

Monthly Climate Report_January 2021 in Tunisia

3rd warmest January and 6th driest since 1970

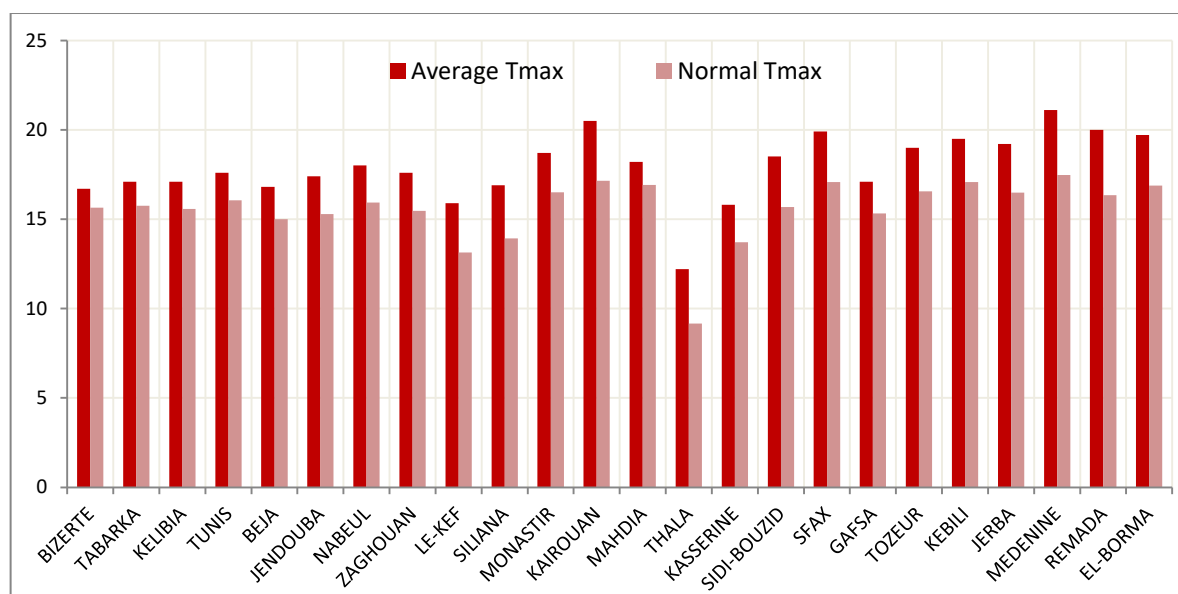
January 2021 was marked by a noticeable decrease in the amounts of rain in most regions of the country (24 main stations). The monthly total was less than the reference average and reached 350.8 millimeters, while the reference rate for the same stations was 1161.1 millimeters.

The deficit across all regions was 70 % which ranked January 2021 as the sixth driest January since 1970.

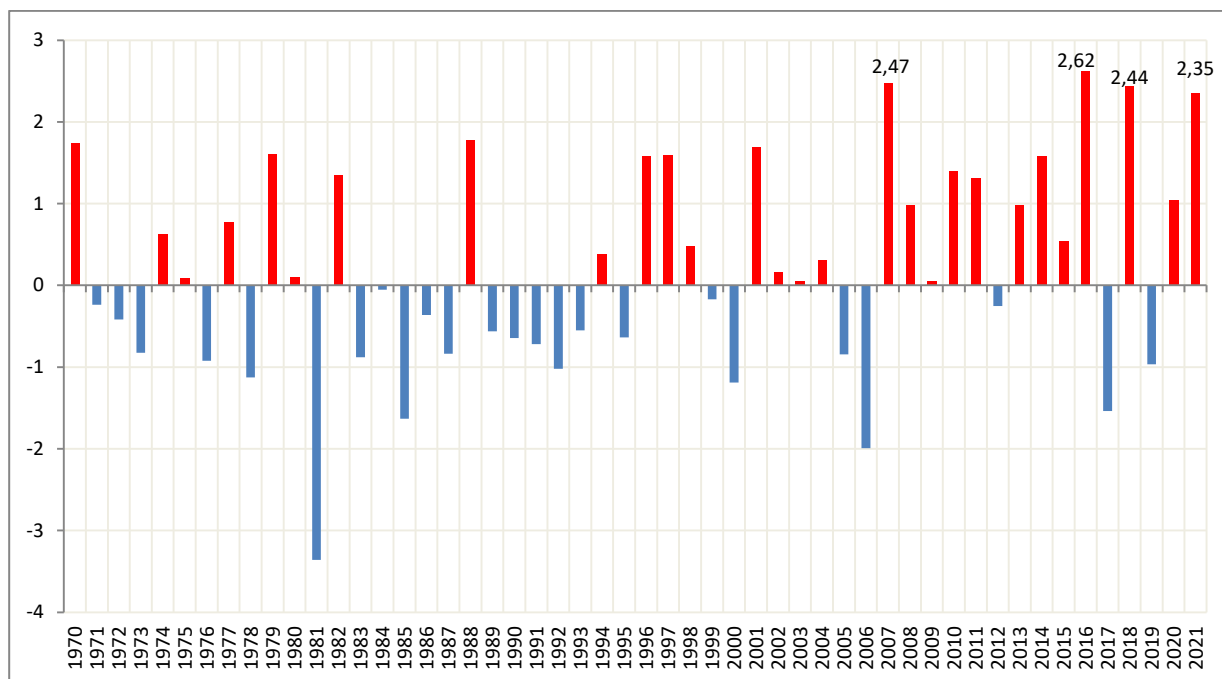
Concerning the temperature, it was high in all regions, new records were broken at several stations. The average general temperature for the month exceeded the reference normal (1981-2010) with a deviation of (+ 1.8) °C and this difference is considered significant, which ranks January 2021 as the third warmest month since 1970.

Maximum temperature:

The maximum temperature has increased in all regions and the rise has been noticeable, especially on January 8 and 9, as well as January 29 and 30, where we set new records at several stations. The absolute maximum temperature reached 33.8 degrees in Medenine on January 09, 2021 (table of records). As for the average maximum temperatures, they varied between 12.1 °C in Thala and 21.1 °C in Medenine and they were higher than the reference norms, with a difference of between (+ 1.1) °C in Bizerte and (+3) °C in Remada. As for the general average of maximum temperatures, it reached 18.2 °C, exceeding the reference normal (15.9 °C) with a significant difference of (+2.4) °C.

