

Maritimes Monthly Weather & Climate Summary May 2023

Overview

Temperatures continue to be near seasonal and this has been the case since February. In terms of precipitation, this was the fourth consecutive month with below normal precipitation. The month was marred by prolonged dryness which has resulted in the largest wildfire in NS history and a number of other significant wildfires in NS and NB towards the end of the month.

Temperature – Anomaly

Monthly average temperatures were near to slightly below normal across the Maritimes in May. Areas that saw near normal temperatures included all of NB, most of PEI, western NS and Cape Breton. Regions that recorded below normal temperatures were extreme southeastern PEI, eastern and northern NS. Some daily maximum temperature records were broken during the end of the month associated with hot and dry conditions.

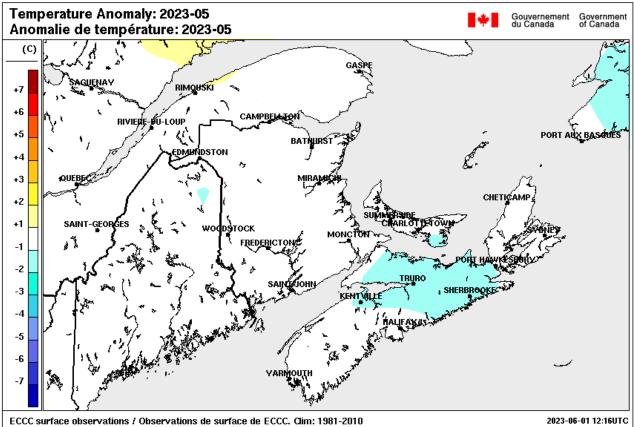


Figure 1: Monthly temperature anomaly map for May 2023 based on archived station data compared to 1981-2010 normals for the Maritimes.

Precipitation – Anomaly

Precipitation in May was below normal across most areas with parts of northern NB, eastern NS and most of Cape Breton seeing near normal conditions. The driest conditions occurred over extreme southeastern NB, portions of western PEI and western & northern NS with monthly total precipitation less than 50% of normal. The dryness has persisted since February with many regions recording less than 60% of normal over the four-month period.

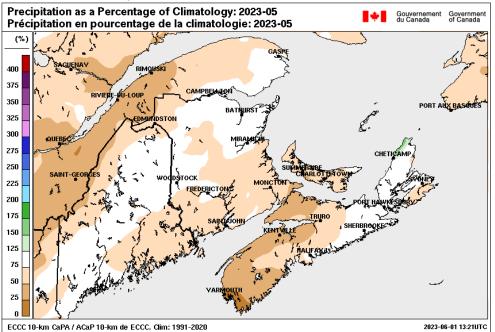


Figure 2: Monthly precipitation anomaly for May 2023 based on ECCC Canadian Precipitation Analysis (CaPA) a gridded blend of model, radar, and station data, compared to 1991-2020 normals for the Maritimes. (Anomaly: Precipitation as a percentage of the average).

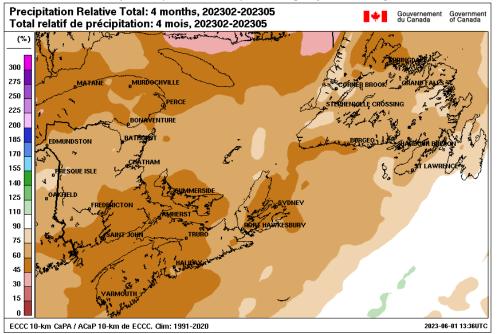


Figure 3: Multi-monthly precipitation anomaly for February-May 2023 based on ECCC Canadian Precipitation Analysis (CaPA) a gridded blend of model, radar, and station data, compared to 1991-2020 normals for the Maritimes. (Anomaly: Precipitation as a percentage of the average).

 Table 1: Monthly average temperature and total precipitation for May 2023 for selected locations in the

 Maritimes compared to 1981-2010 Canadian Climate Normals (for the same or a nearby station).

