

Monthly Climate Report_July 2021 in Tunisia

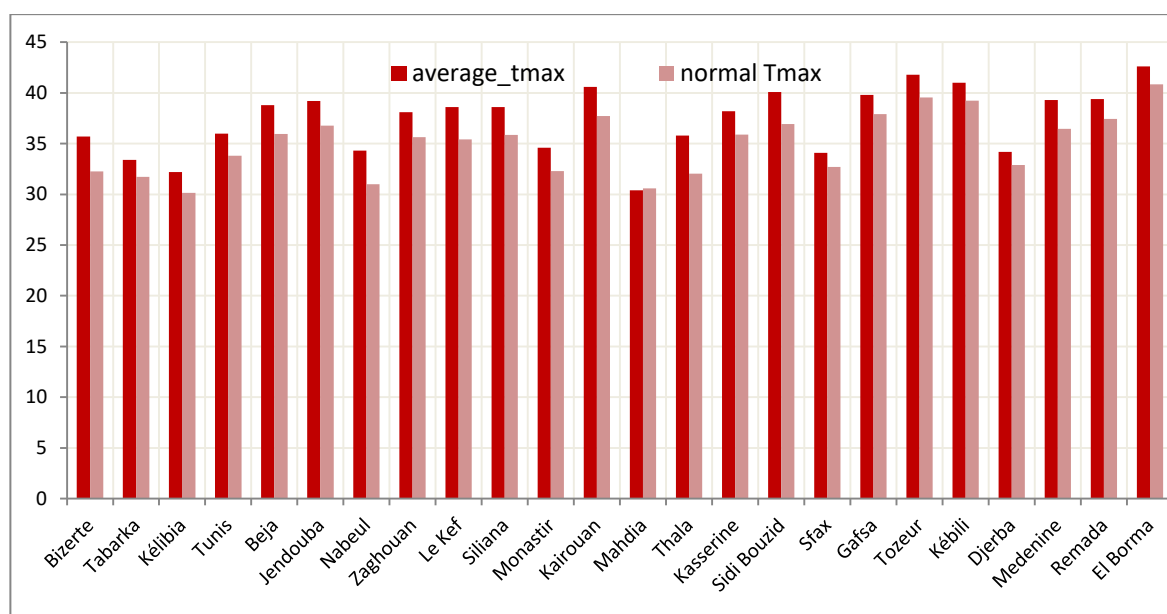
3rd warmest July since 1950

During the month of July 2021, most regions of Tunisia were affected by a noticeable rise in temperature, and all regions (24 main stations) experienced exceptionally high temperatures. In some regions, we have set new records for extreme temperatures. The general average temperature for the month of July this year was above the reference average (1981-2010) by **(+2.14)°C**, which ranks this month in **the third place for the hottest** July months since 1950.

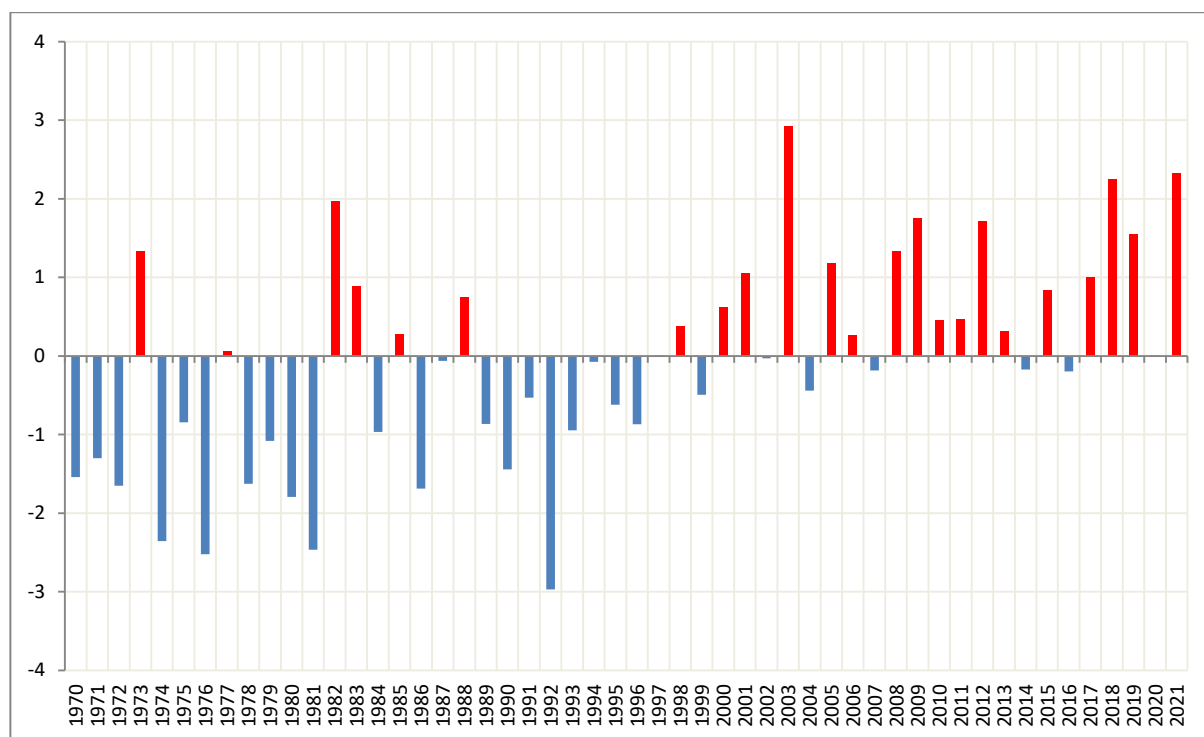
Concerning the precipitation, Tunisia witnessed during the month of July 2021 a decrease in rainfall of about **70%**.

