Maritimes Monthly Weather & Climate Summary July 2023

Overview

A historic rainfall event in Nova Scotia produced flash flooding and widespread severe impacts, including the loss of four lives. Precipitation totals for July were more than double long term averages in many areas, continuing the pattern set in June. Record-breaking heat and humidity also occurred across much of the Maritimes.

Temperature – Anomaly

Monthly average temperatures were 1 to 3 degrees C above the long-term average across the Maritimes. Many locations experienced their warmest July on record. With July typically being the warmest month of the year, some of these areas also had their warmest month on record overall. Details for locations with new records (preliminary) for highest July mean temperatures are posted here: NB, NS, and PEI.

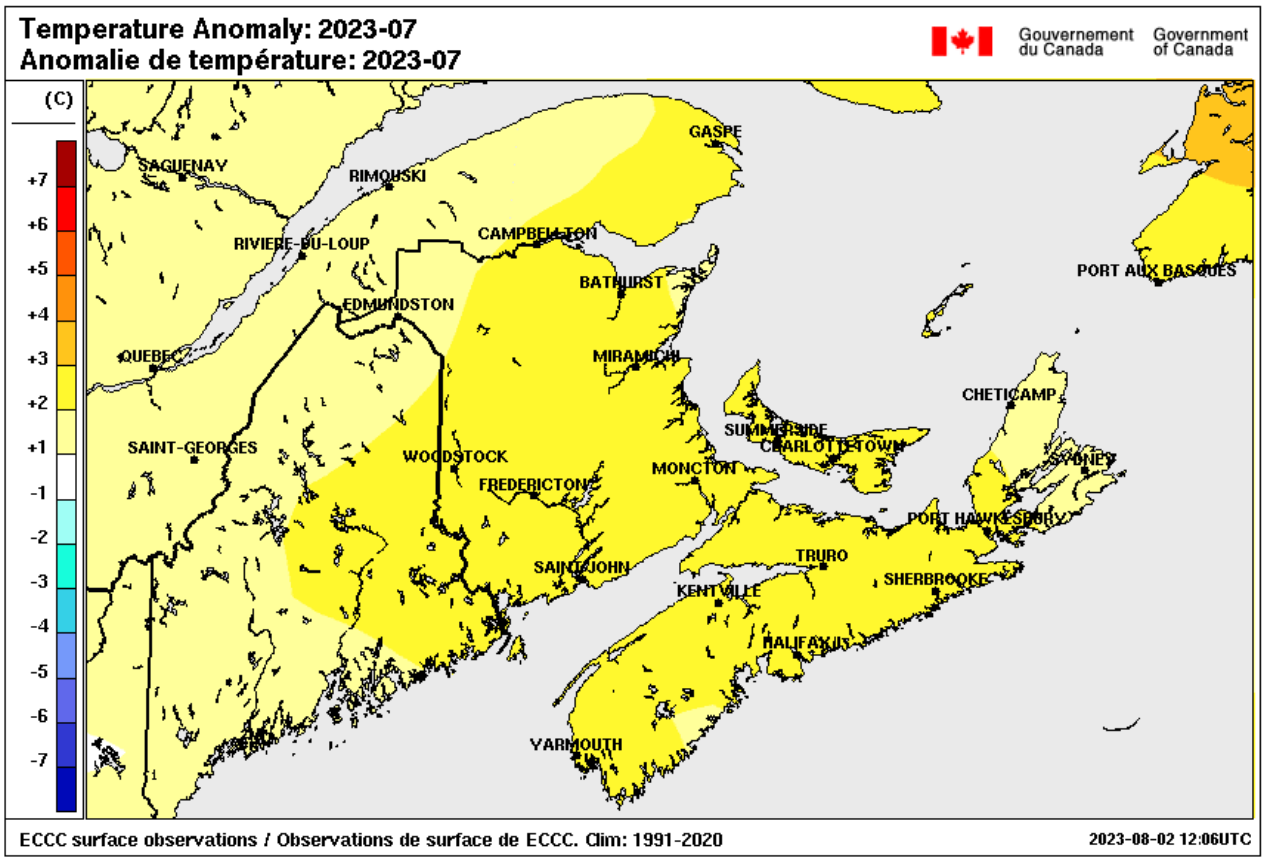

Figure 1: Monthly temperature anomaly map for July 2023 based on archived station data compared to 1991-2020 averages for the Maritimes.

Precipitation – Anomaly

Precipitation in July was well above normal for most of NS, PEI and southern NB with some locations receiving two to three times the normal for the month. This followed an already very wet month in June. One of the main contributors to these high totals was the extreme rainfalls July 21 to 23, in addition to other rain events. Saint John, NB and Truro (Debert), NS had their wettest July on record, based on station data in those areas beginning in the early 1870s. In contrast, northern New Brunswick experienced near normal or drier than normal conditions.

