## New Brunswick

# August 2020 Review September 2020 and Fall Outlook 

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Meteorological Service of Canada Environment and Climate Change Canada September 2, 2020

## Canadä

## August 2020; Climate Summary

|  |  |  |  | Mean Temperature ( ${ }^{\circ} \mathrm{C}$ ) |  |  | Total Precip (mm) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Station Name | Prov | TC ID | Station Type | Monthly <br> Mean | Normal Mean | Diff from Normal | Monthly Total | Normal Total | Total as \% of Normal |
| BAS CARAQUET | NB | wXS | AU8 | 19.0 | 18.6 | 0.4 | 23.8 | 95.0 | > 25 |
| BAS CARAQUET | NB |  | DAILY |  |  |  | 27.4 | 95.0 | 29 |
| BATHURST A | NB | ZBF | NCA | 18.4 | 18.2 | 0.2 | 42.8 | 82.0 | 52 |
| BOUCTOUCHE CDA CS | NB | ABT | AU8 | 19.9 | 18.5 | 1.4 | 46.6 | 85.2 | 55 |
| CHARLO AUTO | NB | ZCR | AU8 | 18.0 | 17.2 | 0.8 | 71.3 | 90.1 | 79 |
| MIRAMICHI RCS | NB | ACQ | AU8 | 19.1 | 18.5 | 0.6 | 39.4 | 93.1 | 42 |
| DOAKTOWN AUTO RCS | NB | ADN | AU8 | 18.6 | 18.4 | 0.3 | 26.9 | 94.4 | 29 |
| EDMUNDSTON | NB | ERM | AU8 | 16.6 |  |  | 78.9 | 93.4 | 84 |
| FREDERICTON INTL A | NB | YFC | NCA | 19.2 | 18.4 | 0.8 | 45.0 | 85.6 | 53 |
| FREDERICTON CDA CS | NB | AFC | AU8 | 19.9 | 18.6 | 1.3 | 50.1 | 85.9 | 58 |
| FUNDY PARK (ALMA) CS | NB | AFY | AU8 | 18.8 | 17.2 | 1.6 | 43.8 | 93.9 | 47 |
| GAGETOWN AWOS A | NB | YCX | AU5 | 19.6 | 19.2 | 0.5 |  |  |  |
| GRAND MANAN SAR CS | NB | XGM | AU8 | 17.7 |  |  |  |  |  |
| KOUCHIBOUGUAC | NB | AKC | AU8 | 19.1 | 18.5 | 0.6 | 43.9 | 86.7 | 51 |
| MECHANIC SETTLEMENT | NB | AMS | AU8 | 18.2 |  |  | 45.4 |  |  |
| MISCOU ISLAND (AUT) | NB | WMI | AU8 | 18.4 |  |  | 32.0 |  |  |
| MONCTON INTL A | NB | YQM | NCH | 20.2 | 18.2 | > 2.0 | 42.9 | 80.8 | 53 |
| OAK POINT | NB |  | DAILY | 19.0 |  |  | 59.8 | 86.5 | 69 |
| POINT LEPREAU CS | NB | WPE | AU8 | 16.8 | 15.6 | $\bigcirc 1.2$ | 58.4 | 98.0 | 60 |
| RED PINES | NB | ARP | AU8 | 17.5 | 17.9 | $>_{-0.4}$ | 37.2 | 93.6 | 40 |
| SAINT JOHN A | NB | YSJ | NCH | 17.2 | 16.8 | 0.4 | 87.4 | 81.7 | - 107 |
| ST. STEPHEN | NB | WSS | AU8 | 19.3 |  |  | 65.5 |  |  |
| SUSSEX FOUR CORNERS | NB | ASF | AU8 | 19.6 | 18.8 | 0.8 | 31.1 | 74.3 | 42 |
| WOODSTOCK NEWBRIDGE | NB | EWD | AU8 | 18.6 | 18.4 | 0.2 | 36.0 | 100.6 | 36 |
| Average |  |  |  | 18.6 | 18.0 | 0.7 | 47.1 | 89.3 | 53 |
| Max |  |  |  | 20.2 | 19.2 | 2.0 | 87.4 | 100.6 | 107 |
| Min |  |  |  | 16.6 | 15.6 | -0.4 | 23.8 | 74.3 | 25 |

## Highlights:

The average temperature anomaly was above normal (+0.7C). Positive anomalies were observed at all sites with exception of Red Pines. Moncton reported the largest positive anomaly at +2.0 C likely due in part to their 11 days of >30C.

Total precipitation amounts were much below normal, with an average of $53 \%$ of total precipitation. Anomalies ranged from only $25 \%$ in Bas Caraquet to 107\% in Saint John. This was the eighth consecutive month with below normal precipitation. Canadä

## August 2020; Climate Summary

## Events:

August 2-5: Heat event. High humidity levels combined with warm temperatures to give humidex levels in the upper 30's across central and southern areas with a few values of 40 being reported.