Maximum temperature:

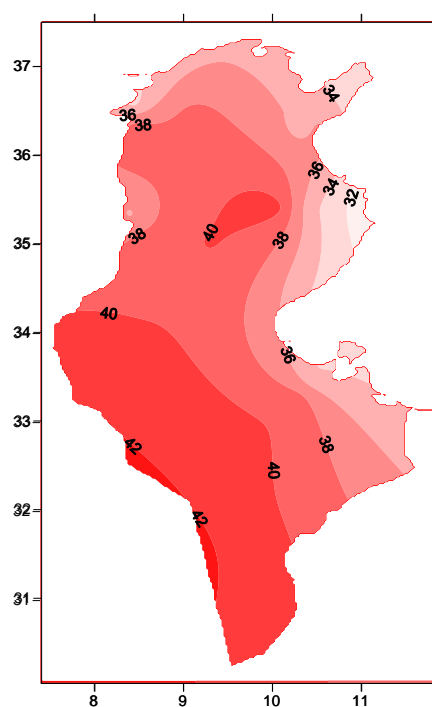
The maximum temperature rose exceptionally in most regions, especially during the period from 04 to 07 July and the period from 29 to 31 July, where we set new records in many stations. The absolute maximum temperature reached 48.9°C in El Borma, 48.8 in Tozeur, 48.7 in Kebili and 48.5°C in Tataouine on July 04, 2021. As for the maximum temperatures, they ranged from 32.2°C in Kelibia to 42.6 degrees in El Borma and were above the reference rates, with a difference ranging from (+1.31)°C in Djerba to (+ 3.45)°C in Bizerte, except in Mahdia, where the average was 30.4°C and was less than Averaged by a slight difference (-0.18)°C. As for the general average of the maximum temperature, it reached 37.37°C, and it exceeded the reference rate (35.04°C) with a significant difference of **(+2.33)°C**.



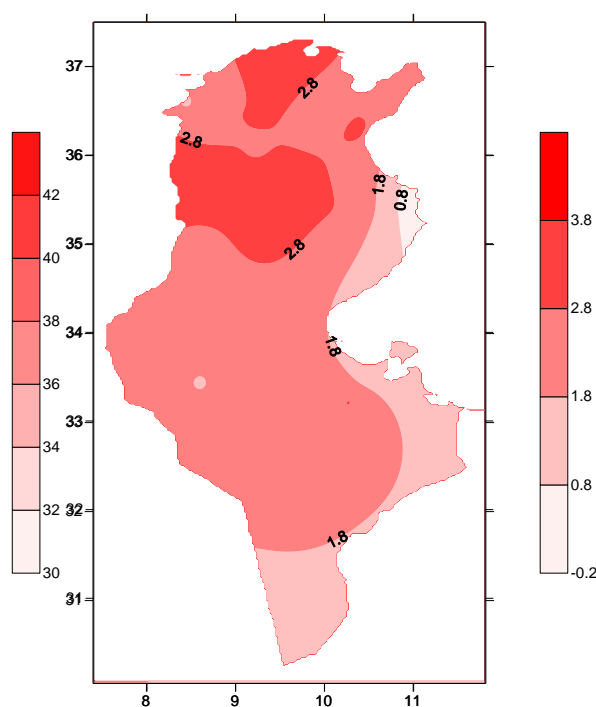
Comparing the maximum temperatures of July 2021 with the reference rates (1981-2010)



Comparing the maximum temperatures of July 2021 with the reference rates (1981-2010)



