

New Brunswick

March 2021 Review April and Spring Outlook

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Environment and Climate Change Canada
April 1, 2021



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March 2021; 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	-2.9	-4.1	1.2			
BAS CARAQUET	NB		DAILY				74.8	91.2	82
BATHURST A	NB	ZBF	NCA	-3.0	-3.8	0.7			
BOUCTOUCHE CDA CS	NB	ABT	AU8	-1.6	-3.0	1.4			
CHARLO AUTO	NB	ZCR	AU8	-3.6	-4.9	1.3	55.6	77.4	72
MIRAMICHI RCS	NB	ACQ	AU8	-2.2	-3.4	1.2			
DOAKTOWN AUTO RCS	NB	ADN	AU8	-2.8	-3.3	0.6			
EDMUNDSTON	NB	ERM	AU8	-4.6			64.5	56.1	115
FREDERICTON INTL A	NB	YFC	NCA	-1.4	-2.4	1.0			
FREDERICTON CDA CS	NB	AFC	AU8	-1.7	-2.2	0.5			
FUNDY PARK (ALMA) CS	NB	AFY	AU8	-1.1	-1.7	0.6			
GAGETOWN AWOS A	NB	YCX	AU5	-1.0	-1.8	0.7			
KOUCHIBOUGUAC	NB	AKC	AU8	-1.4	-3.2	1.8	92.0	123.4	75
MISCOU ISLAND (AUT)	NB	WMI	AU8	-3.2			72.1		
MONCTON INTL A	NB	YQM	NCH	-1.2	-2.9	1.7	66.9	115.6	58
OAK POINT	NB		DAILY	-1.7			62.6	100.7	62
POINT LEPREAU CS	NB	WPE	AU8	-0.2	-1.5	1.3			
RED PINES	NB	ARP	AU8	-2.9	-4.2	1.3			
SAINT JOHN A	NB	YSJ	NCH	-2.0	-2.5	0.5	94.0	108.2	87
ST. STEPHEN	NB	WSS	AU8	-0.3					
SUSSEX FOUR CORNERS	NB	ASF	AU8	-1.0	-1.9	0.8			
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	-2.5	-3.4	0.9			
Average				-2.0	-2.9	1.0	72.8	96.1	79
Max				-0.2	-1.5	1.8	94.0	123.4	115
Min				-4.6	-4.9	0.5	55.6	56.1	58

Highlights:

The average temperature anomaly was above normal (**+1.0°C**). All sites reported positive anomalies with the largest anomalies occurring in the southeast.

Total precipitation amounts were below normal, with an average of **79%** of total precipitation. Moncton received the least at 58% of normal precipitation with Edmundston having been the wettest at 115% of normal. Both snowfall and rainfall were below normal for most sites.



March 2021; Climate Summary

Events:

March 1-2: “Winter Storm Event”. Wind, snow, and some rain pelted the province. The Bas-Caraquet area reported the most snow at 40 cm while the Pennfield Ridge area recorded 29 mm. Winds gusted to near 108 km/h in the Bas-Caraquet area causing a prolonged period of whiteout conditions.

March 11: First day of 2021 to reach 10°C or warmer

March 22: First day of 2021 to reach 20°C or warmer

March 26-27: “Mixed Precipitation Event”. A system brought mainly rain to the south and mainly snow to the north. The Campbellton area recorded 18 cm of snow and Grand Digue reported 51 mm of rain.

March 28-29: “Mixed Precipitation Event”. Another similar system brought mixed precipitation along with gusty winds. The Grand Falls area recorded 16 cm of snow and Maces Bay reported 47 mm of rain. Bathurst recorded a wind gust to 89 km/h.

Days of month with lightning in New Brunswick; 26 (one day)

Day of month with temperature record broken or tied in New Brunswick; 11 12 21-26 31
(red=maximum, blue=minimum)



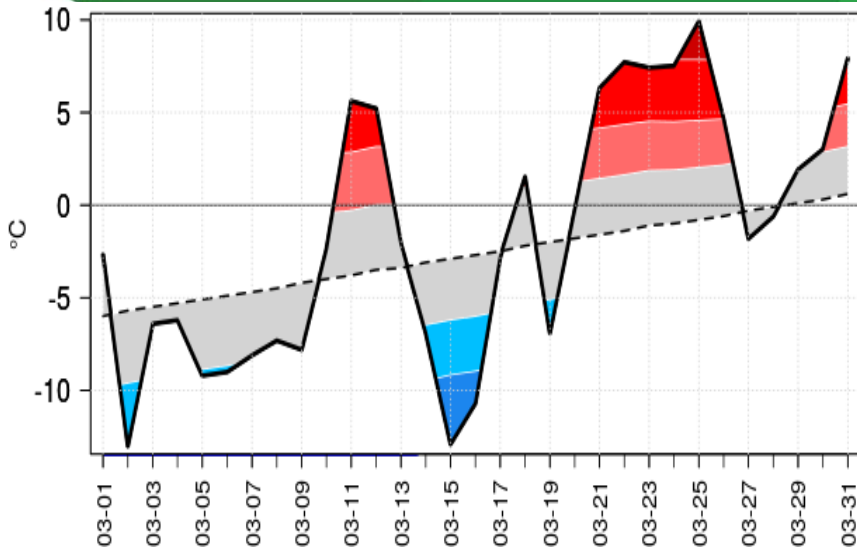
March 2021; Provincial Climate Extremes

Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	20.8°C	St. Stephen	22
Daily Minimum Temperature	-26.8°C	Edmundston	6
Maximum Daily Total Precipitation	39.0 mm	Moncton	26
Daily Maximum Wind Gust	97 km/h	Bas-Caraquet	3
Daily Maximum Wind Chill	-33	Edmundston	2



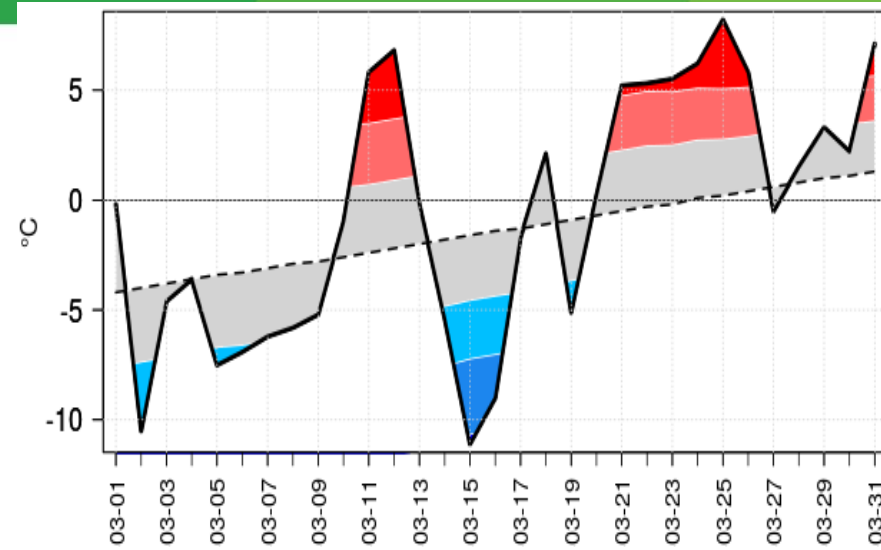
March 2021 - Temperature

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

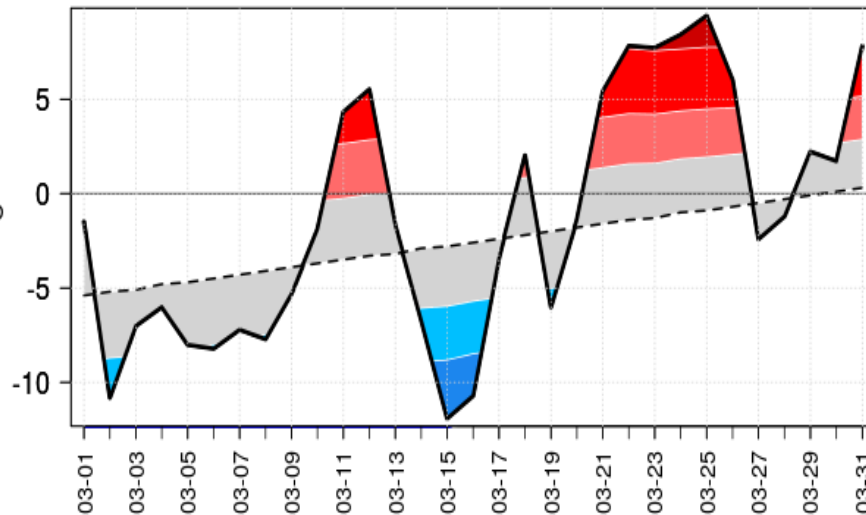
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Saint John

