

The Palestinian Central Bureau of Statistics (PCBS) and the Palestinian Meteorological Directorate (PMD) jointly issued a press release on the Occasion of World Meteorological Day (WMD) under the theme "At the Frontline of Climate Action."

Every year on March 23rd, the World Meteorological Organization (WMO) celebrates World Meteorological Day. This year's theme is "At the Frontline of Climate Action".

The following are the most prominent features of the weather in Palestine.

The Israeli occupation aggression on the Gaza Strip has destroyed all rain metrological stations.

In the Gaza Strip, there were 12 stations set up to monitor rainfall levels from the north of the region to its south. Unfortunately, due to the Israeli occupation aggression that began on October 7th, 2023, all of these stations were destroyed. Unfortunately, we cannot include data from these stations in the press release as we do not have it.

The following are the most important features of the climate that prevailed during the year 2023:

Variation in rainfall amounts during the rainy season

Based on the PMD (Palestinian Meteorological Department) data, the recent rainy season (2023/2024) in the West Bank was characterized by an uneven rainfall distribution. The northern and central parts of the West Bank received more rainfall than the southern areas, which were affected by weather depressions that were mostly concentrated in the northern and northwestern regions. The data shows that Tulkarm station received the highest rainfall during the rainy season, totaling 866.7 mm, representing 144% of the mean average. On the other hand, Jericho station received the lowest rainfall during the season, with only 78.4 mm, representing 47% of the mean average.

Cumulative Amounts of Rainfall Recorded at West Bank Stations from the Beginning of the Current Rain Season 2023/2024 till 21/03/2024 Compared with General Average by Station Location

Station Location	Quantity of Rainfall till 21/03/2024 (mm)	Mean Average (mm)	% of Mean Average
Tulkarm	866.7	602.4	143.9
Qalqiliya	856.0	624.9	137.0
Nablus	777.5	660.1	117.8
Salfit	758.5	698.1	108.7
Ramallah and Al-Bireh	656.1	615.2	106.6
Jenin	593.7	468.2	126.8
Tubas	510.7	431.2	118.4
Hebron	444.7	595.9	74.6
Jerusalem	458.9	537.0	85.5
Bethlehem	425.6	518.4	82.1
Jericho	78.4	166.0	47.2

The highest annual humidity was in Hebron, and the lowest was in Jericho

Data showed that in 2023, the relative humidity varied between 71% in Hebron Station and 44% in Jericho Station. It is important to note that high humidity levels do not necessarily indicate rainfall and could be in the form of other water phenomena such as fog, clouds touching the earth's surface, or dew formation.

Mean Relative Humidity (%) in 2023 and Mean Average in Some West Bank Stations

Station	Relative Humidity (%), 2023	Mean Average %	% of Mean Average
Hebron	71	62	114.5
Nablus	68	61	111.5
Ramallah and Al-Bireh	64	75	85.3
Jenin	64	69	92.8
Jericho	44	52	84.6

Total evaporation was higher than the mean average in 2023

Data showed that the total evaporation in the West Bank station during 2023 was higher than the mean average. The majority of the stations recorded an increase in evaporation, with the highest amount of 2,701 mm observed in the Jericho Station and the lowest amount of 1,716 mm observed in the Nablus Station. It is worth noting that the amount of evaporation is influenced by high temperatures and wind activity in the region.

Total Evaporation in 2023 and Mean Average of Evaporation in Some West Bank Stations

Station	Total Evaporation (mm), 2023	Mean Average (mm)	% of Mean Average
Jericho	2,701	2,101	128.5
Jenin	1,971
Ramallah and Al-Bireh	1,789	1,889	94.7
Nablus	1,716	1,682	102.0

