

# New Brunswick

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## October 2021 Review November and Fall/Winter Outlook

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Meteorological Service of Canada  
Environment and Climate Change Canada  
November 1, 2021



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# October 2021; Climate Summary

## Highlights:

The average temperature anomaly was much above normal (**+2.7°C**). All sites reported positive anomalies with Charlo reporting the largest anomaly at 3.9°C and its warmest month on record. As was the case in September, mild minimum temperatures contributed greatly to the above normal conditions.

Total precipitation amounts were below normal, with an average of **72%** of total precipitation. Charlo was the only site to see a positive anomaly while Sussex reported only 36% of normal. Most of the precipitation came from two weak events in the second half of the month.



Station Name / Nom de la station	Prov	TC ID / ID de TC	Station Type / Type de station	Mean Temperature / Température moyenne (°C)			Total Precipitation / Précipitations totales (mm)		
				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
AROOSTOOK	NB		DAILY	10.3	6.6	3.7			
BAS CARAQUET	NB	WXS	AU8	9.7	7.6	2.1	104.4	108.0	97
BAS CARAQUET	NB		DAILY				108.4	108.0	100
BATHURST A	NB	ZBF	NCA	9.4	6.8	2.7	100.9	122.9	82
CHARLO AUTO	NB	ZCR	AU8	9.6	5.7	3.9	109.6	84.0	131
MIRAMICHI RCS	NB	ACQ	AU8 *record*	10.0	6.9	3.0	77.5	89.7	86
DOAKTOWN AUTO RCS	NB	ADN	AU8	9.9	7.0	2.9	75.5	100.8	75
EDMUNDSTON	NB	ERM	AU8	8.5			62.2		
FREDERICTON INTL A	NB	YFC	NCA	10.2	7.5	2.8	44.6	89.1	50
FREDERICTON CDA CS	NB	AFC	AU8	10.8	7.8	3.0	61.4	89.7	68
FUNDY PARK (ALMA) CS	NB	AFY	AU8	11.0	8.2	2.8	74.8	132.9	56
GAGETOWN AWOS A	NB	YCX	AU5	10.5	8.6	1.9	40.0	105.7	38
GRAND MANAN SAR CS	NB	XGM	AU8	10.5			51.5		
KOUCHIBOUGUAC	NB	AKC	AU8	9.6	7.6	2.0	77.4	99.6	78
MECHANIC SETTLEMENT	NB	AMS	AU8	9.5			91.2		
MISCOU ISLAND (AUT)	NB	WMI	AU8	10.0			95.9		
MONCTON/GREATER									
MONCTON ROMEO LEBLANC INTL A	NB	YQM	NCH	10.4	7.6	2.8	66.1	113.4	58
OAK POINT	NB		DAILY	10.7	8.6	2.1	53.5	105.7	51
RED PINES	NB	ARP	AU8	8.9	6.5	2.3	87.1	90.2	97
SAINT JOHN A	NB	YSJ	NCH	10.0	7.6	2.5	63.6	116.4	55
ST. STEPHEN	NB	WSS	AU8	10.5			74.3		
SUSSEX FOUR CORNERS	NB	ASF	AU8	10.4	8.1	2.3	37.9	106.5	36
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	9.7	6.6	3.1	58.4	95.3	61
<b>Average</b>				<b>10.0</b>	<b>7.4</b>	<b>2.7</b>	<b>73.5</b>	<b>103.4</b>	<b>72</b>
<b>Max</b>				<b>11.0</b>	<b>8.6</b>	<b>3.9</b>	<b>109.6</b>	<b>132.9</b>	<b>131</b>
<b>Min</b>				<b>8.5</b>	<b>5.7</b>	<b>1.9</b>	<b>37.9</b>	<b>84.0</b>	<b>36</b>

# October 2021; Climate Summary

## Events:

**October 13:** “Thunderstorms”. Training thunderstorms across mainly the eastern half of the province brought varied amounts of rain (15-55 mm) with the Doyleville area reporting the most at 80 mm.

**October 16-17:** “Rain Event I”. Partial remnants of tropical moisture brought the first widespread rain to the province for the month. Rainfall amounts were highest over western areas and reached up to 50 mm in a few locations.

**October 26-27:** “Windy Event”. A strong low pressure system passed south of the province and brought northeast wind gusts of 60-70 km/h over southern regions with Grand Manan reporting a 96 km/h gust from a private weather station.

**October 31:** “Rain Event II”. Light to moderate rainfall amounts (5-20 mm) fell across the province in the only second widespread precipitation event for the month. Saint John reported the most at 27 mm.

**Days of month with lightning in New Brunswick; 13 14 16 22 (4 days)**

**Day of month with temperature record broken or tied in New Brunswick; 9 11 12 13 14 22**  
(red=maximum, blue=minimum)



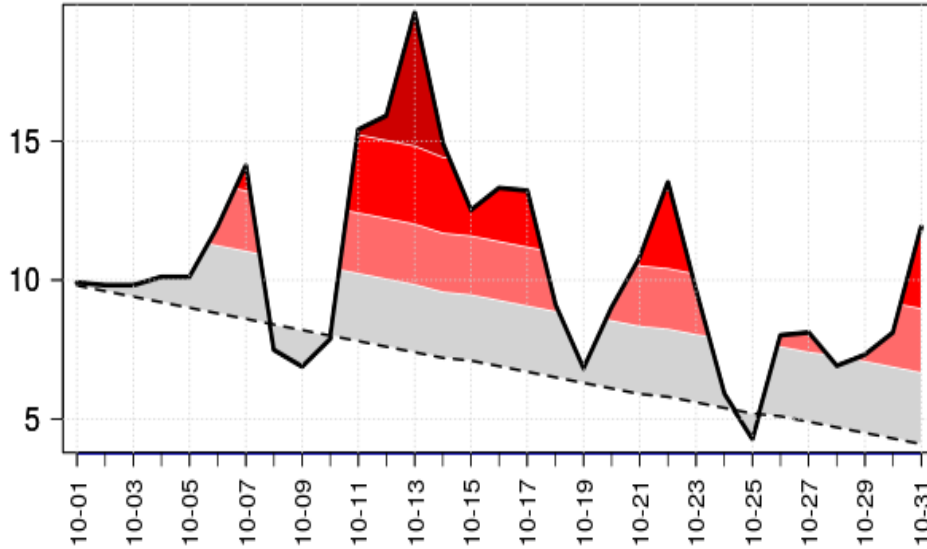
# October 2021; Provincial Climate Extremes

Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	<b>+26.4°C</b>	St. Stephen	13
Daily Minimum Temperature	<b>-6.4°C</b>	Edmundston	30
Maximum Daily Total Precipitation	<b>53.4 mm</b>	Charlo	13
Daily Maximum Wind Gust	<b>74 km/h</b>	Grand Manan	26
Daily Maximum Humidex	<b>31</b>	St. Stephen Gagetown	13



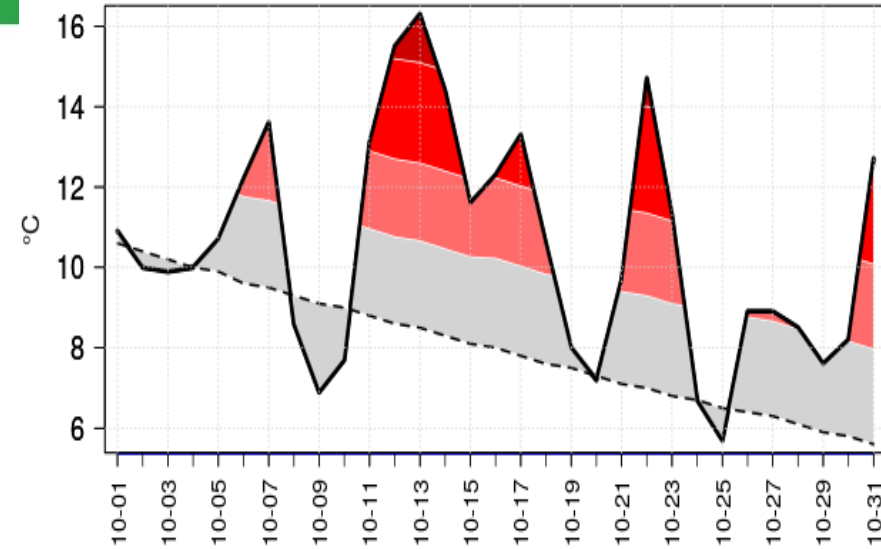
# October 2021 - Temperature

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



Fredericton

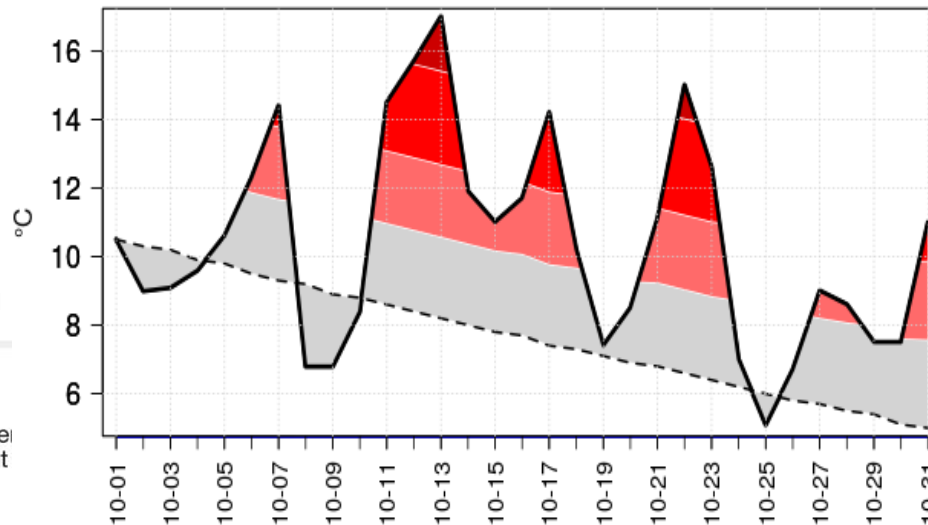
■ <<< normal  
 ■ << normal  
 ■ < normal  
 ■ normal  
 ■ > normal  
 ■ >> normal  
 ■ >>> normal