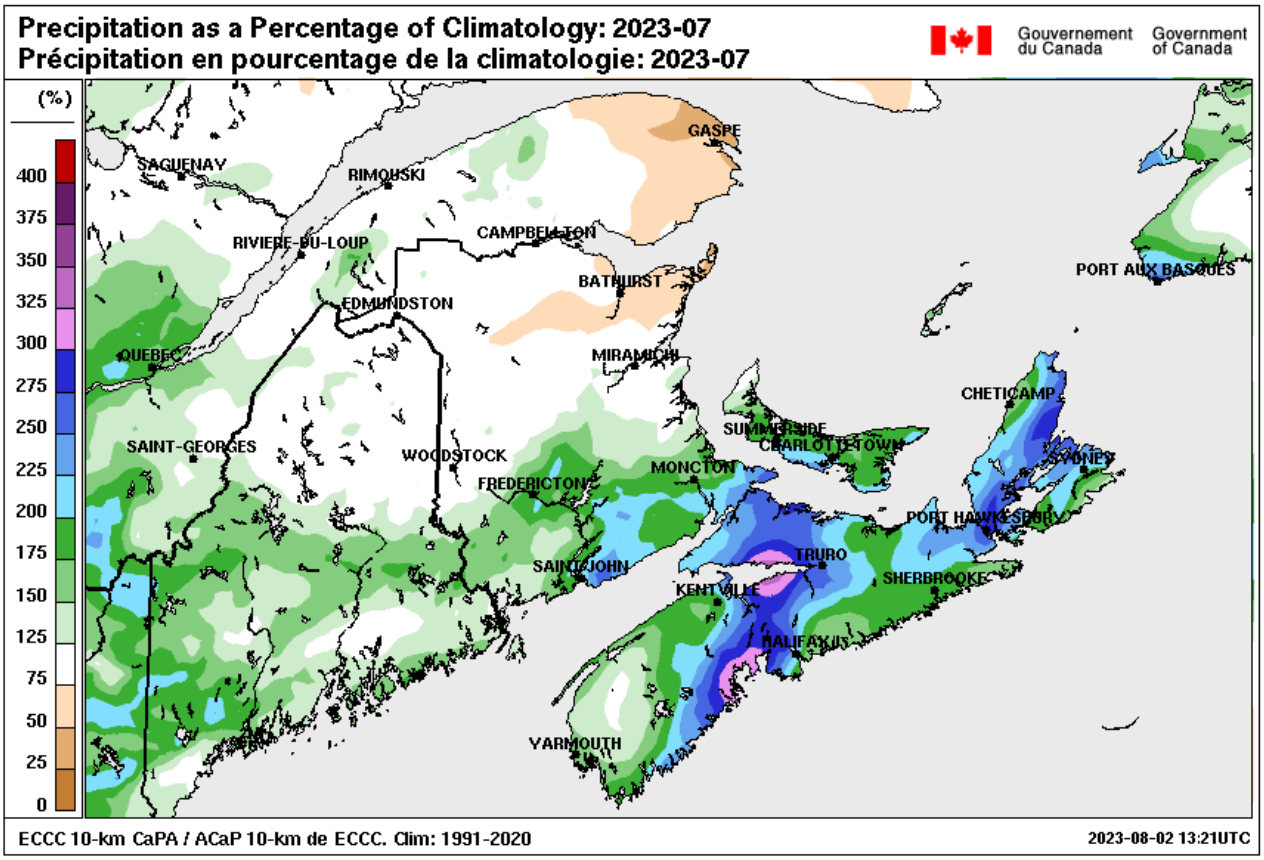

Figure 2: Monthly precipitation anomaly for July 2023 based on ECCC Canadian Precipitation Analysis (CaPA) a gridded blend of model, radar, and station data, compared to 1991-2020 averages for the Maritimes. (Anomaly: Precipitation as a percentage of the average).

Table 1: Monthly average temperature and total precipitation for July 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 ≥ 125% of normal, yellow if ≤ 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, based on a selection of stations reporting through the period of record, not adjusted or homogenized.

	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	20.9	18.7	2.2	2, >10	87.8	80.9	109
Charlo	20.7	17.9	2.8	5, >10	113.8	102.1	112
Fredericton	22.1	19.4	2.8	2, >10	190.1	89.0	214
Moncton	22.4	18.8	3.6	1, >10	135.3	92.1	147
Saint John	19.6	17.1	2.5	1, >10	299.7	88.4	339
Woodstock	21.6	19.0	2.6	5, >10	88.6	100.2	88
Amherst (Nappan)	21.6	18.5	3.2	1, >10	162.3	89.0	182
Greenwood	22.5	19.7	2.8	1, >10	169.0	83.2	203
Halifax (Airport)	21.6	18.8	2.8	1, >10	187.2	95.5	196
Halifax (Shearwater)	21.0	18.1	3.0	1, >10	161.1	103.4	156
Sydney	20.4	17.9	2.5	4, >10	197.2	88.5	223
Truro (Debert)	21.8	18.6	3.2	1, >10	223.7	90.7	247
Yarmouth	19.4	16.8	2.6	1, >10	146.7	88.4	166
Charlottetown	21.9	18.7	3.2	1, >10	154.8	79.9	194
Summerside	22.0	19.2	2.8	1, >10	132.7	74.1	179

Significant Weather Events & Impacts

July 2 – 3: A rare July low-pressure system tracked through the Bay of Fundy bringing significant rain to southern NB, PEI and mainland NS. Most areas saw 40-70 mm of rain with localized amounts of up to 160 mm for parts of the Annapolis Valley area of NS. Heavy rain caused Cape Chignecto Park in northern NS to close temporarily due to flooding after receiving nearly a month's worth of rain in less than 24 hours. Calgary hikers faced waist-high water as flooded N.S. park evacuated | CBC News

July 6 – 9: A hot and muggy airmass settled over the region and set a few maximum daily temperature records. Maximum temperatures reached 33 degrees in both NB and NS while PEI reached 30 degrees on July 7. Humidex values reached 42 in both NB and NS July 6 and/or 7. The air mass was also accompanied by severe thunderstorms on July 7, that ravaged central and northern NB with heavy downpours (over 40 mm in a short period) and violent winds. Felled trees closed some roads near Plaster Rock, NB.

July 11 – 13: A trough of low-pressure was accompanied by widespread rain that crossed most of the Maritimes but became nearly stationary over eastern NS and Cape Breton. Rainfall amounts ranged from 30-100 mm with the highest amounts over Cape Breton.