Temperature difference from normal: cells shaded pink if ≥ 1 °C, blue if ≤ -1 °C. Precipitation as a percent of normal: cells shaded green if $\ge 125\%$ of normal, yellow if $\le 75\%$ of normal. Rank (if included) provides a ranking of mean temperature (eg. 1 warmest, 2 second warmest etc.) for the month against long-term data for the month).

	Mean Temperature (°C)					Total Precipitation (mm)			
Location	Monthly Mean	Normal Mean	Diff. from Normal	Rank (Warmest, Coldest)	Monthly Total	Normal Total	Total as % of Normal		
Bas Caraquet	9.1	8.8	0.3	>10,>10	106.2	85.6	124		
Charlo	9.5	9.0	0.5	>10,>10	82.8	84.8	98		
Fredericton	10.8	11.3	-0.5	>10,>10	86.5	103.8	83		
Moncton	9.7	10.0	-0.3	>10,>10	42.9	96.9	44		
Saint John	9.0	9.5	-0.5	>10,>10	93.4	109.8	85		
Woodstock	10.4	10.9	-0.5	>10,>10	83.2	94.2	88		
Amherst (Nappan)	9.1	10.2	-1.0	>10,>10	35.7	100.7	35		
Greenwood	10.2	11.2	-1.0	>10,>10	29.4	84.8	35		
Halifax (Airport)	9.3	10.0	-0.7	>10,>10	63.5	111.9	57		
Halifax (Shearwater)	9.7	9.2	0.5	>10,>10	84.8	120.6	70		
Sydney	7.1	7.9	-0.8	>10,>10	88.6	103.2	86		
Truro (Debert)	8.4	10.2	-1.8	>10,>10	42.5	106.8	40		
Yarmouth	9.9	9.7	0.2	>10,>10	37.8	100.9	37		
Charlottetown	8.5	9.2	-0.7	>10,>10	46.9	91.0	52		
Summerside	9.2	9.5	-0.3	>10,>10	33.0	97.7	34		

Significant Weather Events & Impacts

May 1-2 – After a dry April, a slow-moving trough brought much needed rain (10-30 mm) to most areas. Exceptions include areas along the central Atlantic coast of NS and isolated regions of the Fundy coast in NB where 60-80 mm of rain fell. The trough was also accompanied by gusty easterly winds of generally 60-80 km/h along exposed coastal areas and Les Suêtes winds in Cape Breton gusted up to 156 km/h.

May 8-9 – A spring snowfall blanketed elevated terrain in northern Cape Breton with up to 15 cm of snow and caused isolated power outages due to the wet and heavy snow.

Snowfall warning ends for parts of the Cape Breton Highlands | CTV News

May 20-21 – Rainy and windy conditions were felt across most regions in the Maritimes as trough of low pressure traversed the region. Amounts varied from west to east with southwestern NB receiving the highest amounts between 30-45 mm and Cape Breton receiving only 3-5 mm. Gusty northwest winds of 60-80 km/h were strongest over eastern areas and caused power outages.

High winds knock out power to thousands on P.E.I. | CBC News

May 24-26 – A trough of low pressure stalled over portions of central and northern NB as a low-pressure system moved south of NS and affected eastern NS and Cape Breton. Both areas saw widespread rainfall amounts of 25-50 mm, which eased the dry conditions so far this spring. Locally, the Broad Cove area in northern Cape Breton received 69 mm.

May 28 – The first taste of summer brought the region's first maximum temperatures that exceeded 30°C in all three provinces along with some daily records. The hot and dry conditions were also accompanied by strong westerly winds that gusted near 60-70 km/h across the region.

May 31 – June 1 – The first heat event of the year affected parts of the region. Charlo, NB recorded a maximum temperature of 33.6°C on May 31st, setting a new record for May at that location, and Bathurst, NB, tied its record daily maximum temperature for May, at 33.7°C. Complete details on this event will be provided in the June summary.