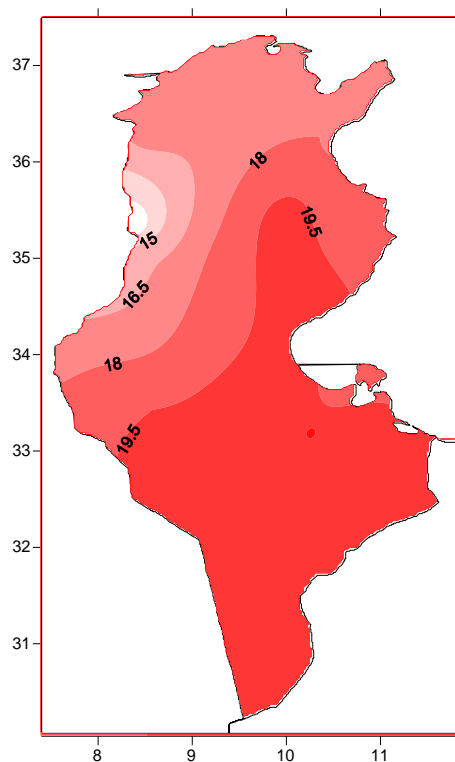


Comparison of maximum temperatures of January with normal (1981-2010)

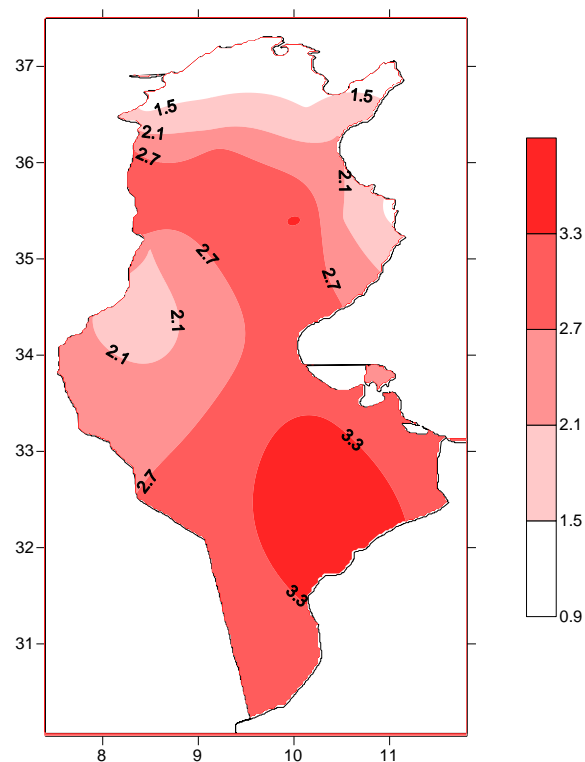


Maximum temperature deviation from normal (1981-2010)

Since1970 _ Month of January



Maximum temperature in (° C)



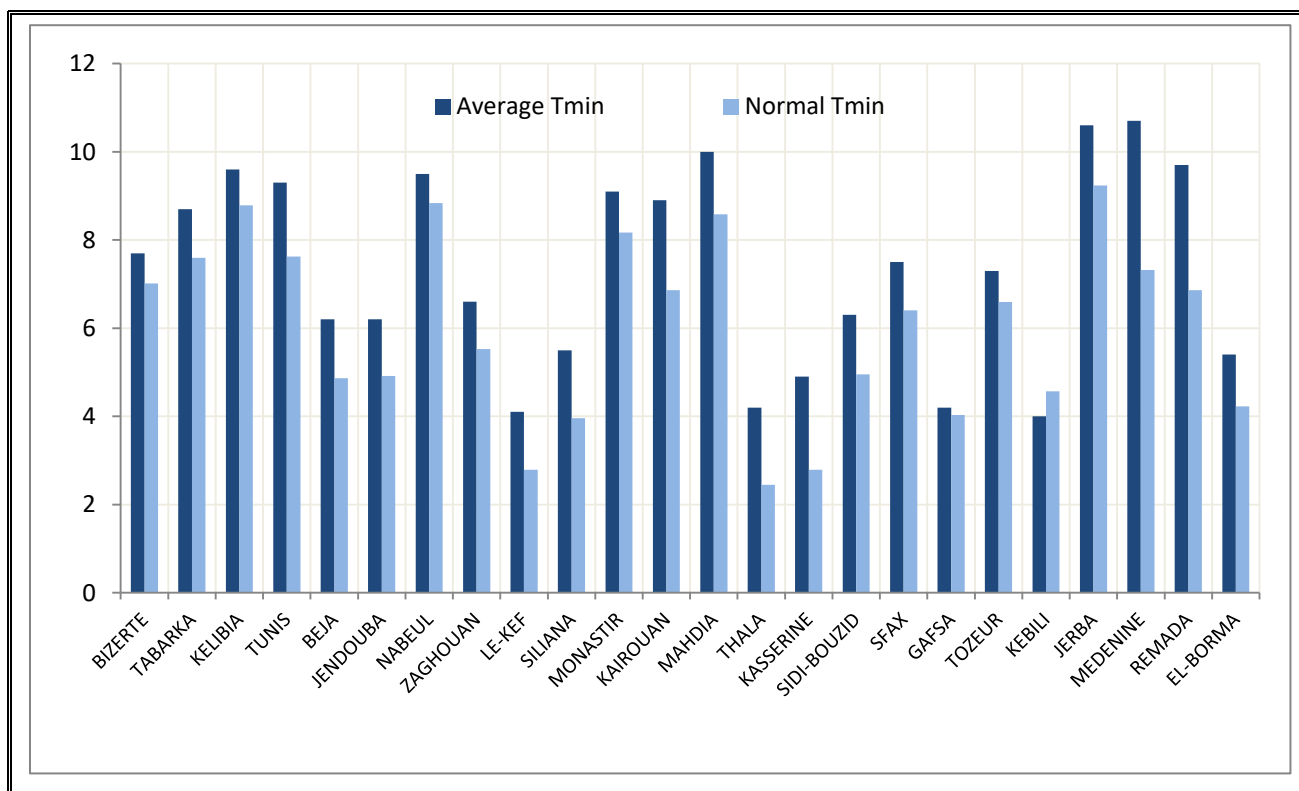
Deviation of Tmax from normal

Maximum temperature records:

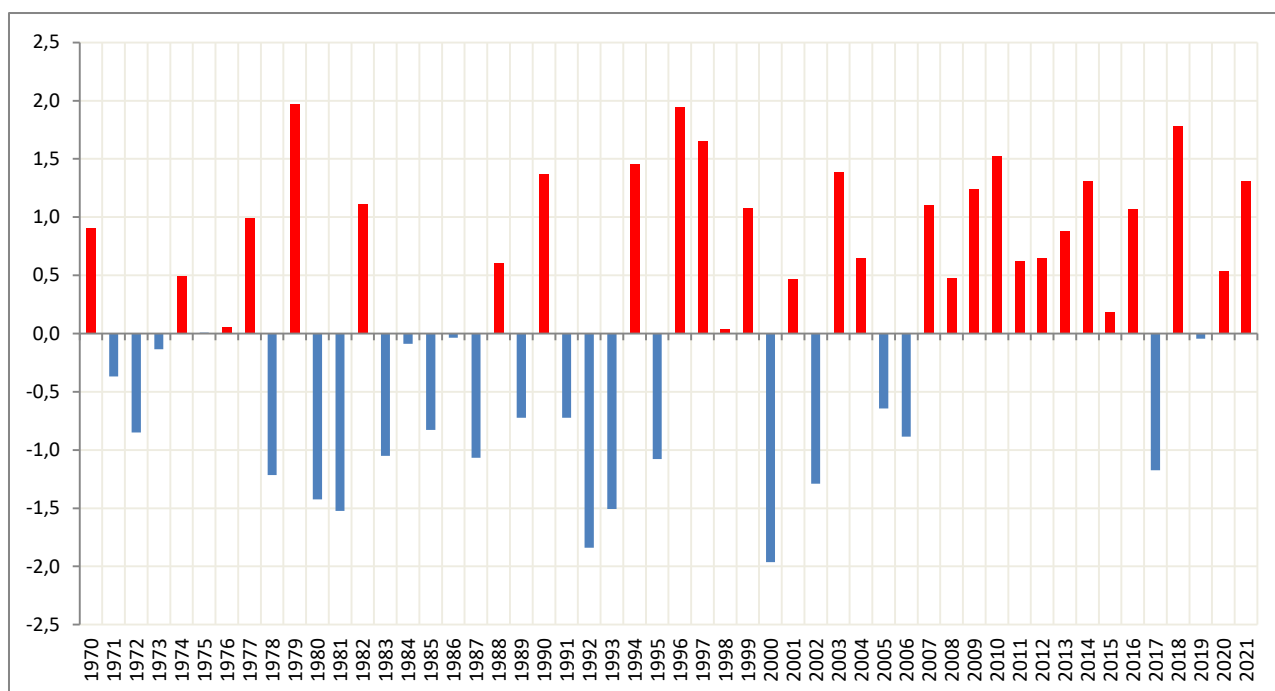
| | New Tmax record (°C) | dated | Last Tmax record (°C) | dated |
|-------------|-------------------------|------------------|--------------------------|--|
| KELIBIA | 24.2 | January 08, 2021 | 23,70 | January 01, 1995 |
| BEJA | 25.2 | January 30, 2021 | 24,70 | January 01, 1995 |
| NABEUL | 26.4 | January 30, 2021 | 25,10 | January 05, 2016 |
| LE-KEF | 25.3 | January 09, 2021 | 25,00 | January 03, 1952 and January11, 2016 |
| KAIROUAN | 30.2 | January 30, 2021 | 30,00 | January 28, 1979 |
| MONASTIR | 28.8 | January 30, 2021 | 27,00 | January 01, 1995 and January06, 2001 |
| GAFSA | 25.7 | January 09, 2021 | 24,80 | January 31, 2013 |
| SIDI-BOUZID | 27.5 | January 30, 2021 | 27,20 | January 28, 1979 |
| SFAX | 27.6 | January 29, 2021 | 26,80 | January 02, 1962 and January 28, 1979 |
| TOZEUR | 26.7 | January 09, 2021 | 25,00 | January 27, 1979 |
| KEBILI | 28.1 | January 09, 2021 | 26,50 | January 30, 2014 |
| JERBA | 31.8 | January 09, 2021 | 28,30 | January 28, 1979 |
| MEDENINE | 33.8 | January 09, 2021 | 31,30 | January 28, 1979 |
| REMADA | 31.9 | January 09, 2021 | 30,00 | January 28, 1979 |
| EL-BORMA | 31.7 | January 09, 2021 | 30,80 | January 28, 1979 |

Minimum temperature:

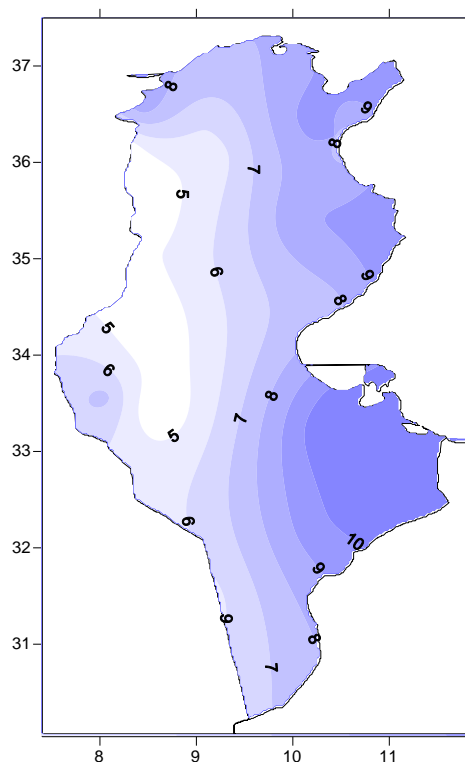
The minimum temperatures in January 2021 were between 4.1 ° C in Kef and 11.3 ° C in Tataouine, and they were above the reference normals, with a difference ranging from (0.2) ° C in Gafsa to (3.4) ° C in Medenine. The absolute minimum temperature reached (-4.3) ° C in Kasserine on January 4, 2021. The general average minimum temperature reached 7.7 ° C and it was higher than the reference normal (6.2 ° C) with a difference of (+1.5) ° C.