July 12 – 14: Several maximum daily temperature records were broken as warm and humid conditions affected the region. Temperatures surpassed 30 degrees in all three provinces while humidex values surpassed 40 in both NB and PEI.

July 15: Severe and slow-moving thunderstorms brought torrential rain to localized areas of NB. The Caraquet area of NB reported flooding on streets as rainfall amounts were radar estimated up to 100 mm.

Thunderstorms cause flooding in parts of New Brunswick | CBC News
Heavy rains prompt closure of Edmundston road days after reopening | CBC News

July 16 – 17: A tropical-like air mass ushered in heavy, convective showers to mainly southern NB. Due to the showery nature of the precipitation, rainfall amounts varied greatly from 10-75 mm but as much as 120 mm fell in Saint John, NB.

July 21 – 23: Historic Rainfall and Flooding in Nova Scotia. A plume of tropical-sourced moisture and a slow moving trough of low pressure brought torrential rain and thunderstorms across Nova Scotia and eastern PEI. Rainfall amounts ranged from 50-150 mm over a wide region. More than 200 mm of rain fell in less than 24 hours from July 21 to 22, with localized reports of near 260 mm falling in less than 24 hours. Some stations reported maximum one-hour rainfalls of up to 100 mm. Such extreme amounts falling over these short durations would be considered much rarer than 1:100 year return period estimates based on past climate data. The south shore and central areas of Nova Scotia were especially hard hit, with flooding of historical proportions. A province wide state of emergency was in effect, with evacuation orders for some areas. The flooding was deadly, claiming the lives of four people when the vehicles they were travelling in became caught in flood waters. Numerous roads and highways were impassable. Numerous bridges were washed out. A rail line washout halted train service between Halifax and the rest of Canada. Widespread frequent lightning during this event contributed to a new Nova Scotia record for number of cloud-to-ground strokes in July. More than 70,000 NS customers lost power. This event was comparable to Hurricane Beth in August 1971 for rainfall, flooding and severe impacts.

Rainfall information including the mapped storm totals below are based on archived data from ECCC, National Defense, and Nav Canada, supplemented by partner networks including CoCoRaHS, Cape Breton Mesonet, NS Fire Weather (Forestry), NS Agriculture, and the NS Fruit Growers Association.

ECCC Weather Summary - Nova Scotia, July 22, 2022

4 people missing in Nova Scotia after vehicles became submerged in floodwaters | CBC News
'A tough couple months': Flood forces 750 Halifax residents from their homes | CBC News
Evacuation order due to flooding lifted for homes in Fancy Lake area | CBC News
Cormorant helicopters called in to assist with N.S. search-and-rescue operations | CBC News
Cleanup continues after devastating flooding in Halifax area | CBC News
Remains believed to be final missing victim of historic N.S. floods have been found | CBC News