Fire Weather

The ongoing and persistent dry conditions since February combined with a warm and windy air mass produced several wildfires in NS and NB beginning early in the month and intensified on May 28th. The daily fire danger index for May 28th was high to extreme for most regions. A wildfire of historic proportions caused thousands of residents to be evacuated in NS along with a number of school and road closures. The flames damaged or destroyed more than 200 homes and structures in the Halifax area. The province's largest fire on record, estimated to be 20,000 hectares as of May 31st, is continuing to burn in Shelburne County in the southwestern portion of the province. In NB, hundreds of residents were evacuated with only a few structures being lost to the fires in the Saint Andrews area. These wildfires will continue to burn into June.

Wildfire burning near Weymouth still out of control | CBC NewsHomes evacuated as crews battle wildfire in Shelburne County | CBC NewsEmergency crews battling wildfire in Shelburne County | CBC NewsLocal state of emergency declared as forest fire rages near Halifax | CBC News75 homes evacuated as forest fire continues near Saint Andrews | CBC NewsP.E.I. bans all outdoor burning as fire risk remains high | CBC NewsHalifax-area wildfire still out of control, but has not grown | CBC NewsForest fires 'surreal' so close to home, says Bocabec evacuee | CBC NewsShelburne County blaze likely to grow, now the largest wildfire in N.S. history | CBC News

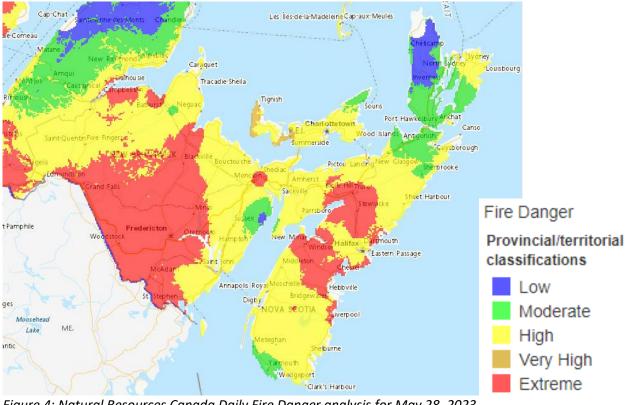


Figure 4: Natural Resources Canada Daily Fire Danger analysis for May 28, 2023. Source: <u>https://cwfis.cfs.nrcan.gc.ca/interactive-map</u>

May Lightning

Across the Maritimes, cloud-ground lightning stroke totals were below normal. The below normal precipitation recorded for the month likely contributed to the lack of lightning. Year-to-Date activity is also below normal for all regions since record keeping began in 2002. The lightning season is just getting started and it is still early. The three busiest months are June, July and August with July being the busiest.

Province	May 2023 Observed	May Average	May 2023 Rank	Year-to-Date Observed	Year-to-Date Average	Year-to-Date Rank
NB	82	1,946	4 th Lowest	143	2,257	3 rd Lowest
NS	204	601	Tie 8 th Lowest	226	1,166	2 nd Lowest
PEI	3	45	9 th Lowest	3	78	4 th Lowest

Daily Temperature and Precipitation Time Series

The temperature time series are similar for the three provincial capitals for May as the month continuously alternated between periods of below and above normal that resulted in near normal temperatures for all sites. The precipitation time series for all three sites indicate one event at the beginning of the month then only light and spotty precipitation for the rest of the month. An exception occurred in Fredericton where moderate precipitation fell during an event near the middle of the month. Precipitation totals were below normal at all sites.

