

7 Elul 5785
31 August 2025

Monthly Weather Conditions - August 2025

Overview

August was characterized by temperatures considerably above the average, primarily due to a prolonged and anomalous heatwave that prevailed during the first part of the month. For the remainder of the month, temperatures were close to or slightly above the average. In the mountains, the interior of the country, and the coastal plain, they were higher than the average on most days of the month. The last few days of the month experienced slightly cooler than average conditions.

The heatwave was the most prominent event of the month, during which temperature records were broken – both a maximum temperature of 49.7°C in Gilgal and a high minimum temperature with a new national record of 37.1°C in Sedom. The heatwave was also exceptional in its long duration, and in the mountains and the interior of the country, it was the most severe since the August 1881 heatwave. Furthermore, two rain events occurred in the south of the country in August, one at the peak of the heatwave in Jerusalem and the southern Negev, and the second towards the end of the month south of Ashkelon.

In a historical comparison, August of this year ranks third in the last 75 years, and the summer of 2025 (June to August) ranks fifth, having been less hot than the summer of 2024, which was the warmest since the beginning of measurements.

Temperatures and Weather During the Month

In the northern and central mountains, August was hotter than the 1991-2020 average during the daytime by 1.5 to 2°C, and in the rest of the country, temperatures were 1 to 1.5°C above the average (Table 1). During the night, August was warmer than the average in most parts of the country by 1 to 1.5°C.

1st to 6th of the month: Near average in the interior

During the first days of the month, temperatures were close to the average in the mountains and the interior of the country and about 1°C higher than the average in the coastal plain.

7th to 16th of the month: Considerably warmer than average – [extreme heatwave](#)

On the 7th of the month, a warming trend commenced, which intensified on the 8th of the month. Until the 14th of August, an extreme heatwave persisted throughout the country with temperatures 7 to 10°C above the average in the mountains and the interior, and 4 to 5°C above the average in the coastal plain.

At the heatwave's peak, temperatures of 45 to 48°C, and even higher, were recorded in the Jordan Valley and the Arava. In the Hula Valley, temperatures reached 46 to 47°C, while the Kinneret (Sea of Galilee) experienced 43 to 45°C. The Negev and the central mountains saw temperatures of 40 to 42°C. In the Shephelah and the Coastal Plain, temperatures ranged from 36 to 37°C, accompanied by relative humidity levels of approximately 50% to 60%. Along the coastal strip, temperatures of 33 to 35°C were observed, with relative humidity between 60% and 75%.

The nights were also exceptionally warm. In the Coastal Plain, minimum temperatures registered between 27 and 29°C, with relative humidity levels of 80% to 90% during the night and early morning hours. In the Jordan Valley and the Dead Sea region, minimum temperatures climbed to 33 to 36°C. In the northern and central mountains, they reached 30 to 31°C, and in the Kinneret area, they settled between 28 and 30°C.

Throughout the duration of the heat wave, temperature records were broken in various regions of the country, primarily in the Jordan Valley, the southern Arava, the Judean Hills, and the Galilee mountains. For instance, in Gilgal, located in the Jordan Valley, a maximum temperature of 49.7°C was measured on the 13th of the month. This reading established a new record for this station, surpassing the previous record of 49.3°C set ten years prior, and represents the second-highest temperature ever recorded in the country's history (the highest being 49.9°C in Sedom in July 2019). Records were also shattered for high minimum temperatures. In Sedom, a minimum temperature of 36.6°C was recorded on the 13th of the month, which broke the nationwide record of 36.5°C, also set in Sedom in September 2015. The following day, on the 14th of the month, this record was broken yet again with a temperature of 37.1°C.

The heat wave was characterized by high heat stress levels. For a significant portion of the day, the heat stress in many areas of the country was classified as heavy and above (exceeding 28 discomfort index units) and even extreme (exceeding 30 discomfort index units). At the peak of the heat wave (August 12th to 14th), extreme heat stress prevailed in the Coastal Plain, the mountains, the Negev, and the northern valleys for approximately one-third of the time. In the eastern valleys, such heat stress conditions were present for over 50% of the day. In Sedom, extreme heat stress was experienced continuously and without respite from the afternoon of the 9th of the month until the night of the 14th.