Saint John

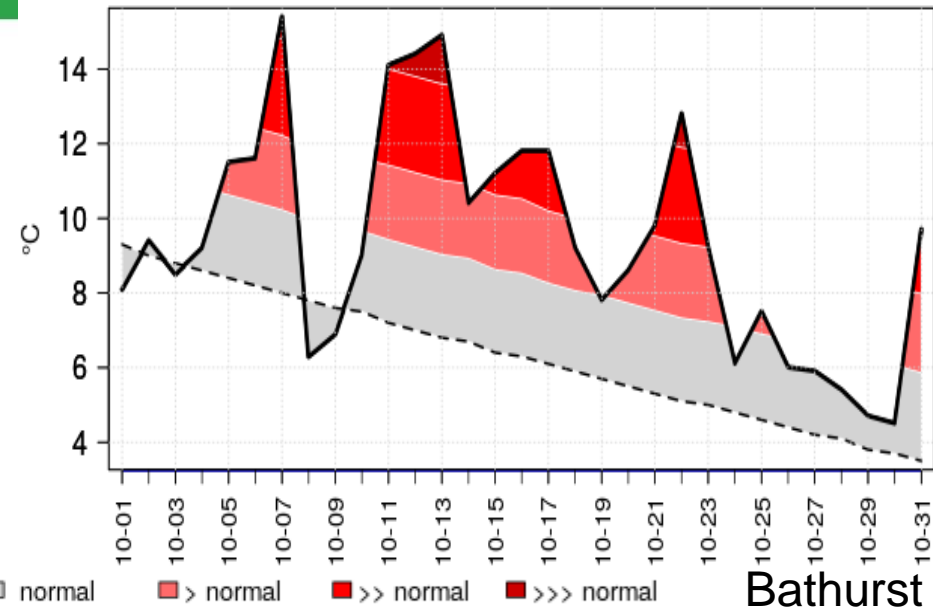
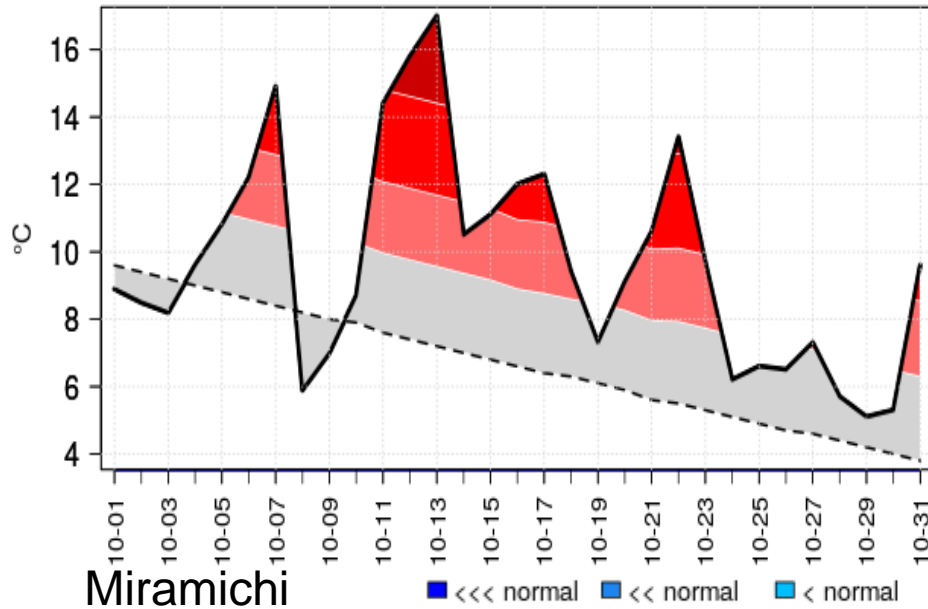
All sites were above normal

Moncton



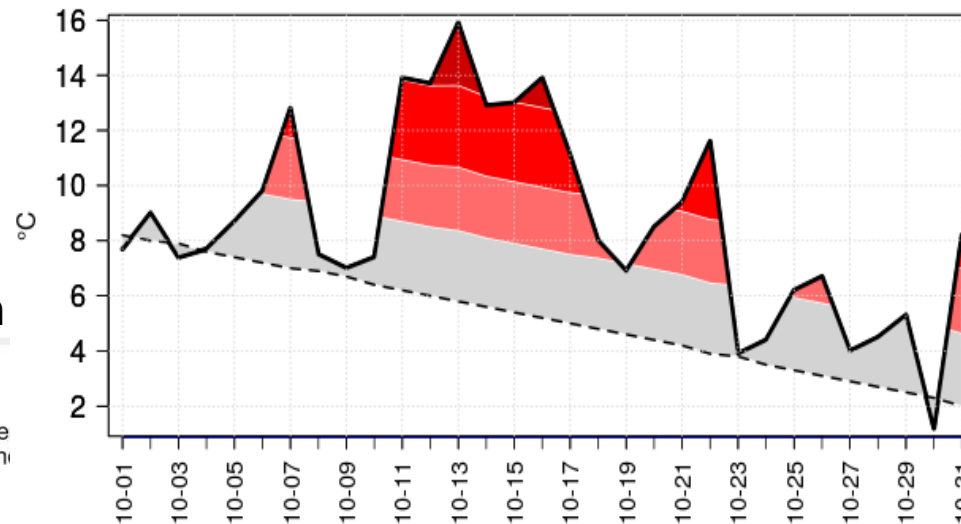
# October 2021 - Temperature

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 and Std. dev. thresholds +/- 0.7, 1.3, 2.1



All sites were above normal

Edmundston



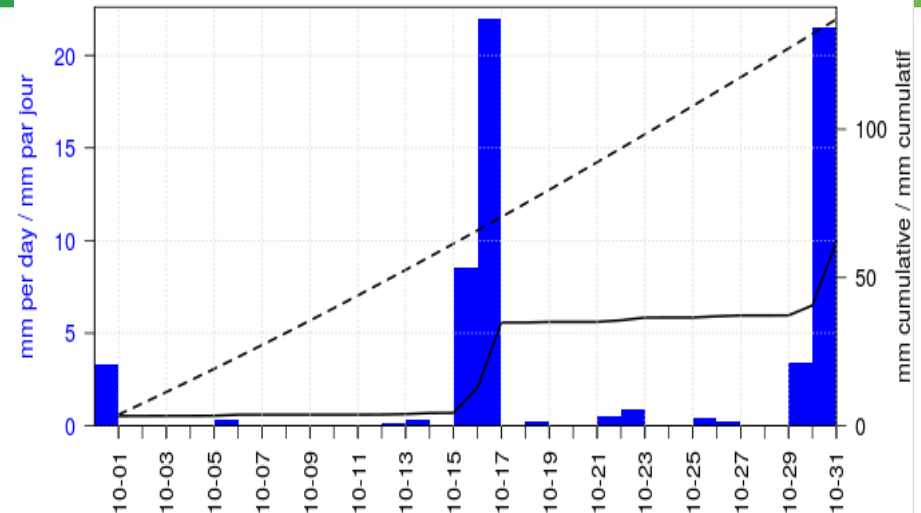
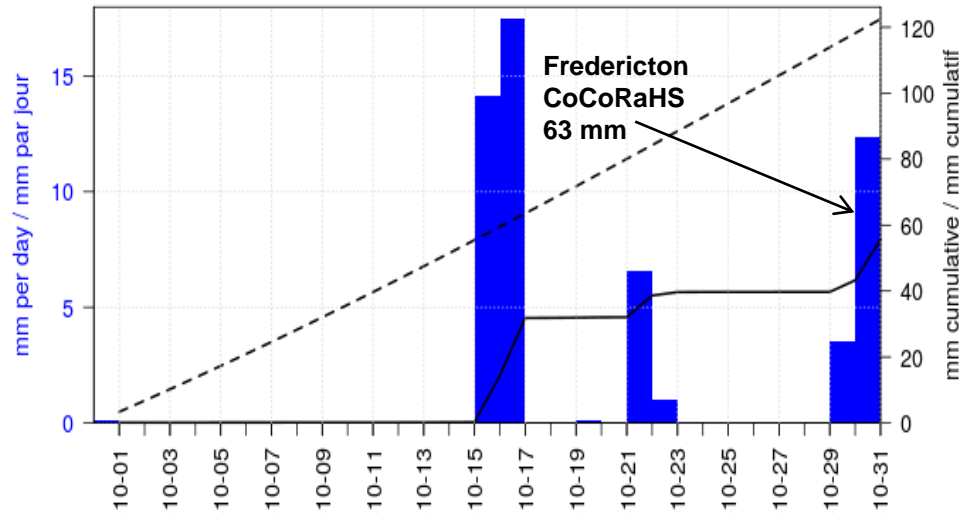
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# October 2021 - Precipitation

Daily Total Precipitation (bars), Cumulative (line) and Cumulative Long-Term Mean (dashed line) Based on ECCC gridded precipitation analysis Climatology 2002-2020