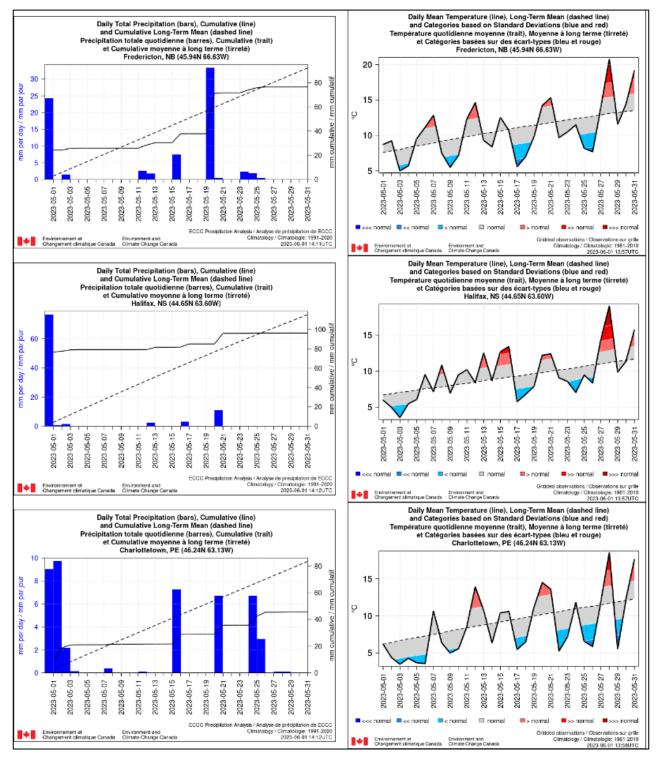


Figure 5: Daily total precipitation (Canadian Precipitation Analysis (CaPA) data) and mean temperature for Fredericton, NB (top), Halifax, NS (middle), and Charlottetown, PEI (bottom), for May 2023 based on gridded data, compared to long-term means (Canadian Precipitation Analysis (CaPA) data, 1991-2020, and temperature data, 1981 to 2010).

Sea Surface Temperature - Departure from Normal

The sea surface temperature (SST) departure from normal map during the week of May 22 to 28, 2023 indicates a range of conditions across the region. Below normal temperatures (1-4 degrees) occurred across portions of the Gulf of St. Lawrence and over offshore waters south of NS. Near to above normal temperatures (zero-3 degrees) occurred across most other areas. Exceptions include the eastern coast of NB, the Northumberland Strait, eastern Bay of Fundy, and parts of coastal NS where anomalies of 5 degrees or more above normal occurred.

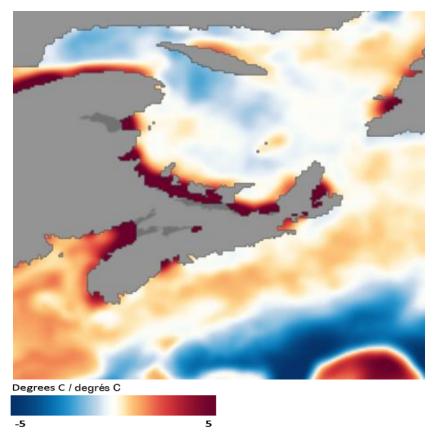


Figure 6: Sea surface temperature (SST) anomaly map for May 22 to 28, 2023. Data based on 1981present. Source: <u>https://www.nnvl.noaa.gov/view/#SSTA</u>

Other Climate Related Information

Polar vortex may have wiped out South Shore mussel beds | SaltWire How warming waters around P.E.I. could affect snow crab and lobster | CBC News Nova Scotia wildfire numbers already higher than all of 2022 | SaltWire Fruit growers lost crops cold snap in Feb | CBC News Strawberry growers hope for warmer, wetter weather | CBC News

Temperature & Precipitation Outlook

The four-week outlook for temperature and precipitation from the Canadian Global Ensemble Prediction System (GEPS) for June 5 to July 3, 2023 indicates a weak to moderate probability of above normal temperatures for the region. In terms of precipitation, there is no signal in relation to normal. Exceptions include portions of western NB and portions of western NS where there is a weak indication of below normal precipitation.

The previous four-week outlook, from April 27th, the outlook did not perform all that well as near normal to below normal temperatures occurred when above normal temperatures were predicted. The precipitation outlook performed slightly better as some regions reported near normal precipitation as forecast. Remaining regions reported below normal conditions when near normal was forecast.