Even during the night time hours, there was no significant relief from the heat stress in most parts of the country. In the Coastal Plain, the heat stress did not fall below a moderate level (26 discomfort index units) at any point during the day from August 11th to 14th (Figure 1), and in the mountains, it did not drop below a mild level (24 discomfort index units). Figure 2 illustrates the heat stress during the heat wave compared to the other days of the month.

At the apex of the heat wave, medium-level clouds developed, which induced localized rainfall in the southern part of the country and in Jerusalem, where a measurement of 0.4 mm was recorded – a rare phenomenon for the month of August.

17th to 21st of the month: Near-Average Temperatures in the Mountainous and Inland Regions

A cooling trend was observed on the 15th and 16th of the month; however, temperatures remained above the seasonal norm. Subsequently, for a period of several days, temperatures in the mountainous and inland regions approximated the mean. Conversely, the coastal plain continued to experience warmer-than-normal conditions, with temperatures ranging from 1°C to 2°C above the average.

20th to 24th of the month: Above-Average Temperatures

A warming trend was recorded in the mountainous and inland regions, with temperatures escalating to 2°C to 3°C above the mean. In the coastal plain, above-average temperatures persisted, consistent with the deviation observed in the preceding period.

25th to 31st of the month: Temperatures Near or Slightly Below the Seasonal Norm

The latter part of the month was characterized by a moderation in temperatures, which were recorded as near-average or marginally below the seasonal norm in the mountainous and inland regions. In the coastal plain, diurnal temperatures remained above the norm, whereas nocturnal temperatures during the final three nights of the month registered as slightly cooler than average.

Figures 3 and 4 illustrate the temperature progression throughout the month in Jerusalem and Beit Dagan.

