MARITIME CANADA CLIMATE SUMMARY October 2022

October Temperatures Well-Above Average Across the Maritimes

The remarkable run of above-average monthly temperatures continued into October with positive anomalies running from 2 to above 3 C across the region. At 4 stations including Halifax and Charlottetown it was the second warmest October on record and at most other stations it ranked in the top 5. In the second half of the month daily positive anomalies were running from 5 to 9 C above normal resulting in many new daily records. Precipitation totals were generally near to below normal with only extreme NW NB and SW NS slightly above normal. SE NB, northern NS and CB were the driest. The only major precipitation event was caused by the remnants of Tropical Storm Ian which brought generally 20-50 mm to NS with 97 mm reported at the Halifax Kootenay station. Sea surface temperatures at the end of the month remained above normal throughout the surrounding waters with Northumberland Strait and eastern Bay of Fundy recording 5 C above normal.

The Warmest (°C)

New Brunswick Sussex 25.2 Nova Scotia Upper Stewiacke 24.6 Prince Edward Island Stanhope 22.3

The Coldest (°C)

-6.4
-4.5
-3.8

The Wettest (Total mm)

New Brunswick	
Grand Manan	133.9
Nova Scotia	
Halifax-Kootenay	297.1
Prince Edward Island	
North Cape	65.1

The Capital Stats

	Mea	n Tempera	Extremes		
Station Name	Monthly Mean	Normal Mean	Diff from Normal	Max (Date)	Min (Date)
Charlottetown	11.9	8.3	3.6	20.2 (18)	-1.1(3)
Halifax	11.8	8.7	3.1	21.9 (27)	0.1 (3)
Fredericton	10.6	7.8	2.8	23.2 (7)	-4.0 (29)

	То	tal Precipit	Snowfall		
Station Name	Monthly Total (mm)	Normal Total (mm)	Percent Normal	Total (cm)	SOG End of Month
Charlottetown	58.2	112.2	52	NA	NA
Halifax	113.5	124.9	91	NA	NA
Fredericton	105.7	89.7	118	NA	NA

Daily Temperature Records

Despite the overall monthly means being well above normal, at the beginning of the month several new daily low records were set: 19 in NB, 7 in PEI and 3 in NS. From around the 18th to the 30th, a warm SW airflow became established and set a total of 85 new daily record highs: 38 in NB, 36 in NS and 11 in PEI. During the same period 103 overnight minimum records were set which significantly contributed to the near-record monthly mean temperatures.

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

October 2-4 A ridge of high-pressure brought mostly clear skies and near or below freezing overnight temperatures to much of the region. Several sites in all three provinces broke minimum daily temperature records. NB saw widespread values below zero degrees and this caused an early termination of the frost advisory program for the fourth straight year. Edmundston, NB reported the coldest temperature at -6.4°C on the morning of the 3rd.

October 6 The remnants of Tropical Storm Ian brought moderate to heavy rainfall to many areas of mainland NS, Cape Breton and extreme eastern PEI. Rainfall amounts varied from 20 to 50 mm with localized higher amounts. The Halifax-Kootenay, NS site reported an extreme amount of 97 mm as the embedded heavy showers moved slowly across the region. The heavy rain also contributed to poor road conditions.

2 dead, 2 seriously injured in Highway 103 crash | CBC News

October 14-15 A slow-moving frontal system brought rain to western NB and western NS. This was the first widespread event for NB for the month. Generally, 15 to 25 mm fell but localized amounts of 63 mm were reported in both the Edmundston, NB and Yarmouth, NS regions.

October 18-19 Another slow-moving frontal system brought tropical moisture once again to western NB but was also more widespread across all three provinces. Western NB amassed 40 to 60 mm with a forestry station in Musquash, NB recording as much as 82 mm. Most other areas saw 20 to 35 mm with localized higher amounts on Cape Breton of up to 57 mm.

October 23-27 A tropical-like air mass brought record warmth and moist conditions to the region. Several daily maximum temperatures were broken during the period with maximum temperatures reaching the 20 to 25°C range. Sussex, NB reached 25.2°C with a humidex of 30. Daily maximum temperature anomalies were 8 to 14 degrees above average on the 26th. Regarding precipitation during this period, it was showery in nature and varied across the region giving a range from 15 to 40 mm with localized higher amounts over southwestern NB and western NS of up to 70 mm. The brief but heavy downpours caused storm drains along some streets in the Halifax area to become inundated and overflow.

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

CMOS Congress 2023: The organizing committee for congress 2023 is hard at work planning the first hybrid CMOS Congress! The congress will be hosted in St. John's NFLD May 28 – June 1. We are looking forward to re-connecting with everyone 'On The Rock'. Stay tuned for more information and the call for session proposal.

In case you missed it: The presentation from the CMOS Tour Speaker, Robert G. Way of Queen's University, took place on Nov. 17th. The title of Robert's talk is Climate services in Canada's North, Are we doing enough? Click here to watch the presentation on the CMOS YouTube Channel.

Upcoming Lecture: Who: Reza Valipour, hosted by CMOS Toronto

What: Ecological response of Canadian large lakes to climate change: outcomes from observations and a

coupled watershed-lake model

When: Friday, November 25th, 1:00PM AST

Where: Click here to register.