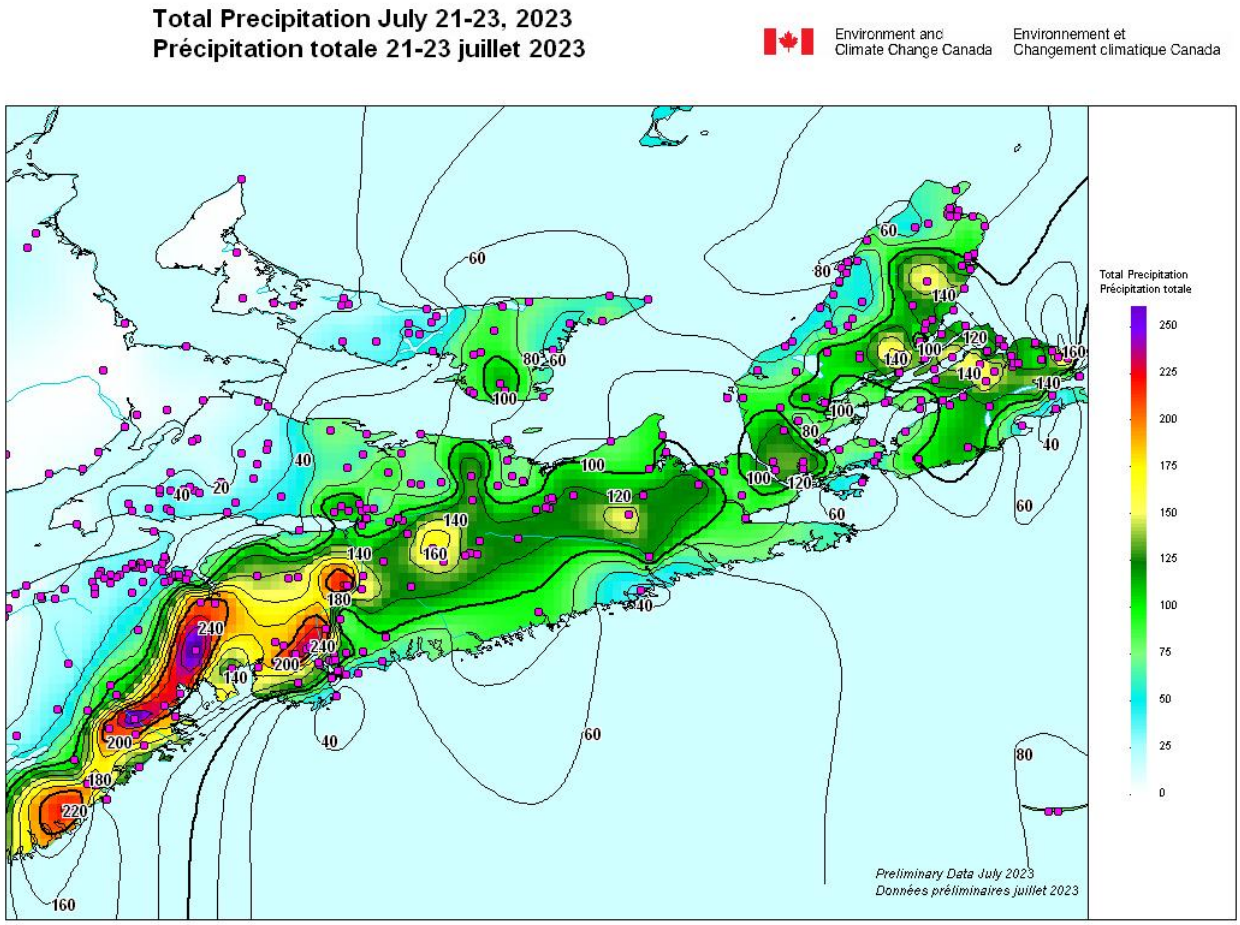

Figure 3: Total precipitation for July 21-23, 2023 based on station data from ECCC, DND, NavCanada, CoCoRaHS, Cape Breton Mesonet, NS Forestry, NS Agriculture, and NS Fruit Growers Association networks.

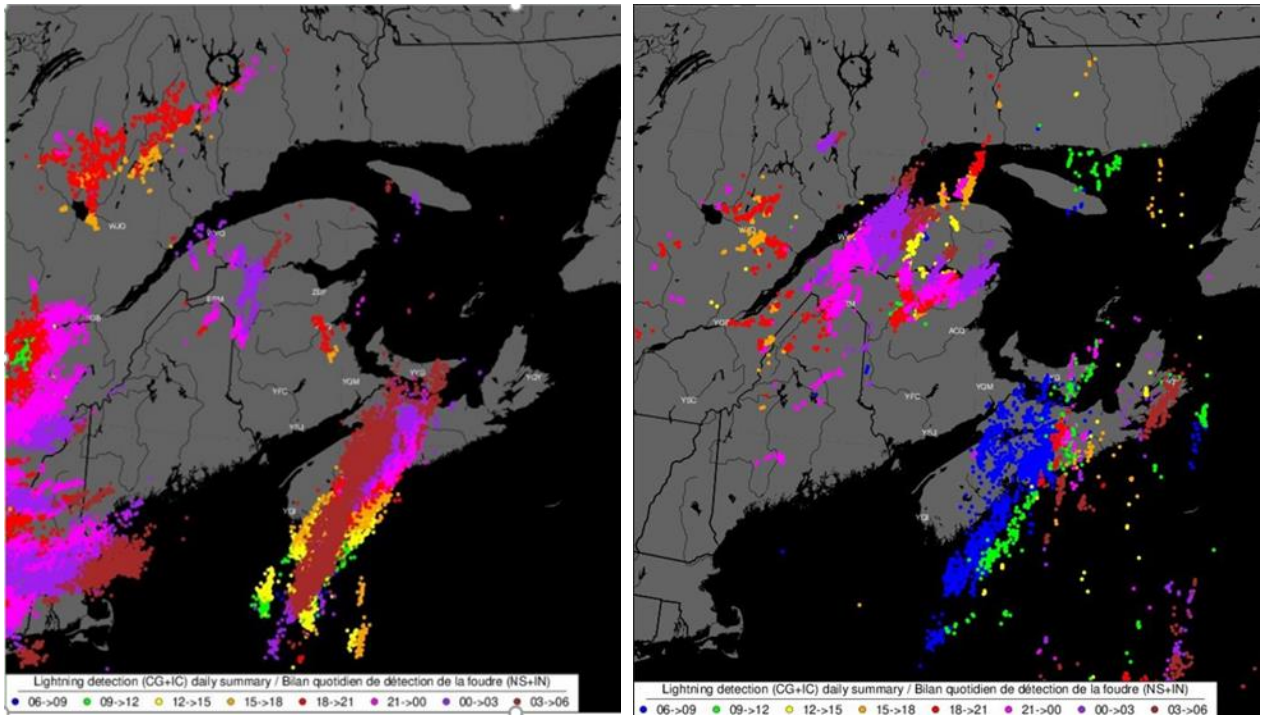

Figure 4: Daily summary of lightning (cloud-to-ground and in-cloud) for July 21, 2023 (left) and July 22, 2023 (right), shown in 3-hour periods from 06 UTC (02 AST) to 06 UTC (02 AST) of the following day.

July 27 – 28: A trough of low-pressure crossed quickly through portions of the Maritimes and brought extensive rain to southern NB, eastern PEI, northern NS and Cape Breton. Hourly rainfall rates reached 30 mm/h and total rainfall amounts of 25-50 mm were reported with localized amounts of 70 mm in southeastern NB. A less humid airmass and a return to more normal temperatures followed.

July Heat and Humidity and Heavy Rainfall
A warm, humid airmass established itself over the Maritimes. This resulted in a prolonged period of record-breaking hot temperatures and high humidex values, which persisted through much of July, finally easing near month-end. Above normal rainfall continuing the pattern set in June impacted agriculture.
Farmers struggling with waterlogged crops after rainy start to summer | CBC News
'We've been pretty lucky': N.B. strawberry crop could have been much worse, say farmers | CBC News
Recent rainy season means beef, dairy farmers struggle to harvest home-grown cattle feed | CBC News
Rain 'always a good thing' — but maybe not this much, P.E.I. farmers say | CBC News
N.S. sees string of oceanside beach closures amid rainy start to summer | CBC News
Salmon group blames climate change for fishing closures on parts of Cape Breton river | CBC News
July on track to be hottest month in P.E.I. history | CBC News

July Lightning

The summary of cloud to ground lightning strokes for July 2023 shows a very active month in NS and NB and a less active month in PEI compared to average. Most notable is NS where the thunderstorms on July 21-22 contributed to a record-breaking number of strokes. On those two days a count of 23,008 cloud to ground lightning strokes was recorded, compared to the July total of 26,194 cloud to ground strokes. Canadian Lightning Detection Network records began in 2002.