Figure 1: Heat Stress Index in Beit Dagan, August 11-14, 2025

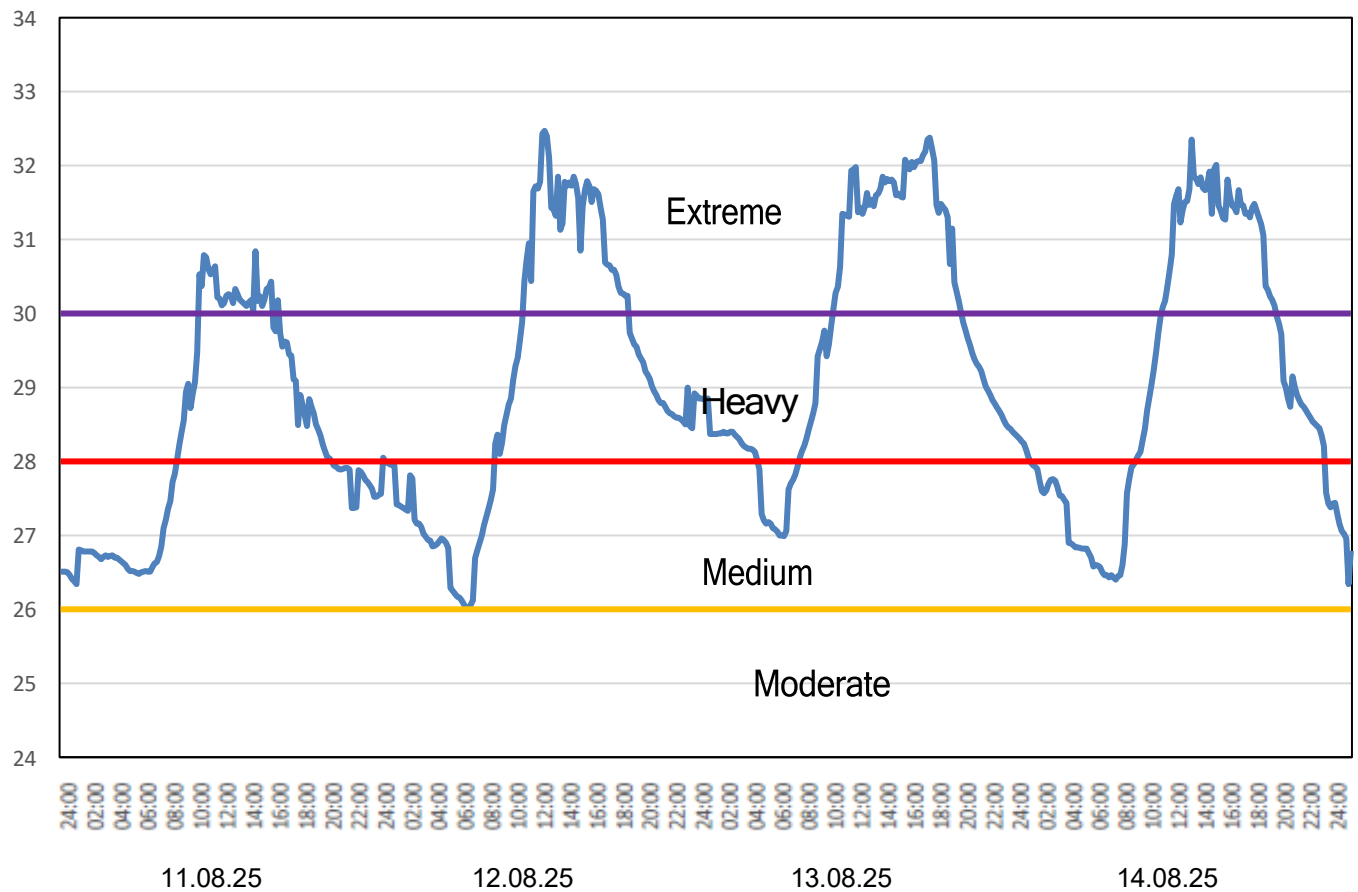
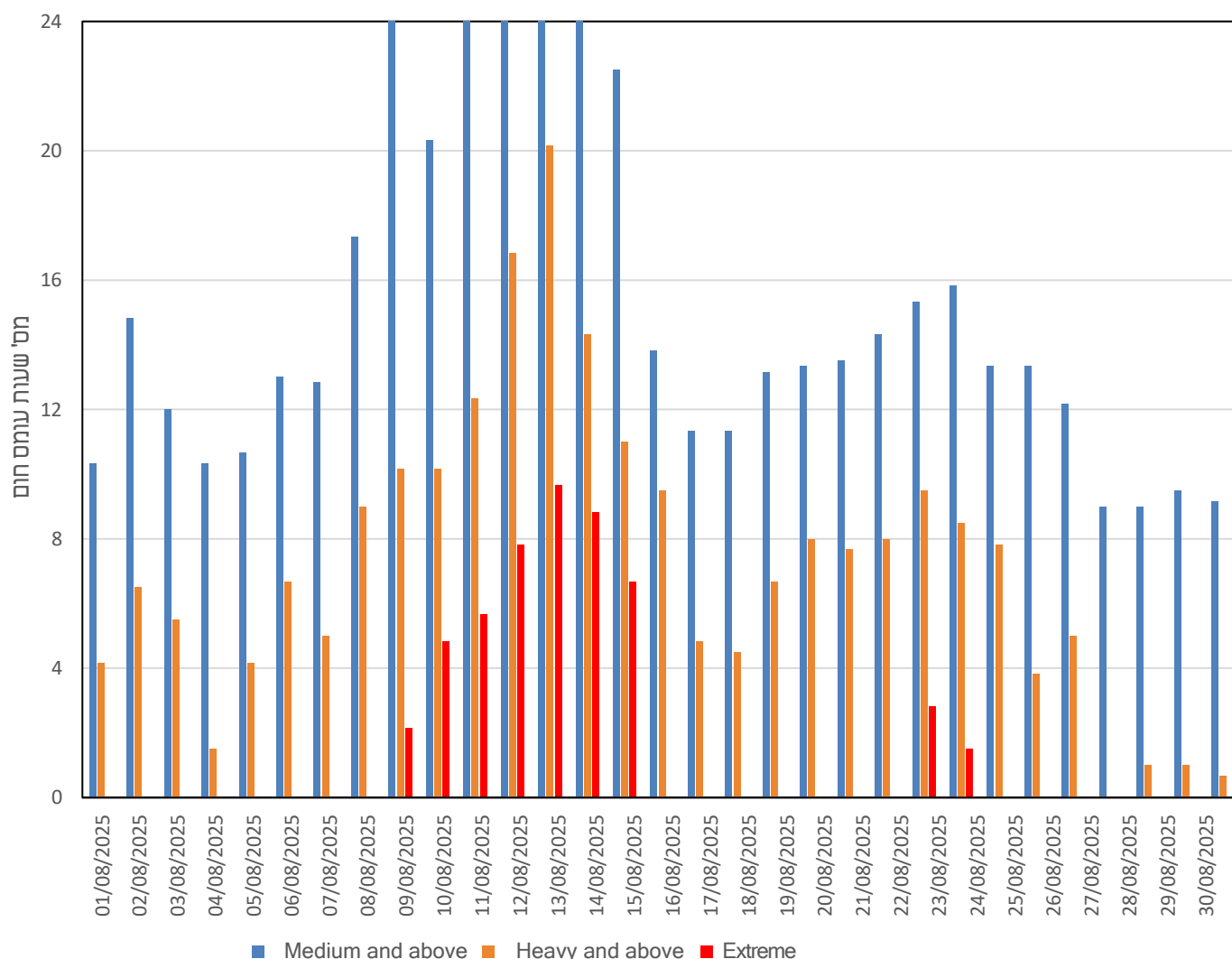