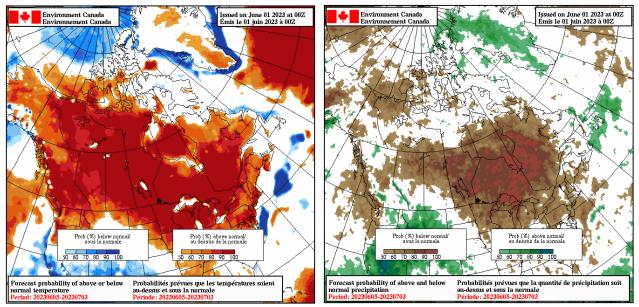


Figure 7: Temperature and Precipitation Anomaly Forecasts from the MSC Global Ensemble Prediction System issued June 1, 2023 for June 5 to July 3, 2023. Source: http://collaboration.cmc.ec.gc.ca/cmc/ensemble/monthly/prev_mens_geps.html

Atlantic Hurricane Season Outlook

For the 2023 Atlantic Hurricane Season (June 1-November 30), NOAA is predicting a near-normal season (40% probability) for Tropical Storm formation in the Atlantic. On average about 35% of tropical storms in the Atlantic, enter the Canadian Response Zone. A rare subtropical storm formed in mid-January 2023 off the northeastern U.S. coast, but was short-lived and was not named. After seven consecutive seasons (2015-2021) with a named storm forming in May, this was the second season in a row without a named tropical storm forming prior to the official start of the hurricane season.

NOAA predicts a near-normal 2023 Atlantic hurricane season | NOAA What El Niño and a warming Atlantic Ocean could mean for the 2023 hurricane season | CBC News America's National Hurricane Centre predicts near normal 2023 Atlantic hurricane season | CTV News

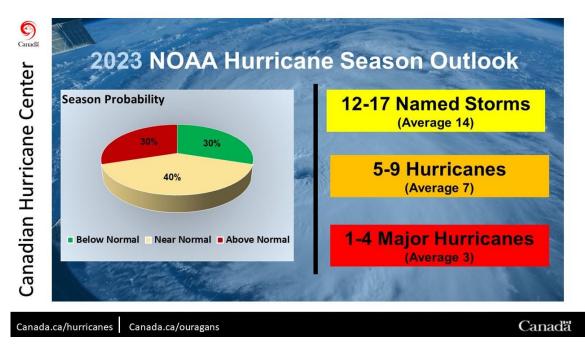


Figure 8: Summary infographic showing hurricane season probability and numbers of named storms predicted from NOAA's 2023 Atlantic Hurricane Season Outlook. Source: NOAA/Canadian Hurricane Center

Contact

Environment and Climate Change Canada, Meteorological Service of Canada, Prediction Services Operations – Atlantic and Ice, Applied Climatology Services Email address: <u>climatatlantique-climateatlantic@ec.gc.ca</u>

Appendix

Table A1: Station metadata for the selected locations in Table 1.

Location/ Emplacement	Station Name/ Nom de la station	Climate ID/ID climat	Station Operator/ Opérateur de station ¹	Type ²	Normals Station Name /Nom de la station normals	Normals Station Climate ID / ID climat station normals
Bas Caraquet	BAS CARAQUET (temps)	8100467	ECCC-MSC	Α	BAS CARAQUET	8100468
	BAS CARAQUET (precip)	8100468	CCN	н		
Charlo	CHARLO AUTO	8100885	ECCC-MSC	A	CHARLO A	8100880
Fredericton	FREDERICTON CDA CS	8101605	ECCC-MSC	Α	FREDERICTON CDA	8101600
Moncton	MONCTON/GREATER MONCTON ROMEO LEBLANC INTLA	8103201	NavCan	н	MONCTON A	8103200
Saint John	SAINT JOHN A	8104901	NavCan	Н	SAINT JOHN A	8104900
Woodstock	WOODSTOCK NEWBRIDGE	8105603	ECCC-MSC	Α	WOODSTOCK	8105600
Amherst (Nappan)	NAPPAN AUTO	8203702	ECCC-MSC	A	NAPPAN CDA	8203700
Greenwood	GREENWOOD A	8202000	DND	н	GREENWOOD A	8202000
Halifax (Airport)	HALIFAX STANFIELD INT'L A	8202251	NavCan	н	HALIFAX STANFIELD INT'L A	8202250
Halifax (Shearwater)	SHEARWATER RCS	8205092	ECCC-MSC	A	SHEARWATER A	8205090
Sydney	SYDNEY A	8205701	NavCan	н	SYDNEY A	8205700
Truro (Debert)	DEBERT	8201390	ECCC-MSC	A	DEBERT	8201380
Yarmouth	YARMOUTH A	8206495	NavCan	н	YARMOUTH A	8206500
Charlottetown	CHARLOTTETOWN A	8300301	NavCan	н	CHARLOTTETOWN A	8300300
Summerside	SUMMERSIDE	8300596	ECCC-MSC	A	SUMMERSIDE A	8300700