Province	July 2023 Observed	July Average	July 2023 Rank	Year-to-Date Observed	Year-to-Date Average	Year-to-Date Rank
NB	28,785	20,667	4th Highest	30,182	32,787	11th Highest
NS	26,194	7,172	**Highest**	30,553	14,339	3rd Highest
PEI	369	1,056	10th Lowest	460	1,622	3rd Lowest

Daily Temperature and Precipitation Time Series

The temperature time series for the three provincial capitals (Fredericton, Halifax and Charlottetown) are all showing daily temperatures well above normal throughout most of the month of July. Temperatures finally dipped back to more near normal values near month end. The precipitation series shows a number of significant events with all three locations receiving totals well above the long-term average.

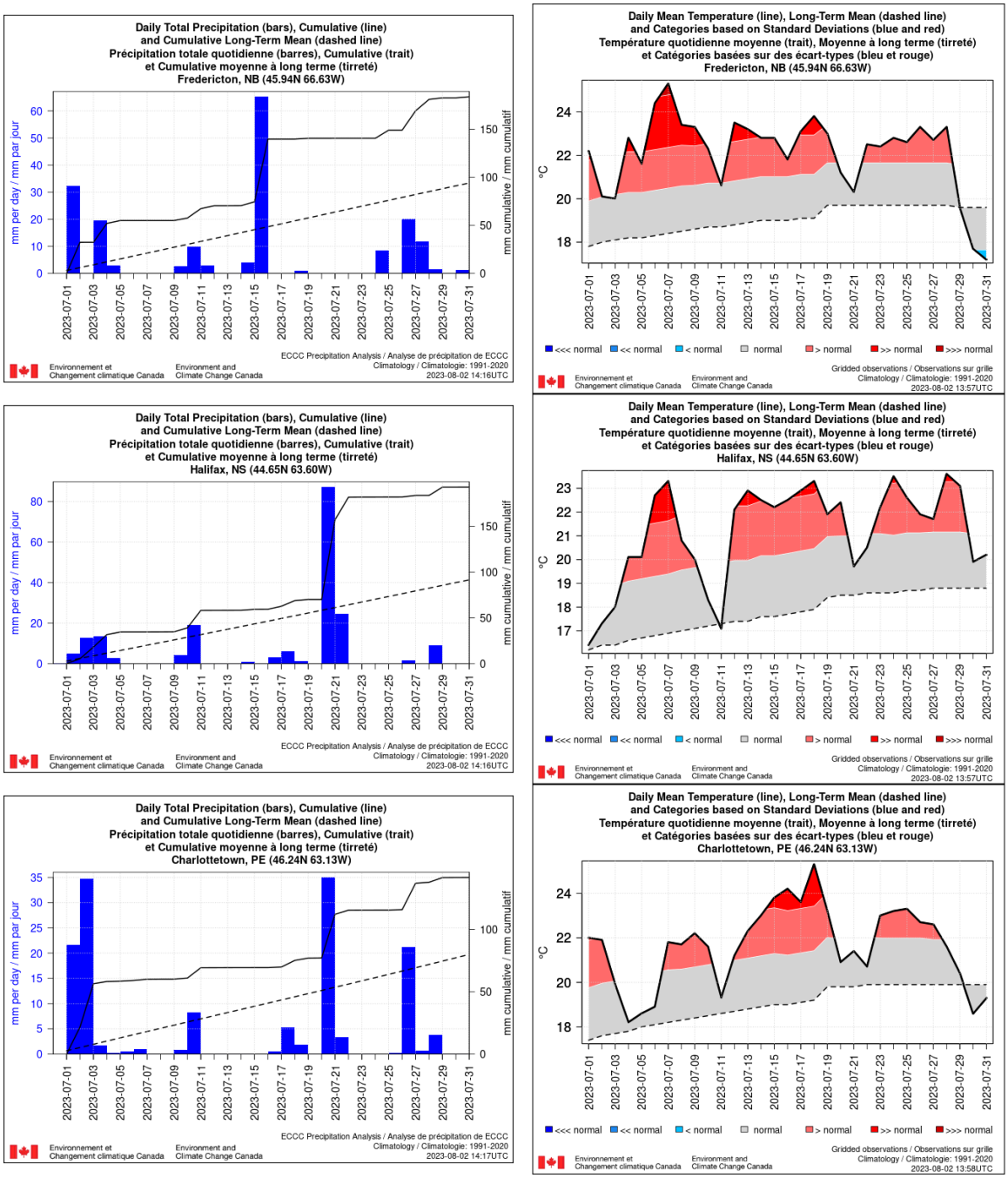

Figure 5: Daily total precipitation (Canadian Precipitation Analysis (CaPA) data) and mean temperature for Fredericton, NB (top), Halifax, NS (middle), and Charlottetown, PEI (bottom), for July 2023 based on gridded data, compared to long-term means (1991 to 2020).

Sea Surface Temperature - Departure from Normal

The sea surface temperature (SST) departure from normal map during the week of July 24 – 30 shows warmer than normal waters surrounding the Maritimes. Much of the area shows temperatures more than 5 degrees C above normal.