Figure 2: Number of hours per day with a moderate or greater heat stress level in Bet Dagan, August 2025



This figure illustrates the daily number of hours with moderate or greater heat stress and heavy or greater heat stress in Beit Dagan for each day in August 2025. It is evident that during the first week of the month, there were approximately 10 to 15 hours of moderate or greater heat stress and few hours of heavy heat stress. Throughout the heatwave, there were 24 hours a day of moderate or greater heat stress, numerous hours of heavy or greater heat stress, and approximately 5 to 10 hours of extreme heat stress. Following the heatwave, a significant decrease in the hours of heat stress was observed, and no extreme heat stress was recorded, with the exception of two days on the 23rd and 24th of the month.

Table 1: Temperatures* in August 2025 (°C) compared to the average

	Station	August 2025		Difference from average 2020-1991	
		Maximum	Minimum	Maximum	Minimum
Coastal Plain and Lowlands	Haifa (Technion)	30.9	24.4	+1.7	+1.0
	En HaHoresh	32.6	21.9	+1.1	+0.8
	Bet Dagan	33.8	24.8	+1.8	+1.8
	Negba	33.4	23.6	+1.5	+1.5
Northern Mountains	Elon	33.0	22.6	+1.7	+0.9
	Merom Golan Picman	32.0	18.7	+2.0	+1.7
	Avne Eitan	34.3	21.8	+0.9	+1.5
	Zefat Har Kena'an	31.7	21.0	+1.9	+1.4
	Deir Hanna	33.2	24.2	+1.2	+1.0
	Tavor (Kadoorie)	36.1	23.6	+1.7	+1.1
Northern Valleys	Afula, Nir HaEmek	35.8	23.2	+1.2	+1.3
	Kefar Blum	38.0	22.8	+1.8	+1.7
	Zemah	38.7	25.0	+0.7	+0.9
	Eden Farm (Bet She'an)	39.0	25.5	+1.1	+1.0
Central Mountains	Qarne Shomron	32.8	22.7	+1.6	+1.4
	Jerusalem	32.6	22.0	+2.3	+1.8
	Beit Jamal	34.1	23.1	+0.7	+1.4
	Rosh Zurim	30.3	20.0	+1.9	+1.7
Negev	Besor	33.2	22.6	+1.0	+1.0
	Arad	35.4	21.0	+1.9	+1.7
	Beer Sheva	36.2	23.3	+1.6	+1.8
	Sede Boqer	33.4	23.6	+0.8	+1.7
The Arava	Sedom	41.2	32.3	+0.8	+1.4
	Hazeva	40.8	28.3	+1.0	+1.6
	Yotvata	40.2	26.8	+1.3	+1.9
	Eilat	41.5	29.5	+1.0	+1.9

