



MARITIME CANADA CLIMATE SUMMARY

February 2023

February Brings an End to Long Run of Above Normal Monthly Temperatures

The long run of consecutive months of widespread above normal temperatures came to an end with most locations recording a near to slightly below normal monthly mean. An exceptionally cold Arctic outbreak at the beginning of the month accompanied by strong northwesterly winds saw several new minimum temperature and maximum wind-chill records set across the region. This was followed by two weeks of above normal temperatures followed by another Arctic outbreak in the final week. Total precipitation for the month ranged from near normal to much below normal with St. John NB recording the 7th driest February on record. Snow amounts were variable across the region with the highest totals (50-75+ cm) recorded in Cape Breton and NW NB. Despite the cold start to the month the ice coverage in the Gulf of St Lawrence remains well below normal. Mid-month it was just 13% compared to the normal of 32%. Coastal sea surface temperatures continued to be above normal, and by as much as 5C in the eastern Bay of Fundy.

The Warmest (°C)

New Brunswick	
Oak Point	13.0
Nova Scotia	
Western Head	16.2
Prince Edward Island	
Stanhope	10.4

The Coldest (°C)

New Brunswick	
Edmundston	-37.3
Nova Scotia	
Collegetown	-28.0
Prince Edward Island	
Harrington	-27.3

The Wettest (Total mm)

New Brunswick	
Bas Caraquet	67.0
Nova Scotia	
Ingonish Beach	102.6
Prince Edward Island	
St Peters	51.8

The Capital Stats

	Mean Temperature (°C)			Extremes	
Station Name	Monthly Mean	Normal Mean	Diff from Normal	Max (Date)	Min (Date)
Charlottetown	-7.5	-7.3	-0.2	9.5 (16)	-27.1 (4)
Halifax	-5.8	-5.2	-0.6	11.8 (16)	-26.0 (4)
Fredericton	-8.6	-7.5	-1.1	11.8 (16)	-28.9 (4)

	Total Precipitation			Snowfall	
Station Name	Monthly Total (mm)	Normal Total (mm)	Percent Normal	Total (cm)	SOG End of Month
Charlottetown	49.1	83.3	59	28.7	1.0
Halifax	68.1	105.8	64	25.6	7.0
Fredericton	37.4	70.1	53	37.2	39.0

Daily Temperature Records

The wide variation in temperatures during the month was reflected in the number of new daily records set. Overall there were 56 new low minimums (29 NS, 18 NB 9 PE) and 39 new daily maximums (19 NB, 18 NS, 2 PE). The extremely cold spell in the 1st week was responsible for the majority of the new lows with several new records below -25C. The new record highs in NB and PE were all set on the 16th. In NS 8 of 18 were set on the 16th with the 16.2 C at Western Head the highest.

Significant Weather Events (information provided by Climate Services, ECCC)

Feb 3-4. An arctic air mass invaded the region with frigid temperatures and howling winds. Minimum temperatures (-25 to -32°C) combined with westerly to northwesterly wind gusts of 111 km/h to give wind chill values that ranged from and -34 to -50. There were also several record-setting daily minimum temperatures. Power outages affected over 53,000 customers across all three Maritime Provinces and frozen water pipes caused havoc for a number of areas.

[More than 21,000 Nova Scotia Power customers without power amid extreme cold | CBC News](#)
[After deep chill in Nova Scotia, warming temperatures means busted water pipes are coming | CBC News](#)
[Frozen pipes cause school closures in N.B. after record-breaking frigid weekend | CBC News](#)
[Growers say it'll be years before N.S. vineyards recover from 'devastating' cold snap | CBC News](#)

Feb 9-10. Mixed precipitation fell across parts of the region, with snow across most of NB, parts of PEI and northern NS, freezing rain over southern NB and rain along the Atlantic coast of NS. Snowfall varied from 10-21 cm and total precipitation varied from 10-25 mm.

Feb 13-14. The northern edge of a system that passed south of NS brought accumulating snow to Atlantic coastal regions. Snowfall ranged from 10 to 38 cm with the highest amounts across southern Cape Breton.

[Nova Scotia digs out after major snowfall | CBC News](#)

Feb 16. Mild temperatures associated with a southerly circulation, broke several daily maximum temperatures across the region. All provinces reached double-digit maximums with Western Head, NS recording the warmest temperature at 16.2°C. Halifax (Shearwater), NS recorded 14.6°C and this was the second warmest temperature in February since records began in 1871.

Feb 17-18. An elongated west-east trough moved across the area from Ontario and brought snow to NB and PEI, freezing precipitation to all areas and some rain to parts of NS. General snowfall totals across most areas was 5-10 cm with up to 25 cm in northwest NB. Several hours of freezing rain fell in southern NB, PEI and northern NS and caused poor transportation conditions.

[Schools across the Maritimes closed due to latest round of winter weather | CTV News](#)
[Freezing rain coats P.E.I. roads, delays arrival of some Canada Games athletes | CBC News](#)

Feb 24-25. A weak and quick-moving low-pressure system brought snow to southwestern regions of the Maritimes. Partly due to cold temperatures, snowfall was unusually light and fluffy for the region, with snow-to-water equivalent ratios near 30:1 in some areas. (A more typical ratio is 10:1 (in other words, typically 10 cm of snow melted down would equal 1 cm (10 mm) of liquid)). General snowfall totals across southwestern NB and western NS were 8-20 cm with up to 30 cm in the Annapolis Valley of NS

Compiled by Peter J. Lewis with data and information provided by Client Service Operations Atlantic, Meteorological Service of Canada
Environment and Climate Change Canada / Government of Canada

Other CMOS News

CDOGS: The annual Conference of Dalhousie Oceanography Graduate Students (CDOGS) took place last Friday, March 25th. Congratulations to the winners of the poster and talk contest: **Matt Mar** (Best Undergraduate Poster); **Sam Aucoin** (Best MSc Talk); **May Wang** (Best PhD talk); and the winner of the CMOS prize for Best Overall Talk, **Jay Kirkham**.

Upcoming Webinar: **Who:** Dr. Altaf Arain (McMaster University), Hosted by CMOS Toronto Centre
What: Heat, Drought and Disturbance Impacts on Carbon Sequestration in Eastern Temperate Forest Ecosystems
When: Monday, April 17, 1PM Atlantic Time
Where: Click [here to register](#).

Canadian Meteorological and Oceanographic Society (CMOS) | Halifax Chapter

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