

New Brunswick

October 2020 Review November 2020 and Winter Outlook

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Meteorological Service of Canada
Environment and Climate Change Canada
November 3, 2020



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October 2020; Climate Summary

| Station Name | Prov | TC ID | Station Type | Mean Temperature (°C) | | | Total Precip (mm) | | |
|----------------------|------|-------|--------------|-----------------------|-------------|------------------|-------------------|--------------|----------------------|
| | | | | Monthly Mean | Normal Mean | Diff from Normal | Monthly Total | Normal Total | Total as % of Normal |
| BAS CARAQUET | NB | WXS | AU8 | 7.0 | 7.6 | -0.6 | 154.2 | 108.0 | 143 |
| BAS CARAQUET | NB | | DAILY | | | | 166.6 | 108.0 | 154 |
| BATHURST A | NB | ZBF | NCA | 6.0 | 6.8 | -0.8 | 137.1 | 122.9 | 112 |
| BOUCTOUCHE CDA CS | NB | ABT | AU8 | 7.9 | 7.9 | 0.0 | 58.6 | 95.4 | 61 |
| CHARLO AUTO | NB | ZCR | AU8 | 5.2 | 5.7 | -0.5 | 157.4 | 84.0 | 187 |
| DOAKTOWN AUTO RCS | NB | ADN | AU8 | 6.7 | 7.0 | -0.3 | 75.5 | 100.8 | 75 |
| EDMUNDSTON | NB | ERM | AU8 | | 5.8 | | 191.1 | 93.6 | 204 |
| FREDERICTON INTL A | NB | YFC | NCA | 7.5 | 7.5 | 0.0 | 60.5 | 89.1 | 68 |
| FREDERICTON CDA CS | NB | AFC | AU8 | 7.8 | 7.8 | 0.0 | 62.2 | 89.7 | 69 |
| FUNDY PARK (ALMA) CS | NB | AFY | AU8 | 8.7 | 8.2 | 0.4 | 108.6 | 132.9 | 82 |
| GAGETOWN AWOS A | NB | YCX | AU5 | 7.8 | 8.6 | -0.8 | | 105.7 | |
| GRAND MANAN SAR CS | NB | XGM | AU8 | 8.0 | | | 67.5 | | |
| KOUCHIBOUGUAC | NB | AKC | AU8 | 7.3 | 7.6 | -0.3 | 96.0 | 99.6 | 96 |
| MECHANIC SETTLEMENT | NB | AMS | AU8 | 6.8 | | | 141.5 | | |
| MIRAMICHI RCS | NB | ACQ | AU8 | 6.9 | 6.9 | 0.0 | 84.7 | 89.7 | 94 |
| MISCOU ISLAND (AUT) | NB | WMI | AU8 | 7.5 | | | 150.4 | | |
| MONCTON INTL A | NB | YQM | NCH | 8.3 | 7.6 | 0.7 | 58.9 | 113.4 | 52 |
| OAK POINT | NB | | DAILY | 8.3 | 8.6 | -0.3 | 75.1 | 105.7 | 71 |
| POINT LEPREAU CS | NB | WPE | AU8 | | 7.6 | | 52.7 | 115.8 | 46 |
| RED PINES | NB | ARP | AU8 | 5.7 | 6.5 | -0.8 | 120.9 | 90.2 | 134 |
| SAINT JOHN A | NB | YSJ | NCH | 7.6 | 7.6 | 0.0 | 78.2 | 116.4 | 67 |
| ST. STEPHEN | NB | WSS | AU8 | 7.8 | | | 90.8 | | |
| SUSSEX FOUR CORNERS | NB | ASF | AU8 | 8.1 | 8.1 | 0.1 | 75.2 | 106.5 | 71 |
| WOODSTOCK NEWBRIDGE | NB | EWD | AU8 | 6.4 | 6.6 | -0.2 | 143.6 | 95.3 | 151 |
| Average | | | | 7.3 | 7.4 | -0.2 | 104.7 | 103.1 | 102 |
| Max | | | | 8.7 | 8.6 | 0.7 | 191.1 | 132.9 | 204 |
| Min | | | | 5.2 | 5.7 | -0.8 | 52.7 | 84.0 | 46 |

Highlights:

The average temperature anomaly was near normal (-0.2°C). Generally, positive anomalies were observed in portions of the south, while negative anomalies were reported elsewhere.

Total precipitation amounts were near normal, with an average of 102% of total precipitation. Below normal anomalies occurred in the south (46% in Point Lepreau) while the north saw above normal anomalies (204% in Edmundston). This was the first month in 2020 that was above normal.

October 2020; Climate Summary

Events:

October 10-11: “Convection”. A slow-moving line of convective showers and thundershowers brought 10-30 mm of rain. The northwest and parts of the southeast received the most precipitation with the Kedgwick area amassing 40 mm.

October 13-14: “Rain event I”. A system associated with the remnants of Delta brought moderate to heavy rain to the province with the exception of the southeast. The Woodstock area reported the most rain at 69 mm while most other areas saw 15-45 mm.

October 16-17: “Rain event II”. A low brought more rain to mainly northwestern areas. The Edmundston area reported the most rain at 48 mm while most other areas saw 10-35 mm.

October 26-27: “First snowfall”. The first accumulating snow of the season fell across northern areas of the province with as much as 10 cm reported in the Doyleville area.

Days of month with lightning in New Brunswick; 1 10-11 14 17 (5 days)

Lightning strikes were much above normal (225%) mainly due to activity that occurred on the 10th

Day of month with temperature record broken or tied in New Brunswick; 11 12 13 26 28 31
(red=maximum, blue=minimum)



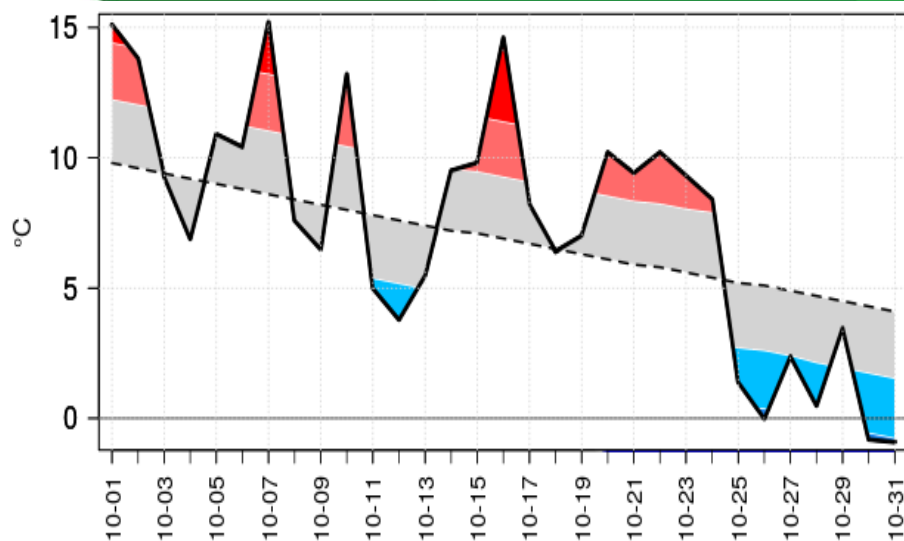
October 2020; Provincial Climate Extremes

| Parameter | Value | ECCC Station | Day of month |
|-----------------------------------|----------------|-----------------------------------|--------------|
| Daily Maximum Temperature | 22.9°C | St. Stephen | 01 |
| Daily Minimum Temperature | -12.4°C | Edmundston | 31 |
| Maximum Daily Total Precipitation | 55.0 mm | Bas Caraquet | 14 |
| Daily Maximum Wind Gust | 88 km/h | Miscou Island | 17 |
| Daily Maximum Wind Chill | -13 | Edmundston Mechanic Settlement | 31 |

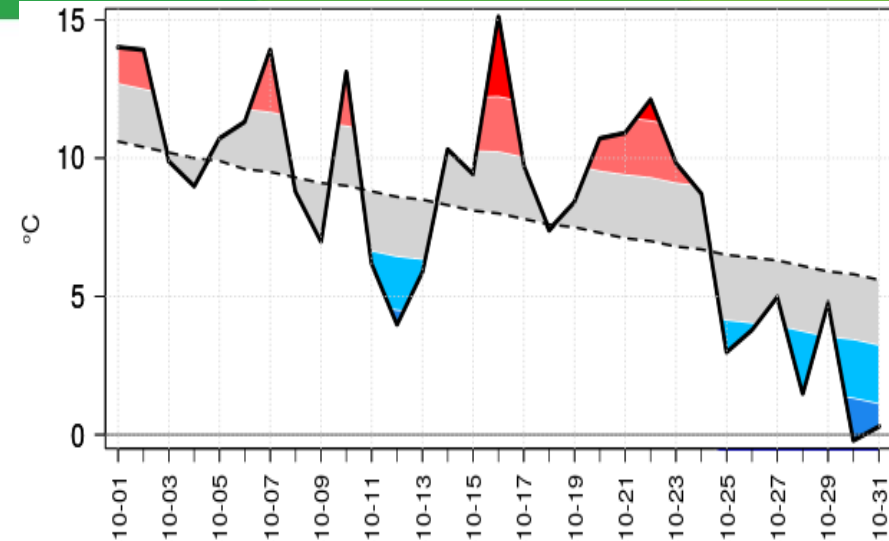


October 2020 - Temperature

Daily Mean Temperature (line), Long-Term Mean (dashed line) and Categories based on Standard Deviations (blue and red) Based on gridded observations / Climatology 1981-2010
Std. dev. thresholds $\pm 0.7, 1.3, 2.1$