Table 2: Extreme temperatures in August 2025 (°C) compared to the past

	August 2025				Extreme values from the beginning of measurements				Years of station activity
	Extreme Maximum		Extreme Minimum		Extreme Maximum		Extreme Minimum		
	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	
Bet Dagan	37.3	14/8/25	20.9	30/8/25	38.6	1/8/2012	14.6	18/8/1969	2025-1962
Negba	37.3	15/8/25	20.3	30/8/25	39.5	5/8/2021	14.0	18/8/1969	2025-1950
Zefat Har Kena'an	*41.4	13/8/25	17.9	19/8/25	40.6	20/8/2010	13.0	22/8/1949	2025-1939
Jerusalem **	41.3	12/8/25	19.0	31/8/25	44.4	28/8/1881 30/8/1881	14.0	3/8/1926	2025-1867
Beer Sheva ***	42.2	13/8/25	20.3	19/8/25	43.8	6/8/2010	12.0	31/8/1934	2025-1922
Eilat	*48.8	13/8/25	26.4	30/8/25	48.0	1/8/2002	19.4	22/8/1976	2025-1949

* A new record for August, breaking the previous record

** Jerusalem: Center, 2025-1950 Talbiya, 1949-1948 Palace Hotel, 1947-1935 the American Colony, 1935-1927 Mount of Olives, 1926-1918 the German Colony, 1915-1895 the English Hospital on Hanevi'im Street, 1913-1898 the English Hospital in the Old City 1915-1867

*** Beer Sheva University, 2025 Beer Sheva Negev Institute, 2025-1957 Beer Sheva 1957-1922

Figure 3: Daily minimum and maximum temperatures in Jerusalem in August 2025 compared to the multi-year average