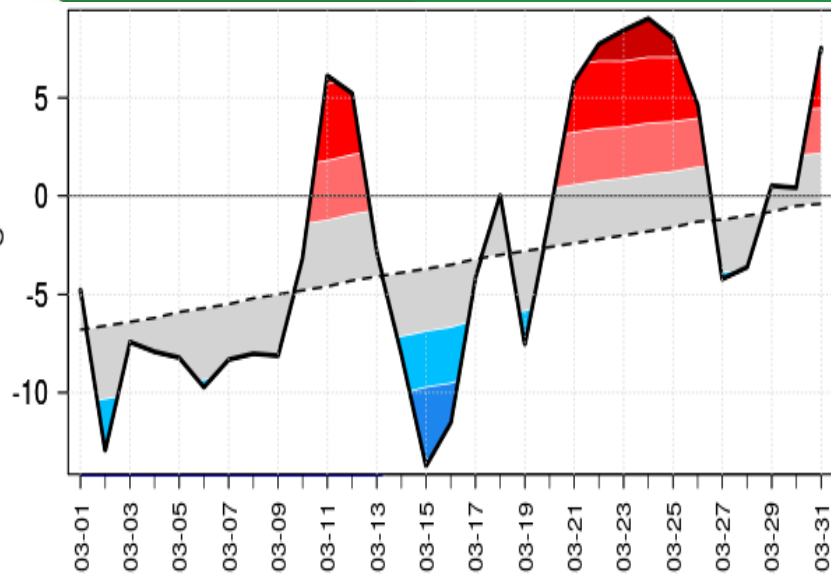
All sites were above normal

Moncton



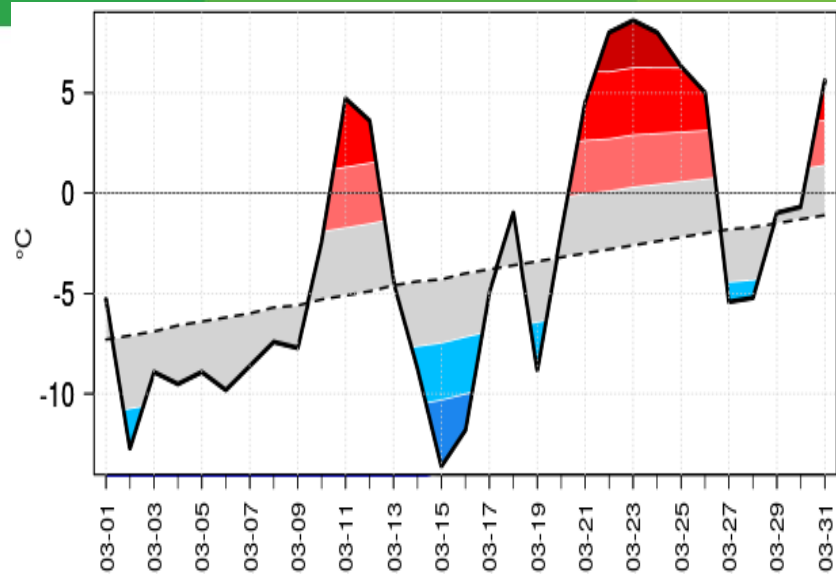
March 2021 - Temperature

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



Miramichi

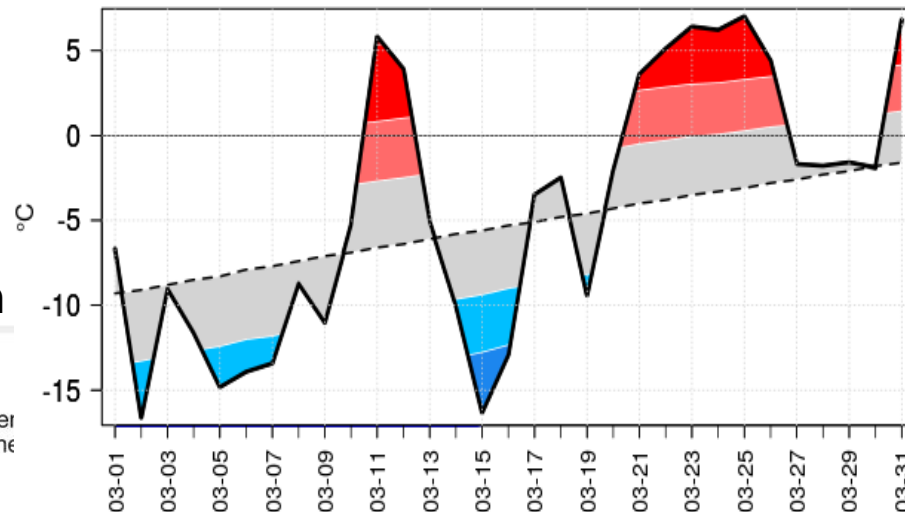
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Bathurst

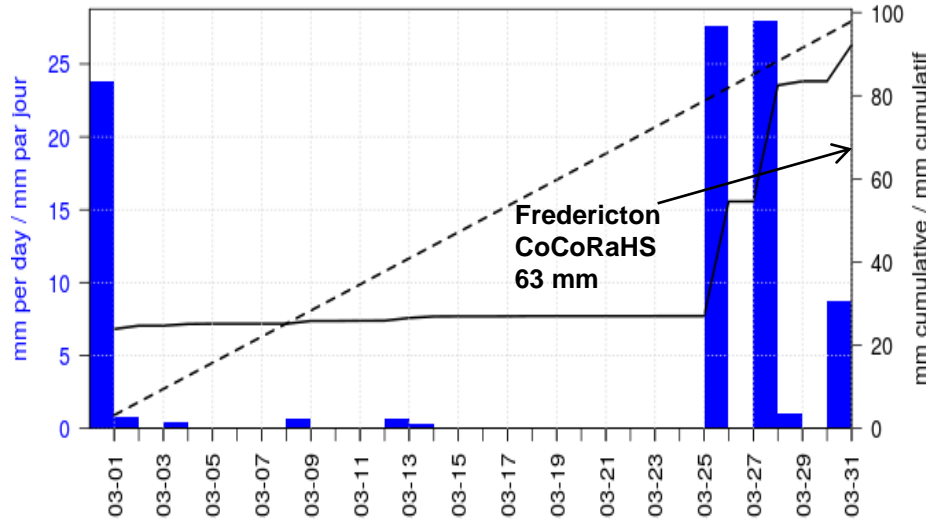
All site were above normal

Edmundston

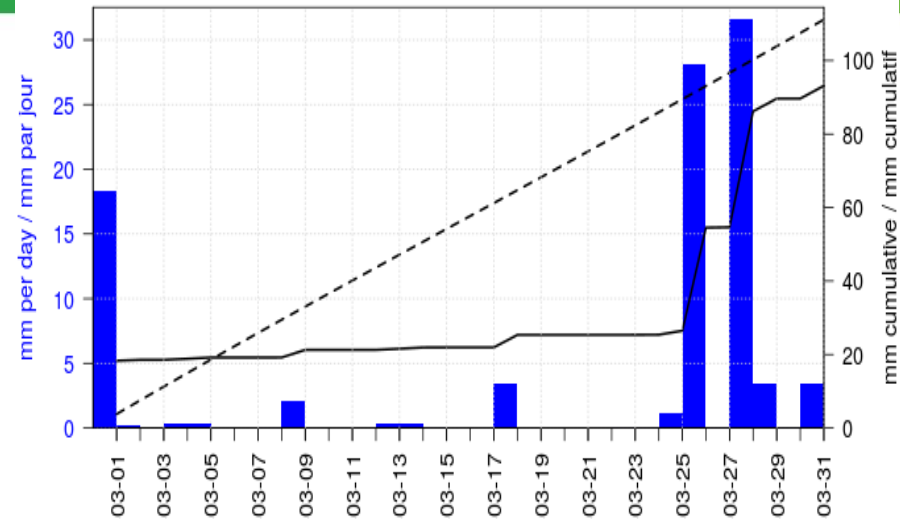


March 2021 - Precipitation

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



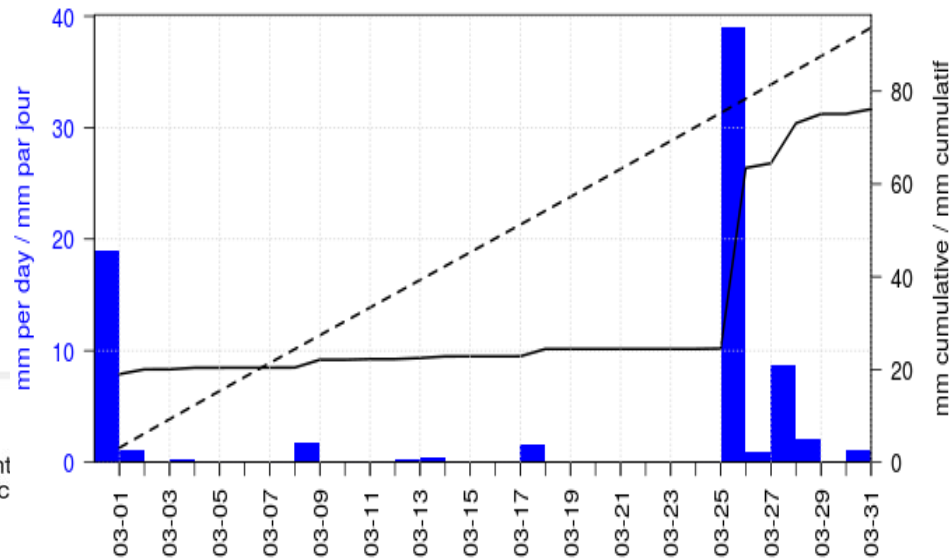
Fredericton (and area)