¹ Station Operator: CCN = Cooperative Climate Network, ECCC-MSC = Environment and Climate Change Canada, Meteorological Service of Canada, DND = Department of National Defence, NavCan = Nav Canada ² Type: A = Automatic observation, H = Human observation Table A2: Monthly totals for May 2023 for New Brunswick stations compared to 1981-2010 Canadian Climate Normals (if available for same or nearby station). Temperature difference from normal: cells shaded pink if \geq 1 °C, blue if \leq -1° C. Precipitation as a percent of normal: cells shaded green if \geq 125% of normal, yellow if \leq 75% of normal.

				Mean Temperature / Température moyenne (°C)			Total Precipitation / Précipitations totales (mm)			
Station Name / Nom de la		TC ID / ID de	Station Type / Type de	Monthly Mean / Moyenne	Normal Mean / Moyenne	Diff from Normal / Écart avec	Monthly Total / Total	Normal Total / Total	Total as % of Normal / Total en % de la	
station	Prov	тс	station	mensuelle	Normale	la normale	mensuel	normal	normale	
BAS CARAQUET	NB	WXS	AU8	9.1	8.8	0.3				
BAS CARAQUET	NB		DAILY				106.2	85.6	124	
BATHURST A	NB	ZBF	NCA	9.6	9.7	-0.1	100.9	103.1	98	
CHARLO AUTO	NB	ZCR	AU8	9.5	9.0	0.5	82.8	84.8	98	
DOAKTOWN AUTO RCS	NB	ADN	AU8	9.7	10.6	-0.9	80.4	113.2	71	
EDMUNDSTON	NB	ERM	AU8	9.1			51.5	90.4	57	
FREDERICTON CDA CS	NB	AFC	AU8	10.8	11.3	-0.5	86.5	103.8	83	
FREDERICTON INTLA	NB	YFC	NCA	10.7	11.1	-0.4	65.8	96.2	68	
FUNDY PARK (ALMA) CS	NB	AFY	AU8	9.4	9.5	0.0	56.8	126.5	45	
GARNETT SETTLEMENT	NB	AJH	AU8	8.9	9.5	-0.6	88.8	109.8	81	
GRAND MANAN SAR CS	NB	XGM	AU8	9.1						
KOUCHIBOUGUAC	NB	AKC	AU8	9.2	9.8	-0.6	71.4	112.2	64	
MECHANIC SETTLEMENT	NB	AMS	AU8	8.8			121.3			
MIRAMICHI RCS	NB	ACQ	AU8	10.1	10.0	0.1	70.3	99.5	71	
MISCOU ISLAND (AUT)	NB	WMI	AU8	8.5			79.0			
MONCTON/GREATER MONCTON ROMEO LEBLANC	NB	YQM	NCH	9.7			42.9			
INTL A					10.0	-0.3		96.9		
OAK POINT	NB		DAILY	11.1			72.2	105.8		
POINT LEPREAU CS	NB	WPE	AU8	9.2			52.9	130.2		
RED PINES	NB	ARP	AU8	8.8		-1.0	94.9	96.0		
SAINT JOHN A	NB	YSJ	NCH	9.0		-0.5	93.4	109.8	85	
ST. STEPHEN	NB	WSS	AU8	10.4			67.8			
SUSSEX FOUR CORNERS	NB	ASF	AU8	10.4		-0.6	57.3	103.0		
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	10.4		-0.5	83.2	94.2		
Average				9.6		-0.3	77.4			
Max				11.1		0.5	121.3	130.2		
Min				8.5	8.8	-1.0	42.9	84.8	41	