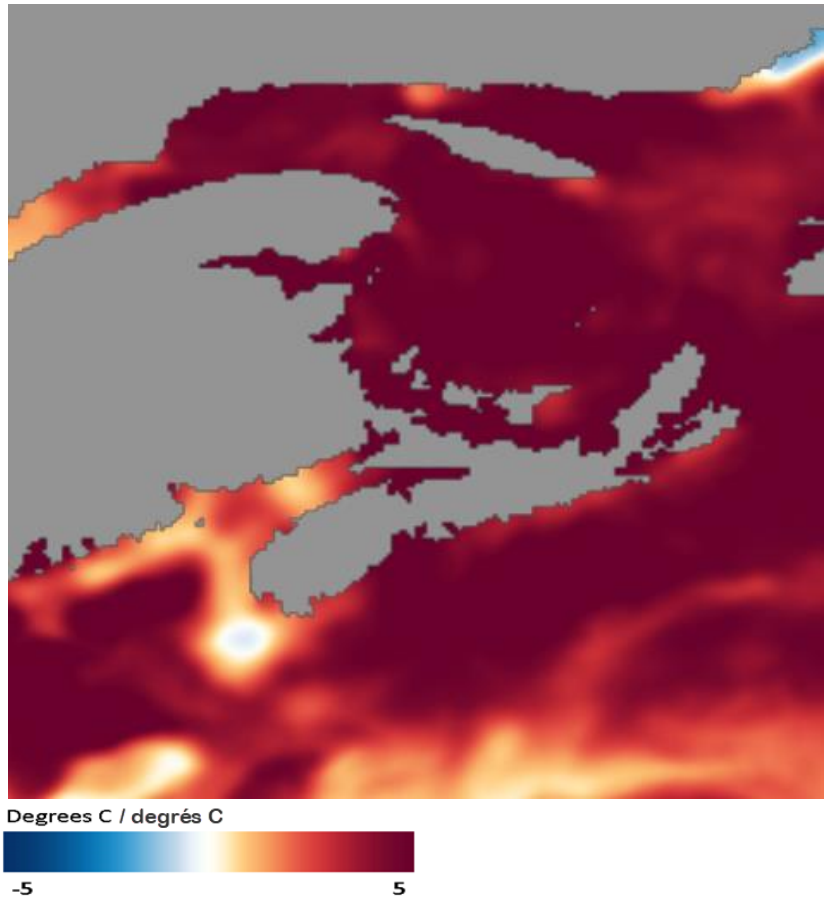

Figure 6: Sea surface temperature (SST) anomaly map for July 24 – 30, 2023.
Source: https://www.nnvl.noaa.gov/view/#SSTA

Hurricane Season Update

During July, Hurricane Don formed southeast of Newfoundland at an exceptionally high latitude of 40N (track shown here: https://vortex.plymouth.edu/tropical/AL/2023/summary.html). The normal date for the first hurricane of the Atlantic Season is August 11th. Don was also a fairly long-lived storm by July standards, being the third longest-lived named storm in July over the past approximately 50 years. The storm's wind field just barely skirted the southern portion of the Grand Banks off Newfoundland. Other than Don, July was quite inactive in the Atlantic while the East Pacific basin was active. This is a common 'anti-correlation' between the two basins.

Other Climate Related Information

6 of 10 turbines out of commission at P.E.I. wind farm, government says | CBC News
Vet hospital says dog died from blue-green algae exposure after 5 minutes in Halifax-area lake | CBC News
Climate change is affecting some of P.E.I.'s most historic homes. Students are ready to help | CBC News
El Niño is back. Here's what it means for Canada | CBC News

[Mystery solved: it was a tornado that touched down on Chaleur Bay | CBC News]
[Plum crop on P.E.I. not peachy due to unusual winter weather | CBC News]
[Swell of major storms prompts Nova Scotia Power to install stronger poles | CBC News]

Temperature & Precipitation Outlook

The four-week outlook for temperature and precipitation for July 31 – August 28, suggests a strong chance of higher than normal temperatures for all of the Maritimes. There is not a strong signal for precipitation, however, the model suggests parts of eastern NS will be drier than normal.