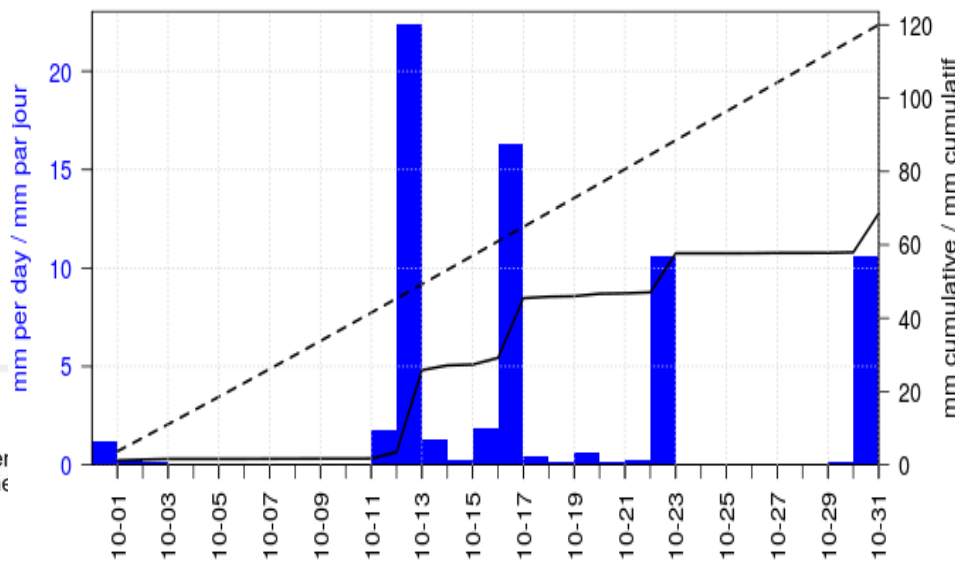


Fredericton (and area)

Saint John

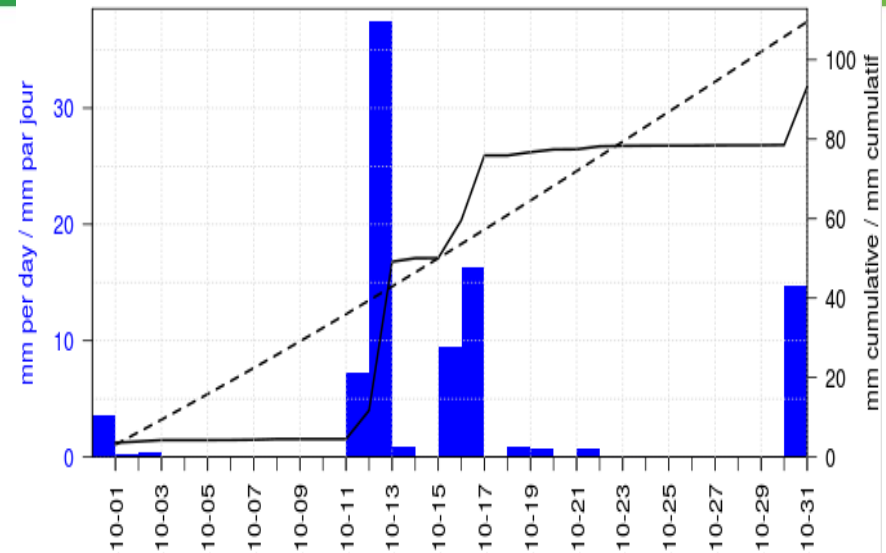
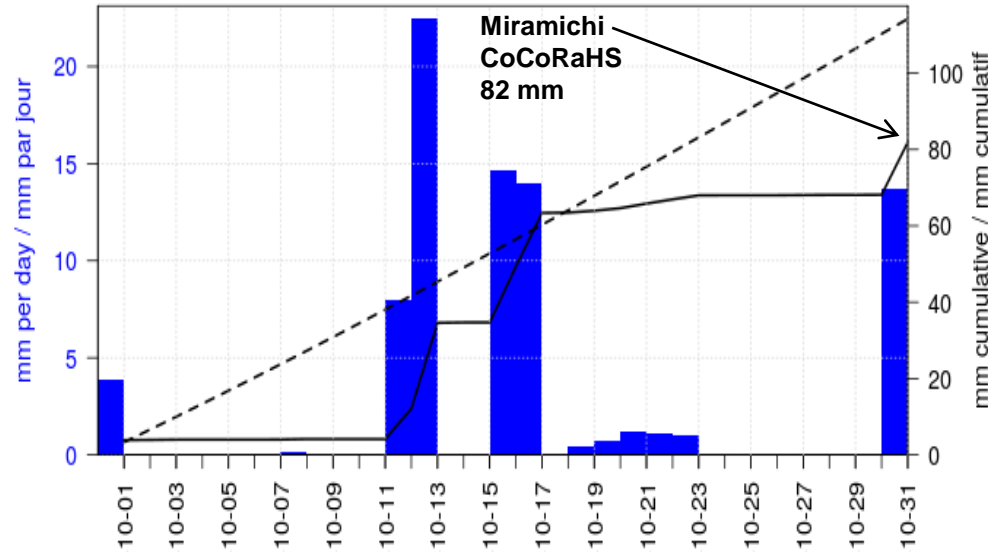
All sites were well below normal

Moncton



# October 2021 - Precipitation

Daily Total Precipitation (bars), Cumulative (line) and Cumulative Long-Term Mean (dashed line) Based on ECCG gridded precipitation analysis  
Climatology 2002-2020

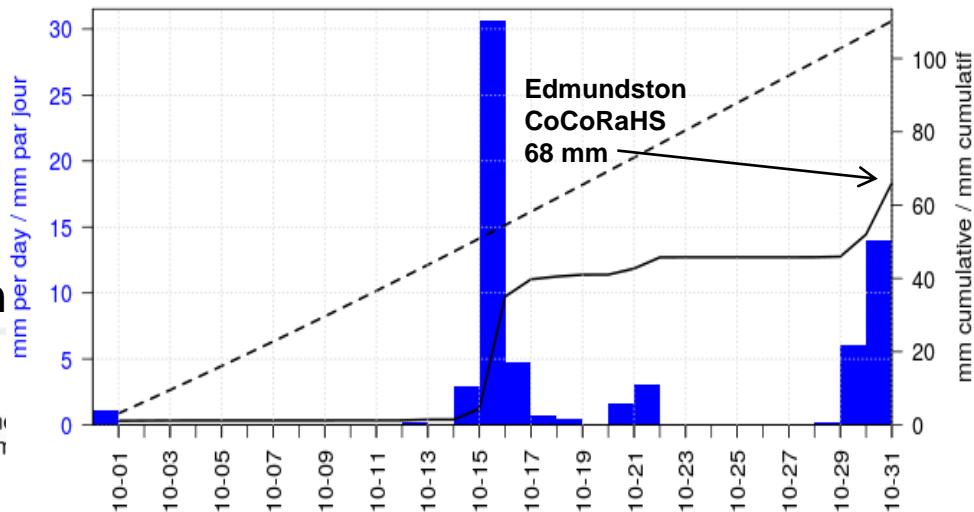


Miramichi

Bathurst

All sites were below normal

Edmundston



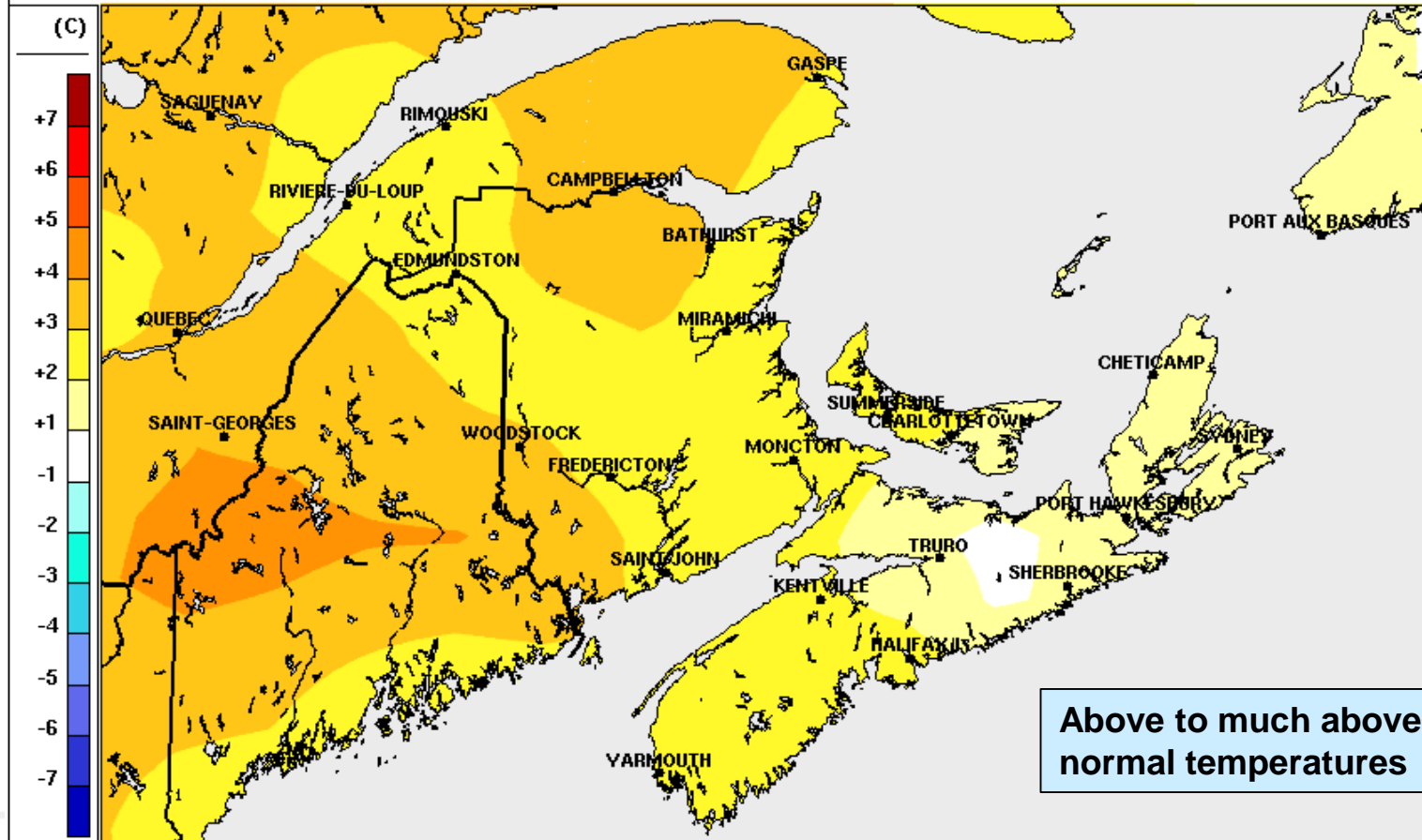


# October 2021 – Temperature departure from 1981-2010 mean

Temperature Anomaly: 2021-10  
Anomalie de température: 2021-10



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Above to much above normal temperatures

