

New Brunswick

February 2021 Review March and Winter/Spring Outlook

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



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Canada

February 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	-6.7	-9.7	2.9	95.2	79.0	120
BAS CARAQUET	NB		DAILY				124.4	79.0	157
BATHURST A	NB	ZBF	NCA	-8.0	-9.4	1.4			
BOUCTOUCHE CDA CS	NB	ABT	AU8	-6.1	-7.7	1.6			
CHARLO AUTO	NB	ZCR	AU8	-7.9	-10.9	3.0	54.9	66.9	82
MIRAMICHI RCS	NB	ACQ	AU8	-7.1	-8.9	1.7			
DOAKTOWN AUTO RCS	NB	ADN	AU8	-7.7	-8.9	1.3			
EDMUNDSTON	NB	ERM	AU8	-12.0			62.8	62.3	101
FREDERICTON INTL A	NB	YFC	NCA	-6.9	-7.9	1.0			
FREDERICTON CDA CS	NB	AFC	AU8	-6.9	-7.5	0.6			
FUNDY PARK (ALMA) CS	NB	AFY	AU8	-4.2	-6.1	1.9			
GAGETOWN AWOS A	NB	YCX	AU5	-6.7	-6.6	0.0			
KOUCHIBOUGUAC	NB	AKC	AU8	-6.2	-8.6	2.4	152.4	98.8	154
MISCOU ISLAND (AUT)	NB	WMI	AU8	-5.5			103.3		
MONCTON INTL A	NB	YQM	NCH	-5.8	-7.6	1.8	146.8	90.9	162
OAK POINT	NB		DAILY	-5.3	-6.6	1.4	105.9	77.3	137
POINT LEPREAU CS	NB	WPE	AU8	-3.6	-5.5	1.9			
RED PINES	NB	ARP	AU8	-8.1	-9.9	1.8			
SAINT JOHN A	NB	YSJ	NCH	-5.7	-7.1	1.3	105.6	91.0	116
ST. STEPHEN	NB	WSS	AU8	-5.7					
SUSSEX FOUR CORNERS	NB	ASF	AU8	-5.8	-6.8	1.0	110.3	85.0	130
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	-8.3	-9.5	1.2			
Average				-6.7	-8.1	1.6	106.2	81.1	129
Max				-3.6	-5.5	3.0	152.4	98.8	162
Min				-12.0	-10.9	0.0	54.9	62.3	82

Highlights:

The average temperature anomaly was above normal (**+1.6C**). All sites reported positive anomalies with Charlo recording the largest anomaly at +3.0C.

Total precipitation amounts were above normal, with an average of **129%** of total precipitation. Charlo received the least at 82% of normal precipitation with Moncton having been the wettest at 162% of normal. Both snowfall and rainfall were above normal for most sites.

February 2021; Climate Summary

Events:

February 2-3: “Winter Storm Event”. Wind, snow, freezing precipitation and rain pelted the province. The Lac Baker area reported the most snow at 39 cm while Kouchibouguac Park recorded 71 mm of total precipitation. Winds gusted to near 106 km/h in the Grand Manan area.

February 7-8: “Snow Event”. Snow blanketed southern portions of the province with areas along the NB/NS border reporting the most snow at 35 cm.

February 16: “Snow and Freezing Precipitation Event”. A system brought freezing precipitation to the south and snow to the north. The St-Quentin area amassed 25 cm of snow and Saint John reported approximately 6 hours of freezing rain.

