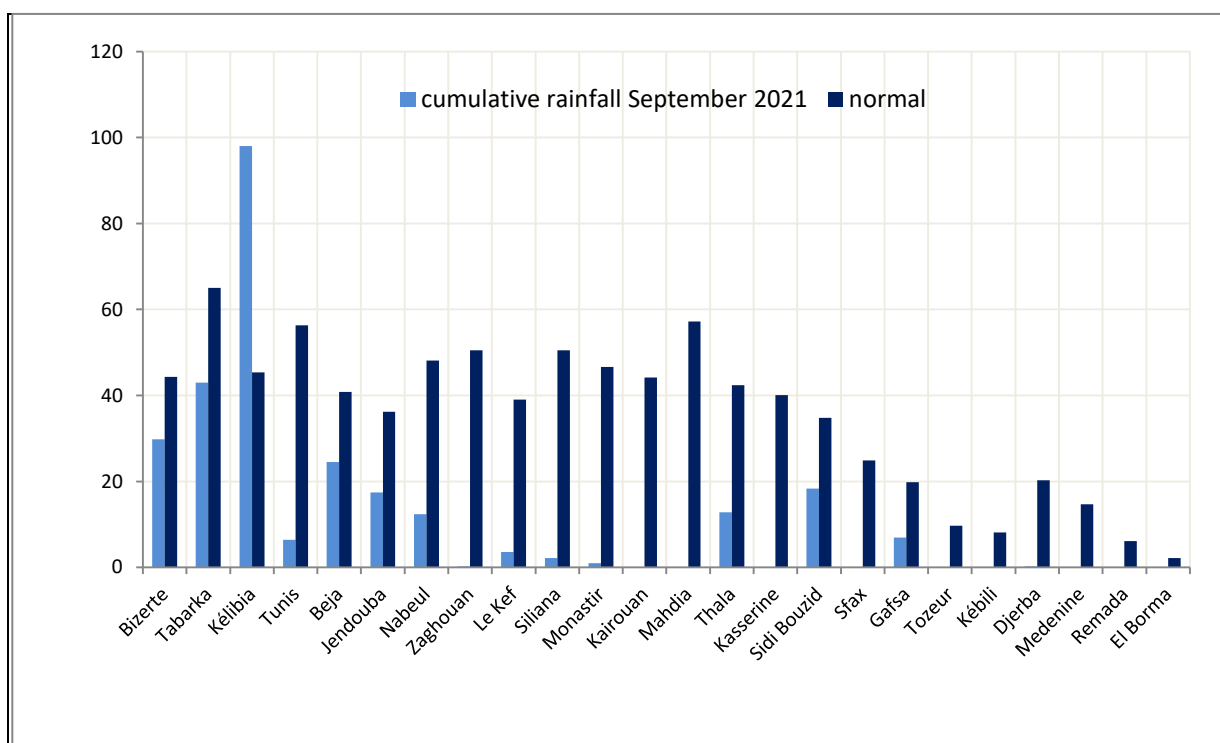
At the end of the month (on September 29 and 30), a decrease in maximum temperatures was recorded in most regions and was slightly below the reference rates. The minimum temperatures also decreased and were at the level of the reference rates.



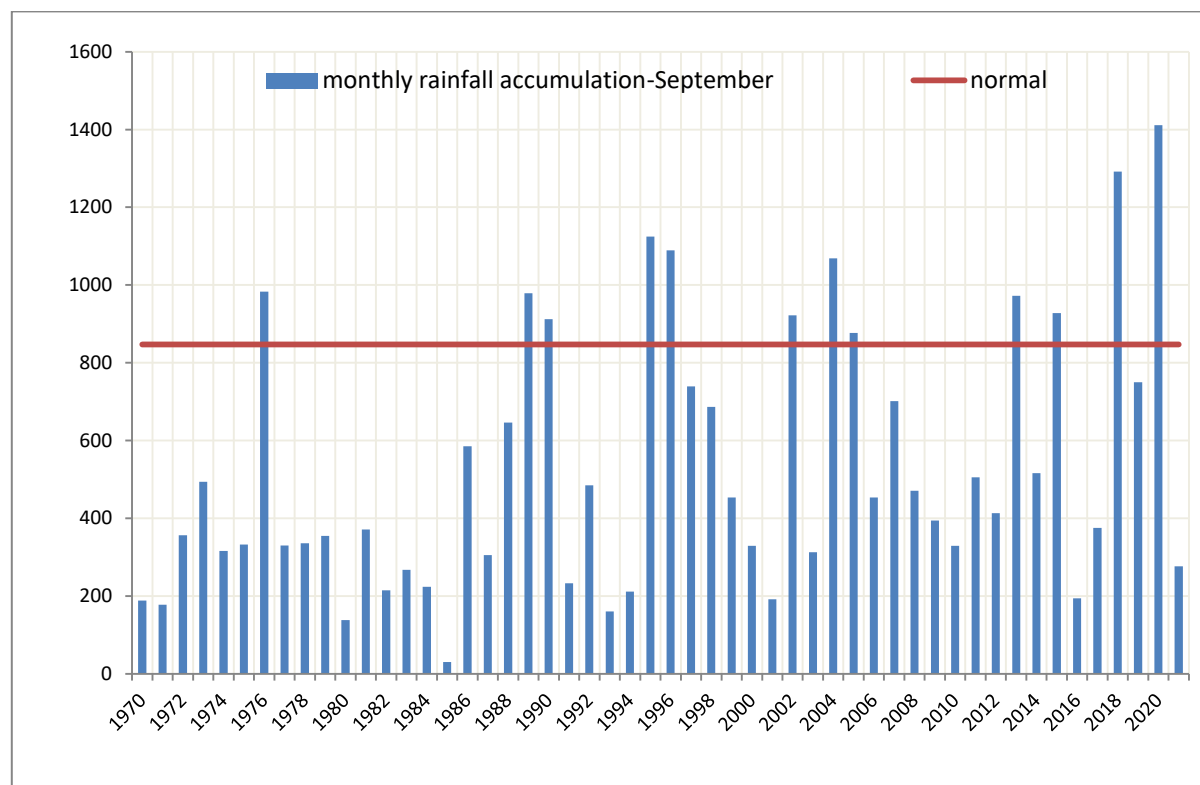
Evolution of daily minimum and maximum temperatures during September 2021