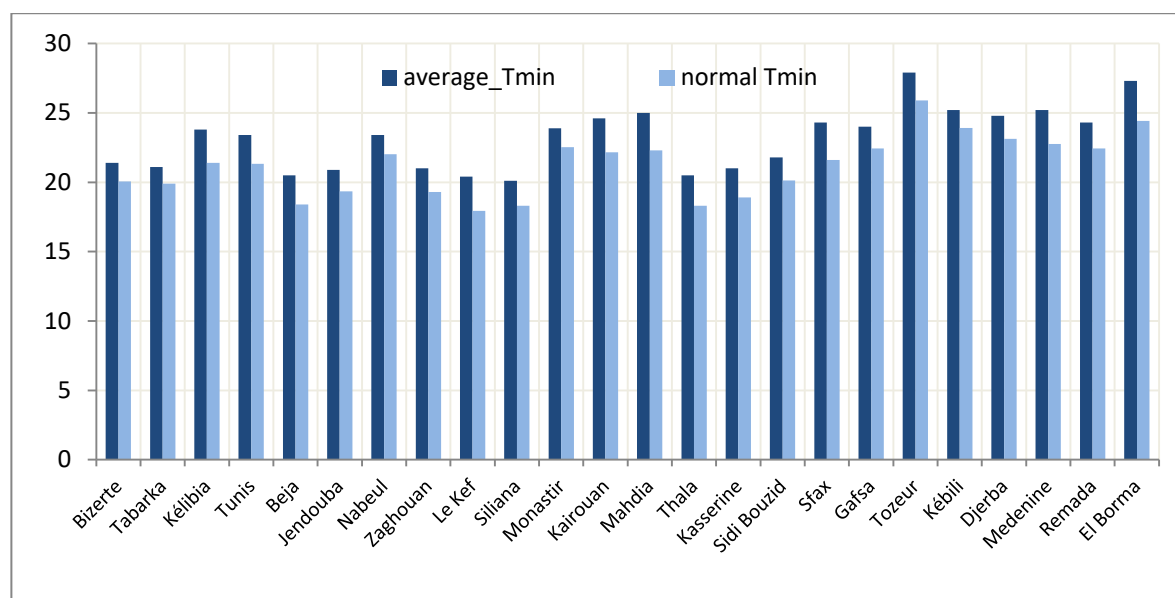
Average Tmax (°C) of July 2021



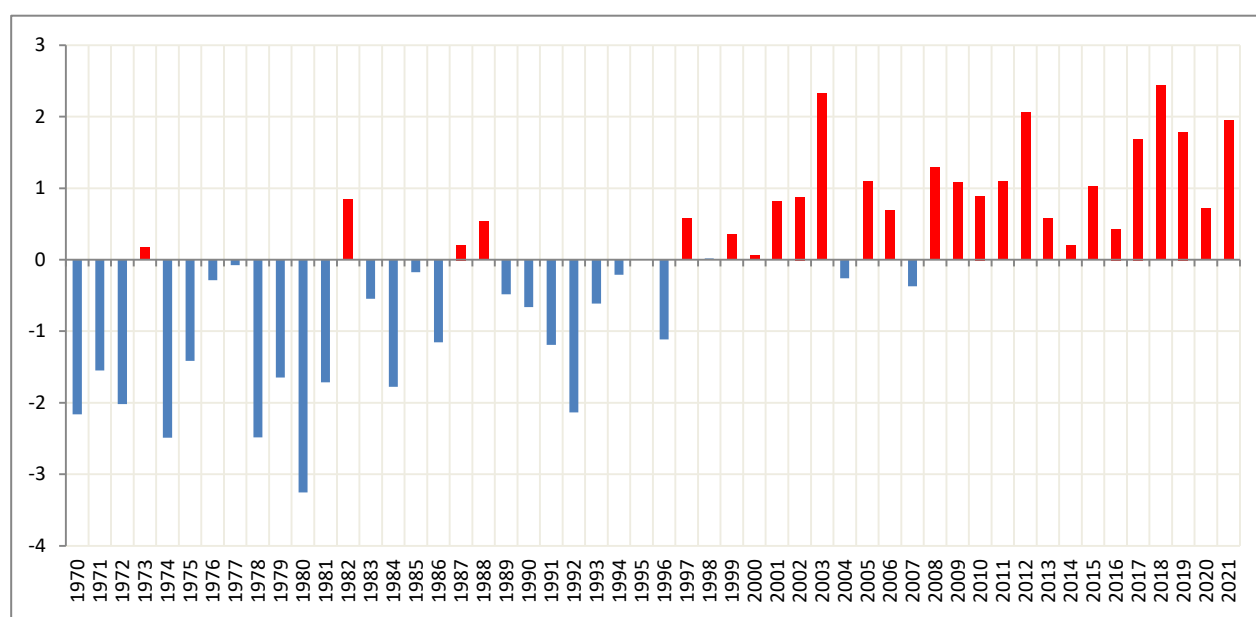
The difference from the reference rate

- Minimum temperature:

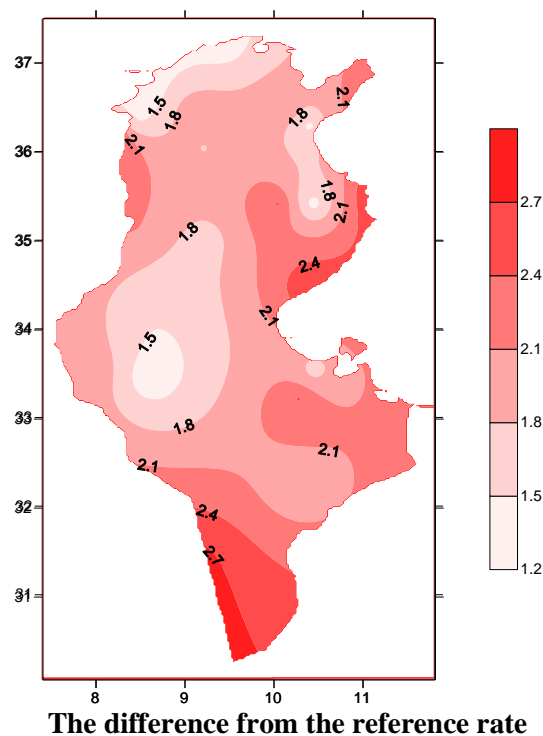
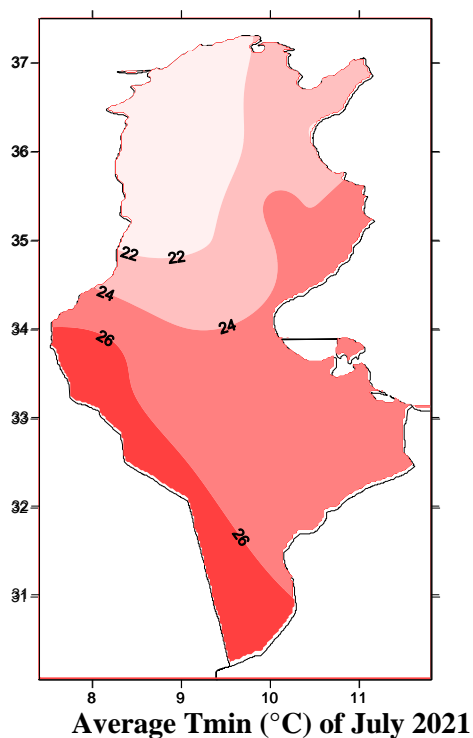
The average minimum temperature was high during the month of July 2021 and ranged from (20.1)°C in Siliana to (27.9)°C in Tozeur. The reference rates were exceeded by a difference ranging from (+1.2)°C in Tabarka to (2.86)°C in El Borma and the absolute minimum temperature reached (14.0)°C in Thala on July 17, 2021. As for the general average of the minimum temperature, it reached (23.16)°C and it was above the reference average of (21.21)°C with a difference of **(+1.95)°C** .



Comparing the minimum temperatures for the month of July 2021 with the reference rates (1981-2010)

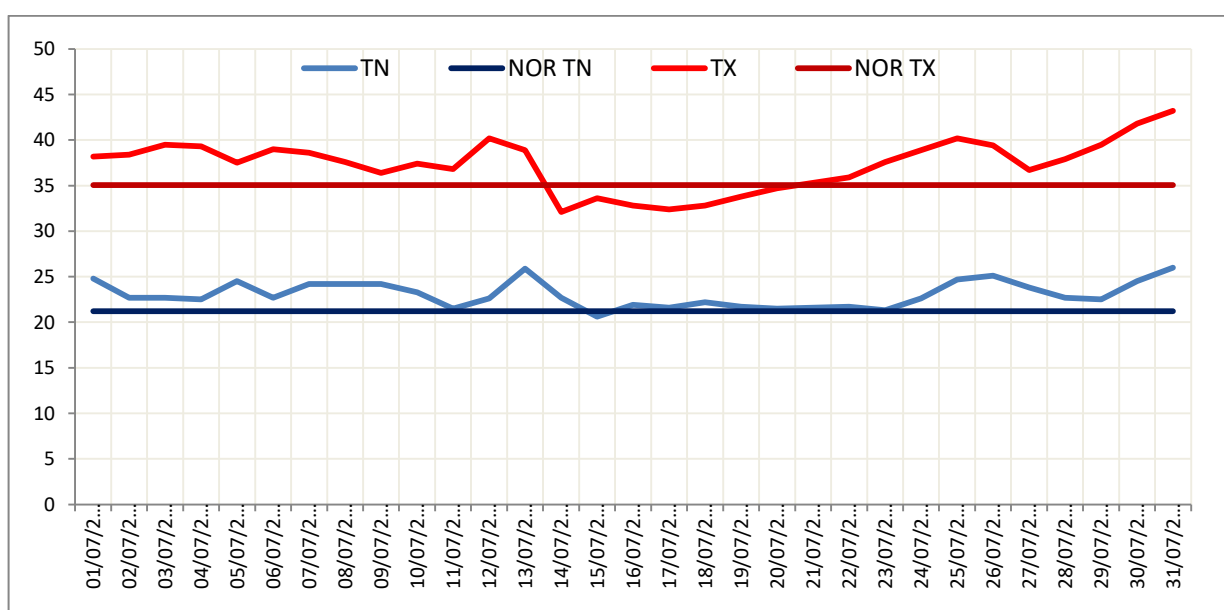


The difference in the average minimum temperature during the month of July relative to the reference rate since 1970