Days of month with lightning in New Brunswick; none

**Day of month with temperature record broken or tied in New Brunswick; none
(red=maximum, blue=minimum)**



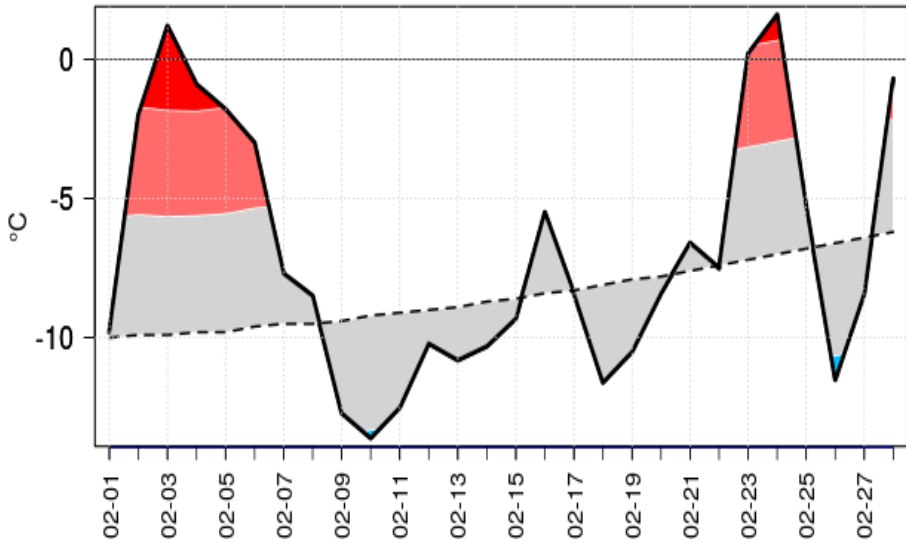
February 2021; Provincial Climate Extremes

Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	7.6°C	St. Stephen Point Lepreau	24 28
Daily Minimum Temperature	-31.1°C	Edmundston	18
Maximum Daily Total Precipitation	52.9 mm	Kouchibouguac	2
Daily Maximum Wind Gust	87 km/h	Saint John	2
Daily Maximum Wind Chill	-35	Edmundston	9



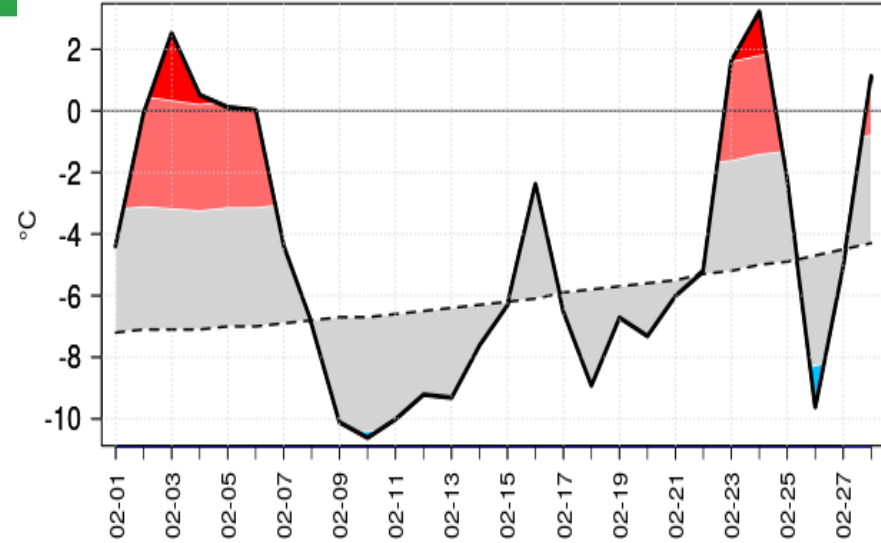
February 2021 - Temperature

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

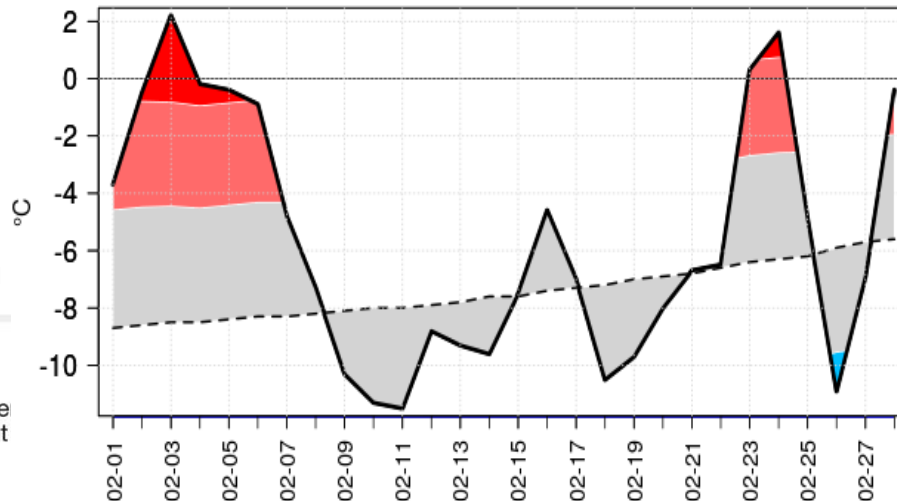
■ <<< normal
 ■ << normal
 ■ < normal
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 ■ > normal
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 ■ >>> normal



