

MARITIME CANADA CLIMATE SUMMARY

July 2021

July Brings an End to the Above Normal Monthly Temperature Trend for 2021

Despite being the warmest July on record globally, for almost all the Maritimes, July monthly means were slightly below normal. For stations in NB the average difference from normal was -1.1C, and for NS and PEI, -0.7 and -1.2, respectively. Thanks mainly to some significant thunderstorms and post-tropical storm Elsa, July was wetter than normal in most locations with the exception of Northern NB. The heaviest rainfall amounts were found in a NE-SW belt across southern NB, northern NS and central PEI. The 233.4mm recorded at St John, NB, compared to the July normal of 88.3 mm was the wettest on record. The wet July was good news for farmers who reported good to excellent crop yields so far. The above normal rainfall also kept the Forest Fire Weather Index low across the region for most of the month.

The Warmest (°C)

New Brunswick	
Bathurst A.	30.4
Nova Scotia	
Greenwood	31.5
Prince Edward Island	
Maple Plains	29.3

The Coldest (°C)

New Brunswick	
Edmundston	1.4
Nova Scotia	
Upper Stewiacke	4.0
Prince Edward Island	
Maple Plains	6.2

The Wettest (Total mm)

New Brunswick	
St John A	233.4
Nova Scotia	
North Mountain	208.4
Prince Edward Island	
Harrington	142.7

The Capital Stats

Station Name	Mean Temperature (°C)			Extremes	
	Monthly Mean	Normal Mean	Diff from Normal	Max (Date)	Min (Date)
Charlottetown Airport	17.6	18.7	-1.1	28.1 (16)	8.5 (13)
Halifax Stanfield Airport.	18.6	18.8	-0.2	28.7 (1)	9.8 (5)
Fredericton	18.1	19.4	-1.3	28.7 (16)	6.4 (8)

Station Name	Total Precipitation			Snowfall	
	Monthly Total (mm)	Normal Total (mm)	Percent Normal	Total (cm)	Max SOG (Date)
Charlottetown Airport	134.3	79.9	168	NA	NA
Halifax Stanfield Airport	123.5	95.5	129	NA	NA
Fredericton	146.3	89.0	164	NA	NA

Daily Temperature Records

Unlike the record-breaking month of June, there were very few daily maximum records broken in July – just four at relatively short record stations in NS and none of those were above 30C. At the opposite “end” all three provinces set a handful of record daily minimums – the coolest 1.5 C at Edmundston, NB on the 3rd. Of concern to gardeners and farmers, the night of 7th brought a relatively chilly night to the SW corner of NB with temperatures dropping to close to or below 5C at 4 stations. Of the 7 record lows set in NS and 4 in PEI only one was below 5C at Sydney NS with 4.4 on the 25th.

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

July 2-4: A slow moving low-pressure system tracked eastward just to the south of NS giving some heavy rain to southern parts of the region. The highest amounts affected southern NB, PEI and NS with amounts in the 25 to 60 mm range. Les Suetes wind gusts reached 121 km/h at Grand Etang on July 4.

July 9-10: A trough of low pressure gave periods of heavy rain and isolated thunderstorms in parts of the Maritimes well ahead of Post-Tropical Storm Elsa, which tracked northeastward across the Maritimes bringing heavy rain, thunderstorms and strong winds to some areas. The combination of the two systems gave the highest precipitation amounts in NB with many locations reporting rainfall totals in the 40 to 110 mm range. Amounts were less in PEI and NS with the highest totals generally in the 20 to 55 mm range. The highest winds affected NS and PEI with peak gusts in the 75 to 90 km/h range. As many as 50 thousand customers lost power - mostly in NS due to the high winds.

[Steeple catches fire after lightning strikes historic church in Shelburne County | CBC News](#)
[Power returns after Elsa causes thousands of outages in the Maritimes | CBC News](#)

[Elsa a breeze for most of P.E.I. | CBC News](#)

[Elsa left vicious riptides behind on her way out | SaltWire](#)

July 14-15: A southwesterly flow with embedded thunderstorms developed across the region ahead of an approaching cold front which gave some localized heavy rain to parts of the region. The highest amounts were in the 20 to 80 mm range affecting parts of all 3 provinces. The Saint John Airport reported 76 mm in 6 hours with some localized flooding reported in the city. A few thousand customers were affected by power outages in southwestern NB.

[Man sleeps through N.B. thunderstorm, wakes up to his car flooded | Globalnews.ca](#)

July 20-22: Smoke from large forest fires in the west moved across the Maritimes. While most of it stayed aloft, in some areas it caused poor air quality readings and reduced visibility in NB and NS. A northerly flow developing behind a low moving through the region gradually pushed the smoke offshore. Significant rainfall and thunderstorms associated with the low brought heavy rain to parts of southern NB, PEI and NS. Peak rainfall totals were in the 40 to 90 mm range and embedded thunderstorms caused thousands of lightning strikes. There was one unconfirmed report of a possible tornado or funnel cloud associated with a thunderstorm in Antrim NS.

[Air quality alert issued as smoke from wildfires reaches New Brunswick | CBC News](#)
[Environment Canada issues air quality statement for all of Nova Scotia | CBC News](#)
[Veteran storm chaser captures video of another N.S. tornado | CTV News](#)

[Lightning sets 15,000-litre propane tank on fire, hits home in Annapolis Valley | CBC News](#)

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

We hope that everyone had an excellent and safe summer. The CMOS-Halifax executive will reconvene in September. Stay tuned for more information about our upcoming AGM.