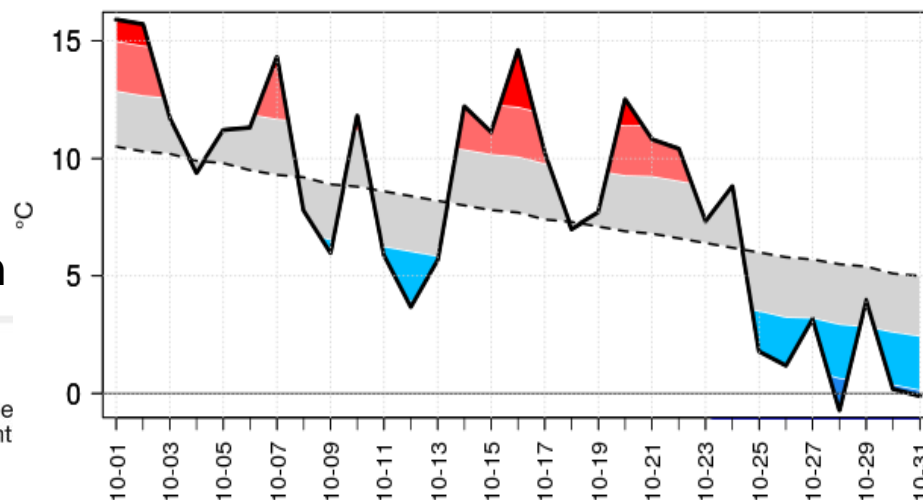
Fredericton



Saint John

Saint John and
Fredericton were
near normal

Moncton



Moncton was
above normal



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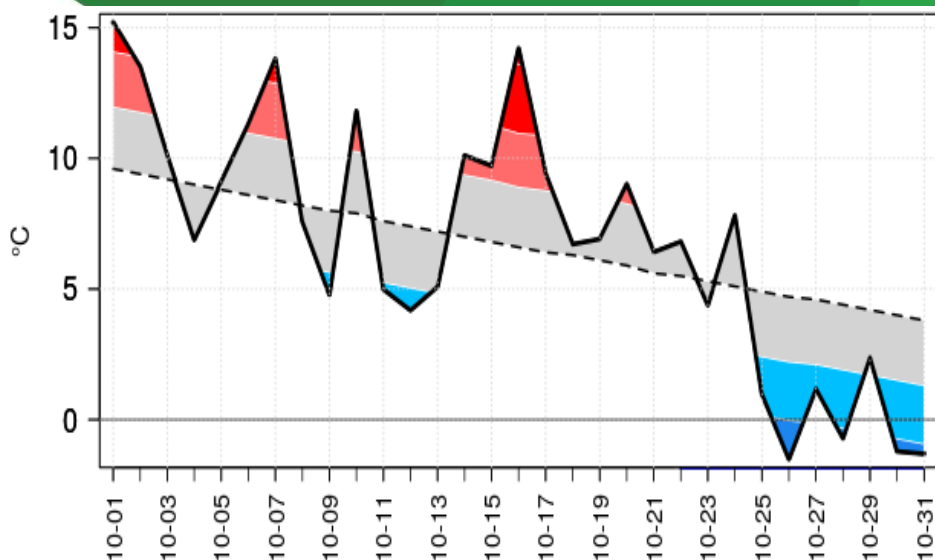
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October 2020 - Temperature

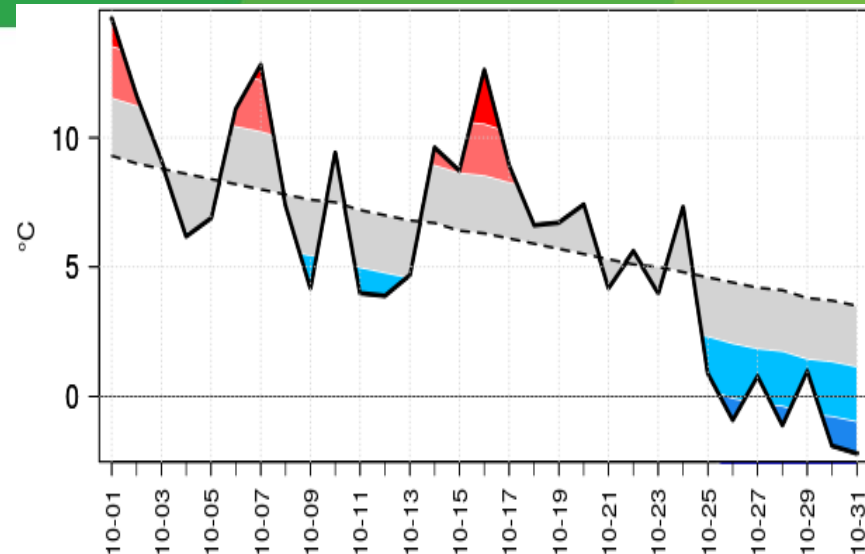
Daily Mean Temperature (line), Long-Term Mean (dashed line) and Categories based on Standard Deviations (blue and red)

Based on gridded observations / Climatology 1981-2010
Std. dev. thresholds +/- 0.7, 1.3, 2.1



Miramichi

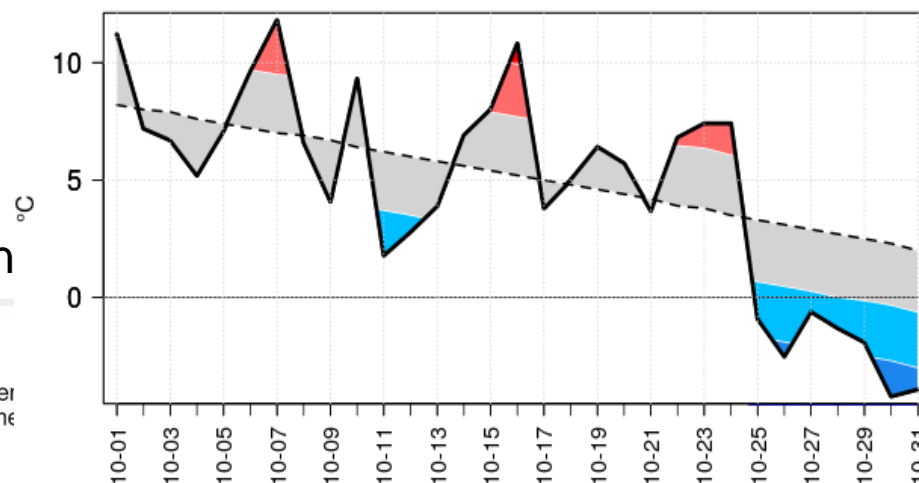
■ <<< normal ■ << normal ■ < normal ■ normal



Bathurst

Miramichi was
near normal

Edmundston



Bathurst and
Edmundston
were below
normal



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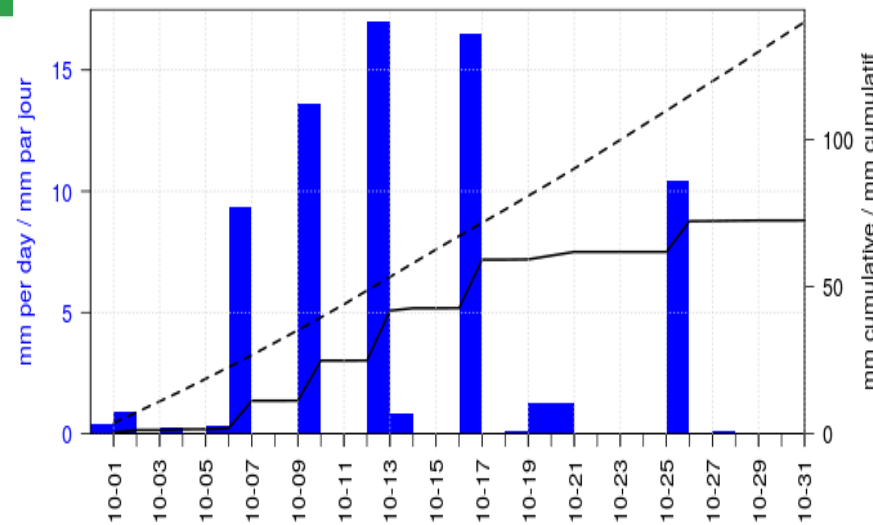
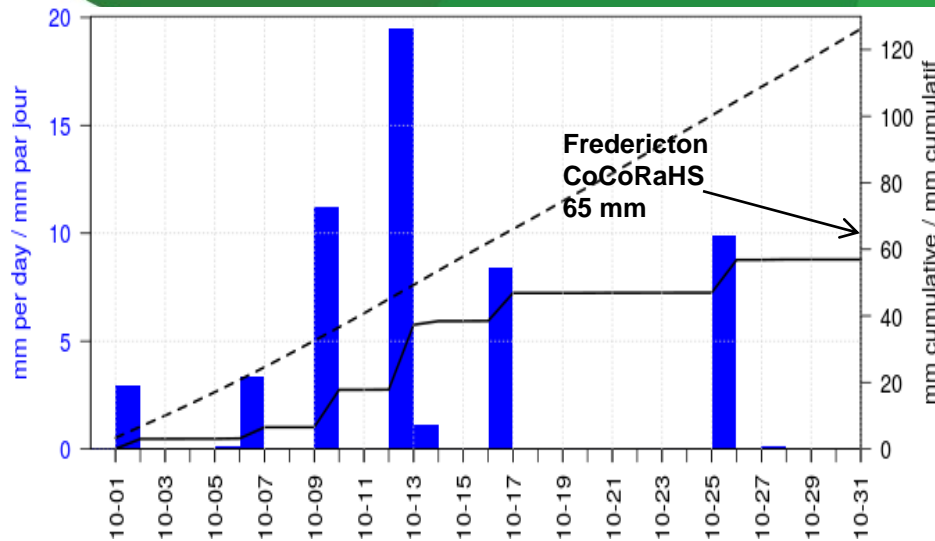
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October 2020 - Precipitation

Daily Total Precipitation (bars), Cumulative (line) and Cumulative Long-Term Mean (dashed line)