Saint John

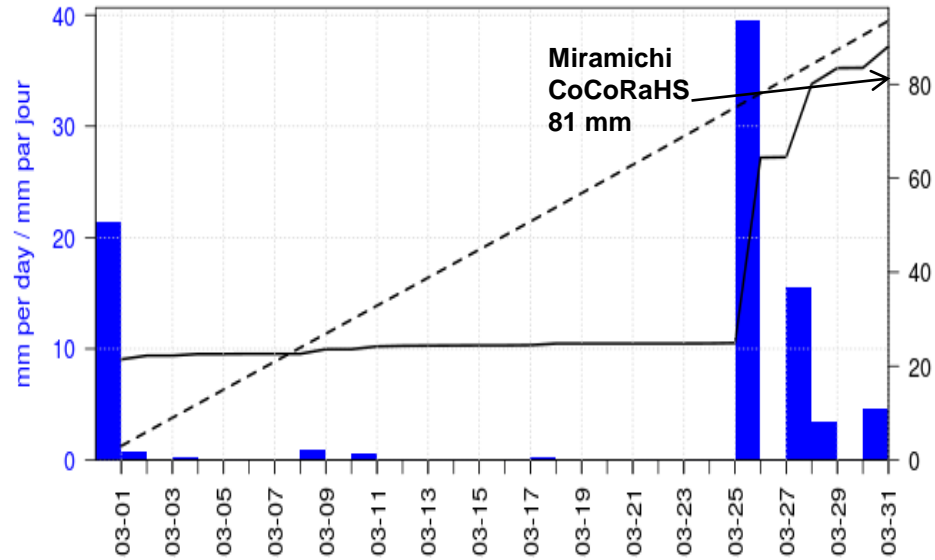
All sites were below normal

Moncton



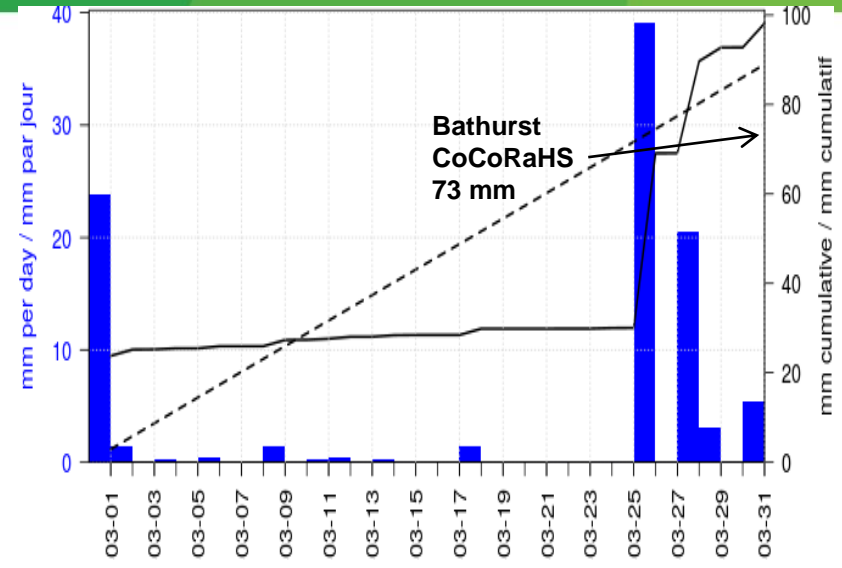
March 2021 - Precipitation

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



Miramichi

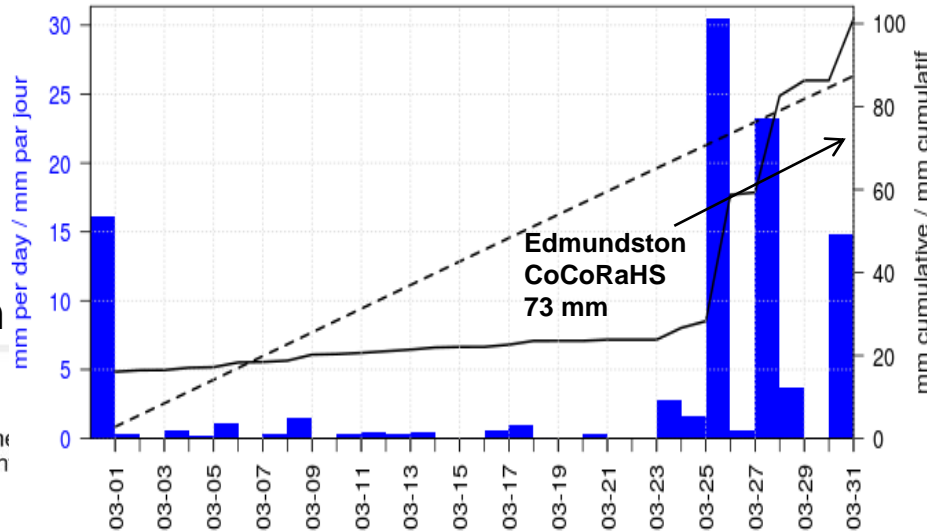
Miramichi was near normal



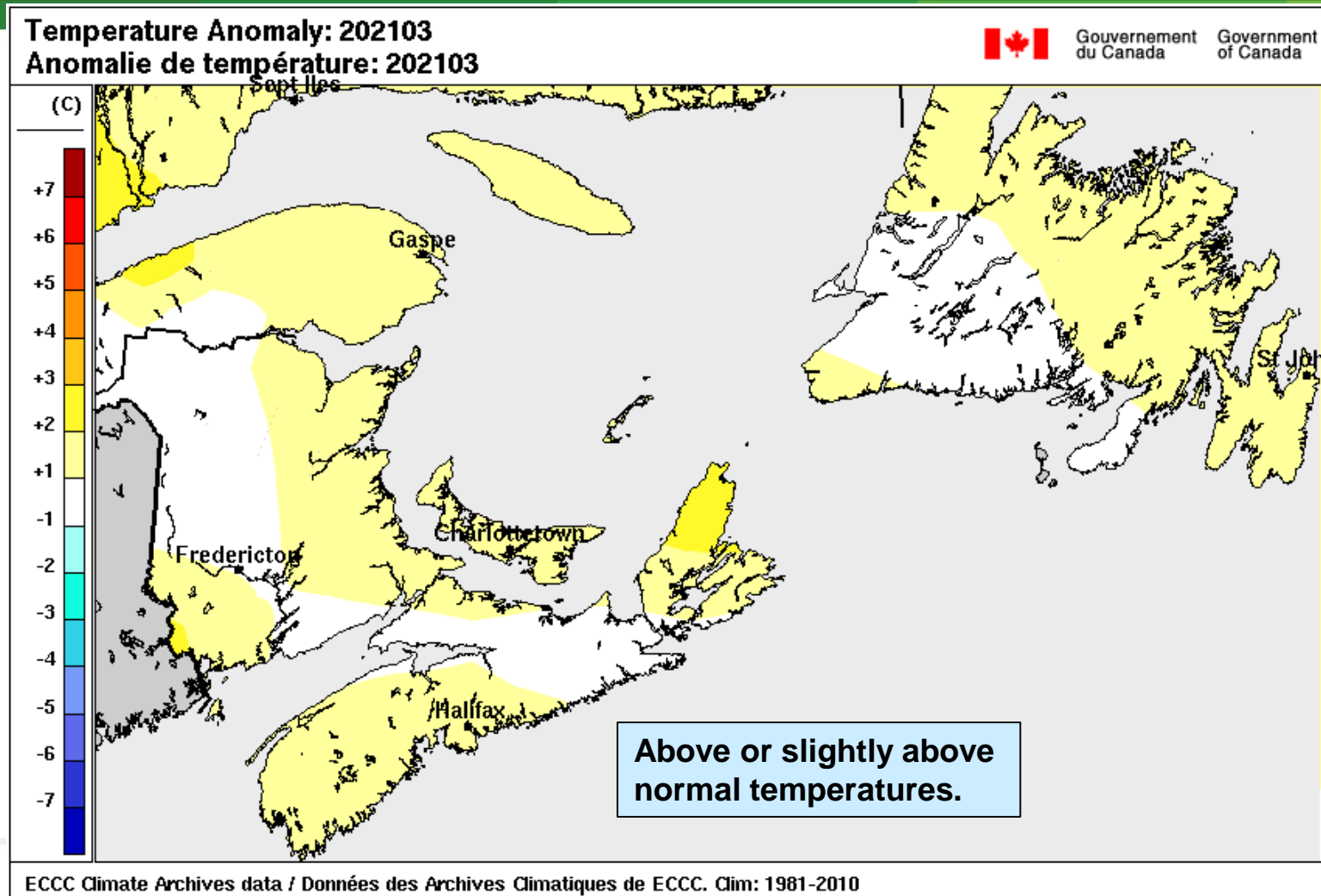
Bathurst

Edmundston and Bathurst were slightly above normal

Edmundston



March 2021 – Temperature departure from 1981-2010 mean



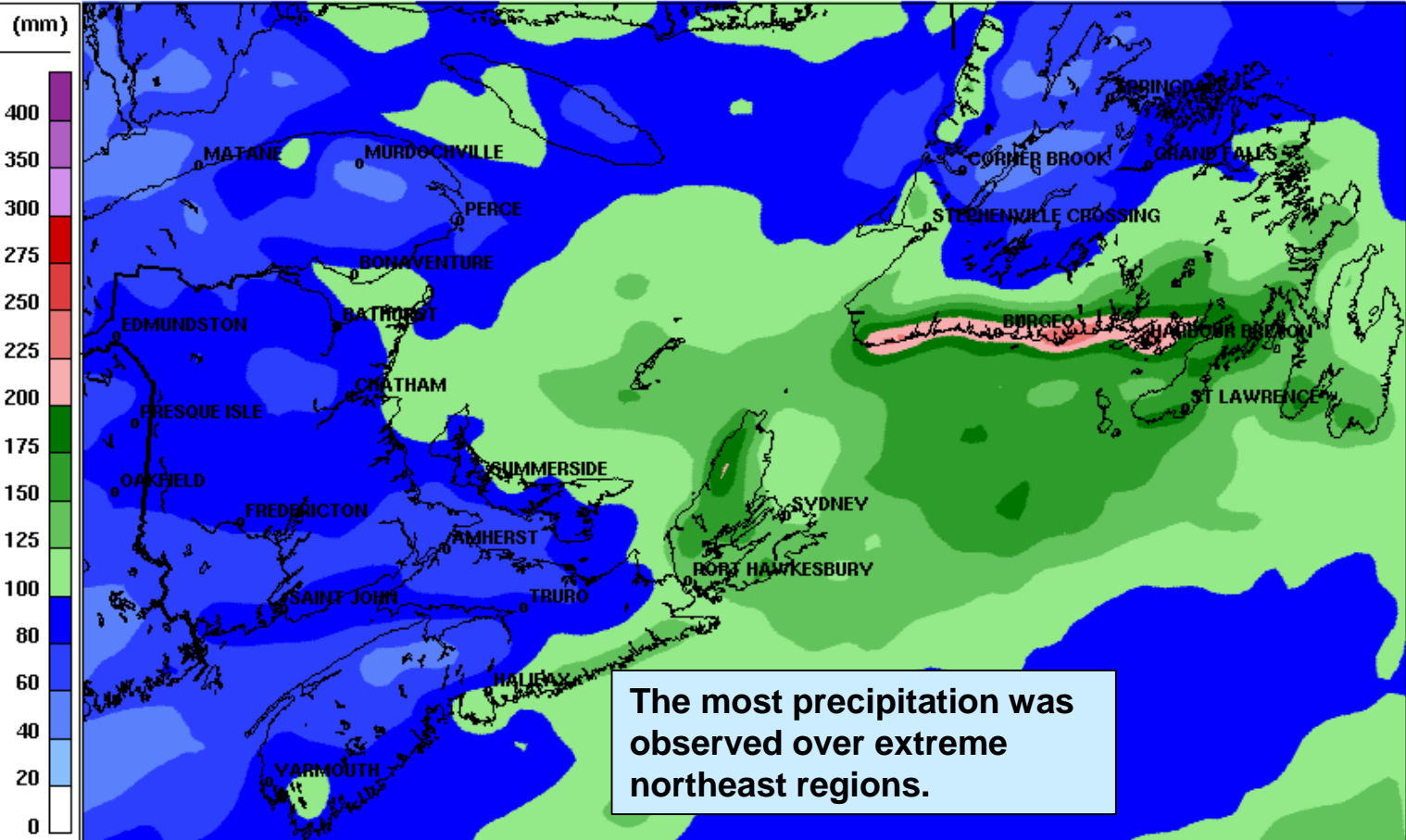
March 2021 – Total precipitation

Total precipitation: 202103
Précipitation totale: 202103



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ECCC NWP model gridded data / Données sur grille de modèle de PNT de ECCC