Saint John

Fredericton was near normal

Moncton

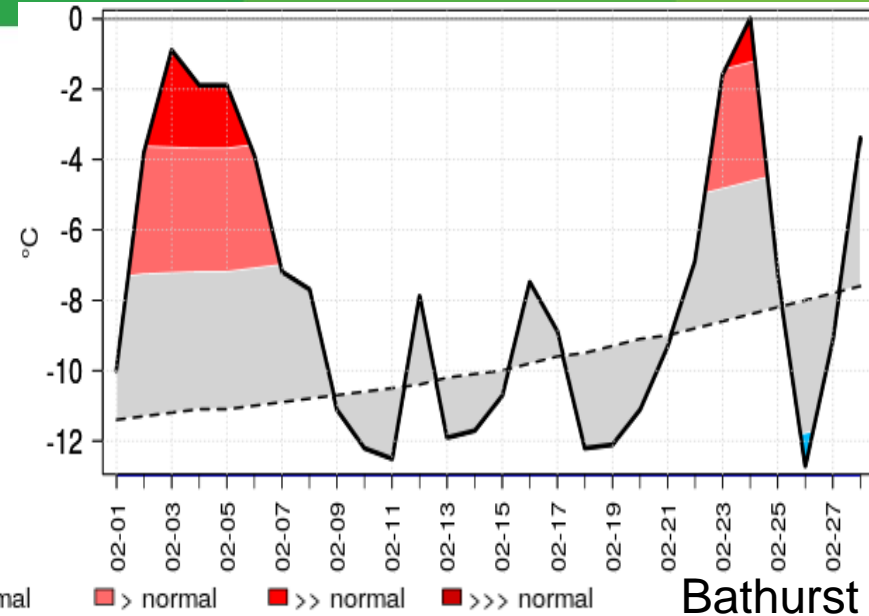
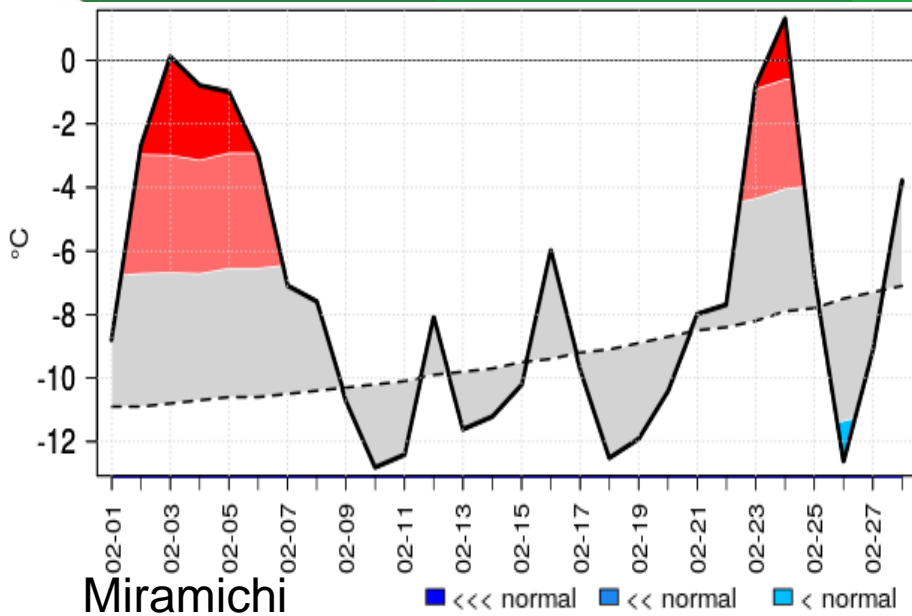