Based on ECCC gridded precipitation analysis
Climatology 2002-2019

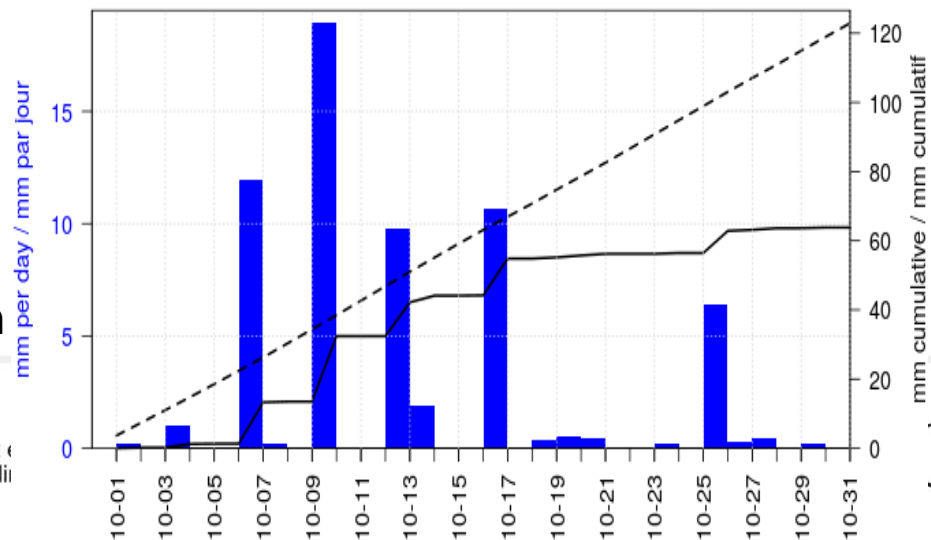


Fredericton (and area)

Saint John

All sites were below normal

Moncton



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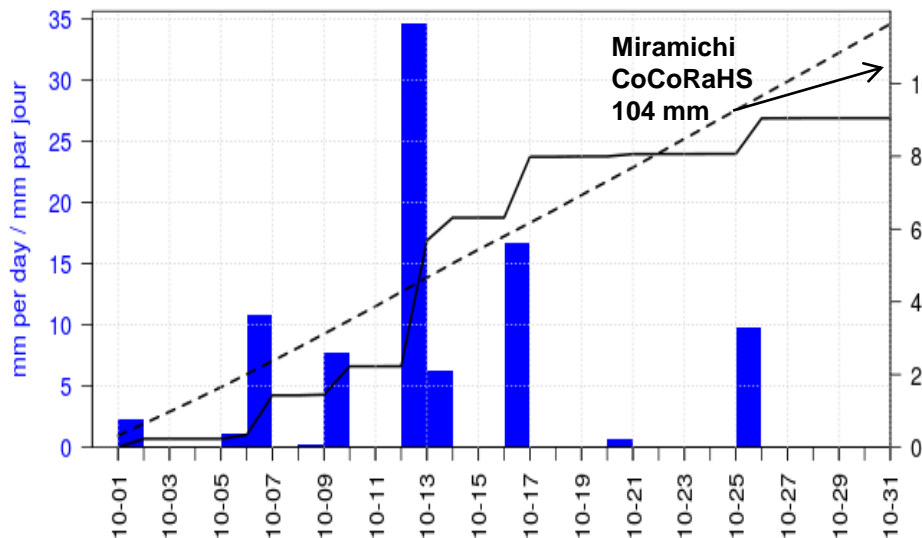
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October 2020 - Precipitation

Daily Total Precipitation (bars), Cumulative (line) and Cumulative Long-Term Mean (dashed line)

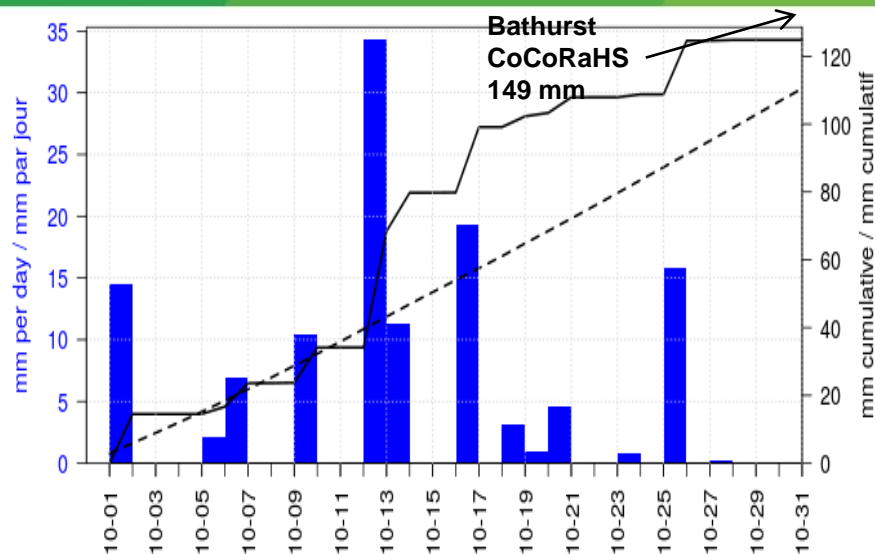
Based on ECCC gridded precipitation analysis
Climatology 2002-2019



Miramichi

Miramichi was
near normal*

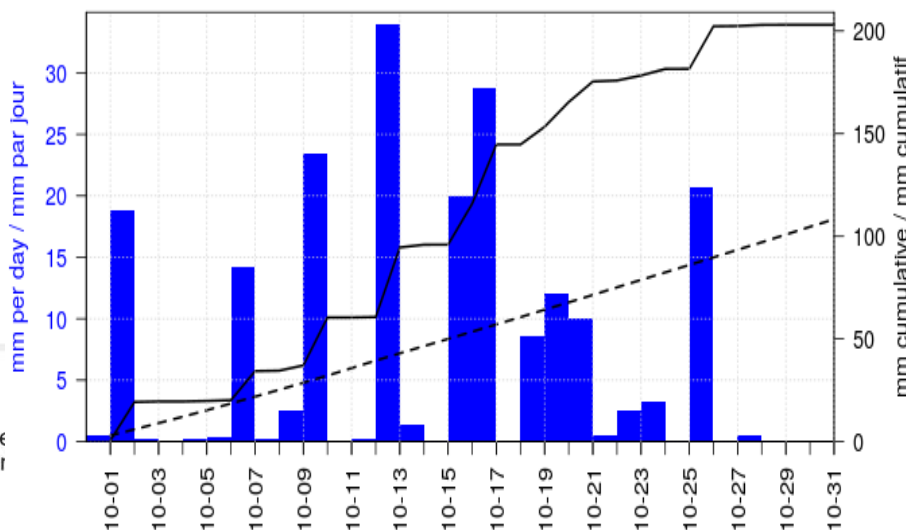
*dashed line is incorrectly
depicted on graph and should
be near 90 mm cumulative



Bathurst

Bathurst and
Edmundston
were above
normal

Edmundston



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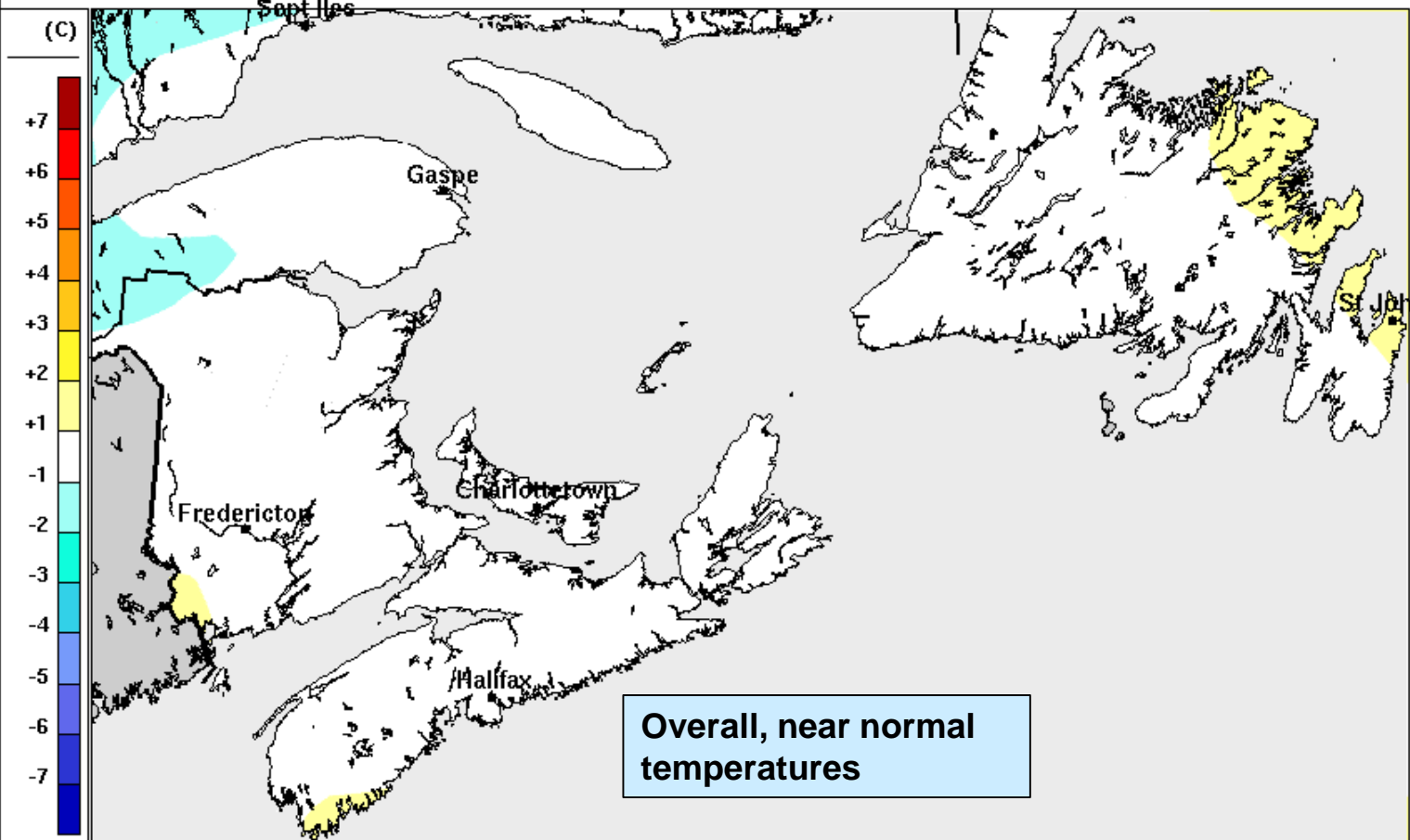
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October 2020 – Temperature departure from 1981-2010 mean