ECCC surface observations / Observations de surface de ECCC. Clim: 1981-2010

2021-11-01 13:57UTC



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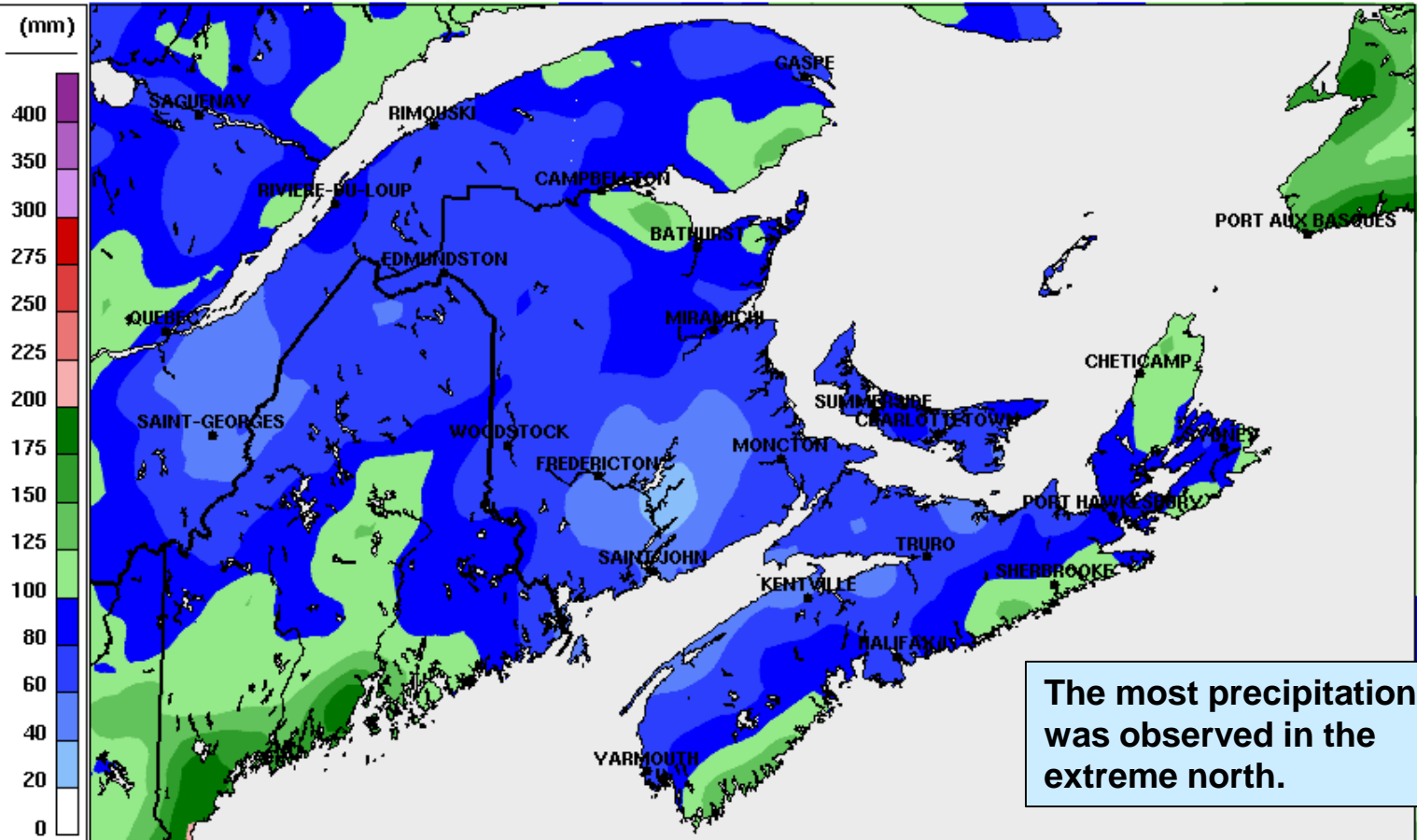
# October 2021 – Total precipitation

Total precipitation: 2021-10  
Précipitation totale: 2021-10



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of Canada



The most precipitation was observed in the extreme north.

ECCC 10-km CaPA / A CaP 10-km d'ECCC

2021-11-01 13:27UTC



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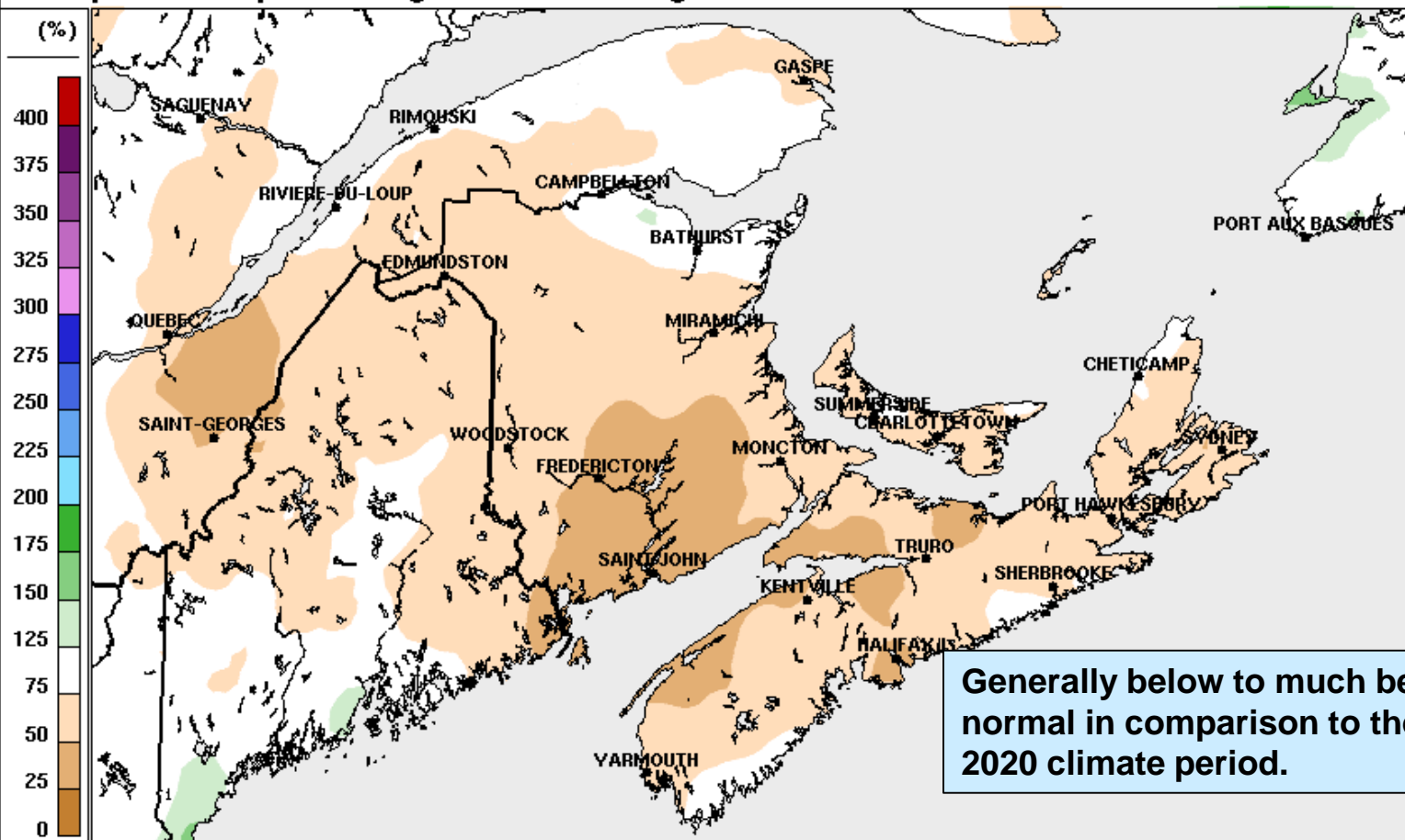


# October 2021 – Precipitation departure from 2002-2020 mean

Precipitation as a Percentage of Climatology: 2021-10  
Précipitation en pourcentage de la climatologie: 2021-10



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Generally below to much below normal in comparison to the 2002-2020 climate period.