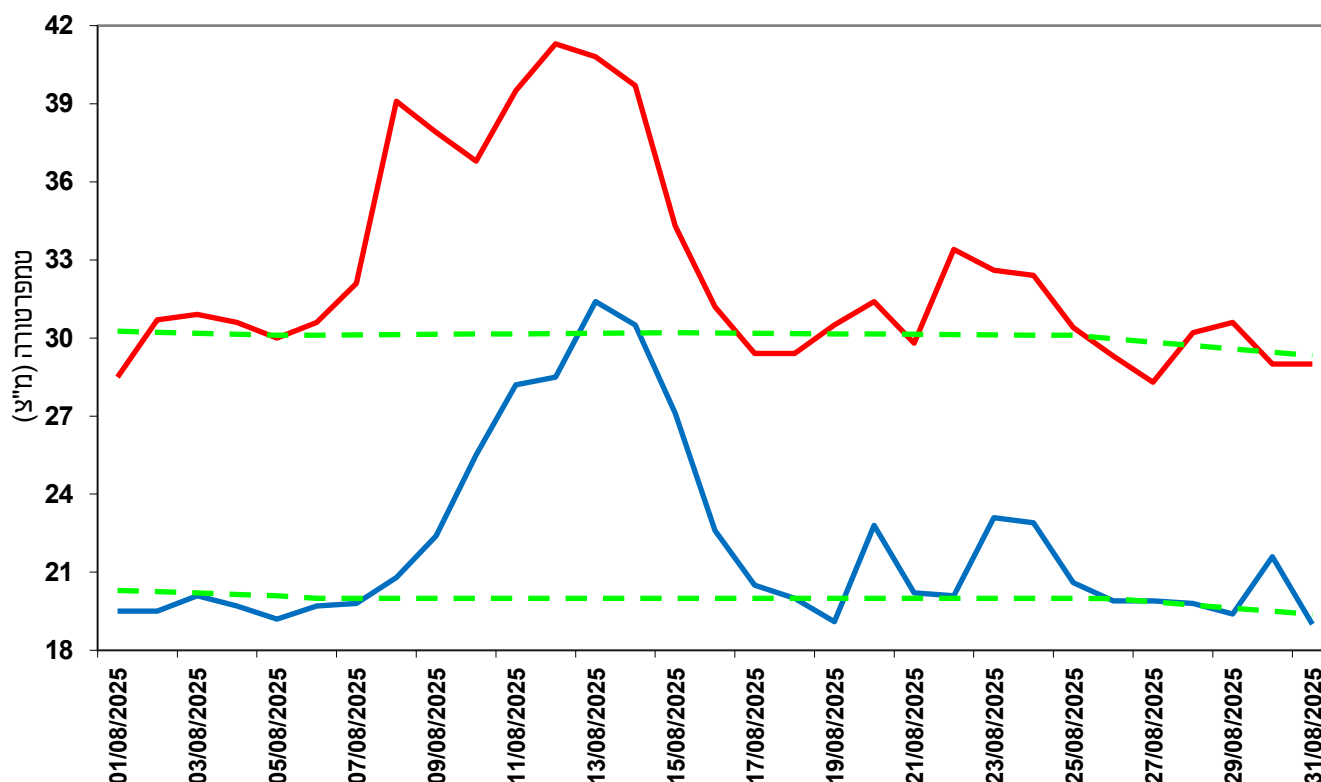
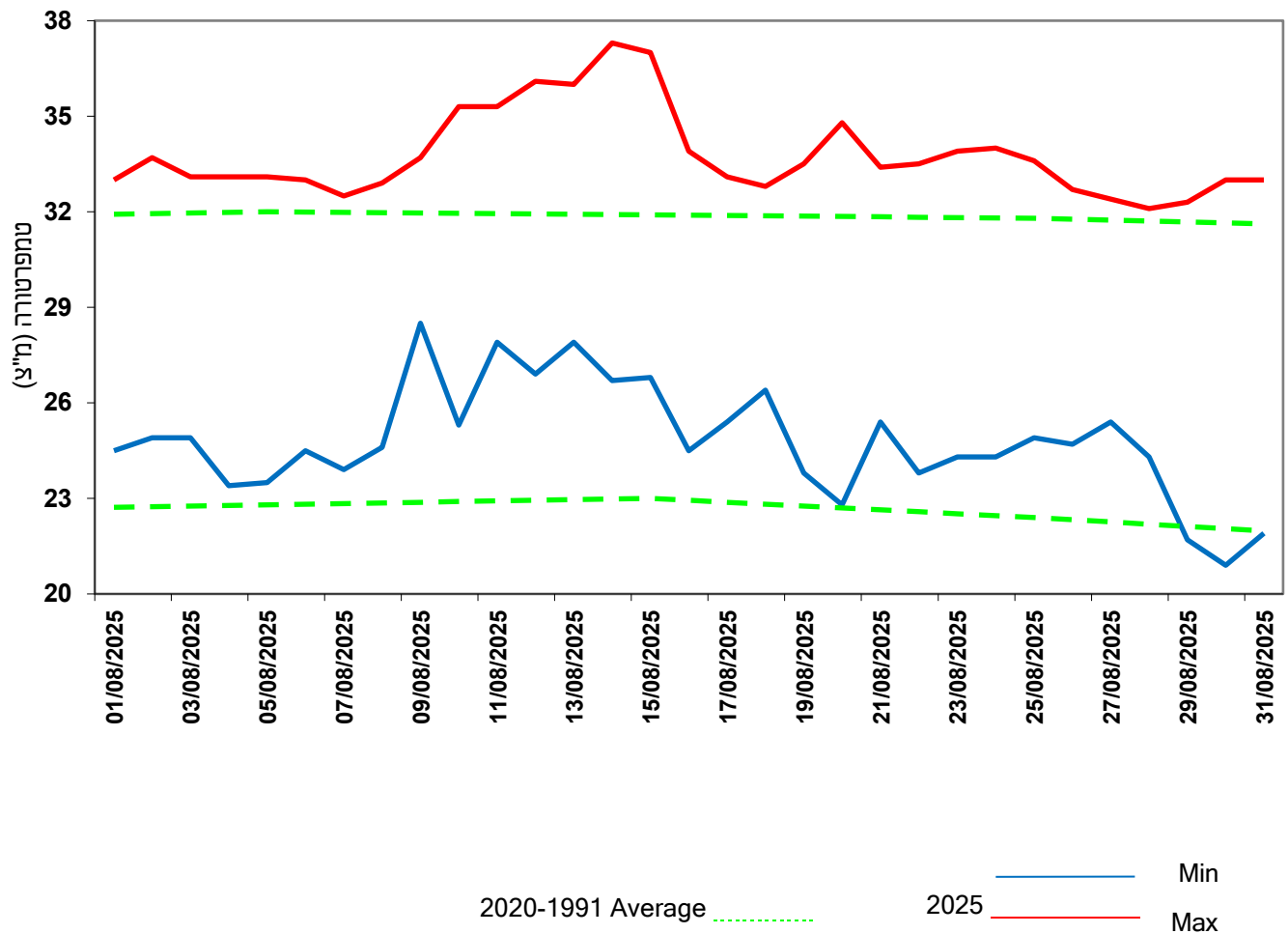


