

Meteorological data summary for January 2024 for the Blenheim Meteorological station located at the Grovetown Park campus of the Marlborough Research Centre.

Weekly temperatures, rainfall and sunshine during January 2024

	Mean (°C)	Mean Max (°C)	Mean Min (°C)	Rainfall (mm)	Sunshine (hours)	Wind-Run (km)
1 <sup>st</sup> - 7 <sup>th</sup>	16.6 (-1.6)	21.8 (-1.7)	11.5 (-1.3)	2.0	63.7	214.4
8 <sup>th</sup> - 14 <sup>th</sup>	20.9 (+2.7)	27.1 (+3.6)	14.8 (+2.0)	0.0	83.6	285.4
15 <sup>th</sup> - 21 <sup>st</sup>	20.9 (+2.7)	25.8 (+2.3)	16.0 (+3.2)	1.0	50.5	221.6
22 <sup>nd</sup> - 28 <sup>th</sup>	19.2 (+1.0)	25.9 (+2.4)	12.6 (-0.2)	3.6	78.5	249.3
29 <sup>th</sup> – 31 <sup>st</sup> (3 days)	16.8 (-1.5)	22.6 (-0.9)	10.9 (-1.9)	0.0	40.4	215.7
1 <sup>st</sup> – 31 <sup>st</sup> January	19.2 (+1.0°C )	24.9 (+1.4°C)	13.4 (+0.6°C)	6.6 (16%)	316.7 (120%)	240.1 (91%)
LTA 1986-2023	18.2	23.5	12.8	41.9	264.2	264.8 (1996-2023)

Summary

January 2024 rainfall was well below average. Mean temperatures were above average, except for the first week of the month and the last three days. Sunshine hours were the third highest since 1930. Wind-run was below average. January 2024 had, therefore, mainly ideal summer and school holiday weather conditions.

Air Temperature

The mean temperature of 19.2°C was 1.0°C above the long-term average temperature (LTA) for January of 18.2°C (1986-2023).  
January 2023 mean temperature was 18.0°C  
January 2022 mean temperature was 18.3°C  
January 2021 mean temperature was 18.4°C  
January 2020 mean temperature was 17.5°C

The only day to record a daily maximum above 30.0°C was 22 January 2024, which recorded a maximum of 30.1°C. Blenheim recorded 17 days above 25.0°C in January 2024. This is in stark contrast to January 2023 which had no days above 30°C and only 5 days above 25°C.

Blenheim recorded 0 days greater than 30.0°C in January 2023. 5 days above 25.0°C  
Blenheim recorded 1 day greater than 30.0°C in January 2022. 10 days above 25.0°C  
Blenheim recorded 2 days greater than 30.0°C in January 2021. 13 days above 25.0°C  
Blenheim recorded 2 days greater than 30.0°C in January 2020. 10 days above 25.0°C

Sunshine

316.7 hours sunshine for January was 120% of the LTA of 264.2 hours. This is the 3rd sunniest January on record for Blenheim for the 95 years 1930 to 2024. In contrast, January 2023 recorded 211.7 hours.

January 2023 sunshine was 211.7 hours  
January 2022 sunshine was 313.8 hours  
January 2021 sunshine was 309.0 hours  
January 2020 sunshine was 245.0 hours  
January 2019 sunshine was 317.9 hours (2<sup>nd</sup> highest January total on record)

Among the large number of sunny days there were still 4 days that recorded less than 5 hours of sunshine per day.

Blenheim has made a good start to the sunshine race for 2024, coming in second compared with the towns listed below. Tasman was the sunniest region in January, with Richmond taking the top spot.

## **Sunniest towns for January 2024**

Richmond	319.2 hours
Blenheim	316.7 hours
Appleby	315.3 hours
Takaka	310.9 hours
Tekapo	300.6 hours
New Plymouth	299.2 hours
Auckland	285.4 hours

## **Rainfall**

Blenheim recorded only 6.6 mm rain during January, 16% of the LTA whereas January 2023 recorded 60.4 mm. However, the previous 4-years also recorded very low January rainfall. 2019: 3.8 mm, 2020: 0.2 mm, 2021: 7.8 mm, 2022: 12.6 mm.

The most recent previous year with higher January rainfall was 2018, with 80.4 mm.

January 2023 rainfall was 60.4 mm

January 2022 rainfall was 12.6 mm

January 2021 rainfall was 7.8 mm

January 2020 rainfall was 0.2 mm – 2<sup>nd</sup> lowest on record

January 2019 rainfall was 3.8 mm – 5<sup>th</sup> lowest on record

January 1978 rainfall was 0.0 mm – lowest on record

Blenheim recorded lower than average rainfall in all 8-months from June 2023 to January 2024. Total rainfall for the 8-months was only 194.2 mm, 45% of the LTA of 436.4 mm. This is the lowest rainfall total for this 8-month period over the 94 years 1930-31 to 2023-24. The previous lowest total on record was 226.6 mm recorded in 1933-34.

## **Wind-run**

Average daily wind-run in January 2024 was 240.1 km, 91% of the LTA of 264.8 km. There were 8 days that recorded above average wind-run, the windiest day being on 14 January which recorded 409 km of wind. Maximum wind speed during the month was 62.6 km/hr recorded on 11 January.

## **Potential evapotranspiration**

Total potential evapotranspiration for January 2024 was 165.9 mm, 115% of the LTA of 144.0 mm.

## **Potential water deficit**

This is the difference between monthly rainfall and potential evapotranspiration.

6.6 mm rainfall – 165.9 mm potential evapotranspiration = -159.3 mm potential water deficit

This water deficit of -159.3 mm is 152% of the LTA of -104.9 mm.

## **Shallow soil moisture (topsoil)**

Average shallow soil moisture (0 to 35 cm) at the Grovetown Park weather station for January 2024 was 15.1%. This was well below the LTA of 20.8%. The shallow soil moisture remained at this very dry level throughout January. On 1 January it was 15.5%. However, with only 6.6 mm rain for the entire month soil moisture remained low at 14.7% on 31 January.

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