ECCC 10-km CaPA / ACPA 10-km d'ECCC. Clim: 2002-2020

2021-11-01 13:29UTC



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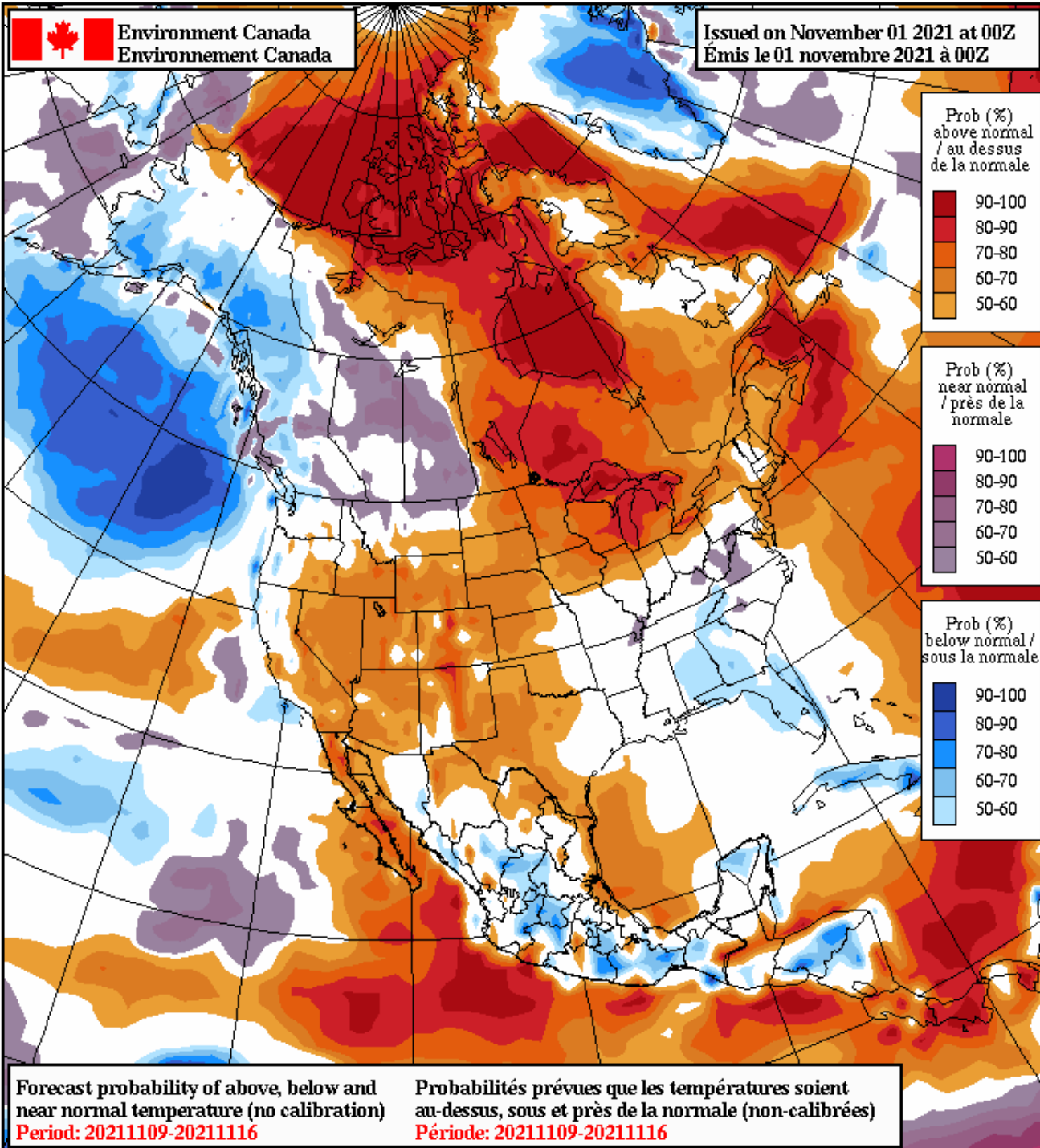
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# Outlook Day 8 to 14 Forecast

Period ending  
November 16,  
2021

Suggesting a  
moderate signal  
of above normal  
conditions.



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# Fredericton

November

Normal high: 6.0C

Normal low: -3.0C

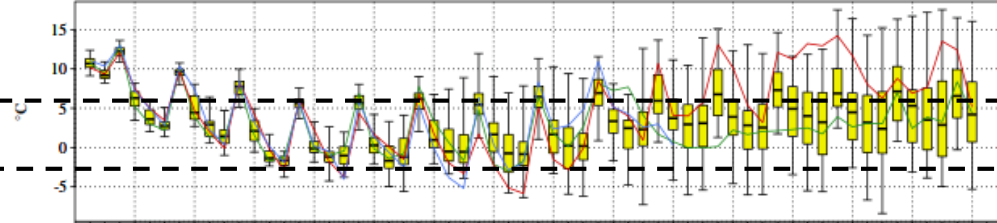
Ensemble and Deterministic Forecasts issued 1 November 2021 00 UTC  
Prévision d'ensemble et déterministe émises le 1 Novembre 2021 00 UTC

for/pour

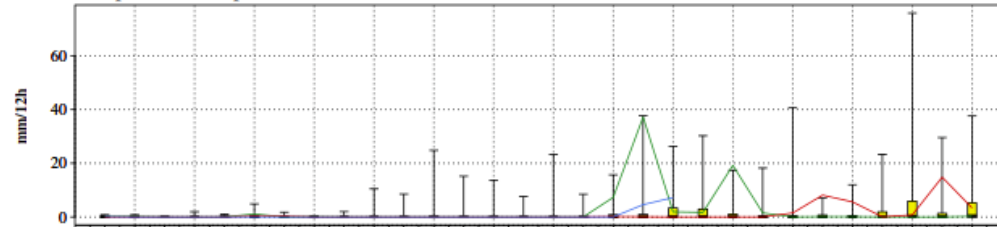
**FREDERICTON (YFC) 45.87 N 66.53 W/O**

NAEFS / SPENA

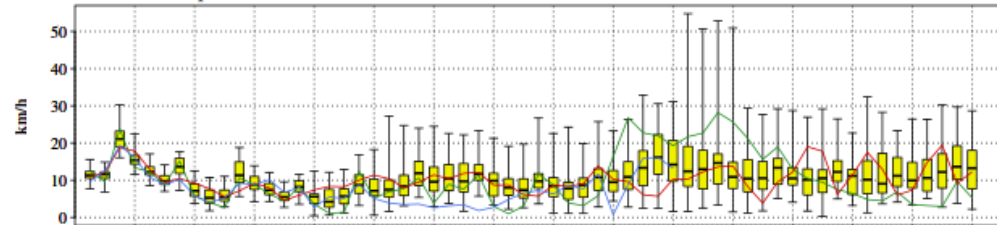
Surface air temperature/Température de l'air à la surface



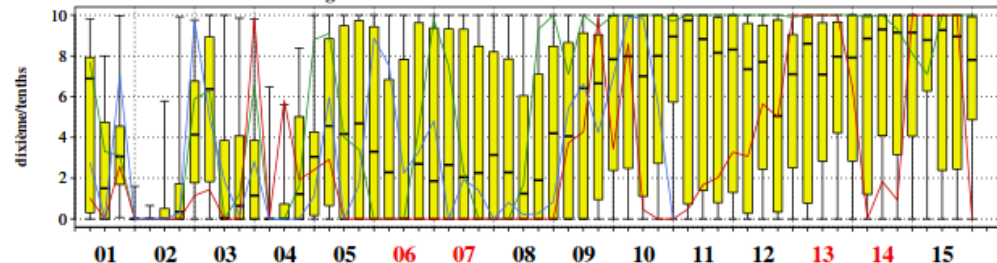
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