Temperature Anomaly: 202010
Anomalie de température: 202010



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

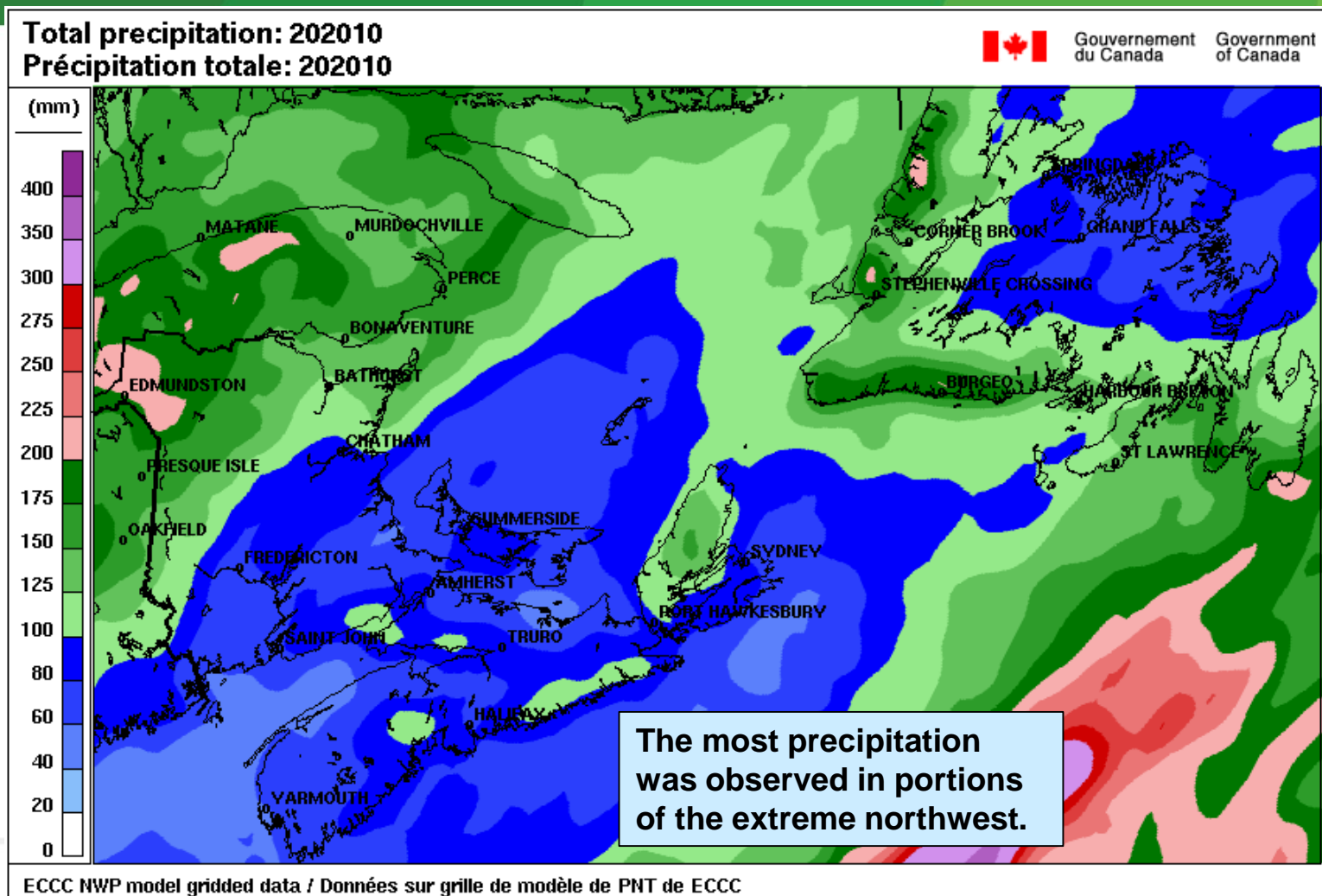


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October 2020 – Total precipitation



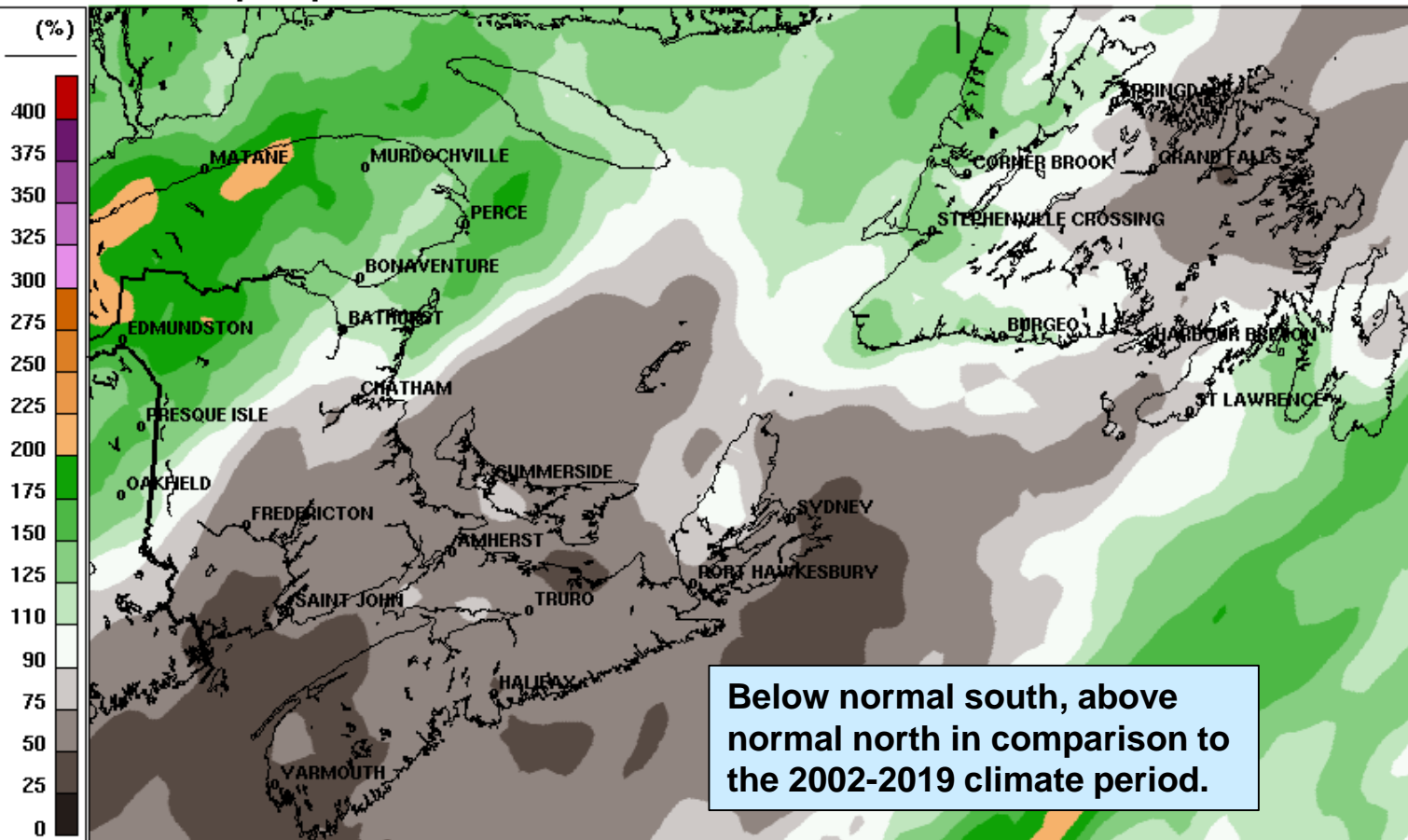
October 2020 – Precipitation departure from 2002-2019 mean

Precipitation Relative Total: 202010
Total relatif de précipitation: 202010



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ECCC NWP model gridded data / Données sur grille de modèle de PNT de ECCC. Clim: 2002-2019



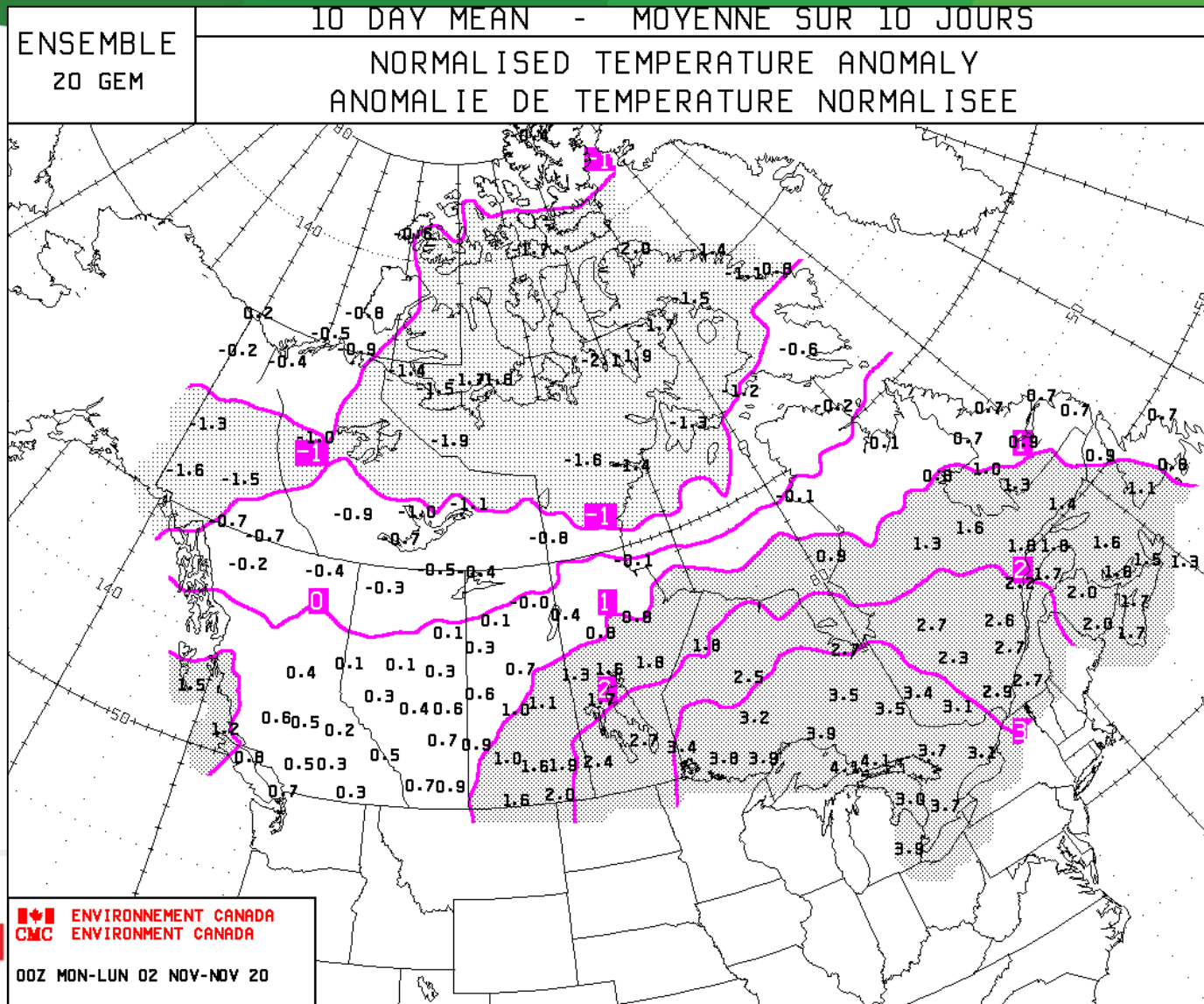
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Outlook – 10 day mean temperature