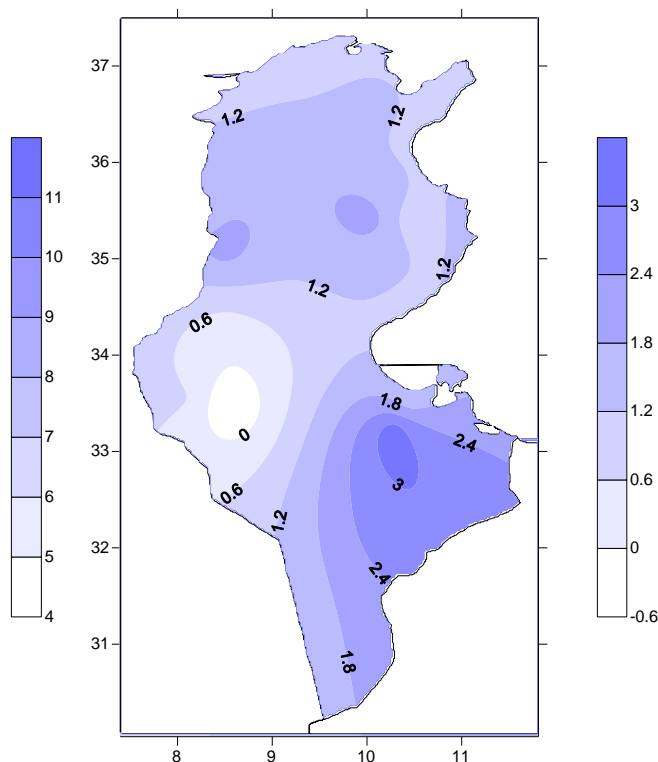
Comparison of minimum and normal temperatures for the month of January



*Deviation from normal (1981-2010) of minimum temperatures
since 1970 - Month of January*



Minimum temperature (° C)



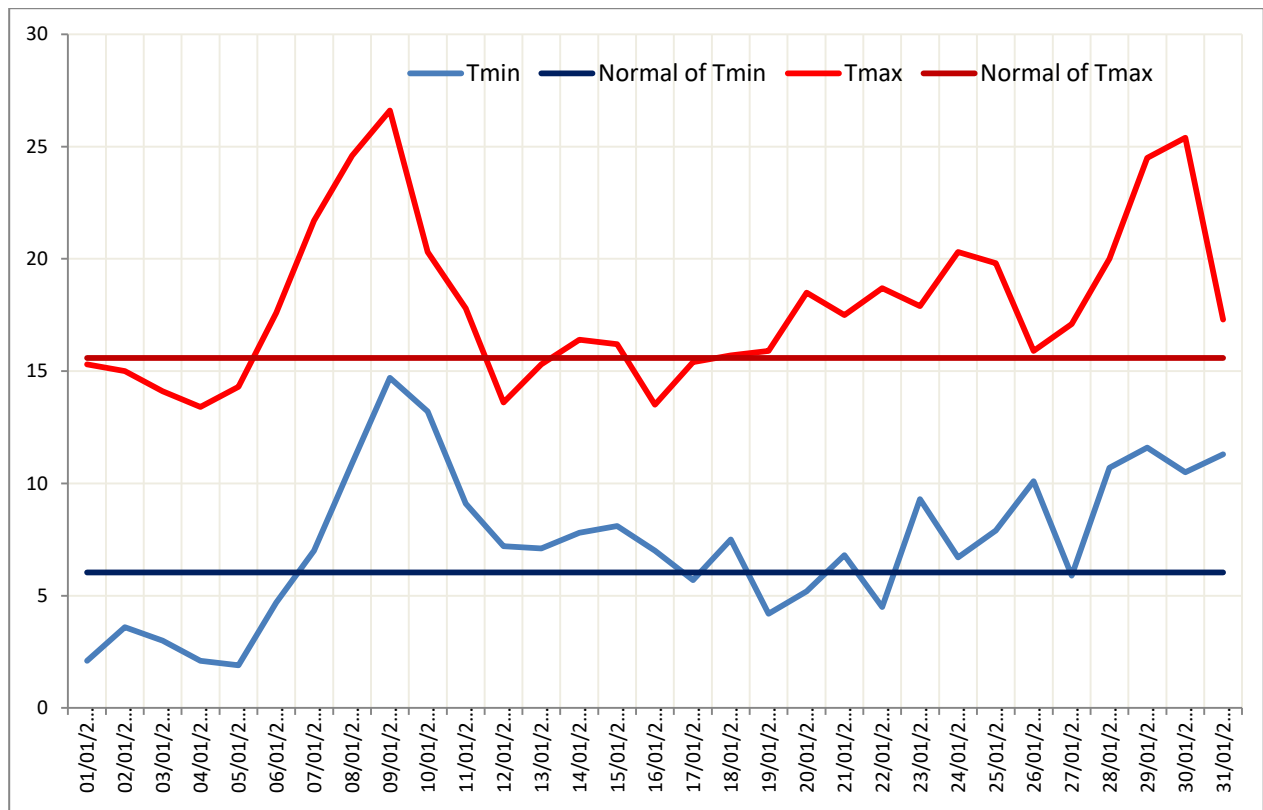
Deviation from normal of T_{min} (° C)

Minimum temperature records:

| | New T _{min} record(°C) | Dated | Last T _{min} record(°C) | Dated |
|-------------|------------------------------------|------------------|-------------------------------------|--|
| LE-KEF | 13.3 | January 09, 2021 | 12,30 | January 22, 2018 |
| SILIANA | 12.6 | January 09, 2021 | 12,50 | January 31, 2015 and January 05, 2016 |
| THALA | 14.5 | January 09, 2021 | 13,20 | January 06, 1979 |
| KASSERINE | 13.9 | January 09, 2021 | 13,50 | January 23, 2018 |
| MAHDIA | 16.7 | January 09, 2021 | 16,10 | January 10, 1996 |
| GAFSA | 15.0 | January 10, 2021 | 14,60 | January 08, 2018 |
| SIDI-BOUZID | 16.7 | January 09, 2021 | 14,80 | January 02, 1996 |
| SFAX | 15.2 | January 09, 2021 | 14,80 | January 06, 1977 |
| TOZEUR | 17.6 | January 09, 2021 | 16,80 | January 21, 1966 |
| KEBILI | 18.4 | January 09, 2021 | 14,30 | January 31, 2014 |
| MEDENINE | 23.4 | January 10, 2021 | 18,00 | January 28, 1979 |
| REMADA | 23.0 | January 10, 2021 | 17,70 | January 05, 1970 |
| EL-BORMA | 17.0 | January 09, 2021 | 15,70 | January 31, 2014 |

Daily temperature evolution:

At the beginning of the month, temperatures were unless to the month's reference normal in most areas until January 05, then they were often high and the rise was noticeable, especially on January 08 and 09 and January 29 and 30, where new records for maximum temperature were recorded. Also new records of the absolute minimum temperature (highest minimum temperatures) were recorded at several stations (See record tables).