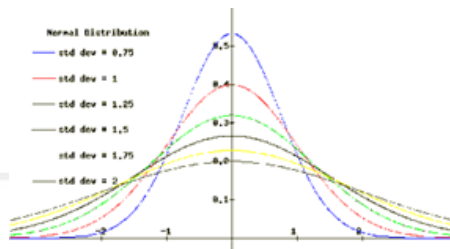
November/Novembre 2021

max  
75%  
median/médiane  
25%  
min

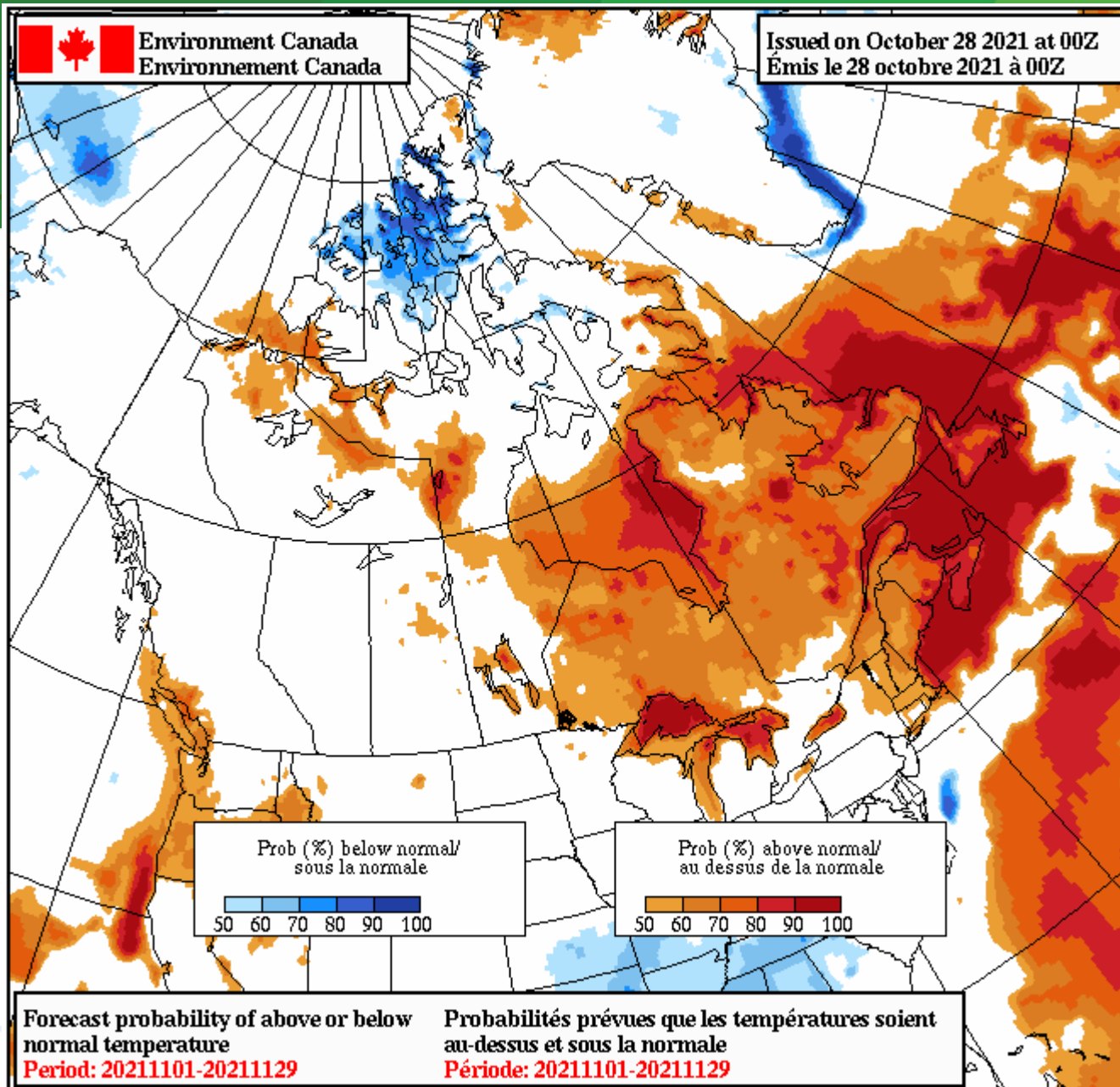
— Global Model / Modèle global  
— Control Member / Membre contrôlé CMC  
— Control Member / Membre contrôlé NCEP

**Next 15 days; ending  
November 15, 2021**

Generally suggesting above normal until near the 3<sup>rd</sup> then near normal until approximately mid-period then a lot of variability for the remainder of the period.



# Temperature November 1 to November 29



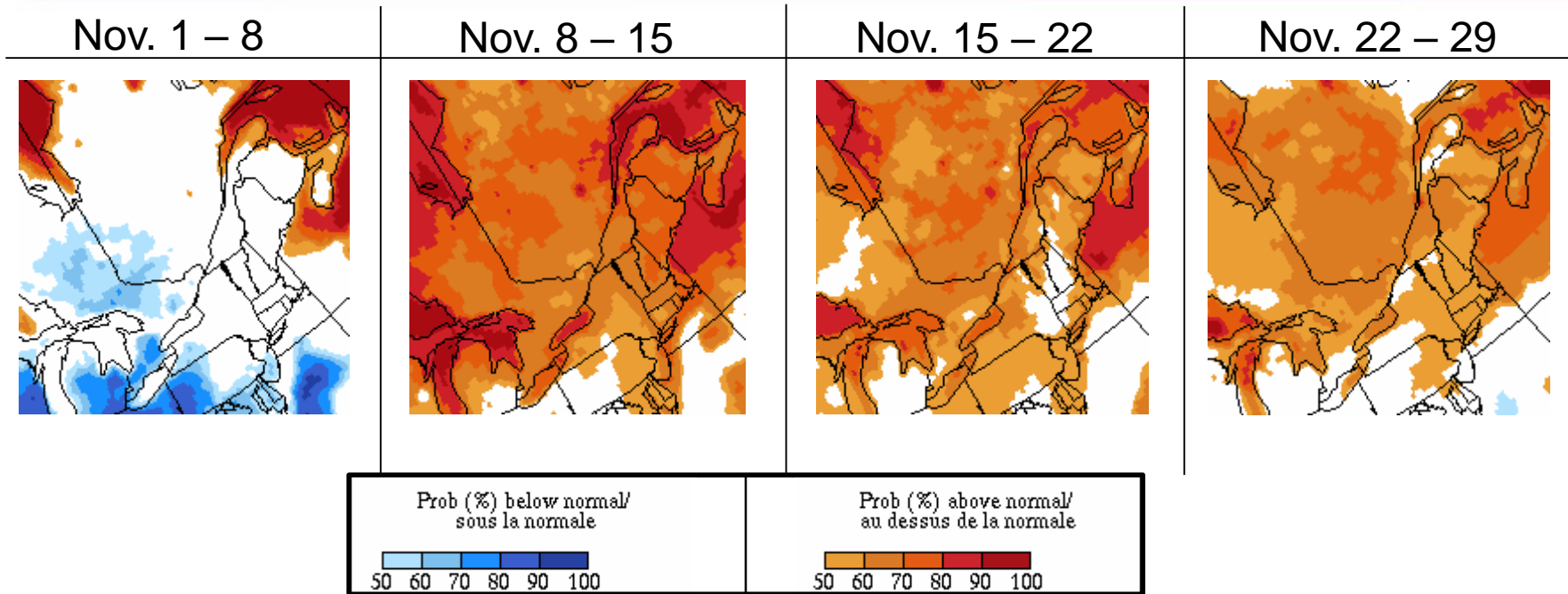
Forecast probability of above or below  
normal temperature  
Period: 20211101-20211129

Probabilités prévues que les températures soient  
au-dessus et sous la normale  
Période: 20211101-20211129

CMC  
Monthly  
Forecast  
Product  
using GEPS  
50km res.



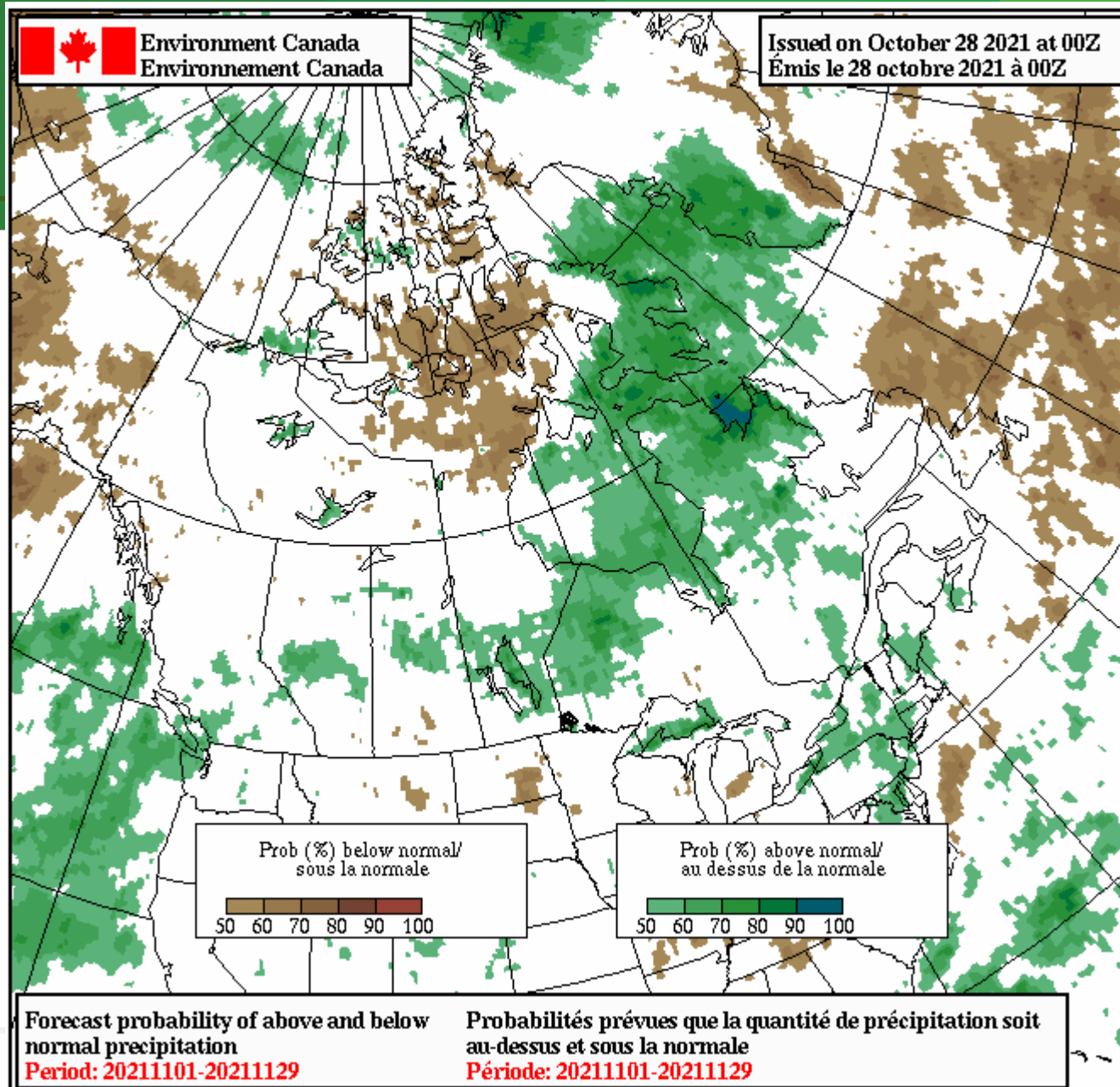
# Weekly signature from GEPS 50km resolution



Initially, no signal (near normal) then transitioning through to a moderate signal of above normal for the second week and finally a weak signal for above normal for the remainder of the period.