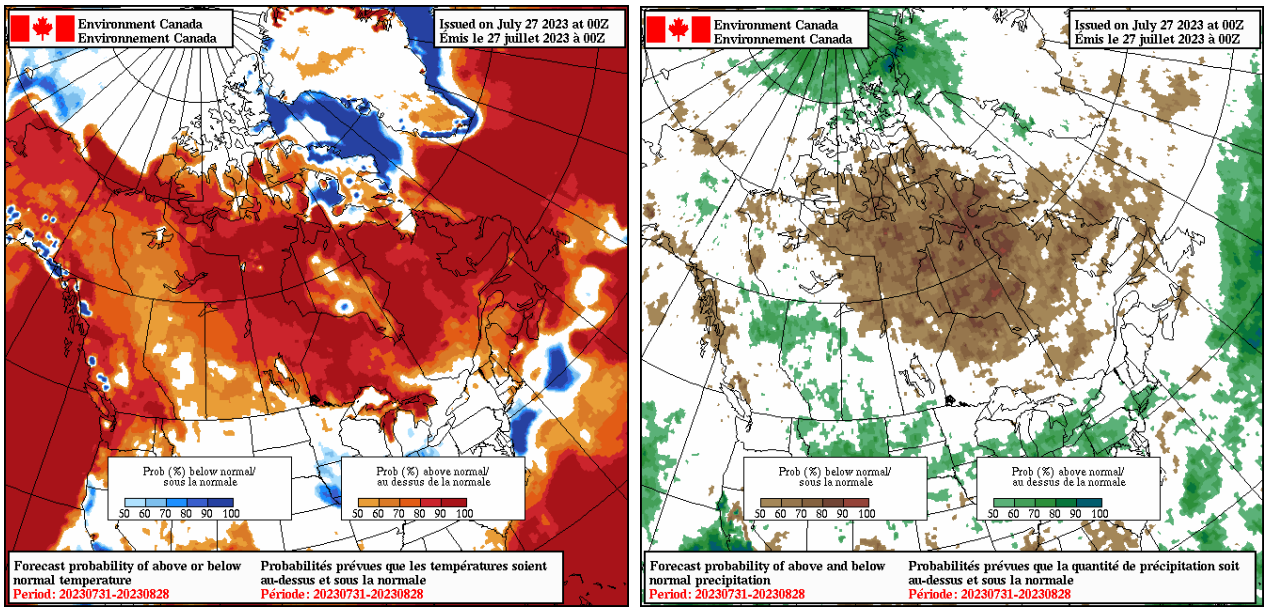

Figure 7: Temperature and Precipitation Anomaly Forecasts from the MSC Global Ensemble Prediction System (GEPS) issued July 27, 2023 for July 31 – August 28, 2023.
Source: http://collaboration.cmc.ec.gc.ca/cmc/ensemble/monthly/prev_mens_geps.html

Contact

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

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	A	BAS CARAQUET	8100468
	BAS CARAQUET (precip)	8100468	CCN	H		
Charlo	CHARLO AUTO	8100885	ECCC-MSC	A	CHARLO A	8100880
Fredericton	FREDERICTON CDA CS	8101605	ECCC-MSC	A	FREDERICTON CDA	8101600
Moncton	MONCTON/GREATER MONCTON ROMEO LEBLANC INTL A	8103201	NavCan	H	MONCTON A	8103200
Saint John	SAINT JOHN A	8104901	NavCan	H	SAINT JOHN A	8104900
Woodstock	WOODSTOCK NEWBRIDGE	8105603	ECCC-MSC	A	WOODSTOCK	8105600
Amherst (Nappan)	NAPPAN AUTO	8203702	ECCC-MSC	A	NAPPAN CDA	8203700
Greenwood	GREENWOOD A	8202000	DND	H	GREENWOOD A	8202000
Halifax (Airport)	HALIFAX STANFIELD INT'L A	8202251	NavCan	H	HALIFAX STANFIELD INT'L A	8202250
Halifax (Shearwater)	SHEARWATER RCS	8205092	ECCC-MSC	A	SHEARWATER A	8205090
Sydney	SYDNEY A	8205701	NavCan	H	SYDNEY A	8205700
Truro (Debert)	DEBERT	8201390	ECCC-MSC	A	DEBERT	8201380
Yarmouth	YARMOUTH A	8206495	NavCan	H	YARMOUTH A	8206500
Charlottetown	CHARLOTTETOWN A	8300301	NavCan	H	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 July 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 ≥ 1 °C, blue if ≤ -1° C. Precipitation as a percent of normal: cells shaded green if ≥ 125% of normal, yellow if ≤ 75% of normal.

				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
BAS CARAQUET	NB	WXS	AU8	20.9	18.7	2.2	66.3	80.9	82
BAS CARAQUET	NB		DAILY				87.8	80.9	109
BATHURST A	NB	ZBF	NCA	21.6	19.1	2.5	96.6	100.8	96
CHARLO AUTO	NB	ZCR	AU8	20.7	17.9	2.8	113.8	102.1	112
DOAKTOWN AUTO RCS	NB	ADN	AU8	22.1	19.1	3.0			
EDMUNDSTON	NB	ERM	AU8	20.6			118.8	113.8	104
FREDERICTON CDA CS	NB	AFC	AU8	22.1	19.4	2.8	190.1	89.0	214
FREDERICTON INTL A	NB	YFC	NCA	22.1	19.3	2.9			
FUNDY PARK (ALMA) CS	NB	AFY	AU8	19.4	17.1	2.3	192.0	99.4	193
GARNETT SETTLEMENT	NB	AJH	AU8	19.0	17.1	1.9	278.8	88.4	315
GRAND MANAN SAR CS	NB	XGM	AU8	18.8			113.4		
KOUCHIBOUGUAC	NB	AKC	AU8	22.1	19.2	2.9	119.7	110.4	108
MECHANIC SETTLEMENT	NB	AMS	AU8	20.4			229.0		
MIRAMICHI RCS	NB	ACQ	AU8	22.7	19.1	3.6	96.5	99.9	97
MISCOU ISLAND (AUT)	NB	WMI	AU8	19.7			24.1		
MONCTON/GREATER MONCTON ROMEO LEBLANC INTL A	NB	YQM	NCH	22.4	18.8	3.6	135.3	92.1	147
OAK POINT	NB		DAILY	21.4			184.9	96.9	191
POINT LEPREAU CS	NB	WPE	AU8	16.5					
RED PINES	NB	ARP	AU8	21.4	18.6	2.8	61.2	105.8	58
SAINT JOHN A	NB	YSJ	NCH	19.6	17.1	2.5	299.7	88.4	339
ST. STEPHEN	NB	WSS	AU8	21.3			161.7		
SUSSEX FOUR CORNERS	NB	ASF	AU8	22.1	19.2	2.8	213.4	84.0	254
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	21.6	19.0	2.6	88.6	100.2	88
Average / Moyenne				**20.8**	**18.6**	**2.8**	**143.6**	**95.8**	**157**
Max				**22.7**	**19.4**	**3.6**	**299.7**	**113.8**	**339**
Min				**16.5**	**17.1**	**1.9**	**24.1**	**80.9**	**58**