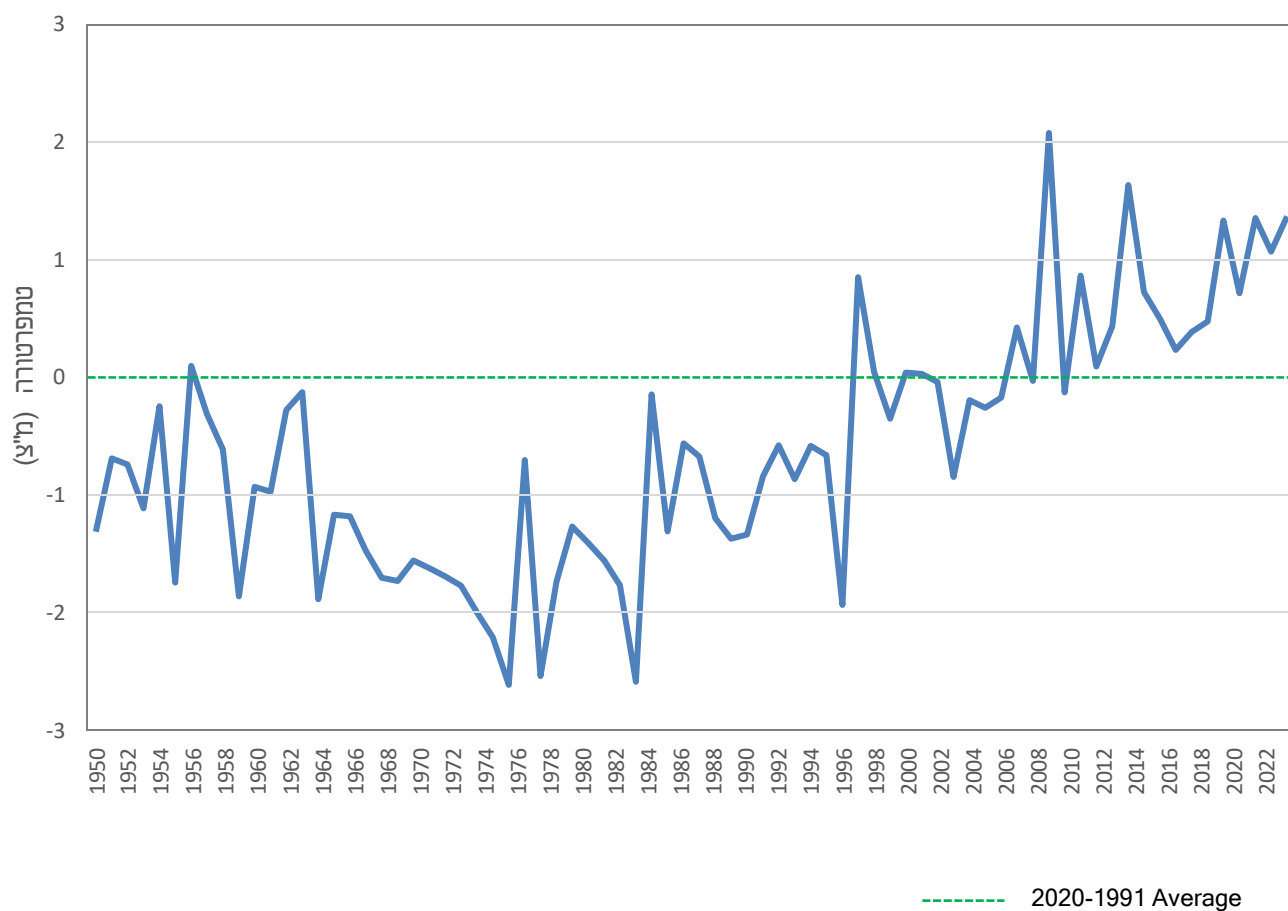
Figure 4: Daily minimum and maximum temperatures in Bet Dagan in August 2025 compared to the multi-year average



A Climatological Past Comparison of August 2025

August 2025 registered as warmer than normal, placing third in the spatial measurement series which commenced in 1950. Temperatures did not exceed those of August 2010, the warmest on record, or those observed in August 2015. The month was marginally warmer than the Augusts of 2023 and 2021, to which it bears a strong resemblance (Figure 5).