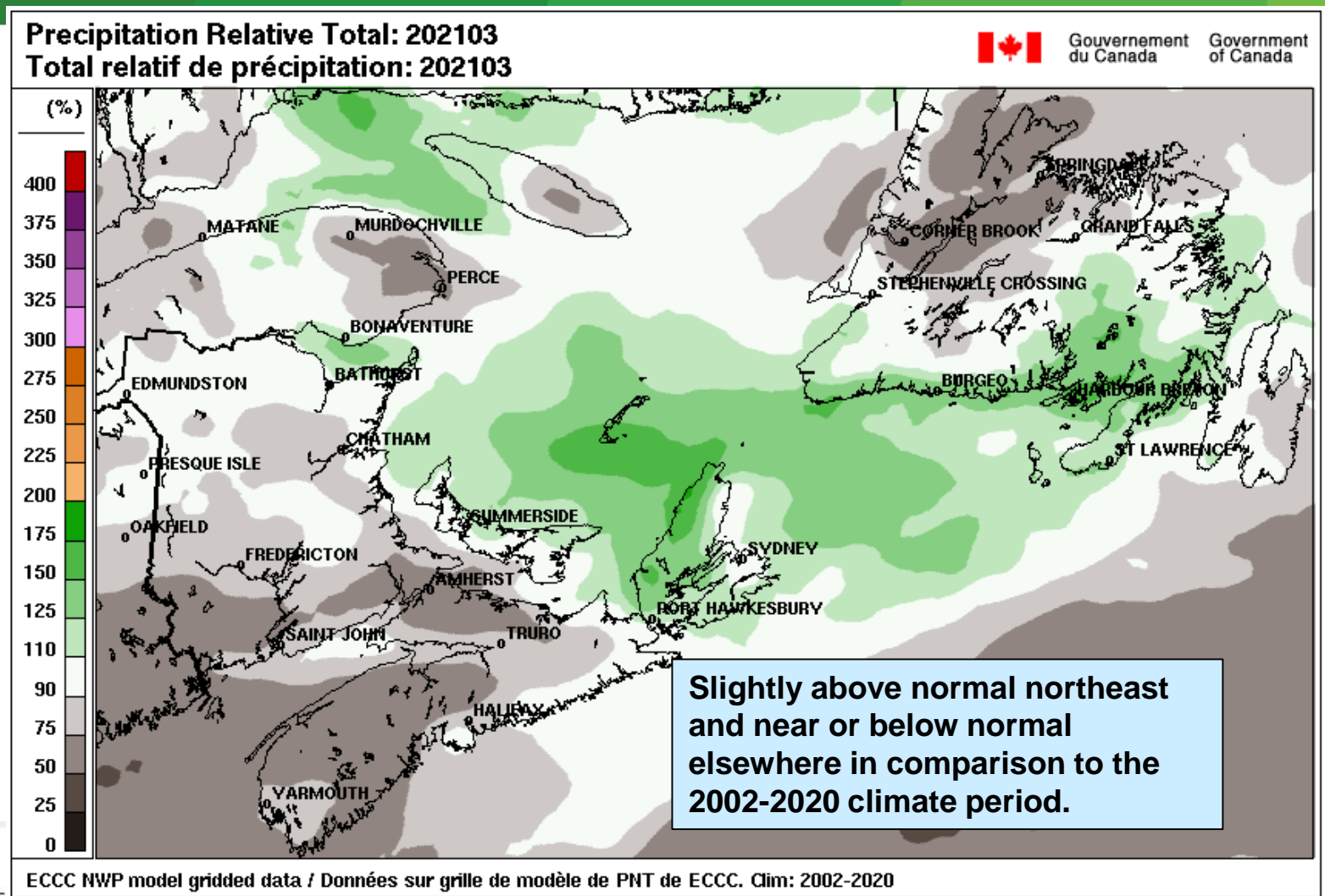


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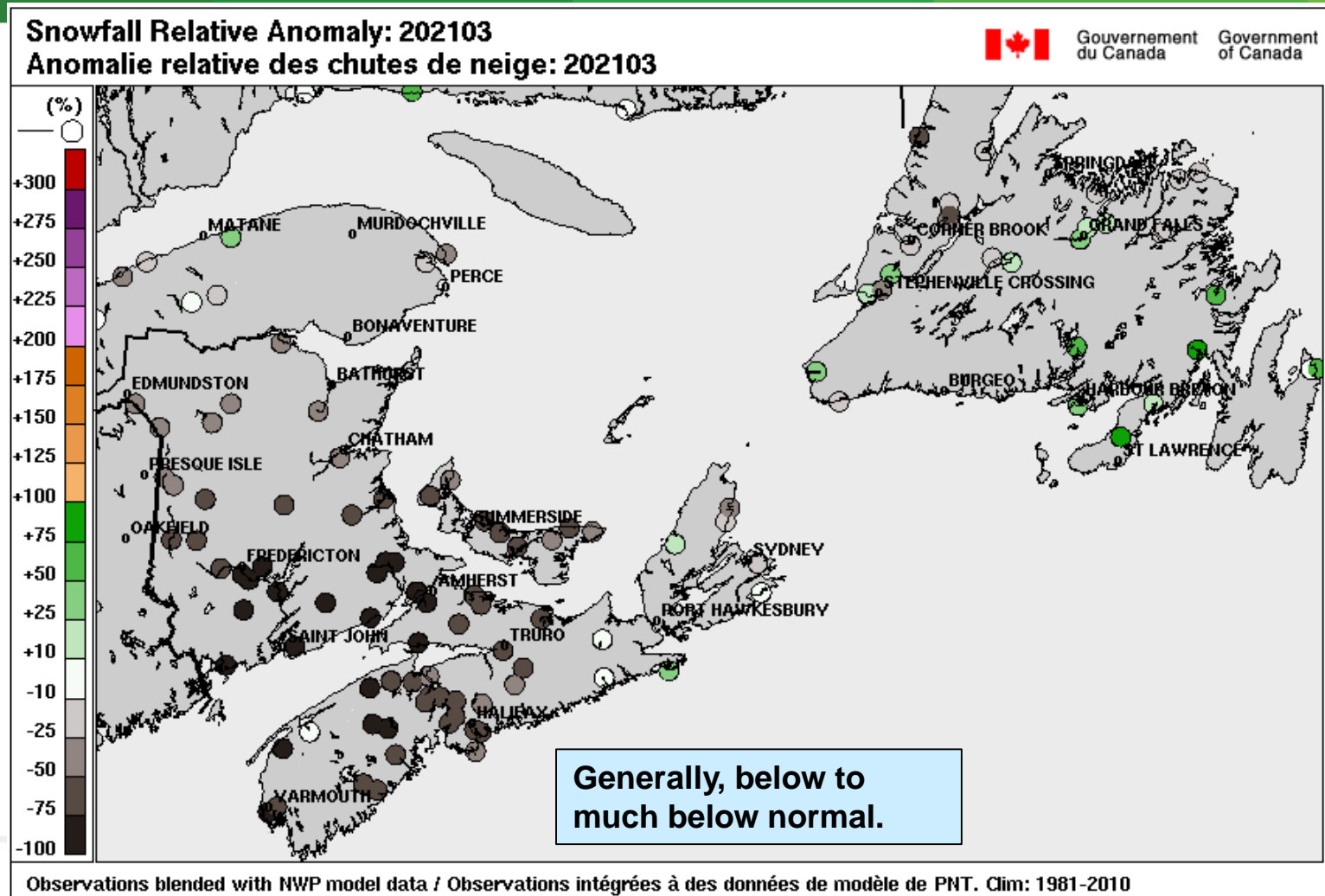
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March 2021 – Precipitation departure from 2002-2020 mean