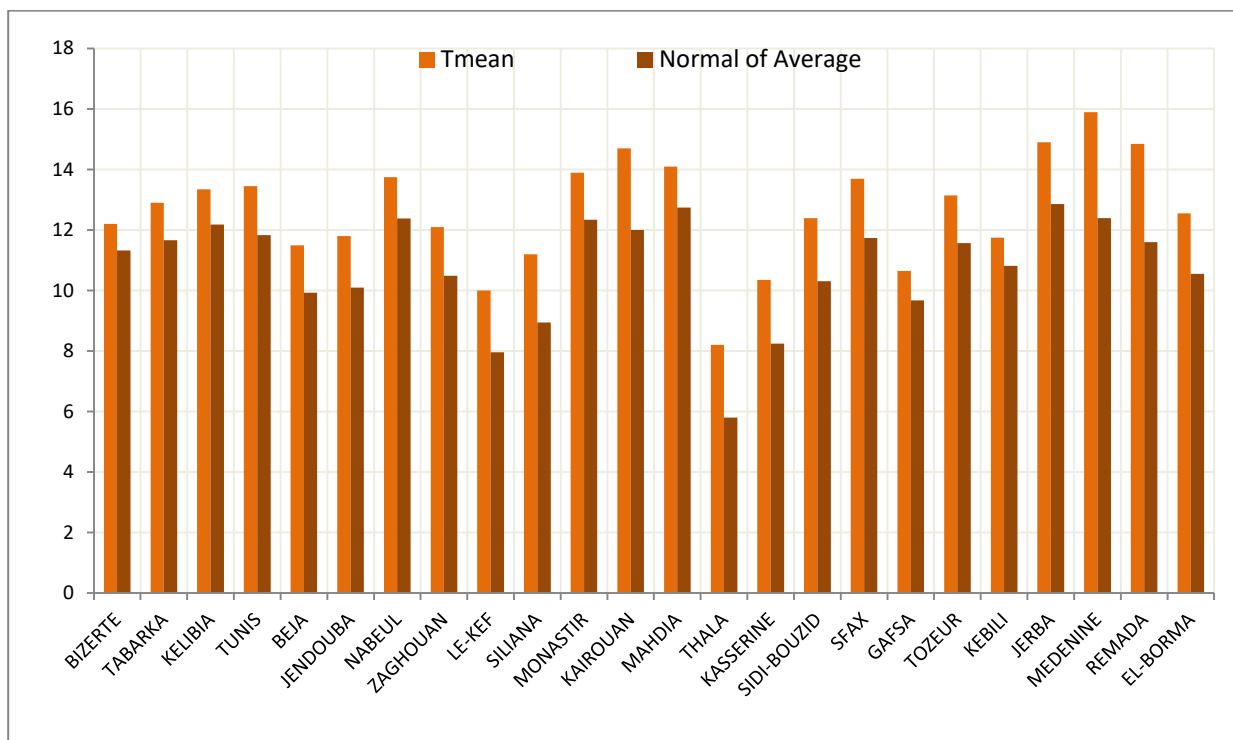


Daily evolution of temperatures compared to the normal for the month of January

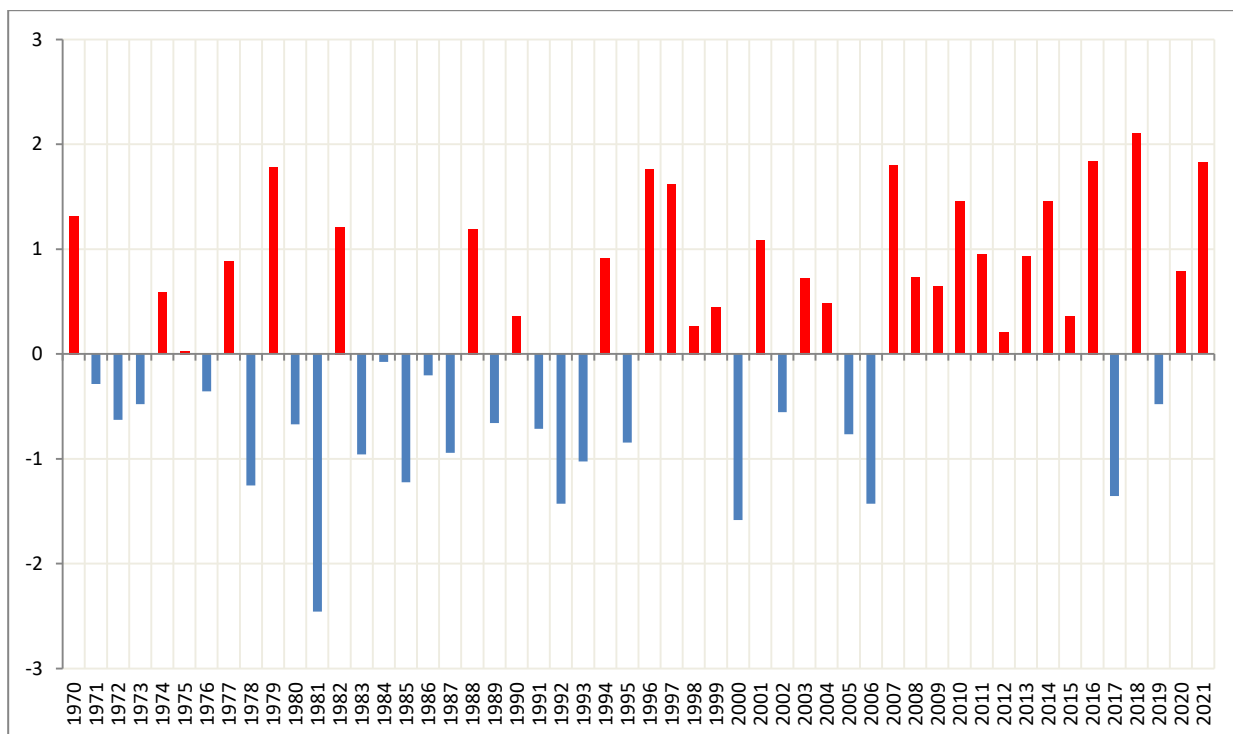
Average temperatures:

The average temperatures were above the reference averages in all the stations (24 stations), and they varied between 8.2 ° C in Thala and 15.9 ° C in Medenine.