(Suggesting above normal conditions (+1.7 to +2.1°C))

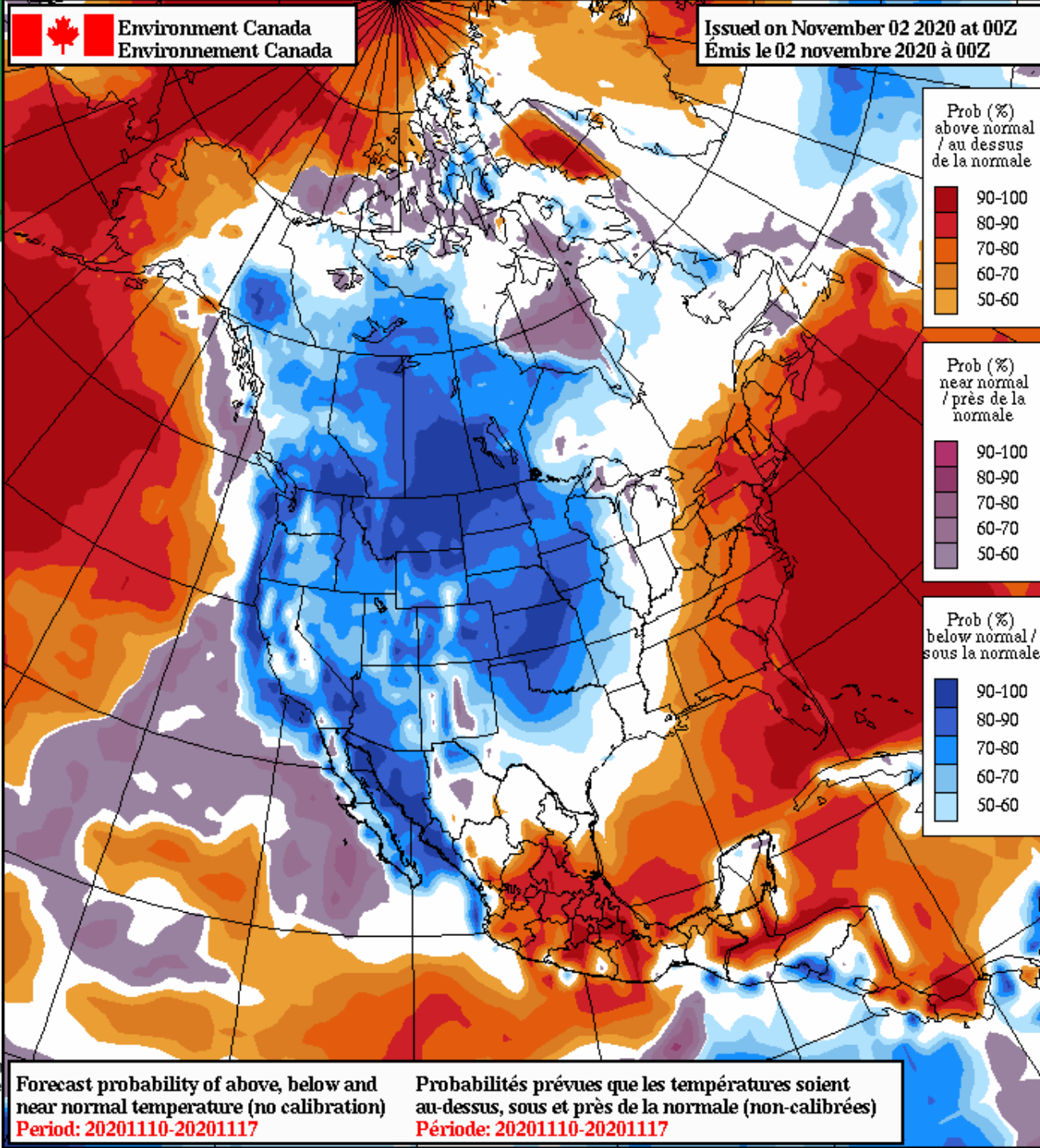


10 day
forecast
ending
November
12, 2020

Day 8 to 14 Forecast

Period ending
November 17,
2020

Suggesting a weak to
moderate chance of
above normal.



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Fredericton

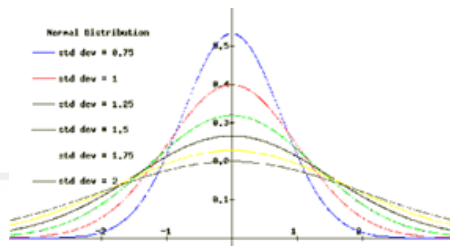
November

Normal high: +6.0C

Normal low: -3.0C

Next 15 days; ending
November 16, 2020

Generally suggesting below normal until near November 5th then above normal until near the 13th then possibly near normal for the remainder of the period.



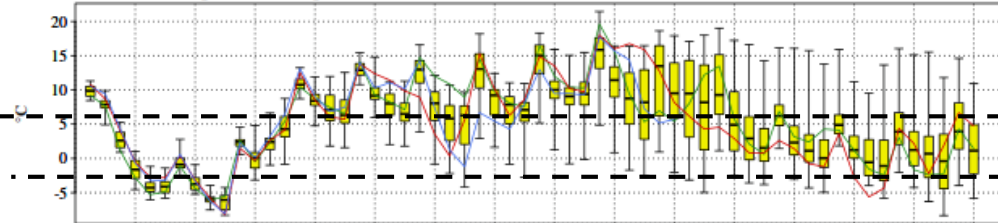
Ensemble and Deterministic Forecasts issued 2 November 2020 00 UTC
Prévision d'ensemble et déterministe émises le 2 Novembre 2020 00 UTC

for/pour

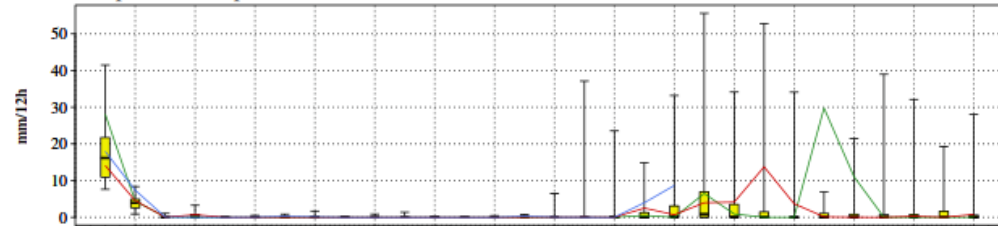
NAEFS / SPENA

FREDERICTON (YFC) 45.87 N 66.53 W/O

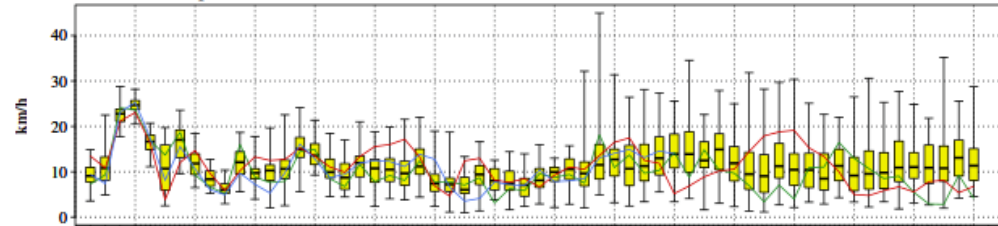
Surface air temperature/Température de l'air à la surface



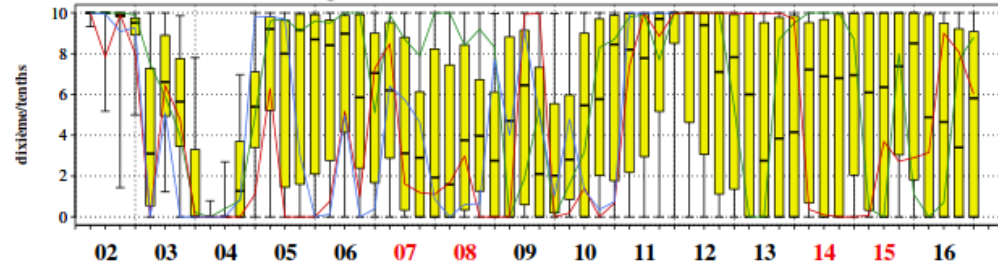
Precipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