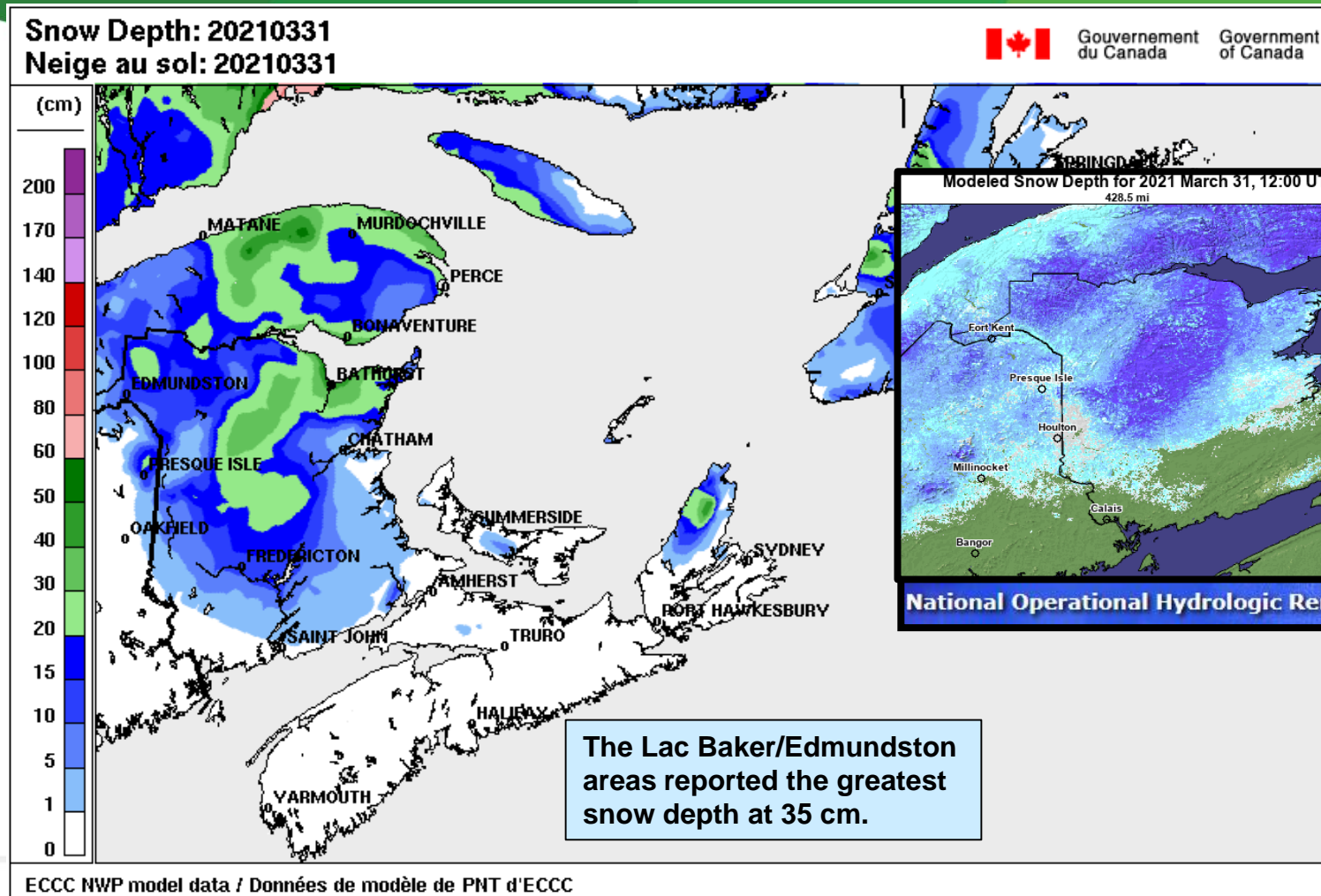


March 2021 – Snowfall departure from 1981-2010 mean



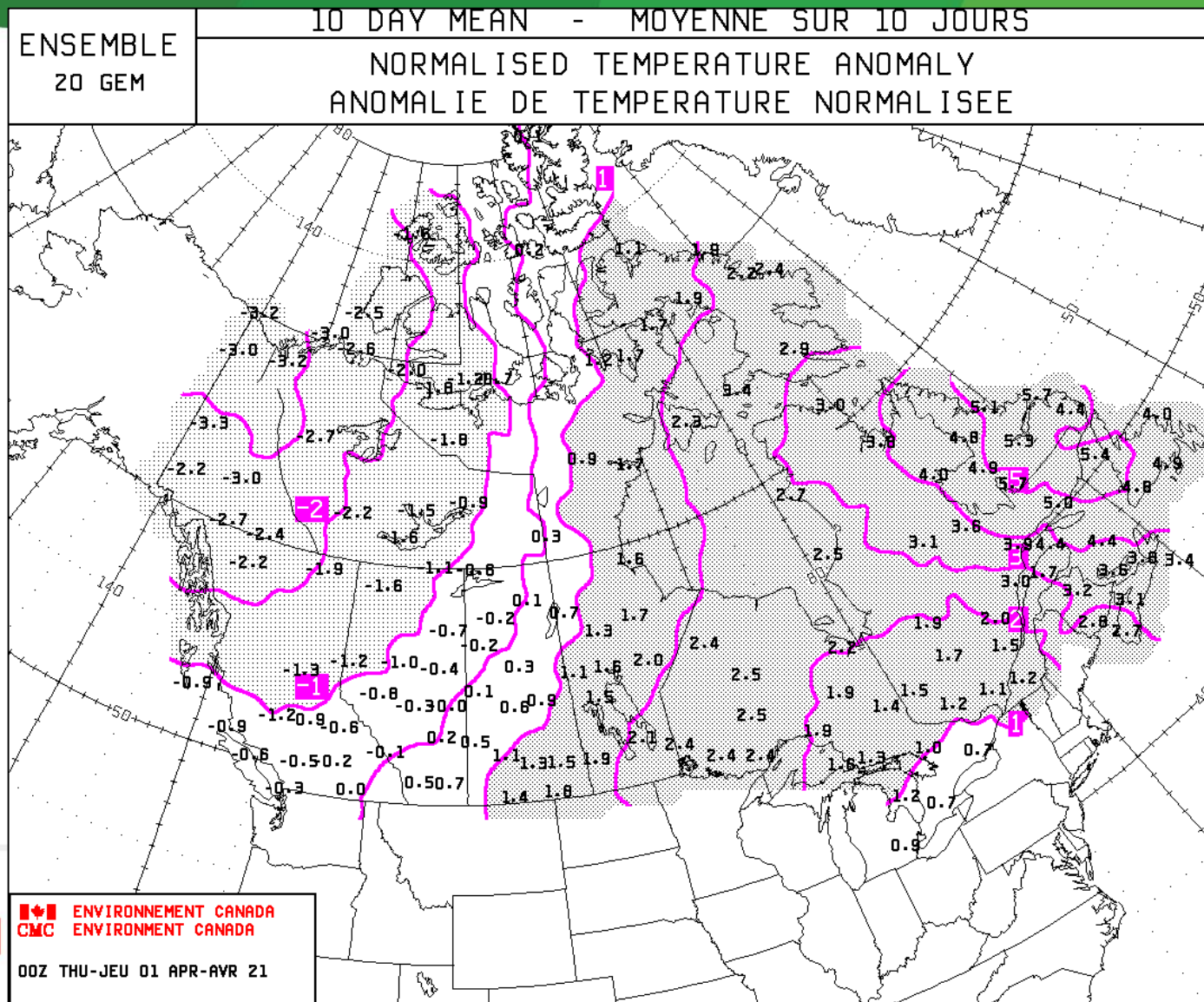
March 2021 – Snow depth at month end

Extracted from Canadian computer model



Outlook – 10 day mean temperature

(Suggesting above normal conditions (+2.3 to +3.6°C))

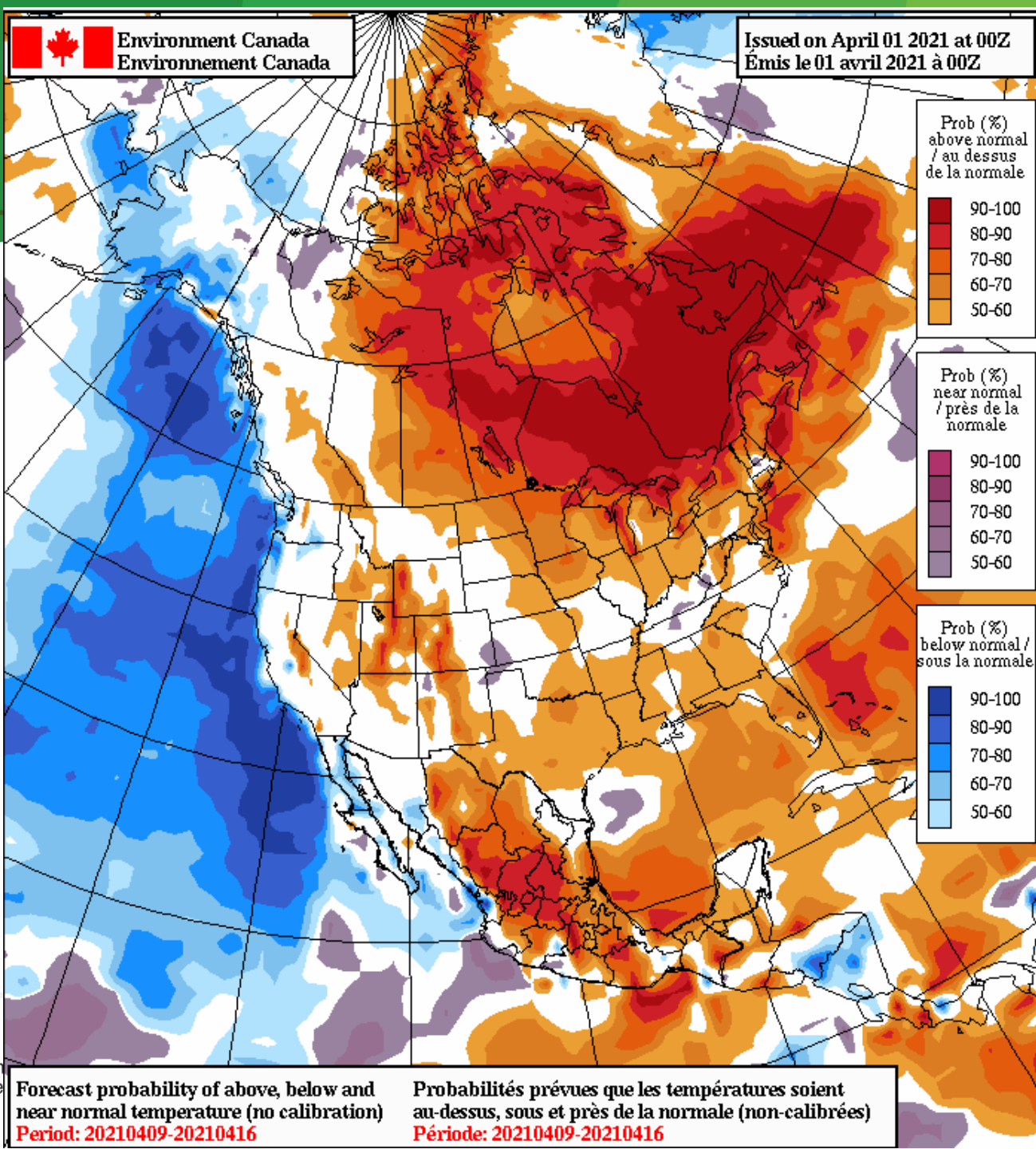


10 day
forecast
ending
April 11,
2021

Day 8 to 14 Forecast

Period ending
April 16, 2021

Suggesting a moderate
to strong signal of above
normal.



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Fredericton



Ensemble and Deterministic Forecasts issued 1 April 2021 00 UTC
Prévision d'ensemble et déterministe émises le 1 Avril 2021 00 UTC
for/pour

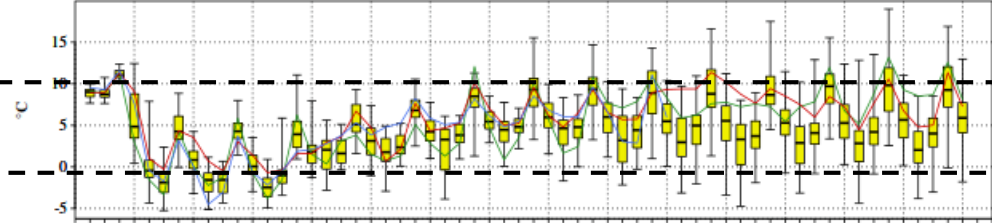
NAEFS / SPENA

FREDERICTON (YFC) 45.87 N 66.53 W/O
Surface air temperature/Température de l'air à la surface

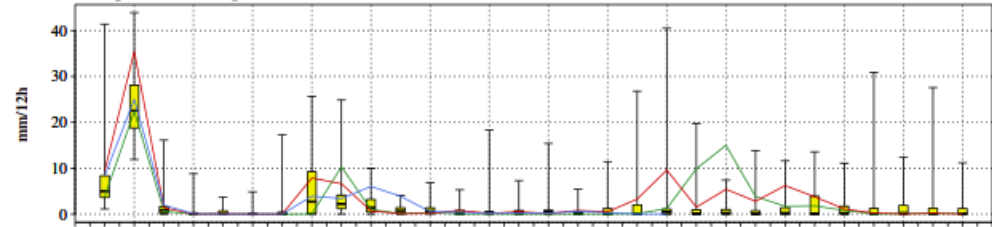
April

Normal high: 10.0C

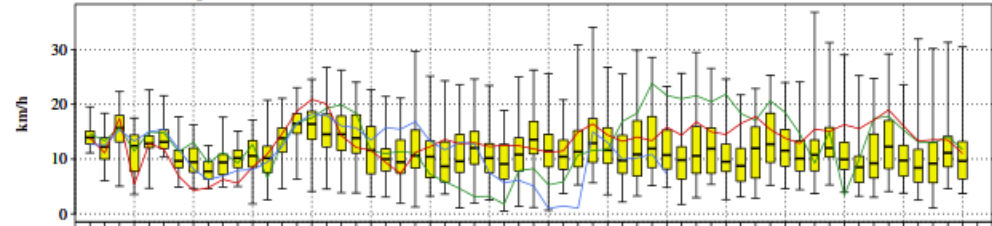
Normal low: -1.0C



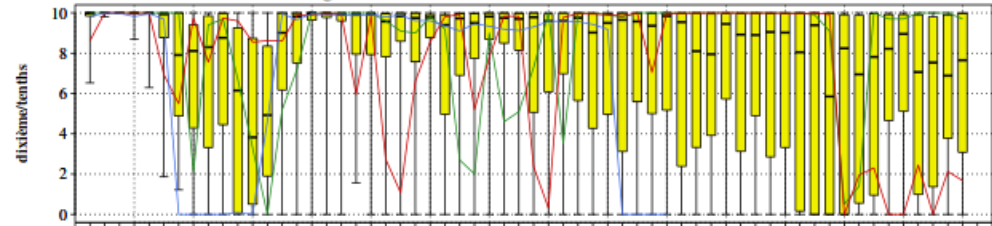
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