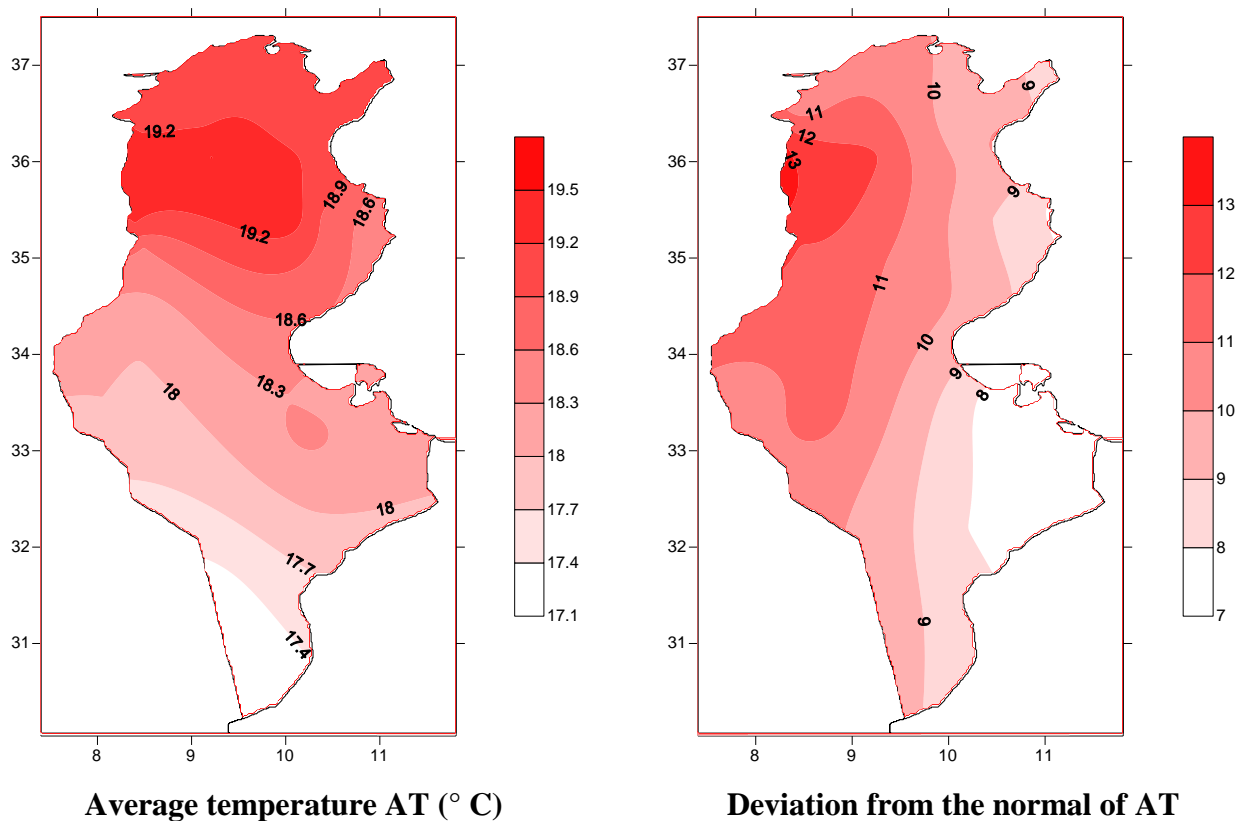
As for the general average temperature, it reached 12.6°C and it was higher than the reference normal (1981-2010), with a difference of (+1.8) ° C and this difference is considered important, which ranks January 2021 as the third hottest January since 1970 after January 2016 (1.84 ° C) and January 2018 (2.10 ° C).



Comparison of average temperatures to normal for the month of January



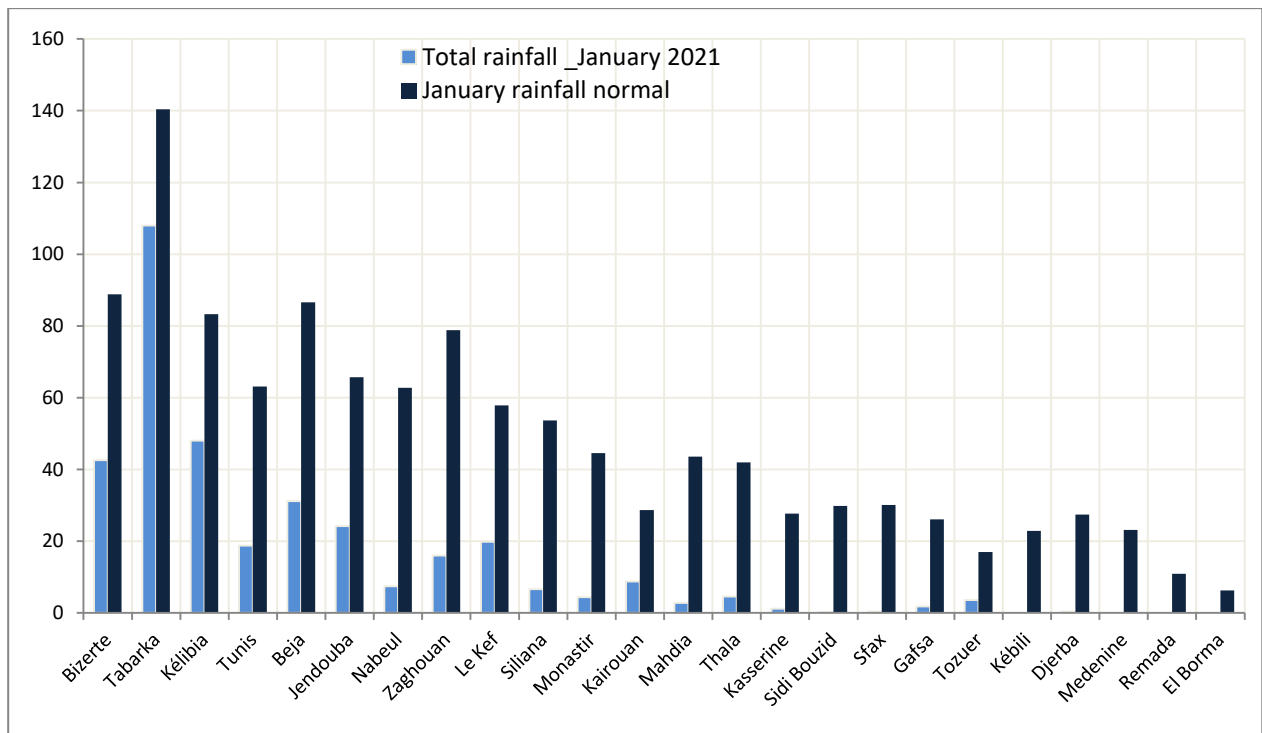
**Deviation from normal (1981-2010) of mean temperatures
since 1970 - month of January**