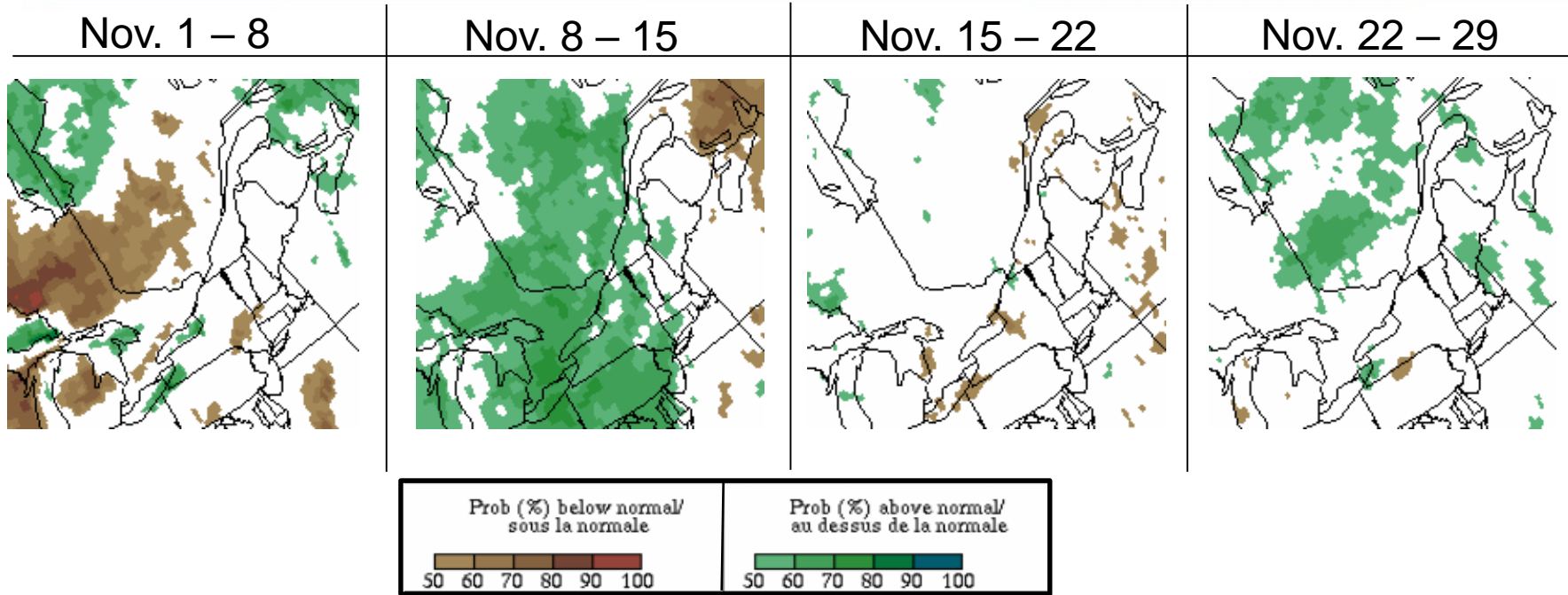
# Precipitation November 1 to November 29



CMC  
Monthly  
Forecast  
Product  
using GEPS  
50km res.



# Weekly signature from GEPS 50km resolution



Generally near normal (no signal) for the period except very localized areas of above normal for the first and last week and below normal for the second and third weeks.



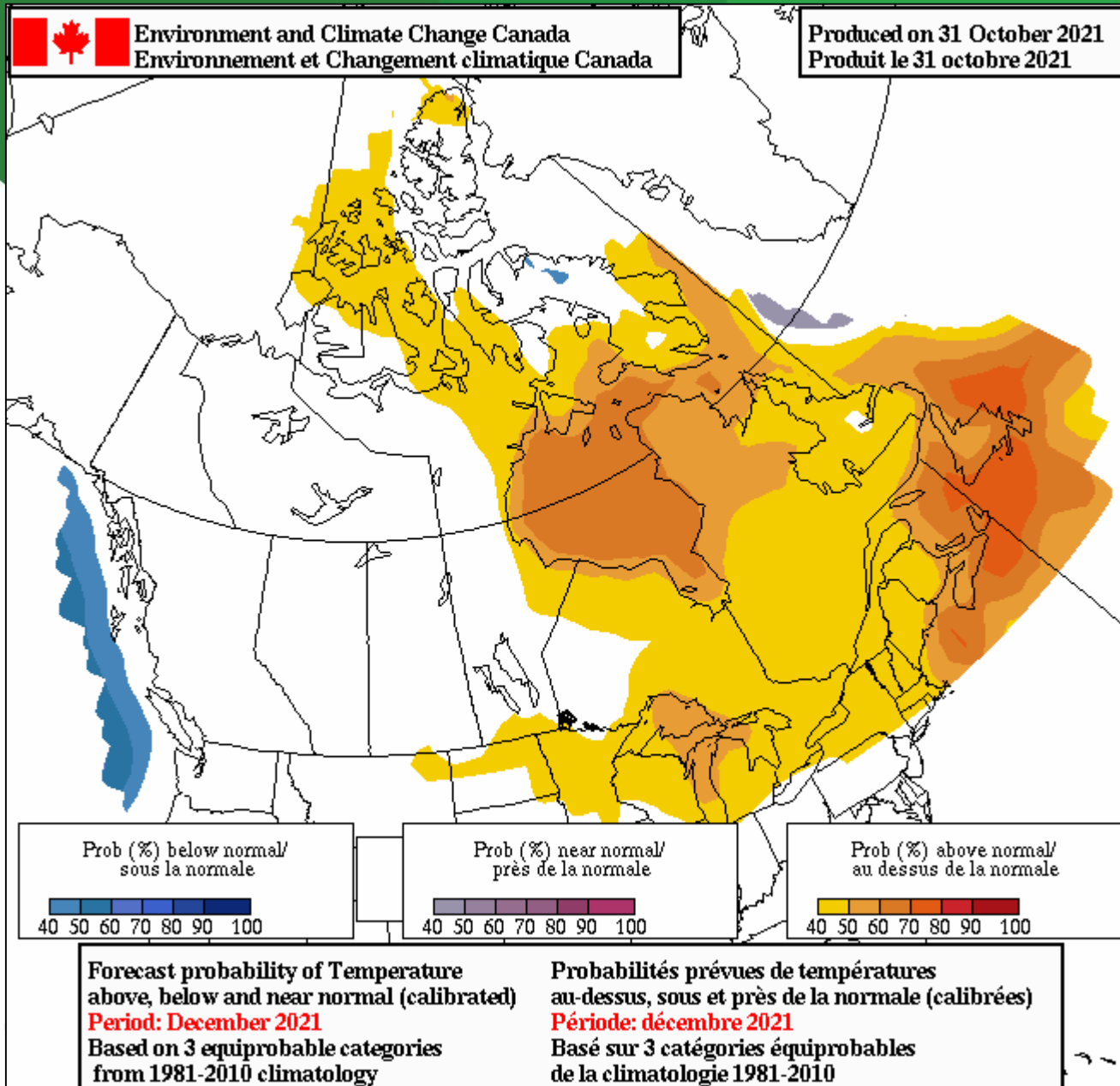


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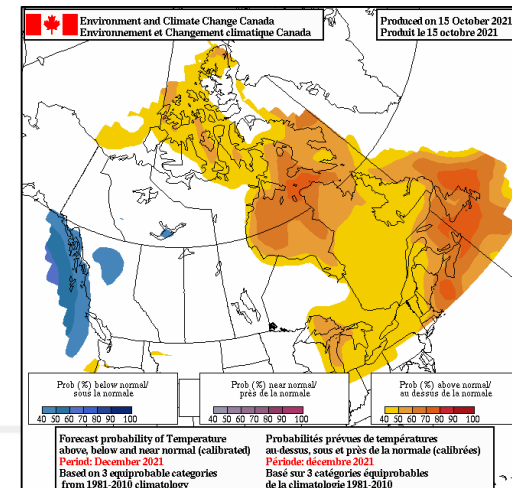
Produced on 31 October 2021  
Produit le 31 octobre 2021

# Temperature December 2021

CanSIPS  
(Canadian Seasonal and  
Interannual Prediction  
System)  
CanAM3  
CanAM4  
+  
CanOM4