- Daily temperature evolution:

After the end of the month of June, which was marked by a noticeable rise in temperature in our regions, the month of July began with high temperatures during the day as well as at night. Since the thirteenth day of the month, the temperature has been slightly below average. Starting on the twenty-fourth day, our country witnessed severe heat waves, where the temperature was above the reference rates and with differences of more than **10 degrees** in the southern regions.



Daily evolution of maximum and minimum temperatures during July 2021

- New records for the month of July (°C) :

- **Maximum temperature :**

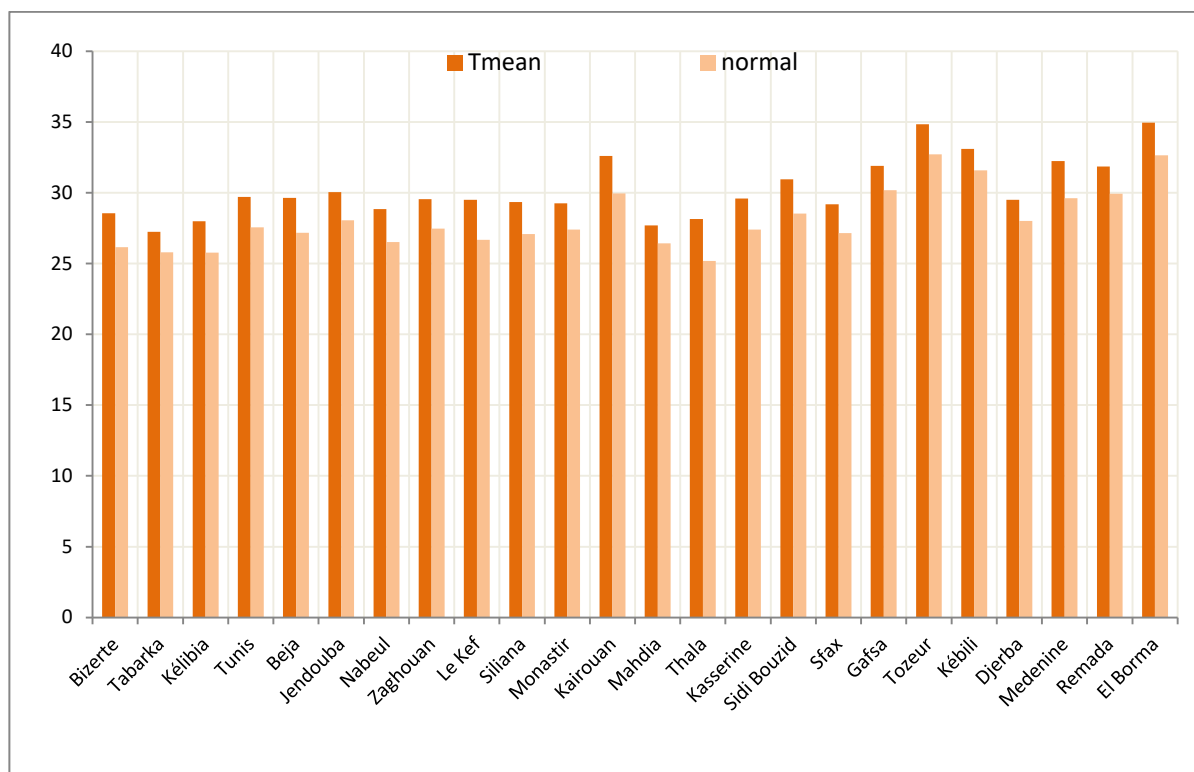
Station	New record		Old record	
	T max	Date	T max	Date
Kasserine	43.9	July 04, 2021	43.6	July 24, 1997
Tataouine	48.5	July 04, 2021	48.4	July 13, 2008
Remada	48.1	July 04, 2021	47.9	July 22, 1973
Gabes Matmata	47.6	July 06, 2021	47.5	July 06, 1993
Gabes city	46.7	July 31, 2021	46.3	July 02, 2002