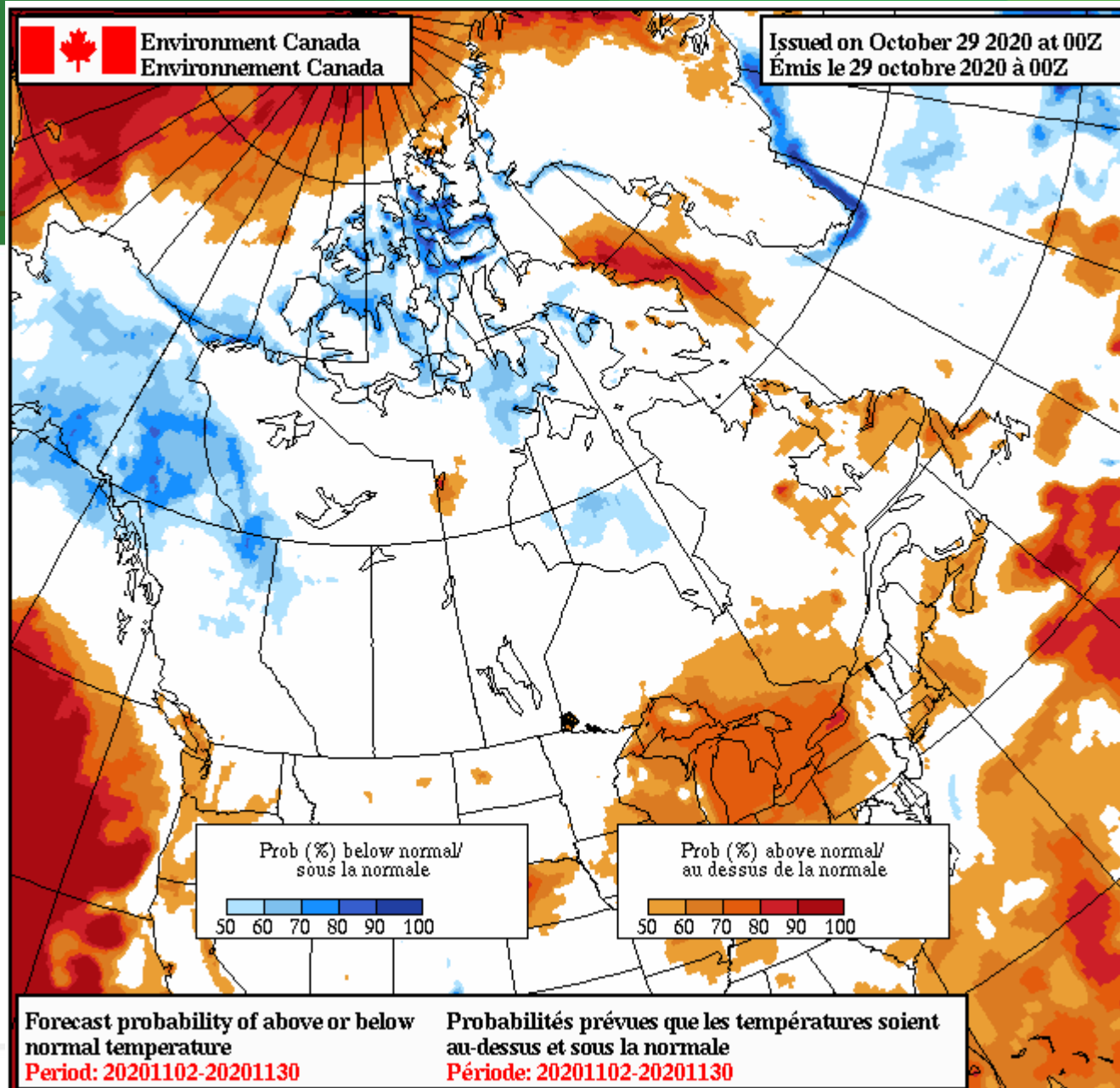
November/Novembre 2020

max
75%
median/médiane
25%
min

Global Model / Modèle global
Control Member / Membre contrôlé CMC
Control Member / Membre contrôlé NCEP

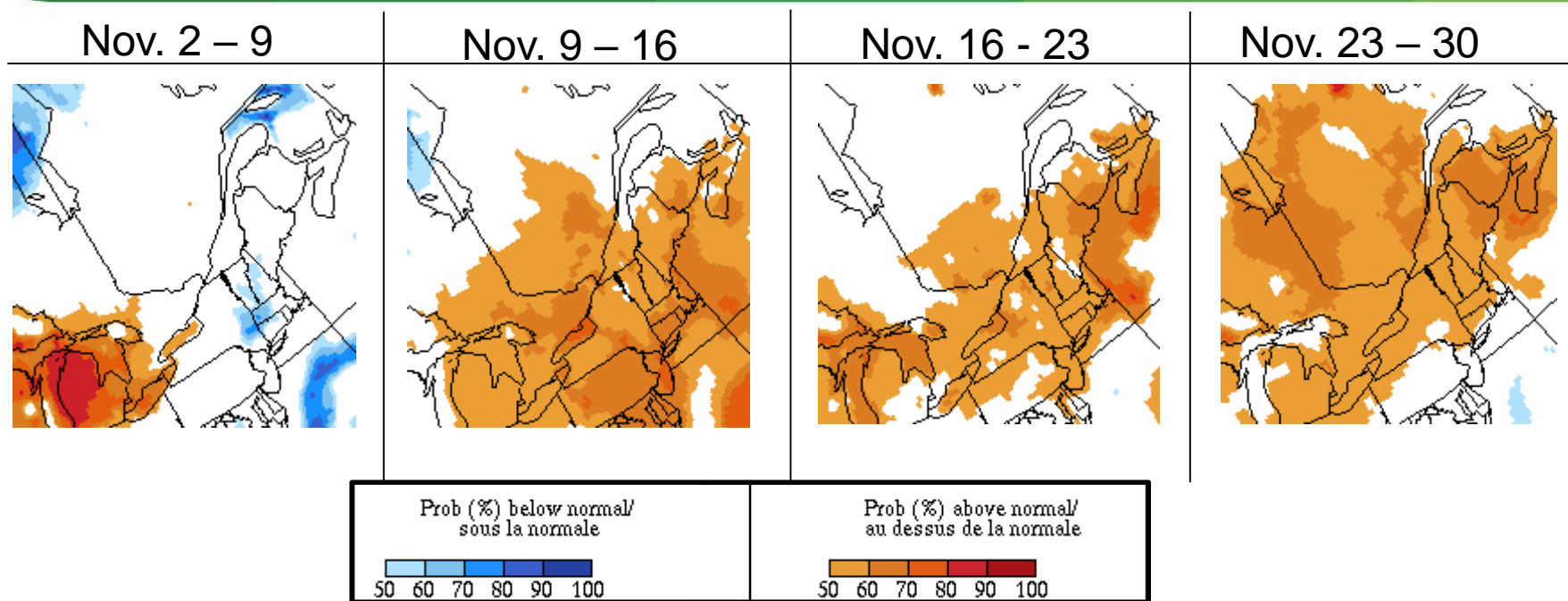


Temperature November 2 to November 30



CMC
Monthly
Forecast
Product
using GEPS
50km res.

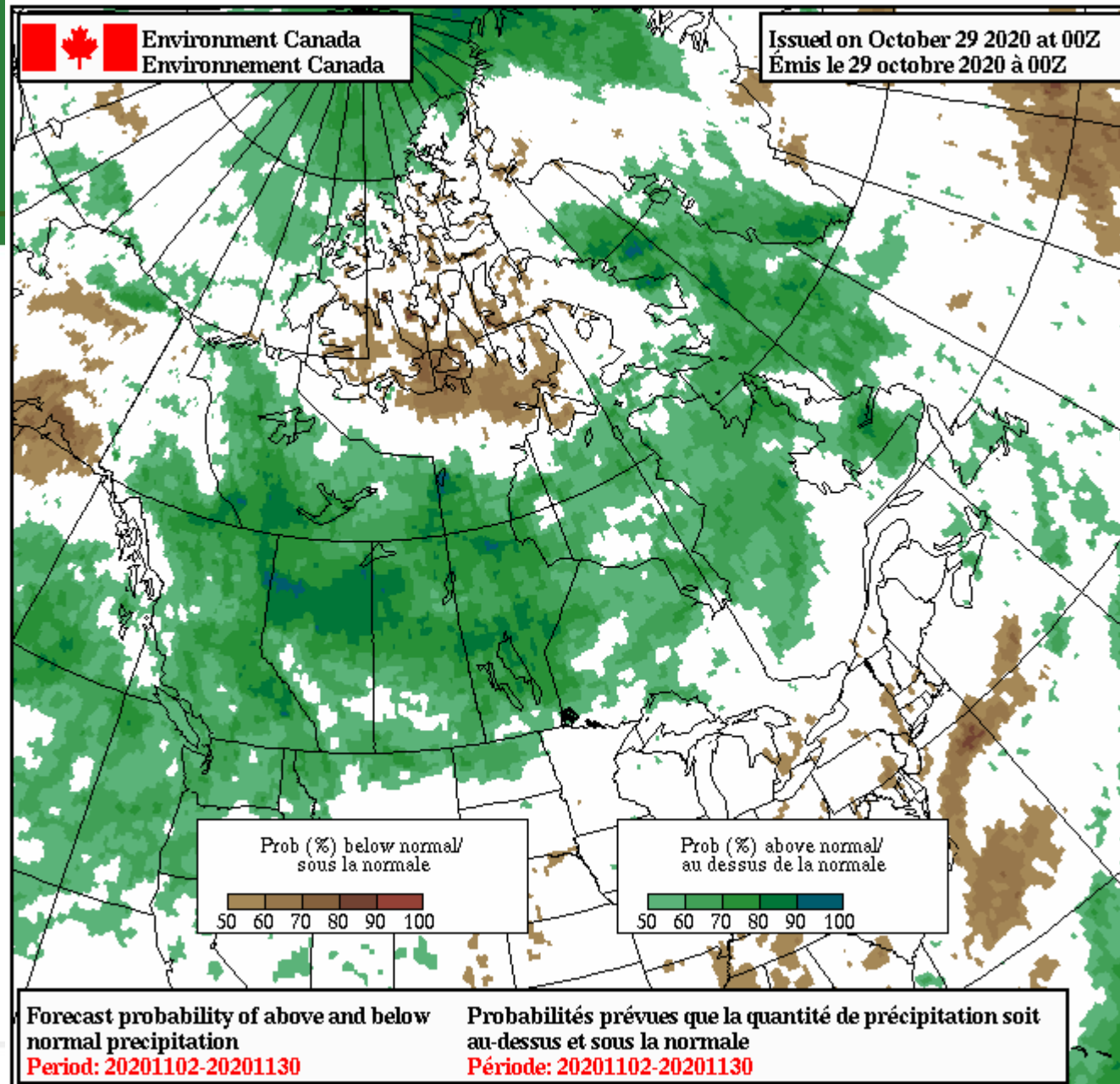
Weekly signature from GEPS 50km resolution



Overall, no signal (near normal) for the first week followed by a weak indication of above normal for most areas through the rest of period, with the strongest signal occurring during the last week.