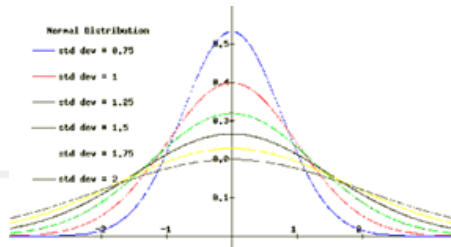
April/Avril 2021

max
75%
median/médiane
25%
min

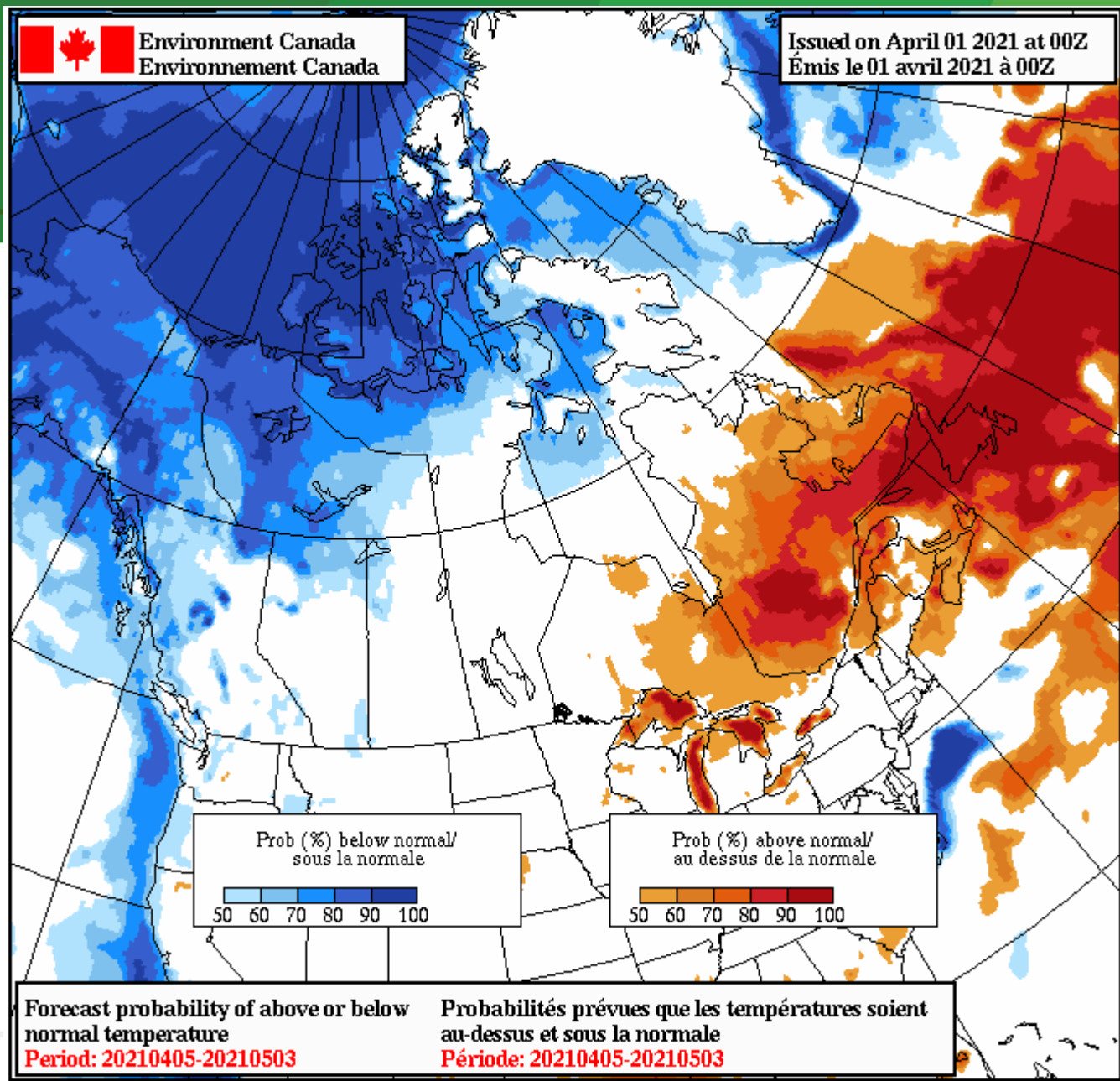
— Global Model / Modèle global
— Control Member / Membre contrôle CMC
— Control Member / Membre contrôle NCEP

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

Generally suggesting below normal until near April 8th then possibly above to near normal for the remainder of the period.



Temperature April 5 to May 3

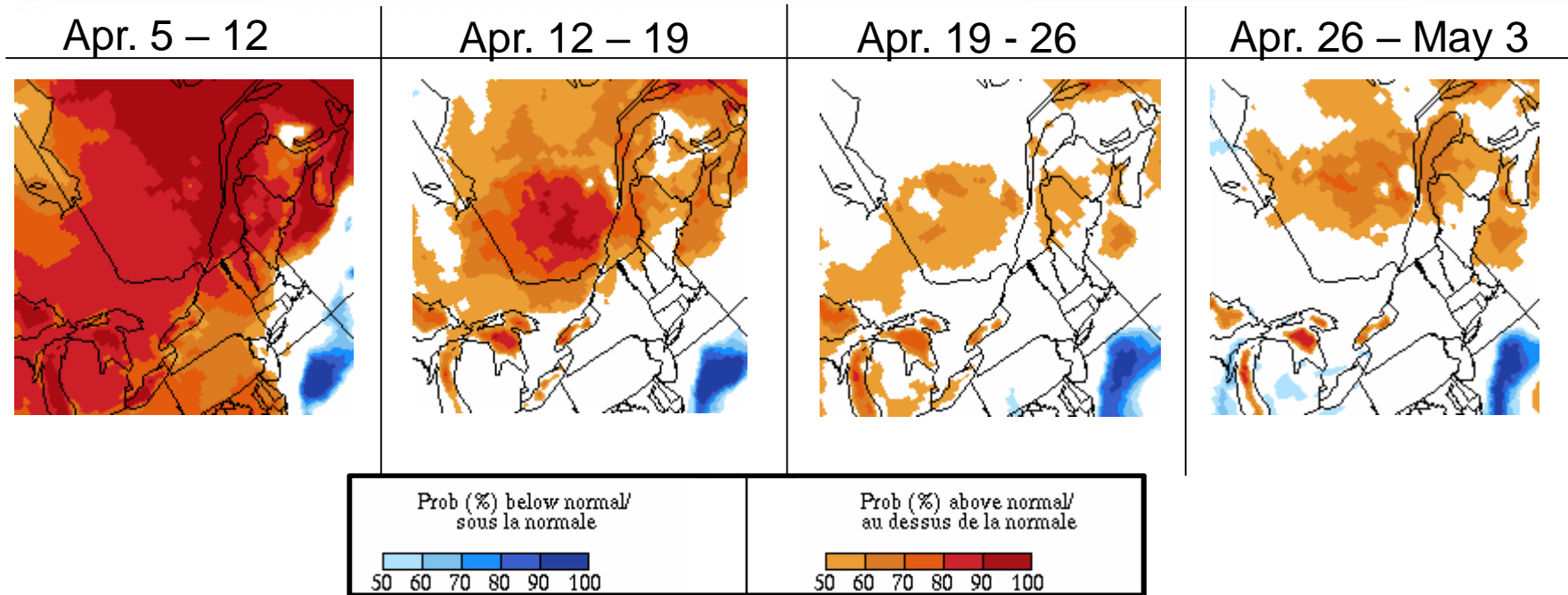


CMC
Monthly
Forecast
Product
using GEPS
50km res.

Forecast probability of above or below normal temperature
Period: 20210405-20210503

Probabilités prévues que les températures soient au-dessus et sous la normale
Période: 20210405-20210503

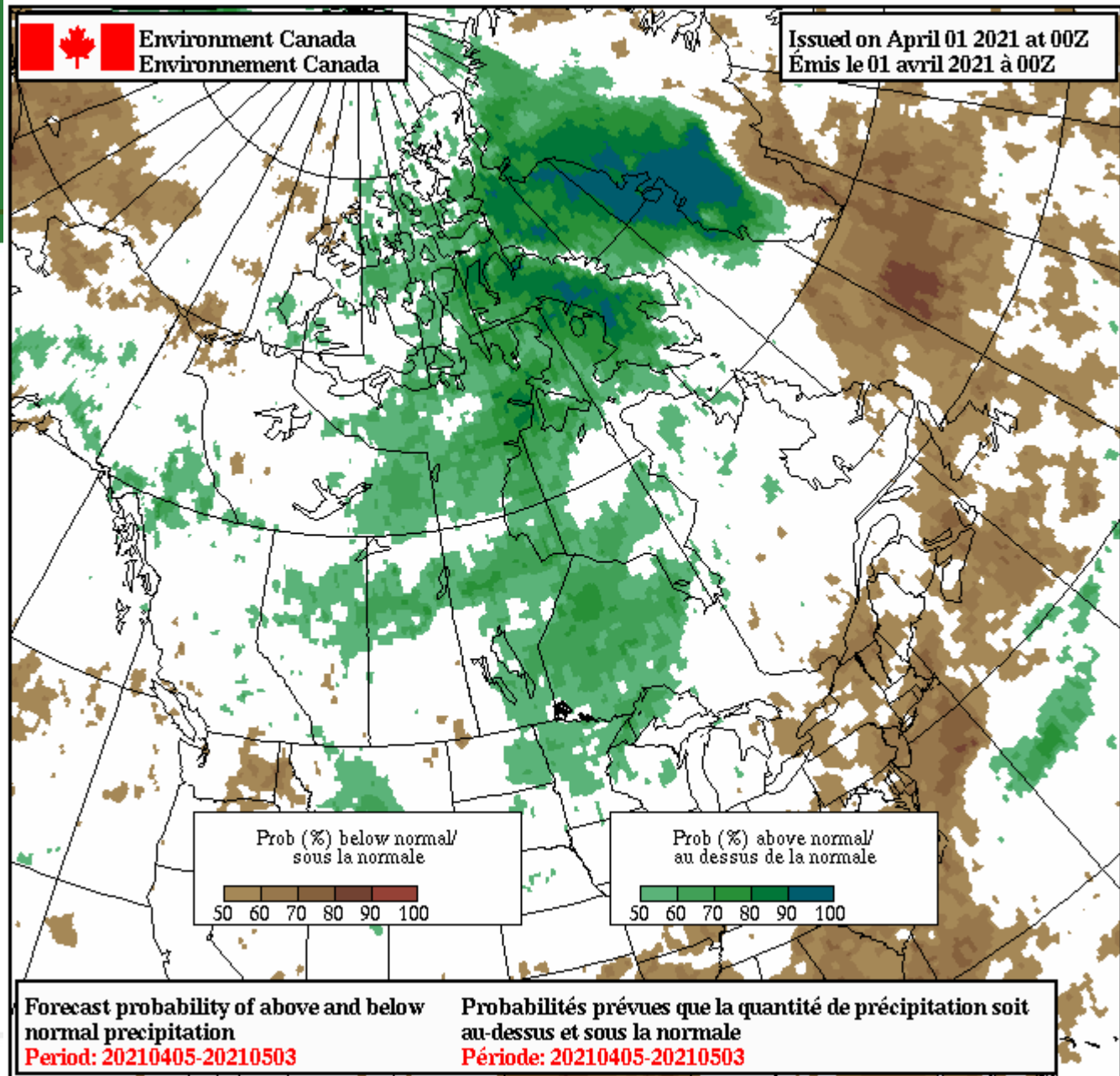
Weekly signature from GEPS 50km resolution



Moderate to strong signal of above normal for the first week then generally a weak signal of above normal for the remainder of the period.