Table A3: Same as Table A2, for Nova Scotia

				Mean Temperature / Température moyenne (°C)			Total Precipitation / Précipitations totales (mm)			
Station Name / Nom de la station	Prov	TC ID / ID de TC	Station Type / Type de station	Monthly Mean / Moyenne mensuelle	Normal Mean / Moyenne Normale	Diff from Normal / Écart avec la normale	Monthly Total / Total mensuel	Normal Total / Total normal	Total as % of Normal / Total en % de la normale	
ALDERSVILLE	NS	ANR	AU8	9.4	10.8	-1.5	56.7	108.4	52	
BACCARO PT	NS	ACP	AU8	8.8			23.7	107.3	22	
BEAVER ISLAND (AUT)	NS	WBV	AU8	6.5						
BEDFORD BASIN	NS	ABB	AU7	9.8	10.1	-0.3				
BEDFORD RANGE	NS	ABR	AU7	9.1	9.9	-0.7				
BRIER ISLAND	NS	WVU	AU8	9.6			31.1			
CARIBOU POINT (AUT)	NS	WBK	AU8	8.7	10.2	-1.5	49.3	83.9	59	
CHETICAMP (C.B. HIGHLANDS NATL PARK)	NS	AHT	AU8	7.4	9.4	-2.0	104.6	85.3	123	
, COLLEGEVILLE AUTO	NS	AGL	AU8	7.3	9.3	-2.0	81.8	103.5	79	
DEBERT	NS	ZDB	AU8	8.4		-1.8	42.5	106.8		
ESKASONI FIRST NATION	NS	AEI	AU8	8.1		-0.9	66.3	104.0		
GRAND ETANG	NS	WZQ	AU8	7.6		-1.8	00.0	20.00		
GREENWOOD A	NS	YZX	WOD	10.2		-1.0	29.4	84.8	35	
HALIFAX KOOTENAY	NS	АНК	AU7	9.4		0.2	97.6	120.6		
HALIFAX STANFIELD INT'L A	NS	YHZ	NCH	9.3		-0.7	63.5	111.9		
HALIFAX WINDSOR PARK	NS	AHW	AU7	9.9		-0.2	114.8	119.1		
HART ISLAND (AUT)	NS	WRN	AU8	7.3		0.2	11.10	110.1		
INGONISH BEACH RCS	NS	XIB	AU7	7.9		-0.2	70.6	108.9	65	
KEJIMKUJIK 1	NS	WKG	AU8	10.3		-0.4	56.6	99.3		
KENTVILLE CDA CS	NS	XKT	AU7	10.5		-0.9	31.2	102.1		
LOUISBOURG	NS	AUU	AU8	6.4		-0.5	85.2	127.6		
LUNENBURG	NS	XLB	AU8	9.6		0.5	05.2	127.0		
MALAY FALLS	NS	XMY	AU8	7.9		-0.4	124.2	134.8	92	
MCNABS ISLAND (AUT)	NS	XMI	AU8	9.2		0.4	127.2	134.0	52	
NAPPAN AUTO	NS	XNP	AU8	9.1		-1.0	35.7	100.7	35	
NORTH MOUNTAIN CS	NS	XNM	AU7	5.1		-3.5	169.5	100.7		
NORTHEAST MARGAREE (AUT)	NS	WNS	AU7	7.0		-2.2	98.3	76.6	128	
OSBORNE HEAD DND	NS	AOS	AU7	8.4		-0.9	108.6	120.6		
PARRSBORO	NS	APR	AU8	8.3		-1.4		105.2		
SABLE ISLAND	NS	ASB	AU8	7.2		-0.3	50.8	101.3		
SABLE ISLAND A	NS	WSA	NCA	7.1		-0.4	55.5	101.3		
SHEARWATER JETTY	NS	WZU	AU7	9.1		-0.2		101.5		
SHEARWATER RCS	NS	AAW	AU8	9.7		0.5		120.6	70	
SHELBURNE SANDY POINT	NS	ESB	AU8	9.6		0.5	52.9	120.0	10	
ST PAUL ISLAND (AUT)	NS	WEF	AU8	6.0			32.3			
SYDNEY A	NS	YQY	NCH	7.1		-0.8	88.6	103.2	86	
SYDNEY CS	NS	AQY	AU8	7.3		-0.7	72.7	103.2		
TRACADIE	NS	XTD	AU8	7.5		-1.6		103.2		
UPPER STEWIACKE RCS	NS	AOH	AU8	8.4		-1.5		98.9		
WESTERN HEAD	NS	WWE	AU8	9.4		1.5	43.3	50.5	50	
YARMOUTH A	NS	YQI	NCH	9.9		0.2	37.8	100.9	37	
YARMOUTH RCS	NS	EQI	AU8	9.8		0.2	36.7	100.9		
	143									
Average				8.4		-0.9		105.0		
Max Min				10.3 5.1		0.5 -3.5		134.8 76.6		