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	21.3	19.1	2.2	169.6	91.0	186
BACCARO PT	NS	ACP	AU8	16.3			181.1	111.4	163
BEAVER ISLAND (AUT)	NS	WBV	AU8	17.2					
BEDFORD RANGE	NS	ABR	AU7	21.7	18.5	3.2	382.0	99.5	384
BRIER ISLAND	NS	WVU	AU8	16.1			127.2		
CARIBOU POINT (AUT)	NS	WBK	AU8	21.0	19.3	1.7	165.4	76.6	216
CHETICAMP (C.B. HIGHLANDS NATL PARK)	NS	AHT	AU8	21.3	18.3	3.0			
COLLEGEVILLE AUTO	NS	AGL	AU8	20.9	18.3	2.6	224.5	86.7	259
DEBERT	NS	ZDB	AU8	21.8	18.6	3.2	223.7	90.7	247
ESKASONI FIRST NATION	NS	AEI	AU8	20.7	18.1	2.5	169.9	97.5	174
GRAND ETANG	NS	WZQ	AU8	21.5	18.3	3.3			
GREENWOOD A	NS	YZX	WOD	22.5	19.7	2.8	169.0	83.2	203
HALIFAX DOCKYARD	NS	AHD	AU7	21.7	18.8	2.9			
HALIFAX KOOTENAY	NS	AHK	AU7	20.7	18.1	2.7	200.0	103.4	194
HALIFAX STANFIELD INT'L A	NS	YHZ	NCH	21.6	18.8	2.8	187.2	95.5	196
HALIFAX WINDSOR PARK	NS	AHW	AU7	21.8	18.8	3.0	220.6	110.3	200
HART ISLAND (AUT)	NS	WRN	AU8	19.3					
INGONISH BEACH RCS	NS	XIB	AU7	20.2	18.3	1.9	216.6	93.1	233
KEJIMKUJIK 1	NS	WKG	AU8	21.8	18.4	3.5	166.5	97.5	171
KENTVILLE CDA CS	NS	XKT	AU7	22.3	19.5	2.8	132.8	84.0	158
LOUISBOURG	NS	AUU	AU8	17.8	16.2	1.6			
LUNENBURG	NS	XLB	AU8	20.0					
MALAY FALLS	NS	XMY	AU8	21.3	17.5	3.8			
MCNABS ISLAND (AUT)	NS	XMI	AU8	20.2					
NAPPAN AUTO	NS	XNP	AU8	21.6	18.5	3.2	162.3	89.0	182
NORTH MOUNTAIN CS	NS	XNM	AU7	19.9	17.6	2.3			
NORTHEAST MARGAREE (AUT)	NS	WNS	AU7	20.8	18.1	2.7	208.2	79.0	264
OSBORNE HEAD DND	NS	AOS	AU7	18.5			92.4	103.4	89
PARRSBORO	NS	APR	AU8	19.8	17.5	2.4	217.9	89.6	243
PORT HAWKESBURY	NS	YPD	NCA	20.4	17.8	2.7	296.2	96.2	308
SABLE ISLAND	NS	ASB	AU8	18.5	15.8	2.7	233.5	100.8	232
SABLE ISLAND A	NS	WSA	NCA	18.5	15.8	2.8	230.2	100.8	228
SHEARWATER JETTY	NS	WZU	AU7	20.7	18.1	2.6	163.0	103.4	158
SHEARWATER RCS	NS	AAW	AU8	21.0	18.1	3.0	161.1	103.4	156
SHELBURNE SANDY POINT	NS	ESB	AU8	21.3			161.5		
ST PAUL ISLAND (AUT)	NS	WEF	AU8	18.0					
SYDNEY A	NS	YQY	NCH	20.4	17.9	2.5	197.2	88.5	223
SYDNEY CS	NS	AQY	AU8	20.5	17.9	2.6	216.8	88.5	245
TRACADIE	NS	XTD	AU8	20.0	18.3	1.7			
UPPER STEWIACKE RCS	NS	AOH	AU8	21.9	18.4	3.5	245.5	94.6	260
WESTERN HEAD	NS	WWE	AU8	17.6			225.0		
YARMOUTH A	NS	YQI	NCH	19.4	16.8	2.6	146.7	88.4	166
YARMOUTH RCS	NS	EQI	AU8	19.3	16.8	2.5	141.6	88.4	160
Average / Moyenne				**20.2**	**18.0**	**2.7**	**194.7**	**94.1**	**211**
Max				**22.5**	**19.7**	**3.8**	**382.0**	**111.4**	**384**
Min				**16.1**	**15.8**	**1.6**	**92.4**	**76.6**	**89**

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

				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
CHARLOTTETOWN A	PEI	YYG	NCH	21.9	18.7	3.2	154.8	79.9	194
EAST POINT (AUT)	PEI	WEP	AU8	20.1	18.2	1.9	152.5	86.6	176
HARRINGTON CDA CS	PEI	AHR	AU8	21.6	18.7	2.9	134.4	79.9	168
MAPLE PLAINS	PEI	XMP	AU8	21.9	18.8	3.1			
NORTH CAPE	PEI	WNE	AU8	21.3			87.9		
ST. PETERS	PEI	ZSP	AU8	21.5	18.5	3.0	186.0	79.3	235
STANHOPE	PEI	ANH	AU8	21.7			111.3		
SUMMERSIDE	PEI	WSD	AU8	22.0	19.2	2.8	132.7	74.1	179
Average / Moyenne				**21.5**	**18.7**	**2.8**	**137.1**	**80.0**	**190**
Max				**22.0**	**19.2**	**3.2**	**186.0**	**86.6**	**235**
Min				**20.1**	**18.2**	**1.9**	**87.9**	**74.1**	**168**

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.

END