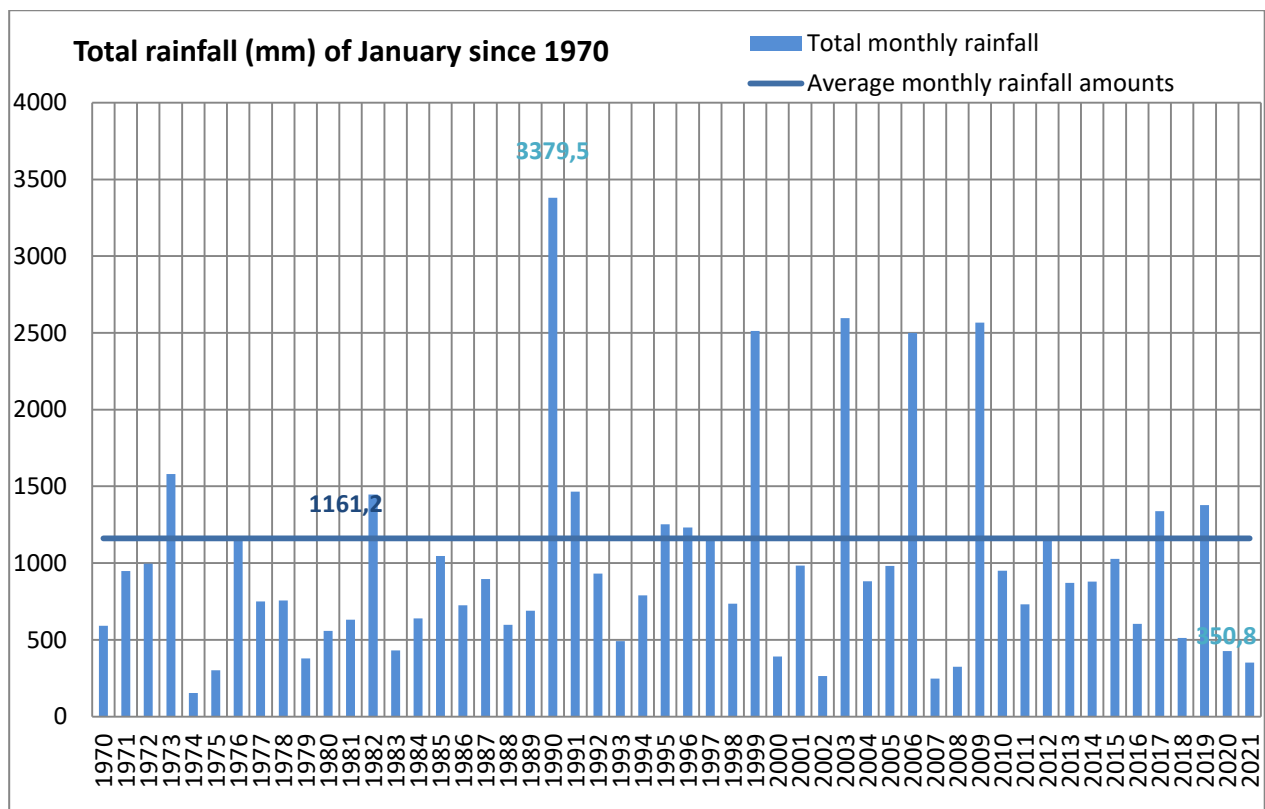
Rainfall:

Regarding rainfall, January 2021 was marked by a significant deficit. The total monthly rainfall accumulation (24 main stations) reached 350.8 mm, which represents 30.21% of the reference cumulative for the same stations (1161.1 mm). This rainfall deficit varied from 16% in Tabarka to 93% in Mahdia. Note that it did not rain during this month of January over most of the central and southern regions.