- **Highest minimum temperature (in ° C):**

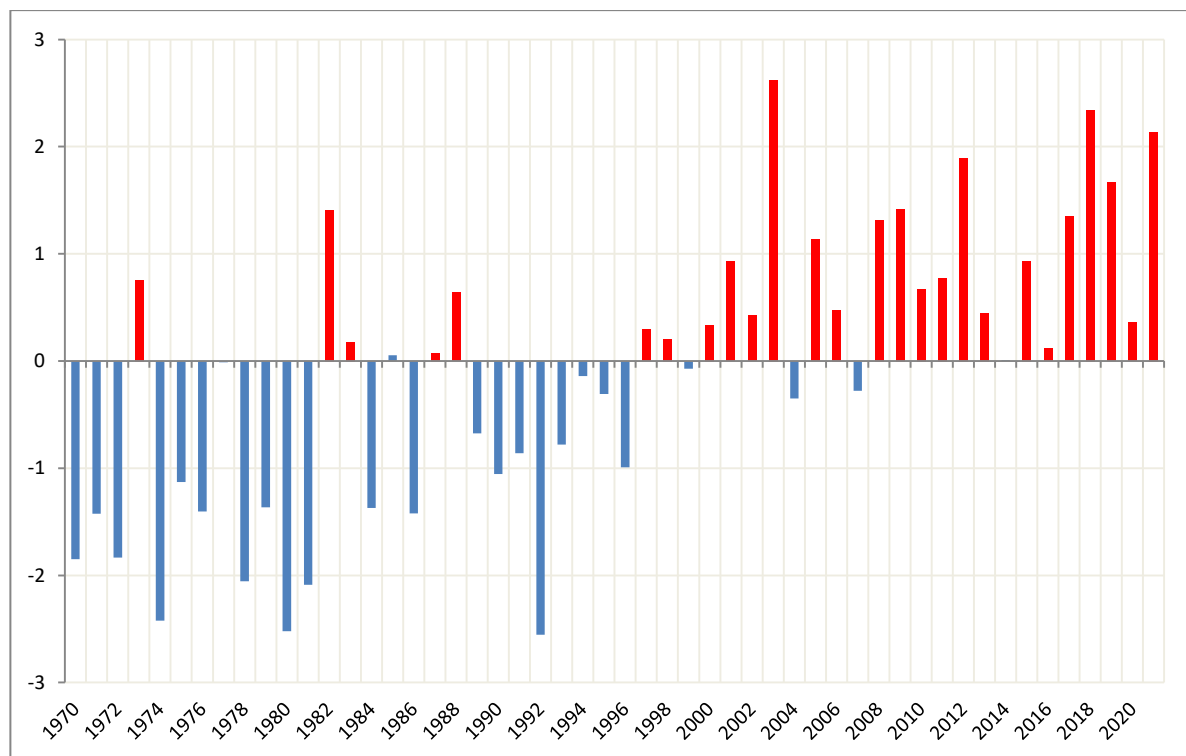
Station	New record		Old record	
	T min	Date	T min	Date
Nabeul	27.5	July 30, 2021	27.4	July 24, 2017
Gafsa	32.8	July 09, 2021	32.1	July 03, 1981

Average temperatures :

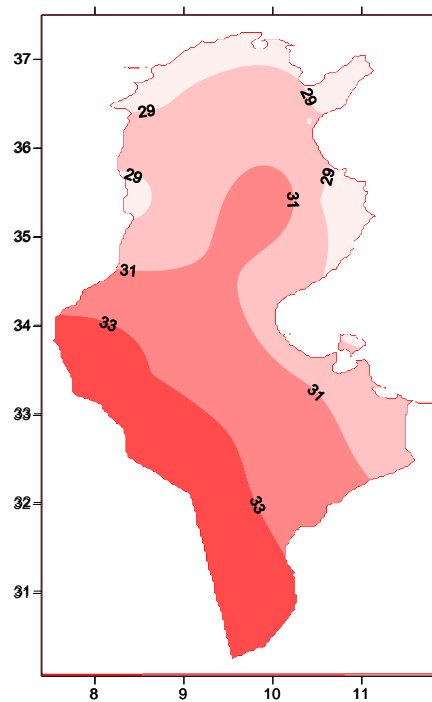
The average temperatures ranged between 27.25°C in Tabarka and 34.95°C in El Borma. The general average temperature reached (30.26)°C and it was above the reference rate for the month (28.13 °C) with a difference of (2.14°C), which ranks July for this year as the third hottest month of July since 1950 after July 2018 (2.34°) and 2003 (2.62°C).