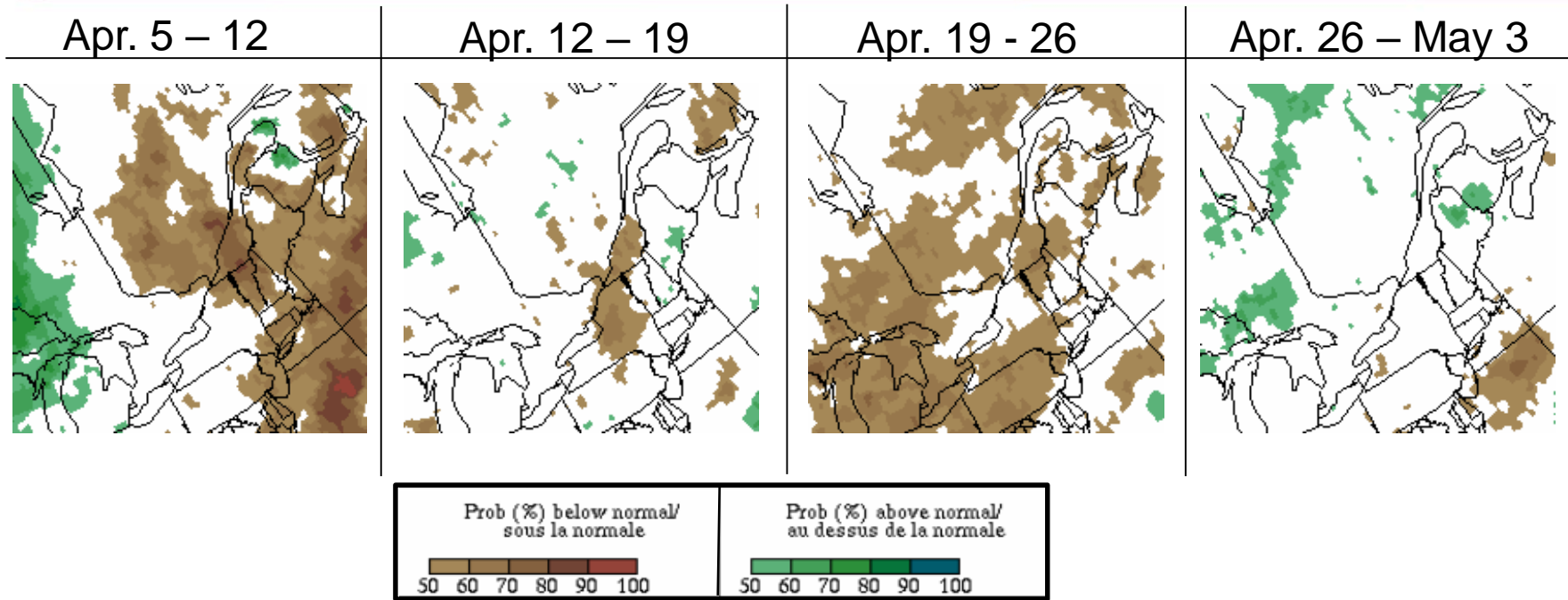


Precipitation April 5 to May 3



CMC
Monthly
Forecast
Product
using GEPS
50km res.

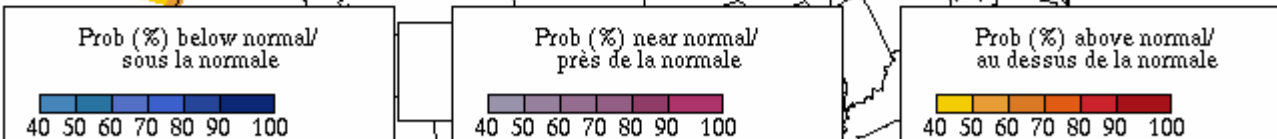
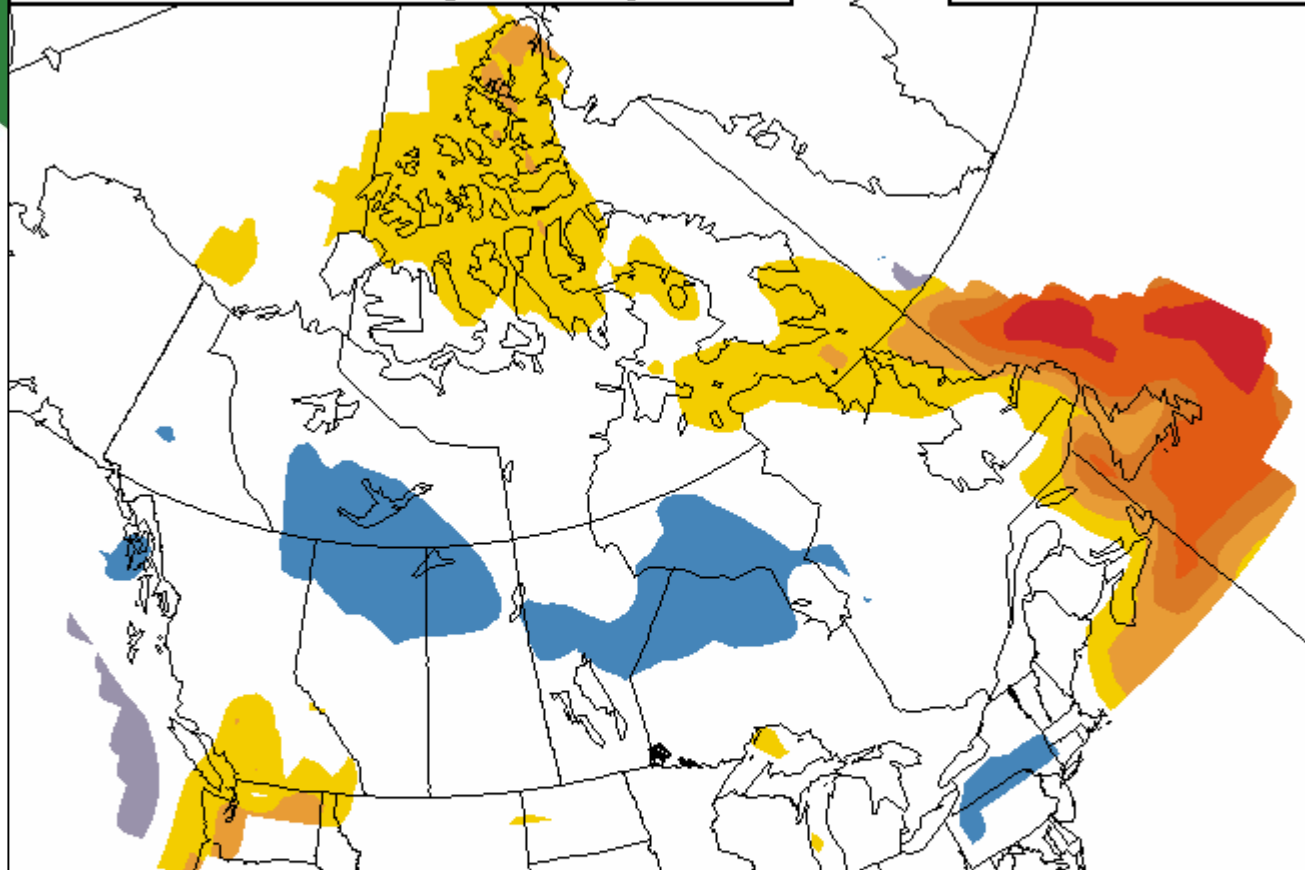
Weekly signature from GEPS 50km resolution



Mixed signals for the first week, then no signal (near normal) for the second week then transitioning to possible subtle indications of below normal for the third week and then shifting to above normal for the last week in some parts of the province.



Temperature May 2021

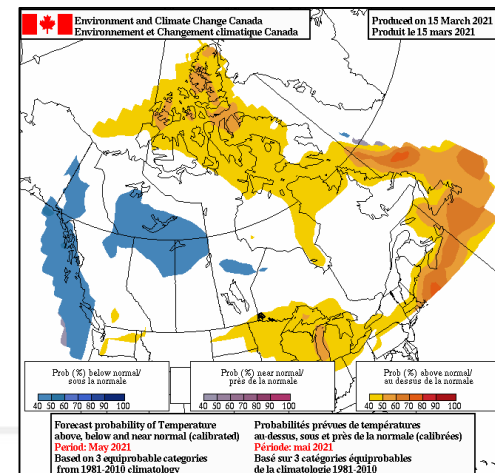


**Forecast probability of Temperature
 above, below and near normal (calibrated)**
Period: May 2021
 Based on 3 equiprobable categories
 from 1981-2010 climatology

**Probabilités prévues de températures
 au-dessus, sous et près de la normale (calibrées)**
Période: mai 2021
 Basé sur 3 catégories équiprobables
 de la climatologie 1981-2010