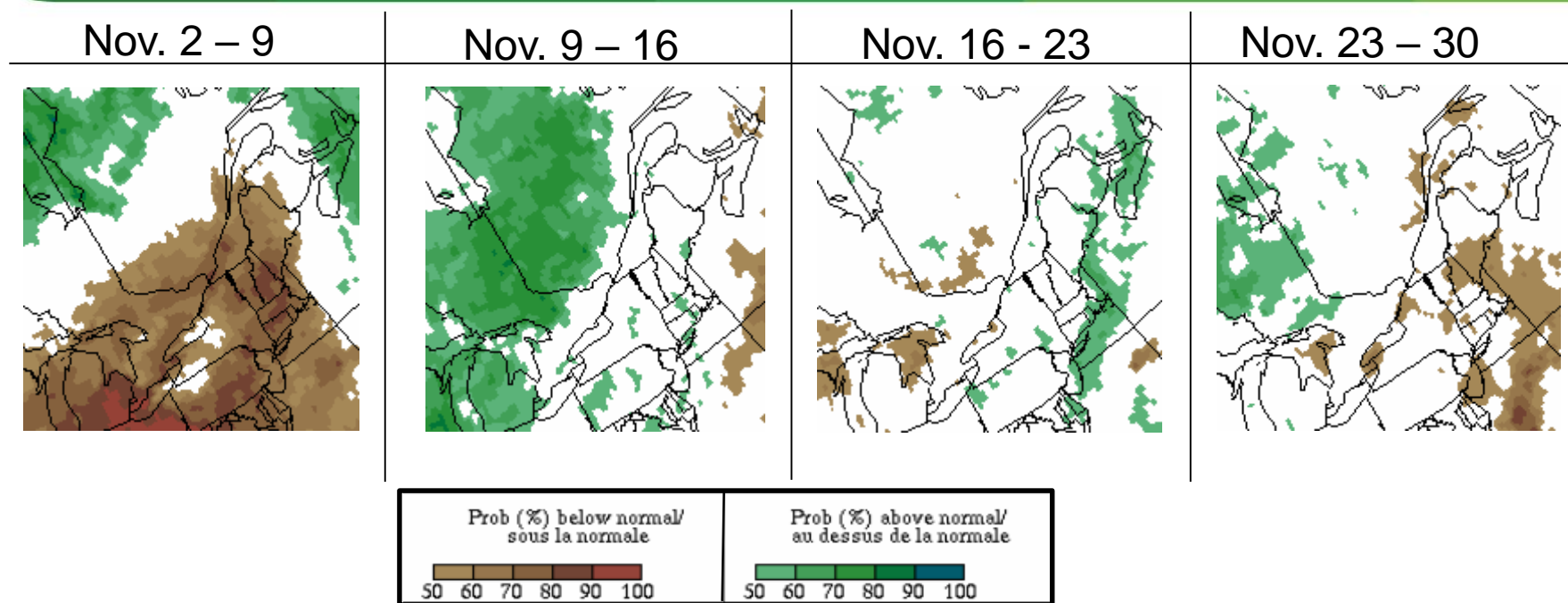


Precipitation November 2 to November 30



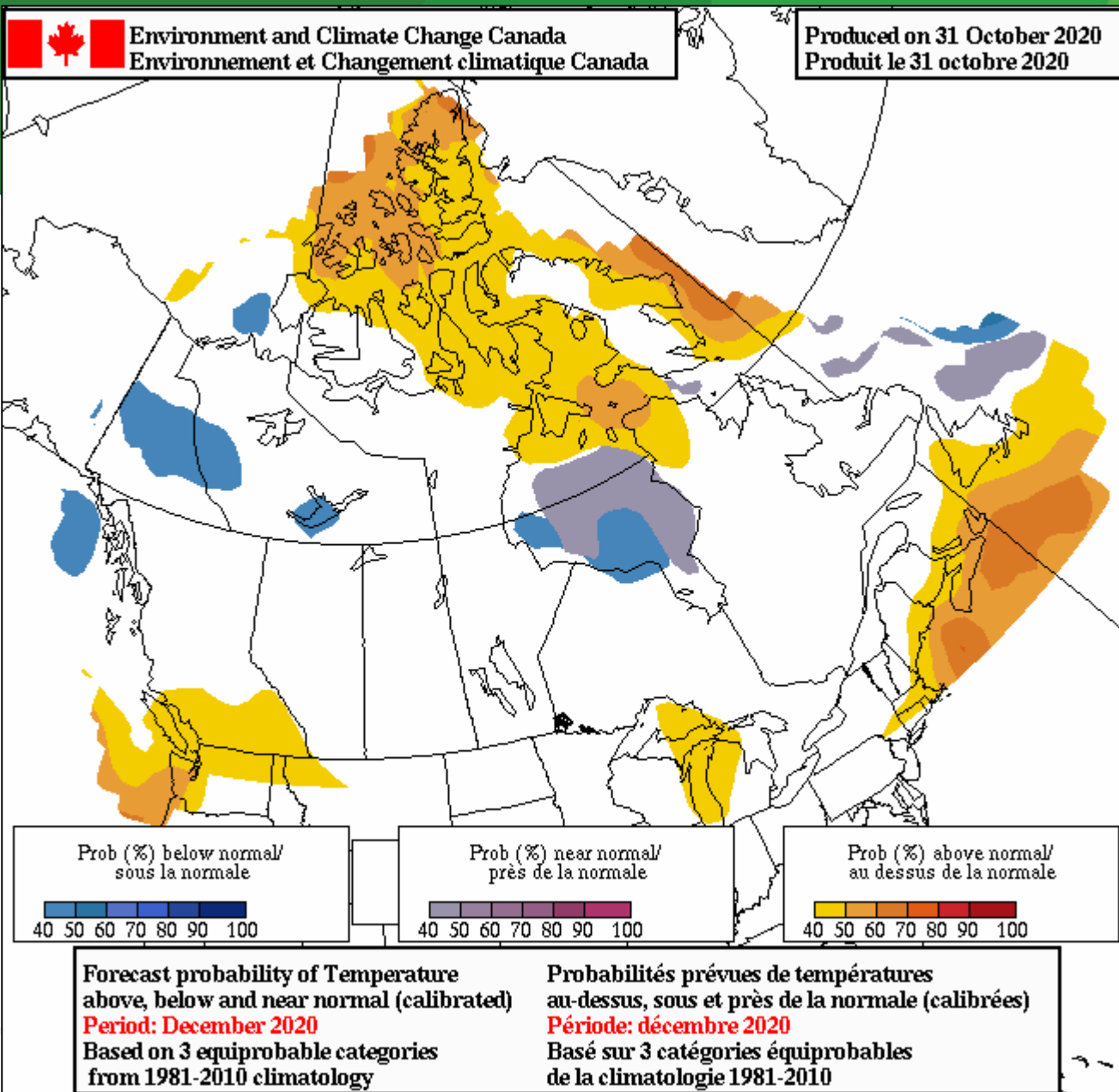
CMC
Monthly
Forecast
Product
using GEPS
50km res.

Weekly signature from GEPS 50km resolution



Generally, no conclusive signal (near normal) with alternating subtle weak signals of below normal and above normal possible for isolated areas of the province for the period.