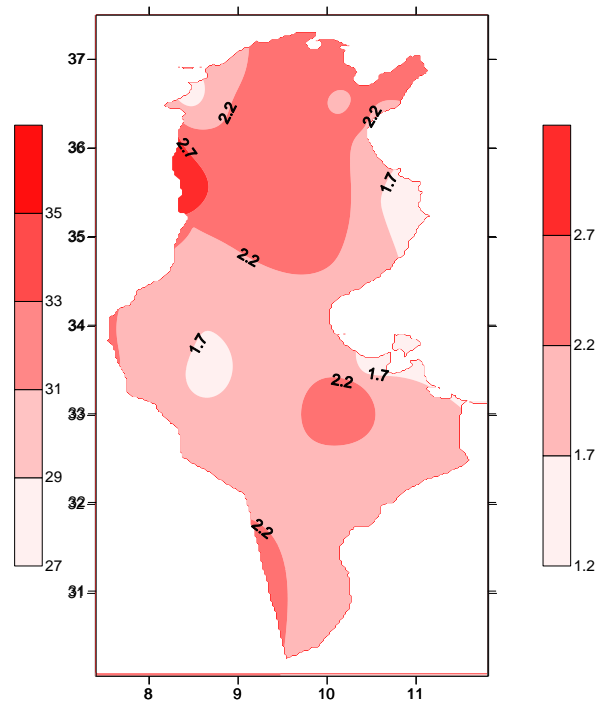
Comparing the average temperature rates for July 2021 with the reference rates (1981-2010)



The difference in the average temperature of July relative to the monthly reference rate since 1970