Figure 5: Anomaly of the mean daily temperature in Israel* in August 1950 to 2025 relative to the 1991 to 2020 average

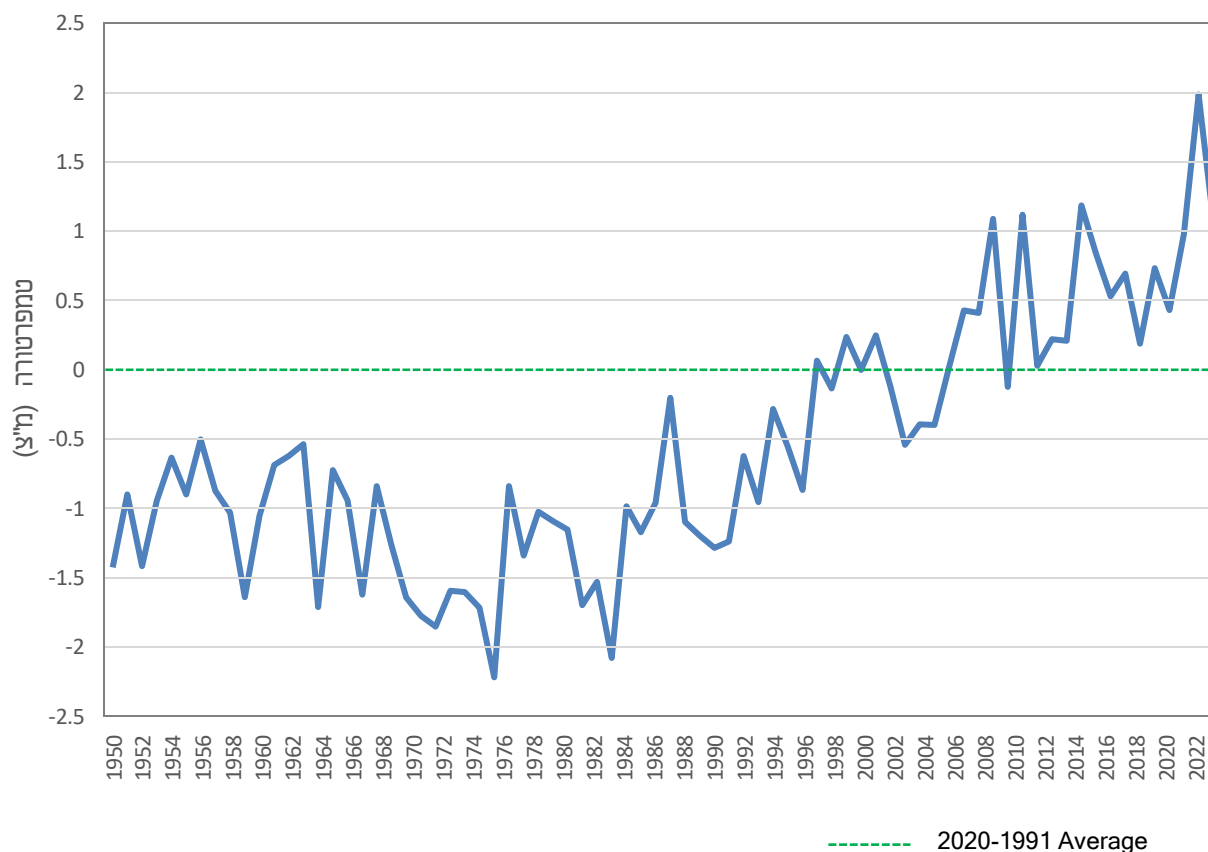


* To represent the area of Israel, 24 stations were selected from across the country that have homogeneous data from 1950.

A Climatological Comparison of Summer 2025

The three summer months (June through August) exhibited above-average temperatures, positioning the summer of 2025 at approximately 1°C warmer than the mean. In a historical comparison, it ranks as the fifth warmest summer on record. It was significantly surpassed by the summer of 2024, which remains the warmest recorded period (Figure 6). Furthermore, the summer seasons of 2010, 2012, and 2016 also registered slightly higher temperatures.

Figure 6: Anomaly of the mean daily temperature in Israel* in summer 1950 to 2025 relative to the 1991 to 2020 average



* To represent the area of Israel, 24 stations were selected from across the country that have homogeneous data from 1950.