Produced October 15



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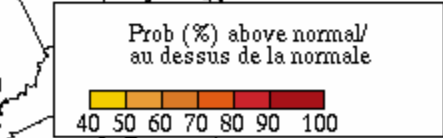
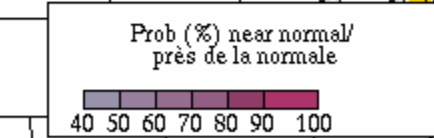
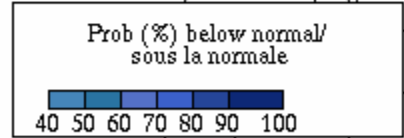
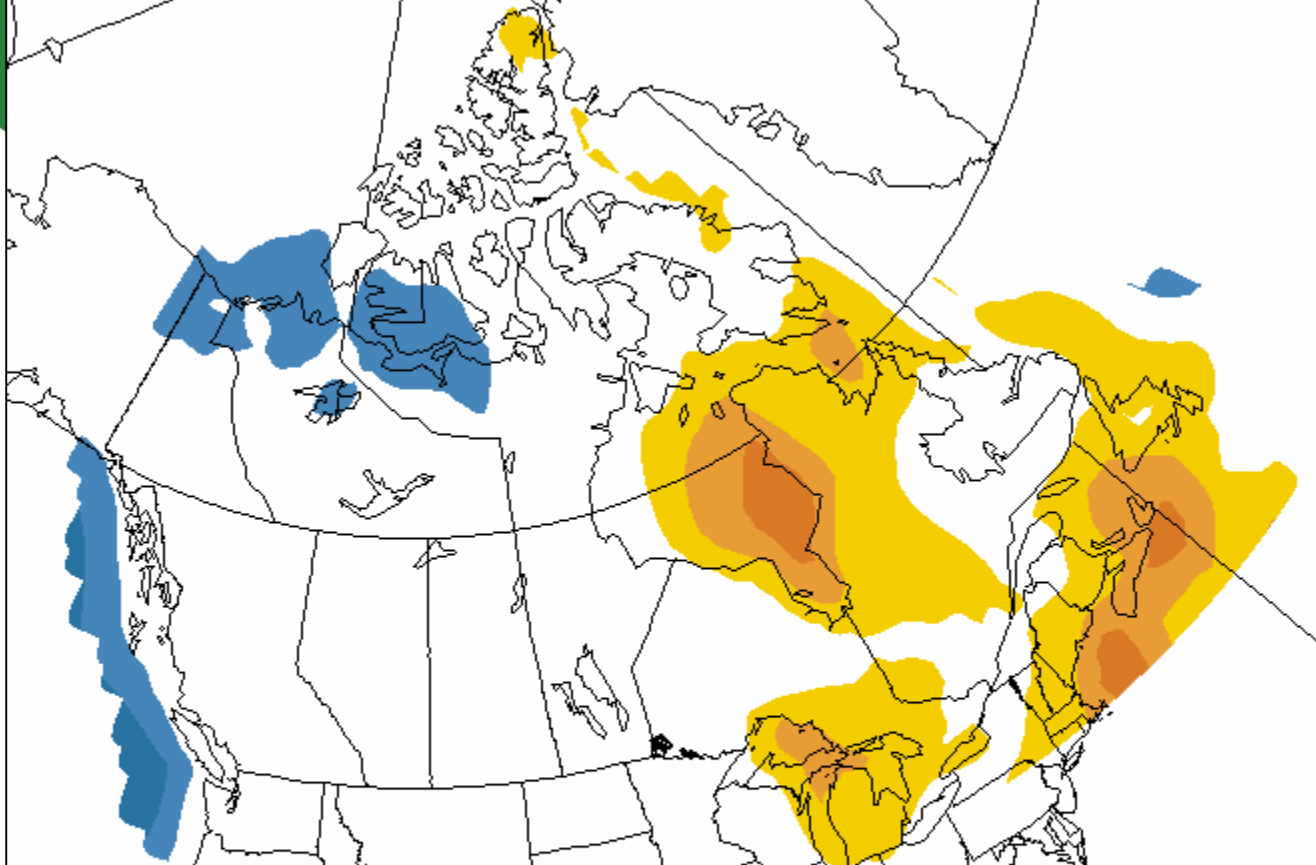
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Produced on 31 October 2021  
 Produit le 31 octobre 2021



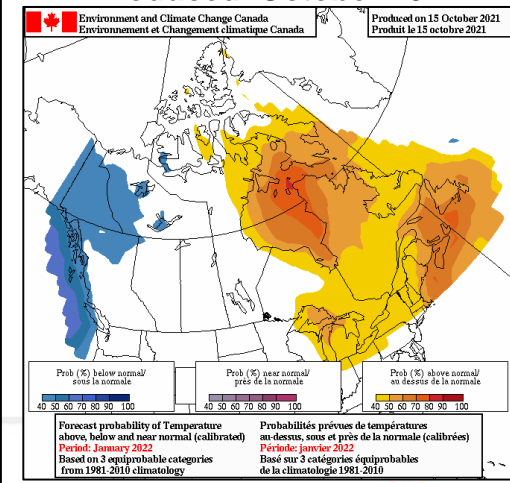
**Forecast probability of Temperature  
above, below and near normal (calibrated)**  
**Period: January 2022**  
 Based on 3 equiprobable categories  
 from 1981-2010 climatology

**Probabilités prévues de températures  
au-dessus, sous et près de la normale (calibrées)**  
**Période: janvier 2022**  
 Basé sur 3 catégories équiprobables  
 de la climatologie 1981-2010

# Temperature January 2022

CanSIPS  
 (Canadian Seasonal and  
 Interannual Prediction  
 System)  
 CanAM3  
 CanAM4  
 +  
 CanOM4

Produced October 15



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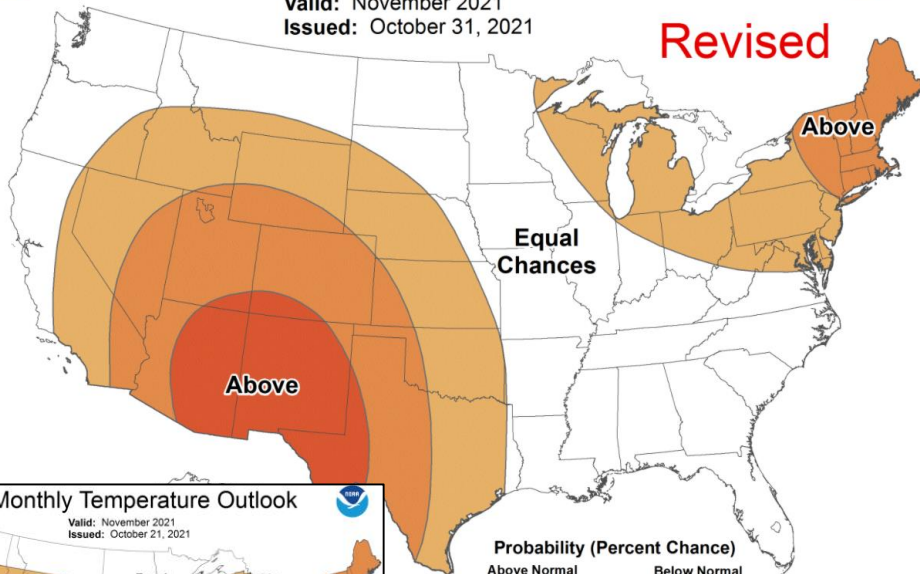
# November 2021

## Monthly Temperature Outlook



Valid: November 2021  
Issued: October 31, 2021

Revised

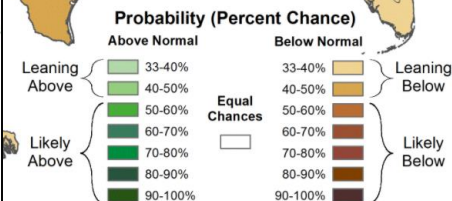
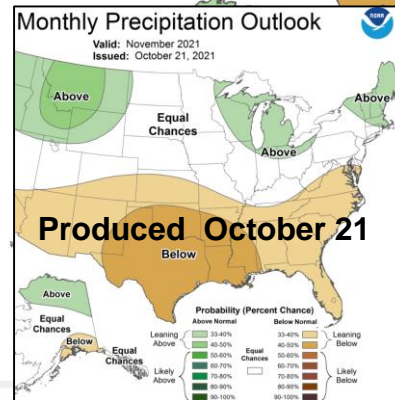
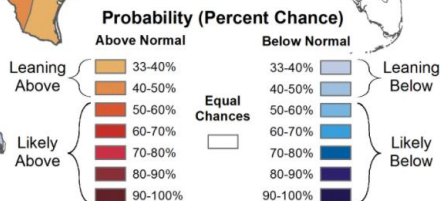
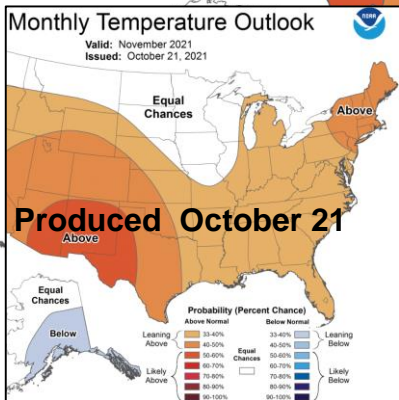
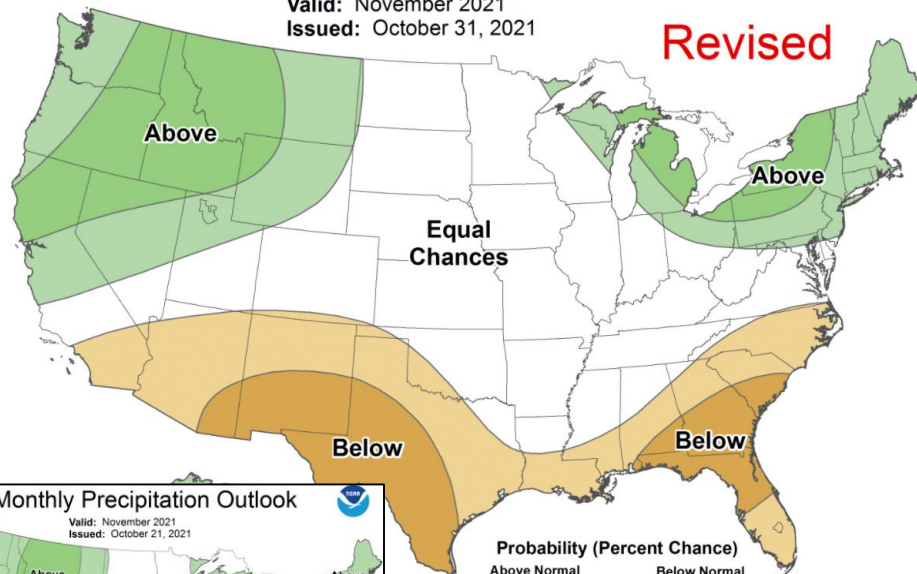


## Monthly Precipitation Outlook



Valid: November 2021  
Issued: October 31, 2021

Revised



# Contact

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Canada Weather Pages

[www.weather.gc.ca](http://www.weather.gc.ca)