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

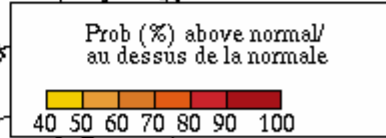
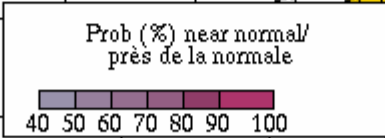
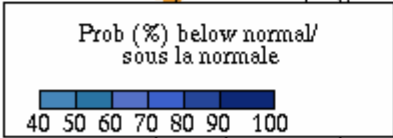
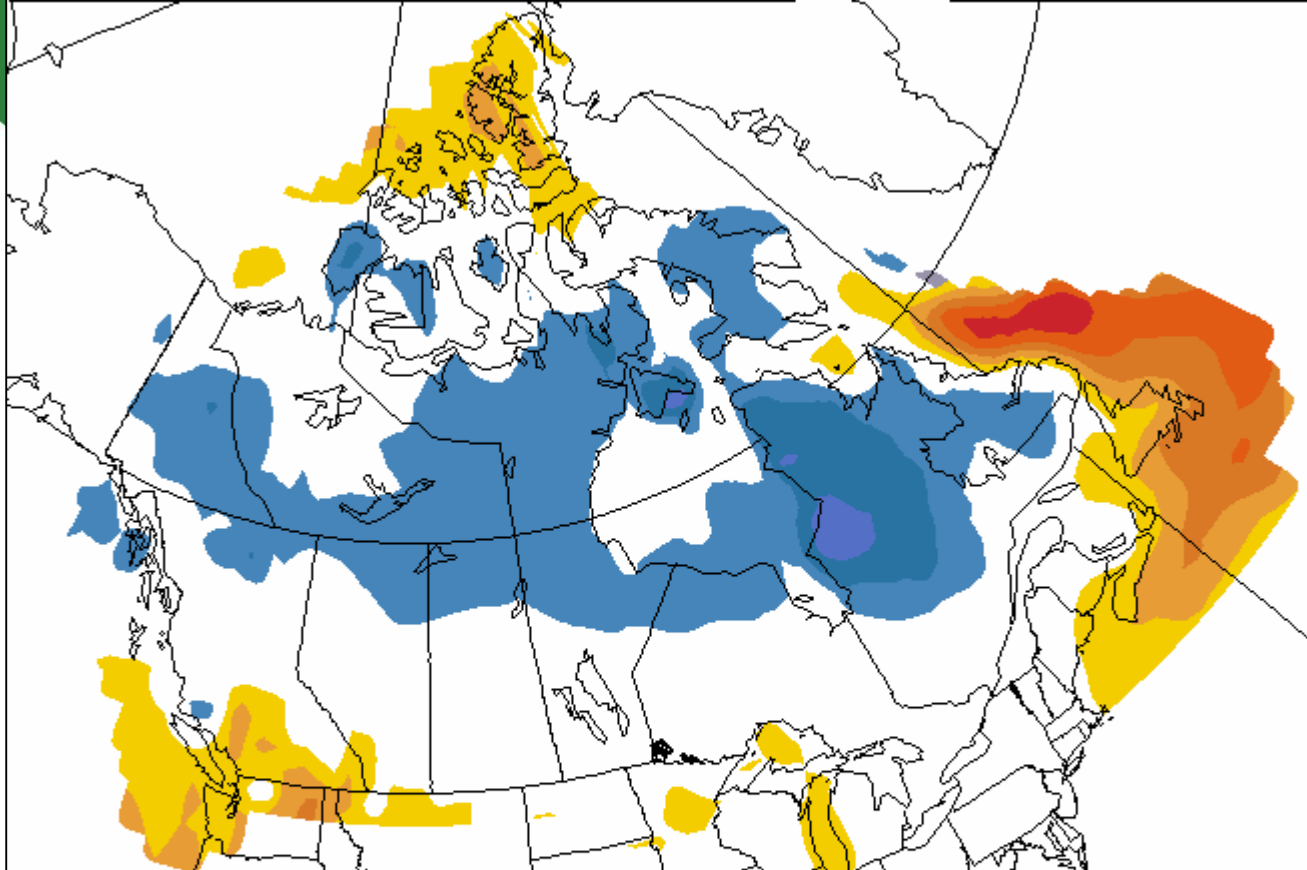
Produced March 15





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Produced on 27 March 2021
Produit le 27 mars 2021



**Forecast probability of Temperature
above, below and near normal (calibrated)**

Period: June 2021

**Based on 3 equiprobable categories
from 1981-2010 climatology**

**Probabilités prévues de températures
au-dessus, sous et près de la normale (calibrées)**

Période: juin 2021

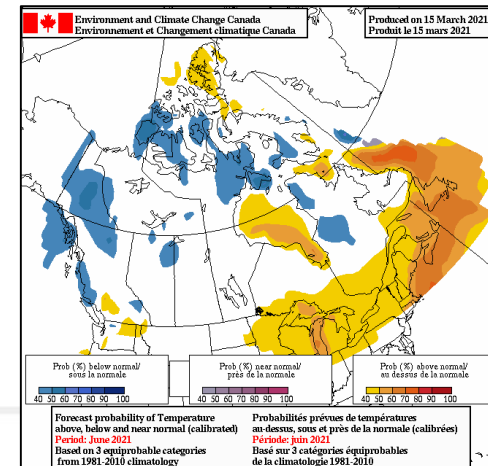
**Basé sur 3 catégories équiprobables
de la climatologie 1981-2010**

Temperature June 2021

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced March 15



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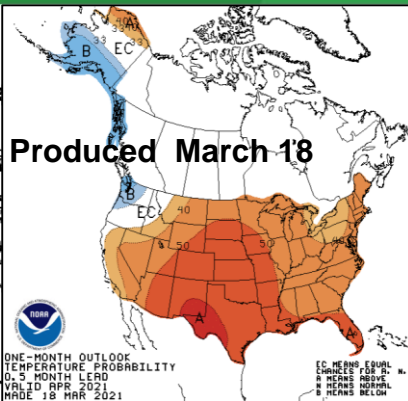
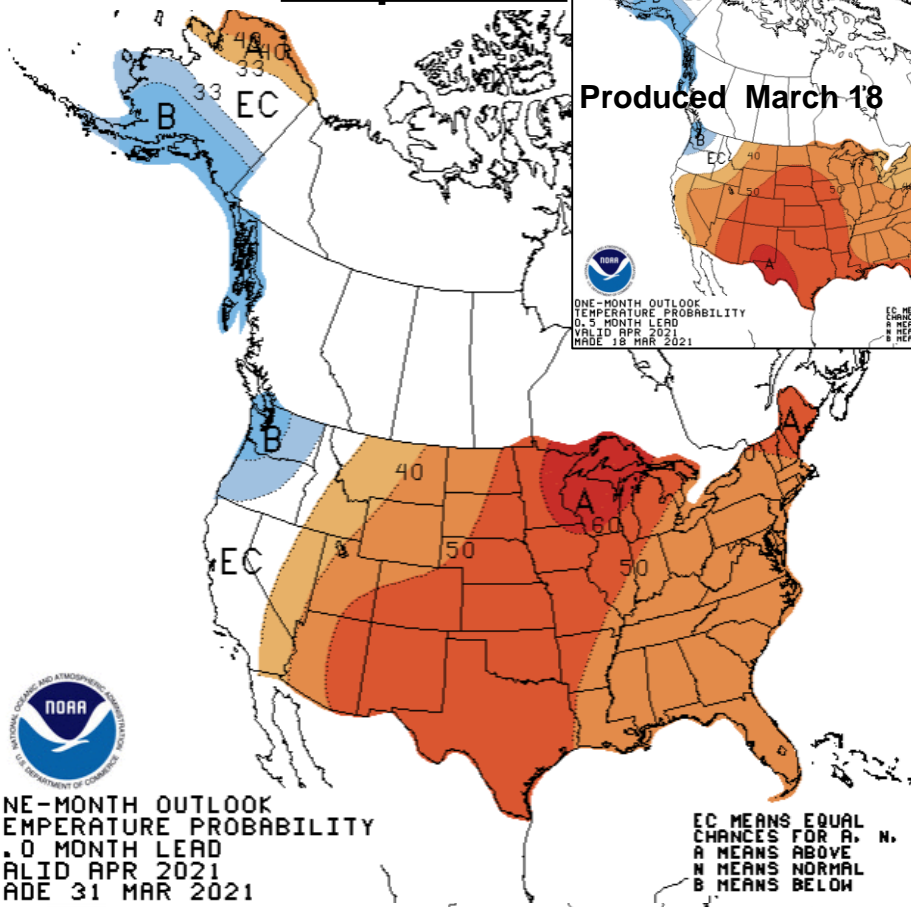
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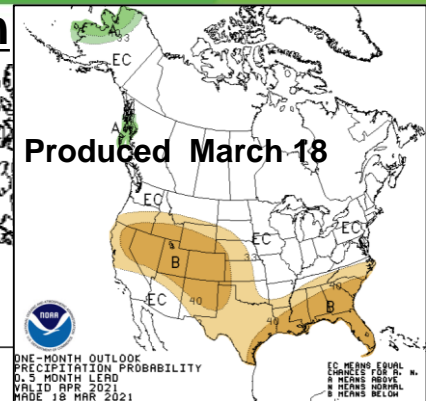
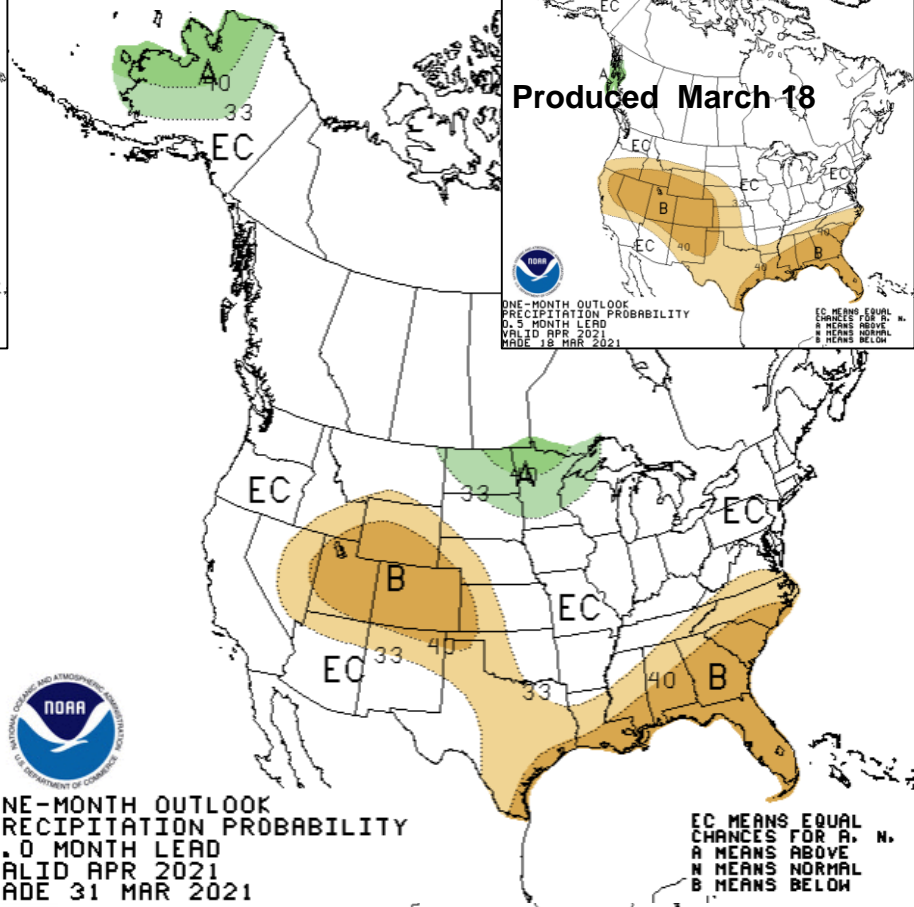


April 2021

Temperature



Precipitation



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Contact

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Warning Preparedness Meteorologist

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Canada Weather Pages

www.weather.gc.ca