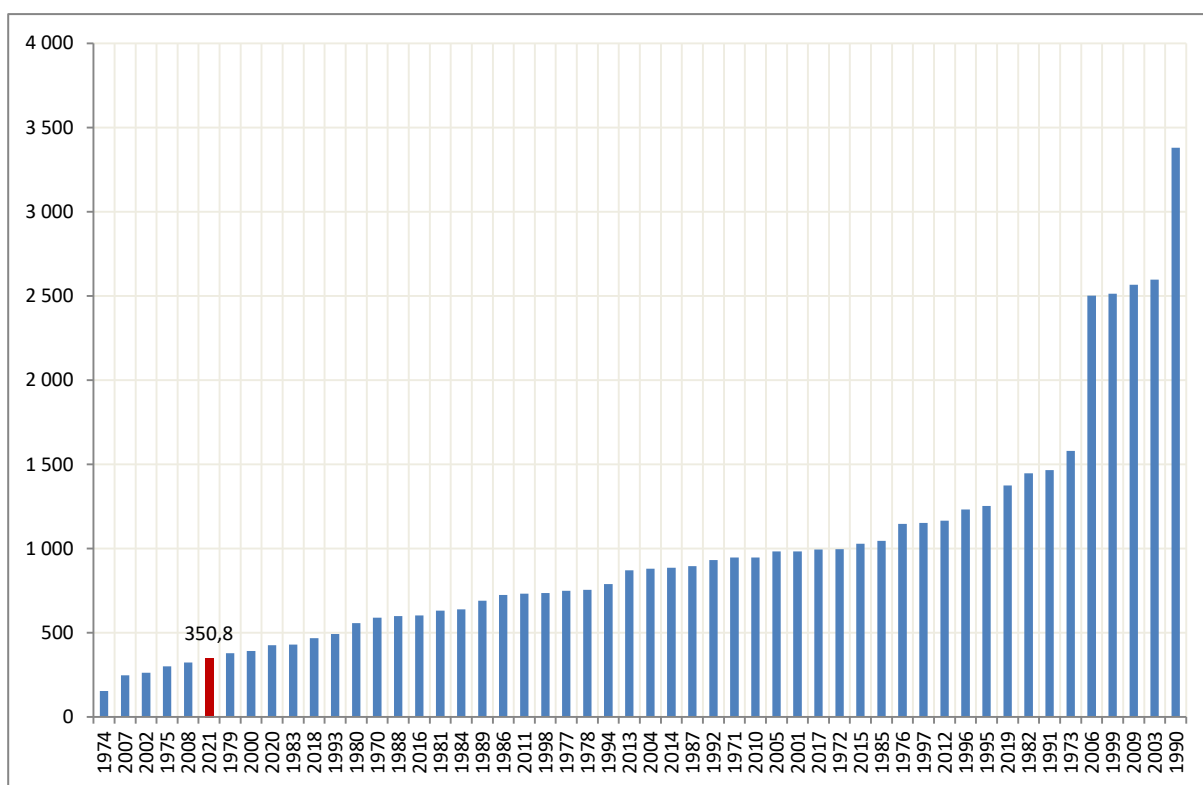
The rainfall deficit in all regions (24 main stations) reached 70%, which ranks January 2021 as the sixth driest January since 1970 after January 2008 (323.6 mm), January 1975 (301.70 mm), January 2002 (263.5 mm), January 2007 (246.7 mm) and January 1974 (154.2 mm).



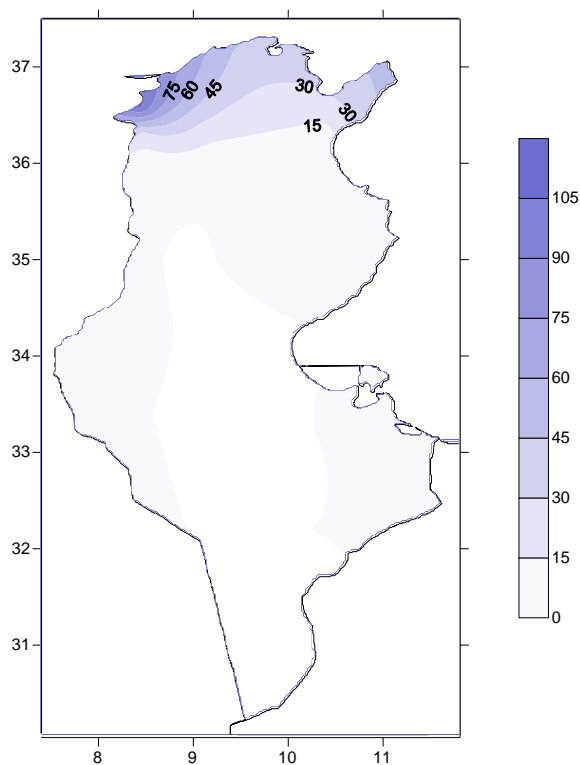
*Comparison of monthly rainfall amounts compared to the reference averages
of the accumulations*



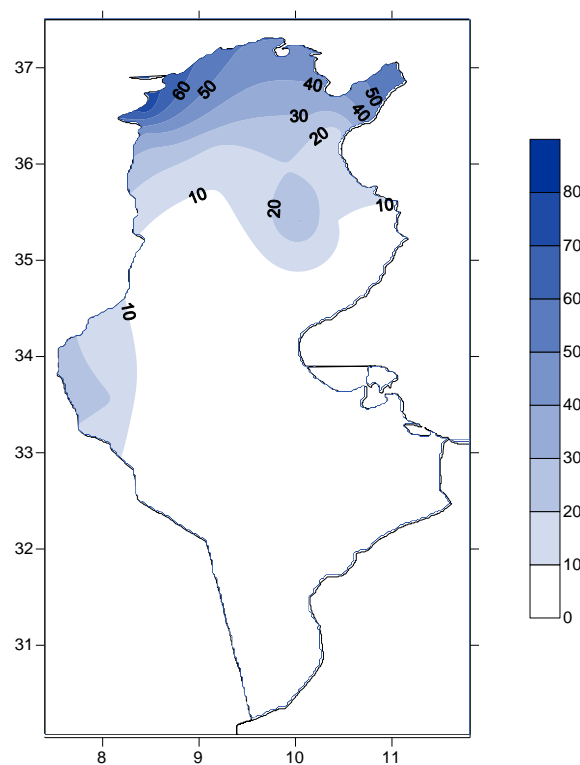
Monthly rainfall (mm) on January in Tunisia since 1970



Classification of rainfall amounts - month of January since 1970



Monthly rainfall accumulation (mm)



Ratio to normal (%)

January 2021



The wind :

As for the wind, it was generally light to moderate, except on few days when the wind was strong during:

- ✚ the period from January 8 to 10 and the maximum speed varied from 60 to 94 km / h, and it reached a maximum of 137 km / h on January 9, 2021.
- ✚ the period from January 12 to 14, the wind speed also increased in the northern regions, the maximum speed was between 60 and 80 km / h and it reached 83 km / h in Tabarka, Bizerte and Nabeul on the 13th January 2021.
- ✚ the period from January 24 to 26 the winds were also strong on the north-west and locally in the center and the south, where the maximum speed varied from 60 to 86 km / h and it reached a maximum of 130 km / h in Kasserine, January 26, 2021.

The strong wind generated sand phenomena in the south of our country.