					perature / T noyenne (°	empérature C)	Total Pred	totales (r	Précipitations nm)
Station Name / Nom de la station	Prov	TC ID / ID de TC	Station Type / Type de station	Monthly Mean / Moyenne mensuelle	Normal Mean / Moyenne Normale	Diff from Normal / Écart avec la normale	Monthly Total / Total mensuel	Normal Total / Total normal	Total as % of Normal / Total en % de la normale
CHARLOTTETOWN A	PEI	YYG	NCH	8.5	9.2	-0.7	46.9	91.0	52
EAST POINT (AUT)	PEI	WEP	AU8	7.5	8.3	-0.8	66.7	93.1	72
HARRINGTON CDA CS	PEI	AHR	AU8	8.4	9.2	-0.8	46.1	91.0	51
MAPLE PLAINS	PEI	XMP	AU8	8.4	9.2	-0.8			
NORTH CAPE	PEI	WNE	AU8	8.3			56.7		
ST. PETERS	PEI	ZSP	AU8	8.3	8.6	-0.3	54.1	90.1	60
STANHOPE	PEI	ANH	AU8	9.0			40.7		
SUMMERSIDE	PEI	WSD	AU8	9.2	9.5	-0.3	33.0	97.7	34
Average				8.5	9.0	-0.6	49.2	92.6	54
Max				9.2	9.5	-0.3	66.7	97.7	72
Min				7.5	8.3	-0.8	33.0	90.1	34

Table A4: Same as Table A2, for Prince Edward Island.

Glossary

CaPA: The Canadian Precipitation Analysis. Full details available here.

Standard Deviation: A statistical measure of how data compares to the mean (average) value. The standard deviation referenced in these monthly summaries is relative to the Canadian Climate Normals data set. The higher the standard deviation value, the further the data is from the normal value.

Temperature Anomaly: The deviation of temperature in a given region over a specified period from the long-term average value for the same region.

A more extensive glossary for weather and climate related terminology can be found here.

Disclaimer:

Links to websites that are not under the control of the Government of Canada, referrals to third-party organizations and other information are offered on an "AS IS" basis and are provided solely for the convenience of the users. The Government of Canada is not responsible for the accuracy, currency or reliability of the content of such websites neither of the information provided by such organization. The Government of Canada does not offer any guarantee in that regard and is not responsible nor liable for the information found through these links or provided by third-party organizations. Please be aware that the information offered by non-Government of Canada sites is not subject to the Privacy Act or the Official Languages Act and may not be accessible to persons with disabilities. The information offered may be available only in the language (s) used by the sites in question. With respect to privacy, visitors should research the privacy policies of these non-government websites before providing personal information.

END