

Weather Data summary for March 2022 for the Blenheim Meteorological station located at Grovetown Park.

Table 1: Weekly temperatures, rainfall and sunshine during March 2022

	Mean Max (°C)	Mean Min (°C)	Mean (°C)	Rainfall (mm)	Sunshine (hours)	Windrun (km)
1 st - 7 th	22.3 (+1.1)	10.7 (+0.1)	16.5 (+0.4)	0.2	73.9	191.0
8 th - 14 th	22.4 (+1.2)	13.9 (+3.3)	18.2 (+2.1)	0.4	55.0	188.0
15 th - 21 st	19.0 (-2.5)	8.7 (-1.9)	13.9 (-2.2)	9.6	47.2	151.4
22 nd - 28 th	21.2 (=)	12.5 (+1.9)	16.8 (+0.7)	6.8	38.3	139.0
29 th - 31 st (3 days)	21.4 (+0.2)	10.4 (-0.2)	15.9 (-0.2)	0.0	23.6	131.7
1 – 31 March	21.2 (-0.3°C)	11.4 (+0.8°C)	16.3 (+0.2°C)	17.0 41%	238.0 104%	163.9 68%
LTA 1986-2021	21.5	10.6	16.1	41.7	229.9	241.9

Sunshine

238.0 hours sunshine for March is 104% of the long-term average (LTA) for March of 229.9 hours (1986-2021).

March 2021 recorded 208.8 hours sunshine.

March 2020 recorded 234.0 hours sunshine.

March 2019 recorded 225.7 hours sunshine.

Total sunshine for the first three months of 2022 is 708.2 hours; 98% of the LTA (1986-2021) of 725.7 hours.

Ranking of sunshine totals around NZ during March 2022

New Plymouth	283.0 hours (provisional as 31 March data missing for New Plymouth)
Levin	276.3 hours
Paraparaumu	271.7 hours
Richmond	269.4 hours
Cromwell	263.1 hours
Appleby	256.8 hours
Auckland	255.1 hours
Whakatane	253.7 hours
Nelson	244.1 hours
Blenheim	237.9 hours

As indicated in the ranking list, Blenheim fared poorly in the sunshine stakes for March. This was also the case in January and February. In each of the first 3-months in 2022 New Plymouth has recorded the highest sunshine hours of any town in New Zealand.

Rainfall

17.0 mm rain is 41% of the LTA for March of 41.7 mm (1986-2021).

March 2021 rainfall was 79.2 mm.

March 2020 rainfall was 11.2 mm.

March 2019 rainfall was 94.6 mm.

The first 20 days of March 2022 were virtually dry, with only 0.2 mm on 1 March and 0.4 mm on 11 March. The four days from 21 to 24 March were overcast bringing 16.4 mm rain. The final 7-days from 25 to 31 March all recorded no rainfall.

While last year's (2021) March rainfall total was well above average, a reminder is necessary with regard to how that rainfall was received. The first 27 days of March 2021 were very dry, with only 1.4 mm of rain recorded over that period. The final four days of March 2021 (28-31) recorded 77.8 mm rain. The large amount

of rain in the last four days of March 2021 was the first substantial rainfall event that Blenheim had received since early November 2020.

Total rainfall for the first 3-months of 2022 was 183.0 mm; 141% of the LTA of 129.8 mm

Total rainfall for the first 3-months of 2021 was 109.8 mm; 118% of the LTA.

Soil moisture

Average shallow soil moisture (5-35 cm depth) at the Grovetown Park weather station during March was 25%. This was 5% above the LTA March value of 20%. The reason for the shallow soil moisture being above average in March 2022 when rainfall was low was due to the high rainfall in February and the much higher soil moisture that carried over into March.

However, due to the low rainfall, soil moisture during March fell by 6.9%, whereas the LTA change in soil moisture in March is an increase of 3.1%.

Air Temperature

Mean temperature of 16.3°C was 0.2°C above the LTA temperature for March of 16.1°C (1986-2020).

March 2021 mean temperature was 16.2°C.

March 2020 mean temperature was 15.5°C.

March 2019 mean temperature was 17.6°C.

Coldest and Hottest days during March

No frosts were recorded during March 2021. The coldest minimum air temperature of 4.8°C and the coldest minimum grass temperature of 1.0°C were both recorded on 19 March.

The hottest day was 12 March with a maximum temperature of 26.4°C.

Wind Run

March 2022 recorded average daily wind run of 163.9 km compared to the LTA of 241.9 km (1996-2021); 68% of the long-term average; i.e March 2022 was very calm. This is by far the lowest March wind-run recorded over the 27 years 1996 to 2022. The previous lowest was 181.1 km recorded in March 2017. This is the 12th year in a row that March has recorded lower than average wind-run.

Only 2-days in March 2022 recorded above average daily wind-run; i.e. greater than 241.9 km.

March 2022 average daily wind-run of 163.9 km is now the second lowest monthly wind-run total over the 327 months from January 1996 to March 2022. The lowest total on record is 159.3 km recorded in June 2013.

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