Average temperature (°C) of July 2021

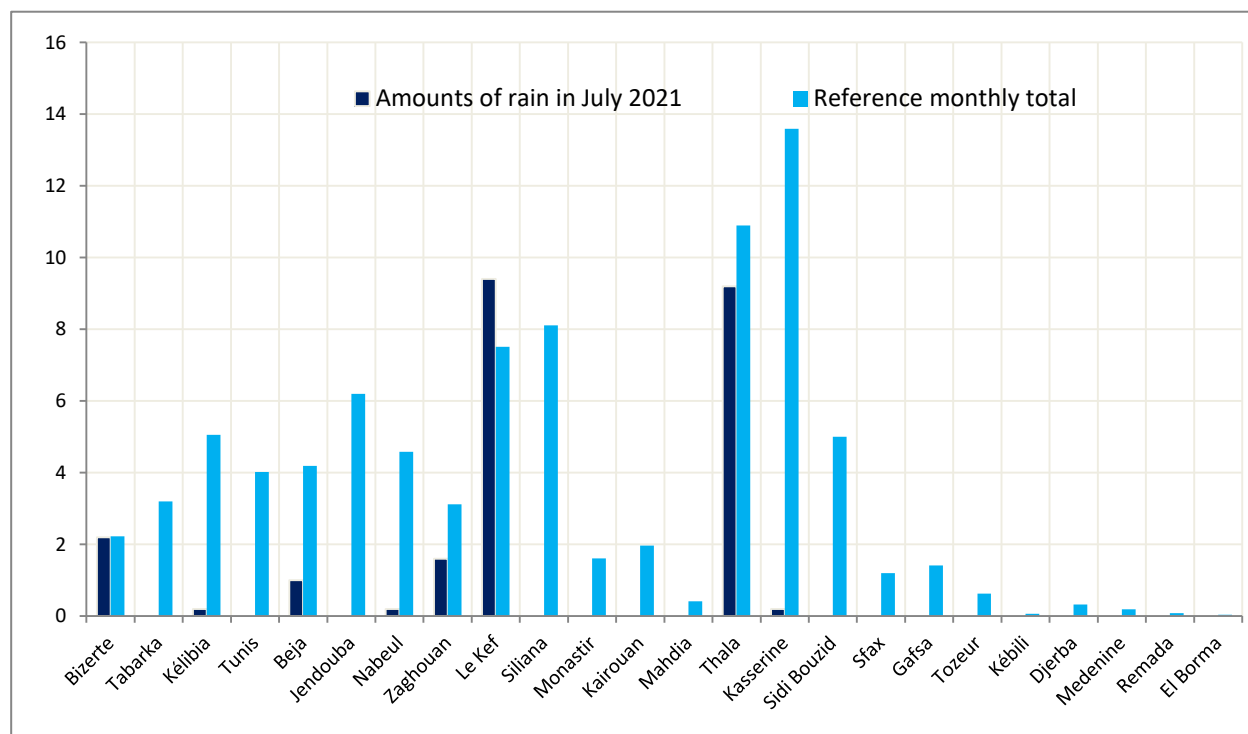


The difference from the reference rate

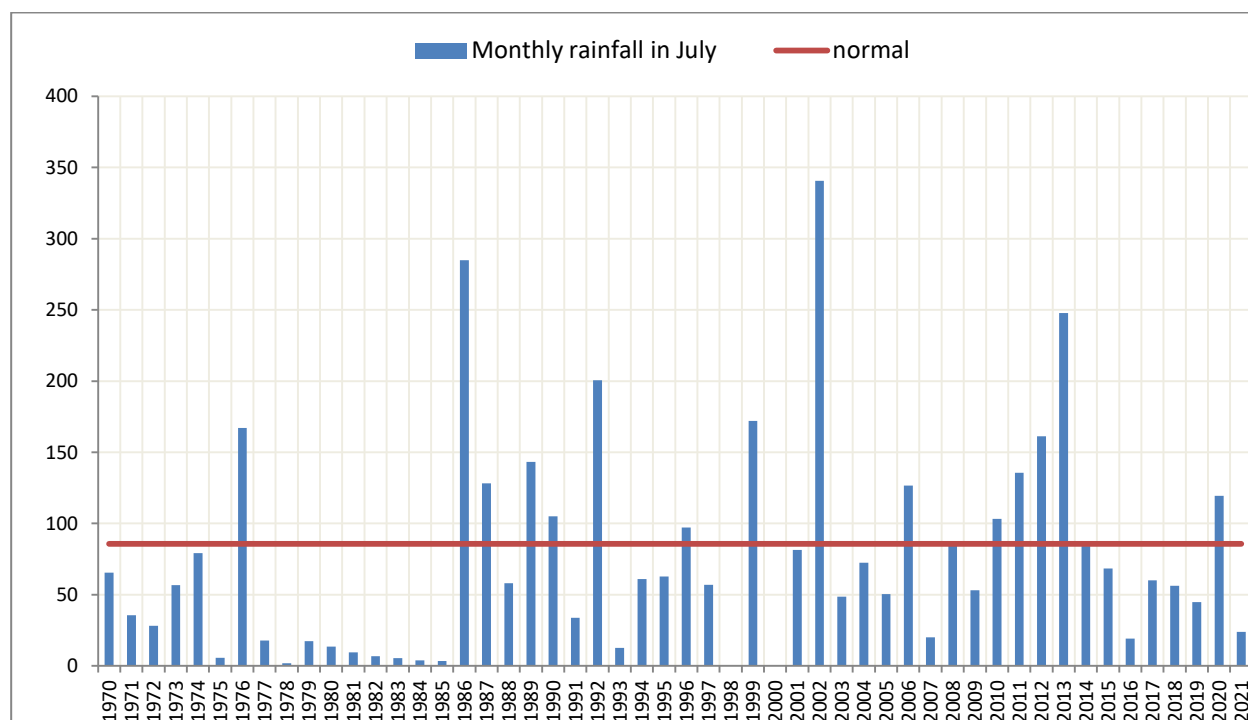
Rainfall :

Rain is usually weak but rare in the month of July in most regions of the country. This year, and based on the reference monthly total of rain, there was a decrease of 72%, as the monthly total of rain recorded in all regions (24 main stations) was only 24 millimeters, while the reference total for the same stations amounted to 85.66 mm, which represents about **28%**.

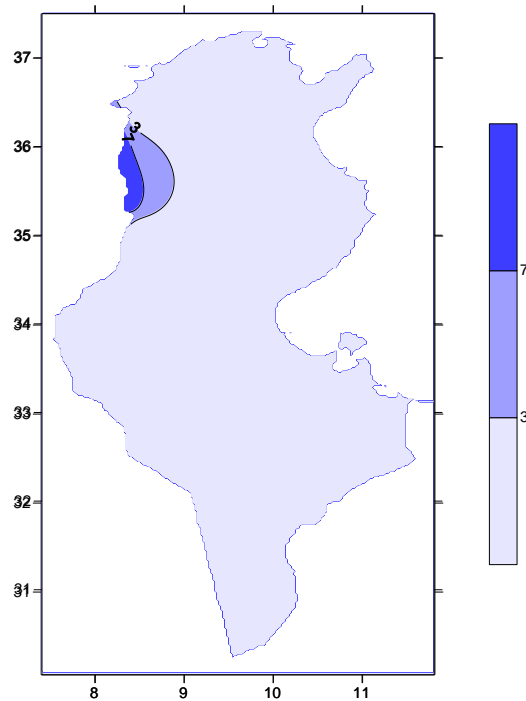
It should be noted the rains did not fall in most of the central and southern regions during the month of July 2021.



Comparing the total amounts of rain of July 2021 with the reference monthly total



Total amounts of rain (in millimeters) of July since 1970



Total rainfall during July 2021

The winds:

As for the winds, they were mostly weak to moderate, but their speed increased at the beginning of the month (from 01 to 04 July 2021) in the central and southern regions, and its maximum speed ranged between 58 and 83 km / h and reached 104 km / h in Thala on July 3 and 108 km / h in Kasserine on July 4, 2021.

The wind speed increased during July 6 and 7 in the northwest regions, with a maximum speed ranging from 72 to 90 km / h and a maximum of 101 km / h in Tabarka on July 7, 2021.

The winds were strong on July 13 and 14 in Mahdia and in the southern regions, with a maximum speed of 58 and 68 km / h and a maximum of 86 km / h in Kebili on July 14. The winds were locally strong on July 17, reaching 97 km / h in Bizerte, 72 in Kelibia and 58 km / h in Monastir.

Also, the winds were strong at the end of the month on July 31, 2021, with a maximum wind of 83 km / h in Tunisia and 72 km / h in Zaghuan and Kairouan.