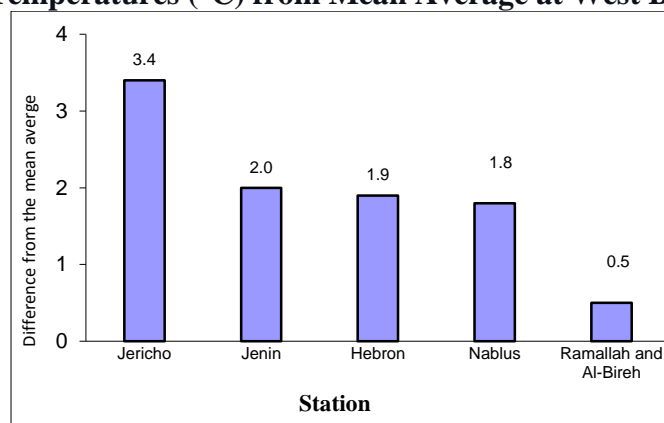
..: Data not Available

Air Temperatures in 2023 are higher than the mean average

Air temperatures in the West Bank in 2023 were analyzed using data from selected stations representing the region's climate system. A sample was taken from a station representing the mountainous and semi-coastal areas and the Al-Aghwar region. The results showed that the air temperatures in 2023 were higher than the mean average by 3.4°C in Jericho stations.

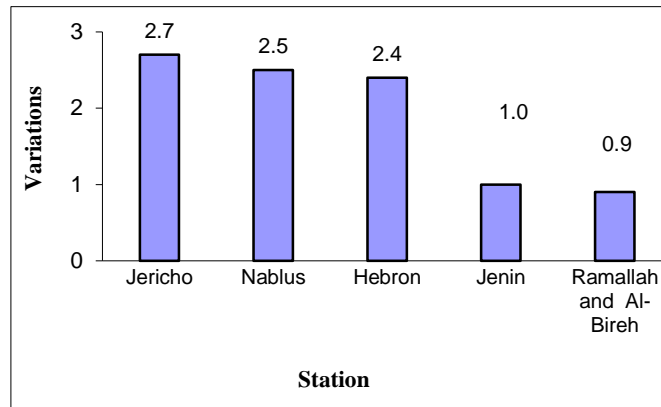
This significant increase in air temperatures can be attributed to heat waves that affected the West Bank during July, August, and October. The mountainous, coastal, and semi-coastal areas were particularly affected, resulting in even higher temperatures in those locations. These heat waves were also accompanied by a marked increase in humidity levels in the same areas.

Variations in Air Temperatures (°C) from Mean Average at West Bank Stations in 2023



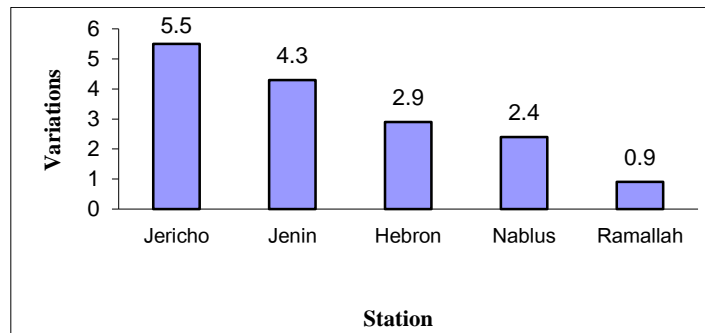
During 2023, maximum temperatures varied across stations in Palestine, with Ramallah and Al-Bireh seeing temperatures around 0.9°C higher than the yearly average, while Jericho station had a difference of 2.7°C.

Variations in maximum air temperature in 2023 (°C) from the yearly average at West Bank stations.



During 2023, minimum temperatures in Ramallah and Al-Bireh station were higher than the yearly average by around 0.9 °C, while in Jericho station, they were higher by 5.5 °C.

Variations in minimum air temperature compared to yearly averages in select West Bank stations in 2023.



The highest average hours of sunlight during 2023 was in Jericho Station

In 2023, the Jericho Station experienced the highest average hours of sunlight, with 8.6 hours per day. The Ramallah and Al-Bireh Station, on the other hand, had the minimum average hours of sunlight with only 8.3 hours per day.