Temperature December 2020

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

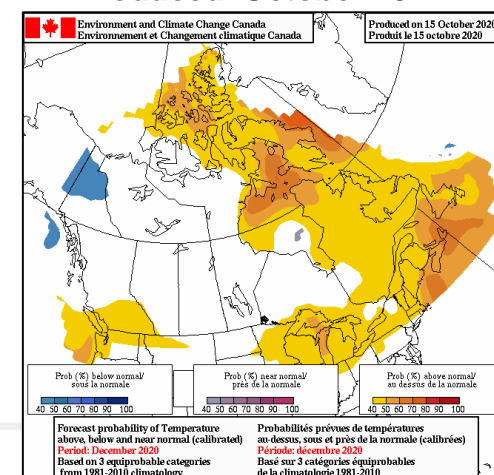
CanAM3

CanAM4

+

CanOM4

Produced October 15





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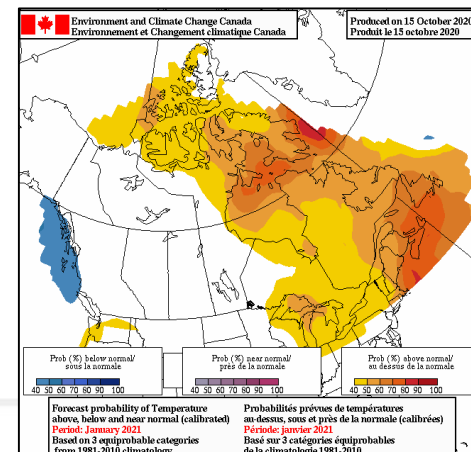
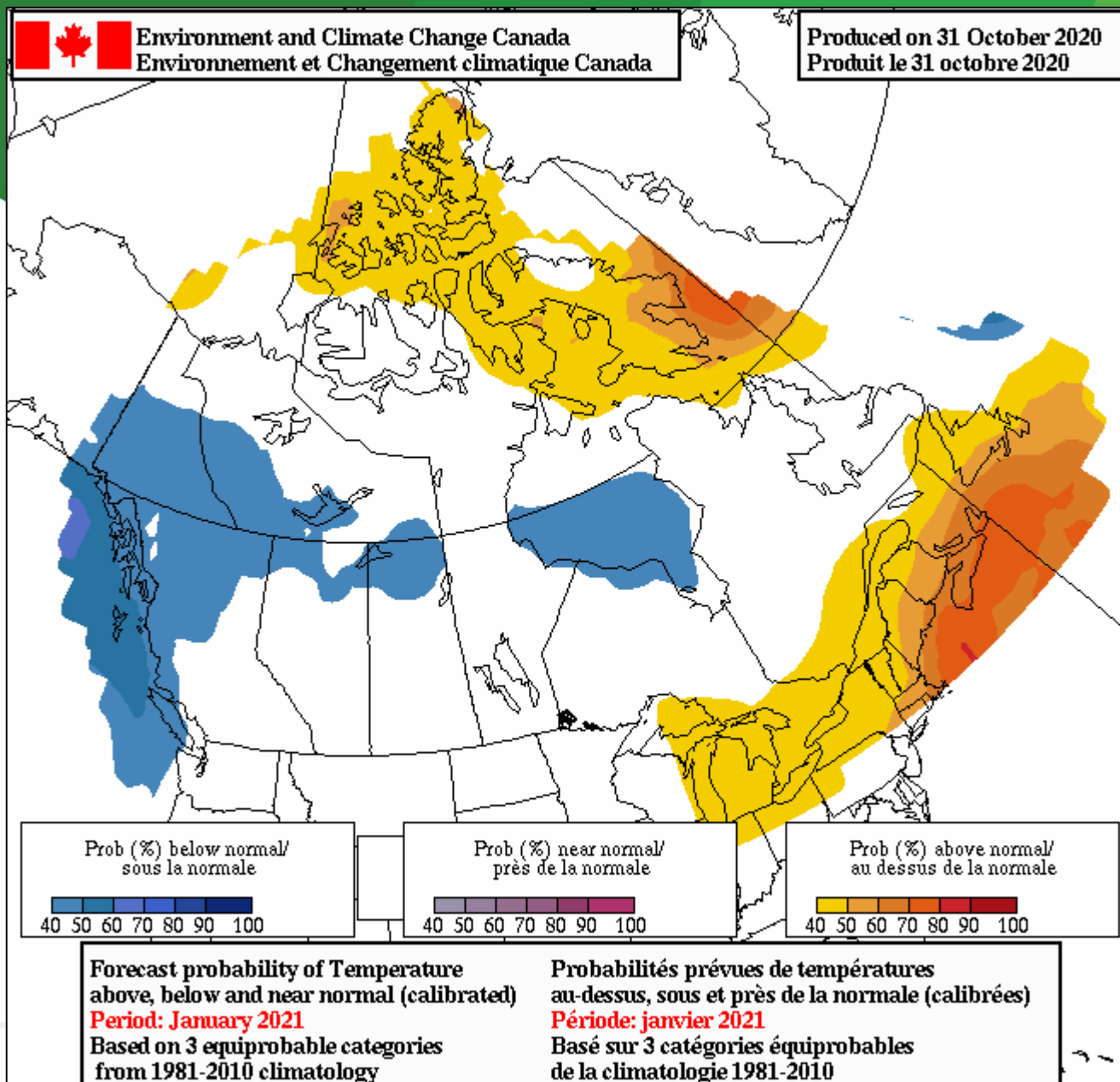
Produced on 31 October 2020
Produit le 31 octobre 2020

Temperature January 2021

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced October 15



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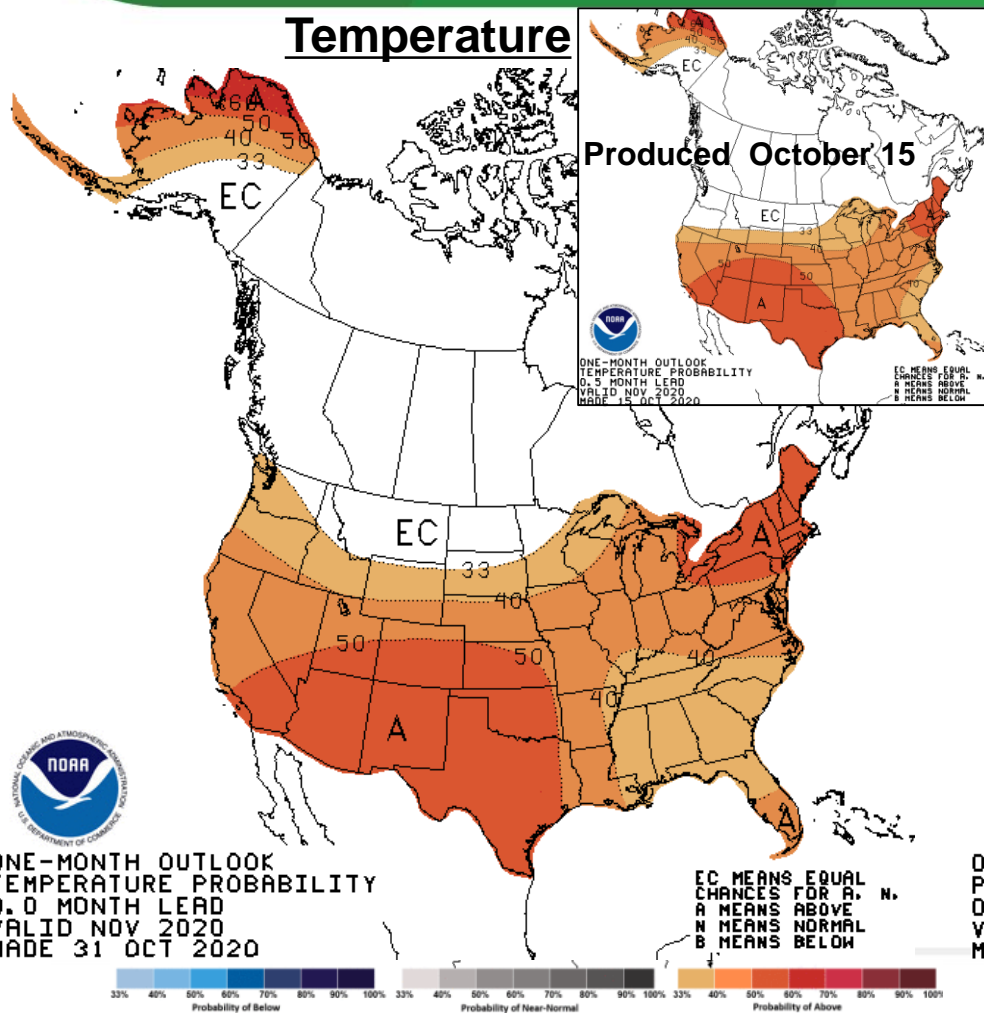
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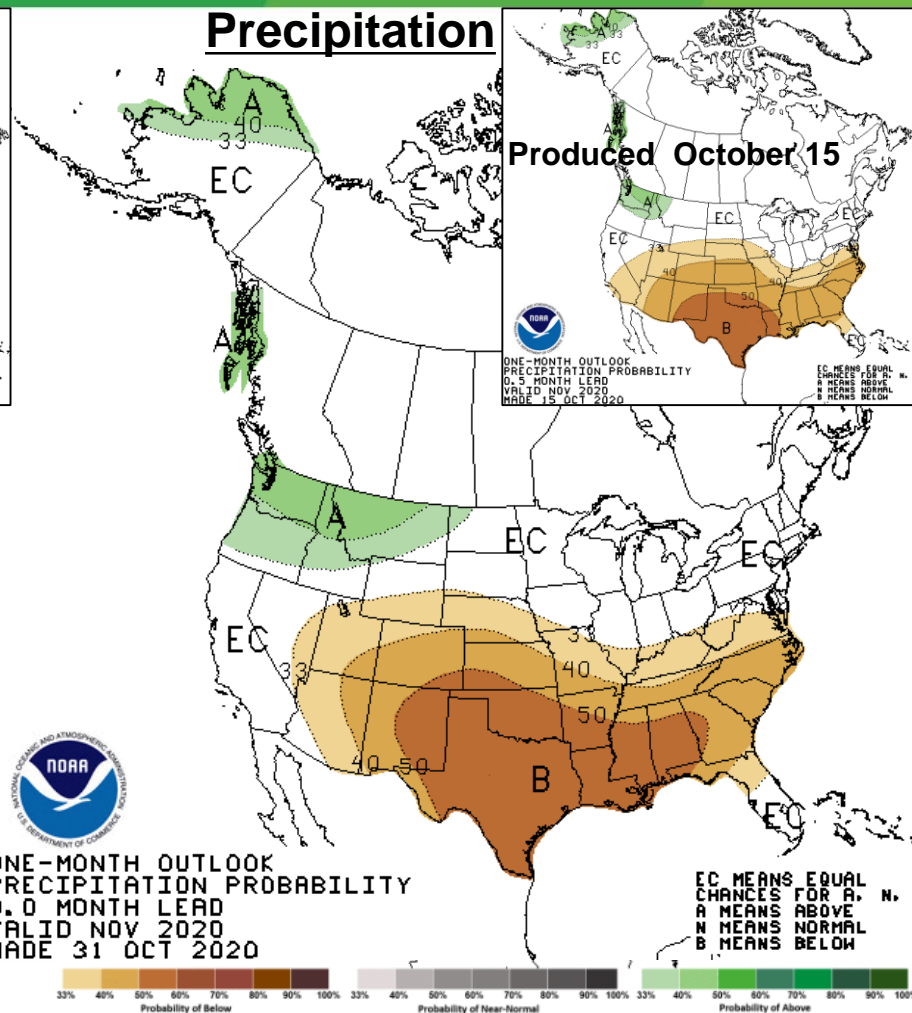


November 2020

Temperature



Precipitation



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Contact

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Canada Weather Pages

www.weather.gc.ca



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