The Rainfall:

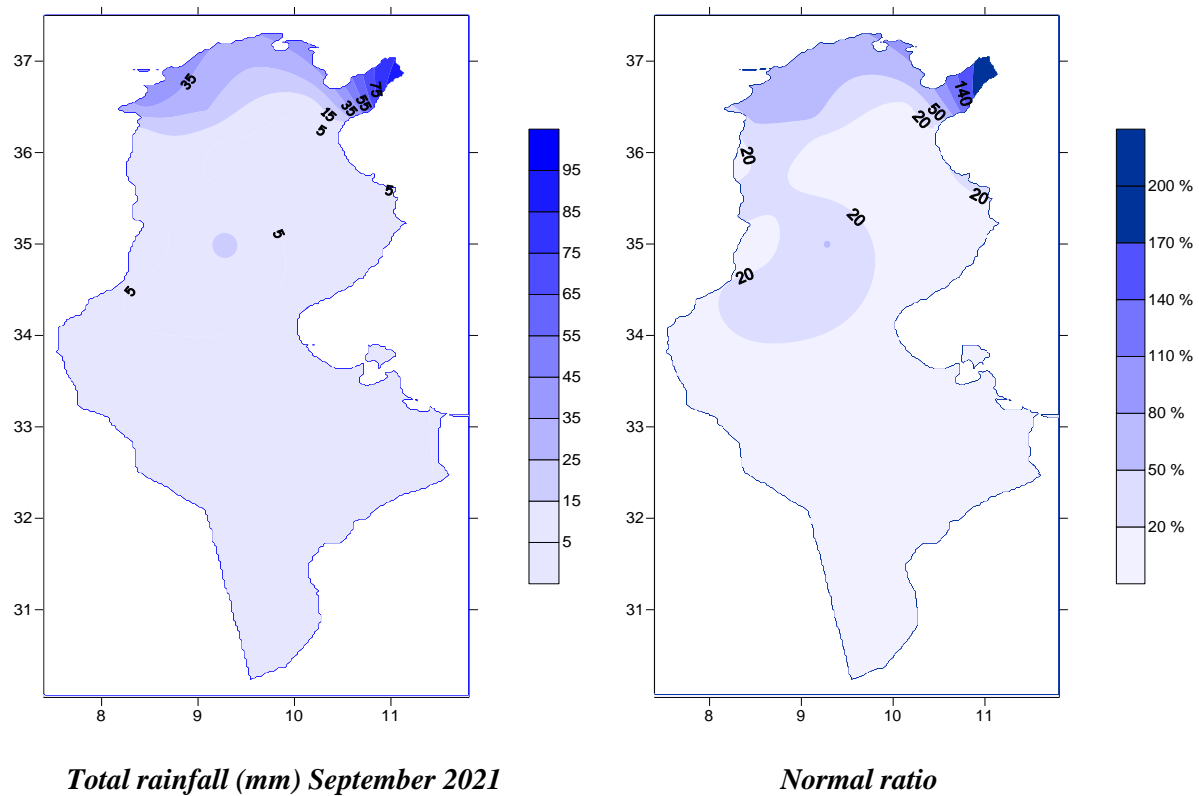
With regard to rain, the monthly total for all stations (24 main stations) was 276.7 millimeters, while the reference rate for the same stations was 847.2 millimeters, which represents 33%. The deficit of rain varies from one station to another. It ranged from 29% in Bizerte to 98% in Siliana and Monastir, with the exception of Kelibia, where 98 millimeters were recorded. This total is higher than the reference average for the month (45.4 millimeters) and the surplus amounted to 116%. It should be noted that rain **did not fall** in Zaghouan, Ain Draham, Mahdia, Kairouan, Kasserine and most of the southern regions throughout september 2021, so september 2021 is classified as one of the driest months, unlike september 2020, which was classified as the wettest september since 1950 with a total of 1410.9 millimeters. .



**Comparison of monthly rainfall amounts
with cumulative reference averages: September 2021**



Monthly rainfall accumulation (mm): September (1970 to 2021)



- The winds :

The winds were generally weak to moderate, and their speed increased during the period from 01 to 05 September in the central western and southern regions, where its maximum speed ranged from 68 km / h in Gafsa to 76 km / h in Sidi Bouzid and its maximum reached 122 km / h in Thala on 03 September 2021.

The wind speed also increased during the period from 09 to 11 September in all the eastern coastal regions, with a maximum speed ranging from 58 km / h in Gabes to 68 km / h in Kelibia, and a maximum of 72 km/h in Monastir on September 10th.

The wind was also strong on September 21, 2021 in the north, with a maximum speed of 61 km / h in Tunis and 76 km / h in Kef, with a maximum speed of 83 km / h in Tabarka.

