New Brunswick

December 2021 Review January 2022 and Winter Outlook

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Meteorological Service of Canada Environment and Climate Change Canada January 4, 2022



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December 2021; Climate Summary

				Mean Temp	erature / T	empérature	Total Prec	ipitation /	Précipitations
				n	noyenne (°	C)		totales (n	nm)
		TC ID /	Station Type /	Monthly Mean /	Normal Mean /	Diff from Normal /	Monthly Total /	Normal Total /	Total as % of Normal / Total
		ID de	Type de	Moyenne	Moyenne	Écart avec	Total	Total	en % de la
Station Name / Nom de la station	Prov	тс	station	mensuelle	Normale	la normale	mensuel	normal	normale
AROOSTOOK	NB		DAILY	-6.0	-7.6	1.6	102.8	89.7	A 115
BAS CARAQUET	NB	WXS	AU8	-2.9	-5.1	2.2	99.1	106.6	93
BAS CARAQUET	NB		DAILY			~	97.4	106.6	91
BATHURST A	NB	ZBF	NCA	-5.3	-6.0	<u>0.7</u>	41.2		
CHARLO AUTO	NB	ZCR	AU8	-5.5	-7.9	2.4	73.4	79.6	92
MIRAMICHI RCS	NB	ACQ	AU8	-4.1	-6.2	2.1	76.3	85.3	89
DOAKTOWN AUTO RCS	NB	ADN	AU8	-4.4	-6.4	2.0	84.0	96.7	87
EDMUNDSTON	NB	ERM	AU8	-7.7			70.7	80.6	88
FREDERICTON INTL A	NB	YFC	NCA	-3.8	-5.7	2.0	61.3		
FREDERICTON CDA CS	NB	AFC	AU8	-3.5	-5.3	1.8	67.4	91.8	73
FUNDY PARK (ALMA) CS	NB	AFY	AU8	-1.4	-3.3	1.9	129.6	146.6	88
GAGETOWN AWOS A	NB	YCX	AU5	-3.5	-4.4	0.9	54.5	98.4	55
GRAND MANAN SAR CS	NB	XGM	AU8	-0.4		~			
KOUCHIBOUGUAC	NB	AKC	AU8	-3.3	-6.2	2.9	80.3	125.4	64
MECHANIC SETTLEMENT	NB	AMS	AU8	-4.1			122.8		
MISCOU ISLAND (AUT)	NB	WMI	AU8	-2.3					
MONCTON/GREATER MONCTON ROMEO LEBLANC INTL A	NB	YQM	NCH	-2.8	-4.8	2.0	60.3	114.4	> 3 53
OAK POINT	NB		DAILY	-2.7	-4.4	1.7	91.0	98.4	92
RED PINES	NB	ARP	AU8	-5.4	-7.2	1.8	72.9	87.4	83
SAINT JOHN A	NB	YSJ	NCH	-2.5	-4.4	1.9	95.5	130.4	73
ST. STEPHEN	NB	WSS	AU8	-2.9					
SUSSEX FOUR CORNERS	NB	ASF	AU8	-2.4	-4.5	2.0	65.3	105.6	62
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	-5.0	-7.0	2.0	80.5	103.2	78
Average				-3.7	-5.7	1.9	81.3	102.7	81
Max				-0.4	-3.3	2.9	129.6	146.6	115
Min				-7.7	-7.9	0.7	41.2	79.6	53

Highlights:

The average temperature anomaly was above normal (+1.9°C). All sites reported positive anomalies with Kouchibouguac recording the largest anomaly at +2.9°C. Above normal minimum temperatures continued to greatly influence the positive anomaly.

Total precipitation amounts were below normal, with an average of **81%** of total precipitation. Moncton recorded nearly only half of normal precipitation. The north was slightly wetter than the south. Rainfall and snowfall were below normal.



December 2021; Climate Summary

Events:

December 6-7: "Mainly windy event". Wind and elevated water levels battered coastal areas of the province. Storm surge levels in Belledune caused Route 134 to partially close along the Bay of Chaleur. Winds gusted as high as 96 km/h in Moncton.

December 11-12: "Wind and Freezing Rain". A system brought some rain to the south, several hours of freezing rain to northern and central areas and strong winds. Fundy Park saw the most rain at 30 mm while Moncton recorded the strongest wind gust at 97 km/h.

December 22-23: "Snow and Freezing Rain". Snow fell over northern portions of the province leaving behind as much as 33 cm in the Doyleville area. A few hours of freezing rain occurred over some central areas.

Days of month with lightning in New Brunswick; 6 7 11 (3 days)

Day of month with temperature record broken or tied in New Brunswick; 6 7 11 12 (red=maximum, blue=minimum) Environment and Environmement et

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December 2021; Provincial Climate Extremes

Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	16.0°C	Moncton	6
Daily Minimum Temperature	-25.8°C	Edmundston	10
Maximum Daily Total Precipitation	34.6 mm	Mechanic Settlement	6
Daily Maximum Wind Gust	97 km/h	Moncton	12
Daily Maximum Wind Chill	-30	Mechanic Settlement	24





December 2021 - Temperature

Daily Mean Temperature (line), Long-Term Mean (dashed line) Based on gridded observations / Climatology 1981-2010 and Categories based on Standard Deviations (blue and red) Std. dev. thresholds +/- 0.7, 1.3, 2.1



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Daily Mean Temperature (line), Long-Term Mean (dashed line) Based on gridded observations / Climatology 1981-2010 and Categories based on Standard Deviations (blue and red) Std. dev. thresholds +/- 0.7, 1.3, 2.1



December 2021 - Precipitation

Daily Total Precipitation (bars), Cumulative (line) and Cumulative Long-Term Mean (dashed line) Based on ECCC gridded precipitation analysis Climatology 2002-2020



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Daily Total Precipitation (bars), Cumulative (line) and Cumulative Long-Term Mean (dashed line) Based on ECCC gridded precipitation analysis Climatology 2002-2020



December 2021 – Temperature departure from 1981-2010 mean



December 2021 – Total precipitation



December 2021 – Precipitation departure from 1991-2020 mean



December 2021 – Snowfall departure from 1981-2010 mean



December 2021 – Snow depth at month end

Extracted from Canadian computer model



Temperature anomaly by month in 2021



Precipitation anomaly by month in 2021



Day 8 to 14 Forecast

Period ending January 19, 2022

Suggesting a weak signal of below normal in the northwest otherwise, no conclusive signal.





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Forecast probability of above, below and near normal temperature (no calibration) Period: 20220112-20220119 Probabilités prévues que les températures soient au-dessus, sous et près de la normale (non-calibrées) Période: 20220112-20220119





Temperature January 3 to **January 31**

CMC Monthly Forecast Product using GEPS 50km res.



Weekly signature from GEPS 50km resolution



A weak signal of below normal for the first two weeks for most areas, then no conclusive signal (near normal) for the remainder of the period.





Precipitation January 3 to January 31

CMC Monthly Forecast Product using GEPS 50km res.

Canada

Weekly signature from GEPS 50km resolution



A weak signal of above normal for the first week for most areas, then gradually transitioning to no conclusive signal (near normal) for the remainder of the period.







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