August 9-12: Heat event. A sultry air mass brought another round of humidex values into the high 30's. Warmest temperature recorded during the period was in the Woodstock area with 33.4C and Bathurst reported the warmest humidex at 41.

August 29-30: "Rain" event. First widespread rain event since May gave much needed moisture to many areas of the province. Generally, 10-35 mm of rain fell across the province with Grand Manan receiving the most at 54 mm .

Days of month with lightning in New Brunswick; 358 10-12 14182530 (10 days) The number of strikes was well below average at just $59 \%$ of normal.

Day of month with temperature record broken or tied in New Brunswick; 2348 10-14 31 (red=maximum, blue=minimum)

## August 2020; Provincial Climate Extremes

| Parameter | Value | ECCC Station | Day of <br> month |
| :---: | :---: | :---: | :---: |
| Daily Maximum Temperature | $\mathbf{3 3 . 4 ^ { \circ }} \mathbf{C}$ | Woodstock | 11 |
| Daily Minimum Temperature | $\mathbf{0 . 5 ^ { \circ }} \mathbf{C}$ | Edmundston | 29 |
| Maximum Daily Total <br> Precipitation | $\mathbf{5 3 . 6 ~ \mathbf { ~ m m }}$ | Grand Manan | 29 |
| Daily Maximum Wind Gust | $\mathbf{7 8 ~ k m / h}$ | Bathurst | 26 |
| Daily Maximum Humidex | $\mathbf{4 1}$ | Bathurst | 11 |

## August 2020 - 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


## All sites were above normal

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## August 2020 - 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



## All sites were near normal

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## August 2020 - Precipitation

## Daily Total Precipitation (bars), Cumulative (line) Based on ECCC gridded precipitation analysis and Cumulative Long-Term Mean (dashed line) Climatology 2002-2019



Fredericton (and area)


All sites were below normal


## August 2020 - Precipitation



## August 2020 - Temperature departure from 1981-2010 mean

Temperature Anomaly: 202008 Anomalie de température: 202008 du Canada


ECCC Climate Archives data / Données des Archives Climatiques de ECCC. Clim: 1981-2010

## August 2020 - Total precipitation



## August 2020 - Precipitation departure from 2002-2019 mean



ECCC NWP model gridded data / Données sur grille de modèle de PNT de ECCC. Clim: 2002-2019
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## Outlook - 10 day mean temperature

(Suggesting above normal conditions ( +2.5 to $+3.4^{\circ} \mathrm{C}$ ))


## Day 8 to 14 Forecast

## Period ending

 September 15, 2020Suggesting a weak to moderate signal for above normal across the province.


Prob (\%) above normal au dessus de la normale

Prob (\%) near nomal /près de la normale

| $\square$ |
| ---: |
| $\square$ |
| $90-100$ |
| $80-90$ |
| $70-80$ |
| $60-70$ |
| $50-60$ |

Prob (\%) below nomal sous la nomale

90-100
80-90
$70-80$
60-70
50-60

Forecast probability of above, below and near normal temperature (no calibration) Period: 20200909-20200916

Probabilités prévues que les températures soient au-dessus, sous et près de la normale (non-calibrées) Période: 20200909-20200916

## Fredericton

Ensemble and Deterministic Forecasts issued 1 September 202000 UTC
Prévision d'ensemble et déterministe émises le 1 Septembre 202000 UTC
for/pour NAEFS / SPENA
ror
NAEFS / SPENA

Normal high: +20.0C

## September

Normal low: 7.1C -

## Next 15 days; ending September 15, 2020

Generally suggesting above normal until near September $13^{\text {th }}$ before transitioning to more near normal for the remainder of the period.


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Surface wind speed/Vitesse du vent à la surface


Total cloud cover/Couvert nuageux

_ Global Model / Modèle global

- Control Member / Membre contrôle CMC
- Control Member / Membre contrôle NCEP


Temperature August 31 to September 28

CMC Monthly Forecast Product using GEPS 50km res.

## Weekly signature from GEPS 50 km resolution



Overall, a weak indication of above normal through the period, with the strongest signal occurring during the second week.


## Precipitation August 31 to

CMC Monthly Forecast Product using GEPS 50km res.

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## Weekly signature from GEPS 50 km resolution



Generally, no conclusive signal (near normal) with the exception of eastern sections showing a subtle signal of below normal possible for the first week with a subtle signal of above normal for the last week.



## Temperature November 2020

## CanSIPS

(Canadian Seasonal and Interannual Prediction System) CanAM3 CanAM4

## $+$

## CanOM4

## Produced August 15



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## September 2020



## Contact

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Environment and Climate Change Canada Weather Pages
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