Saint John and Moncton were above normal



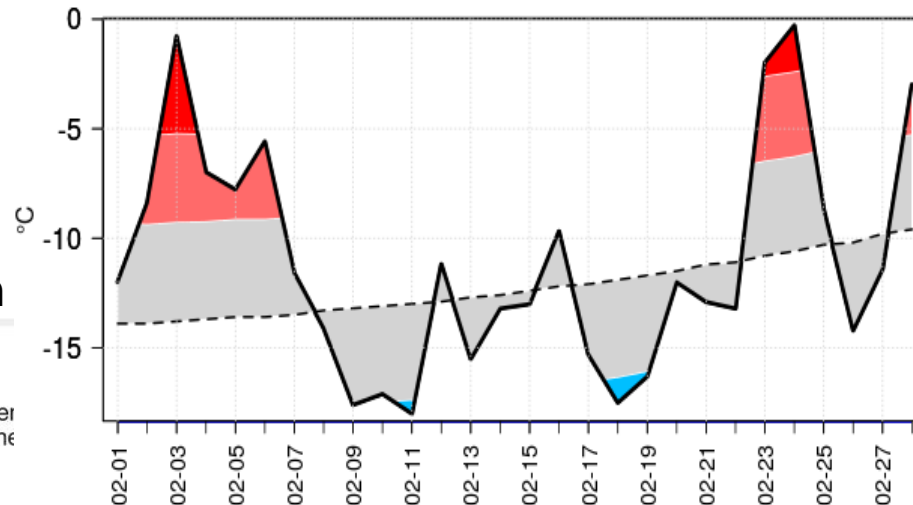
February 2021 - Temperature

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



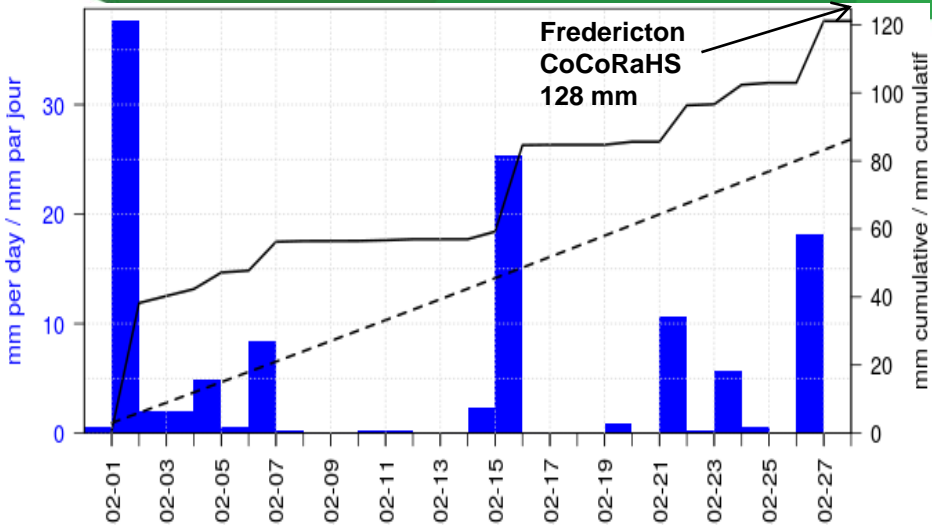
All site were above normal

Edmundston

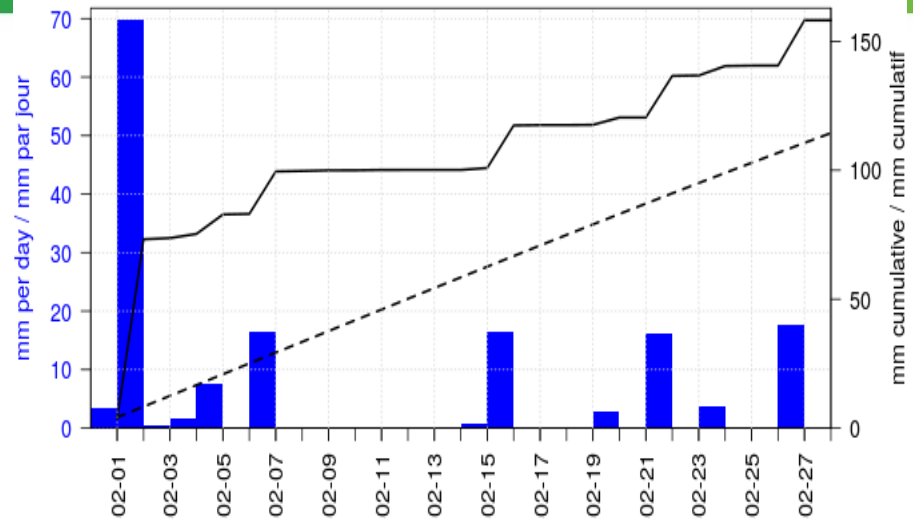


February 2021 - Precipitation

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



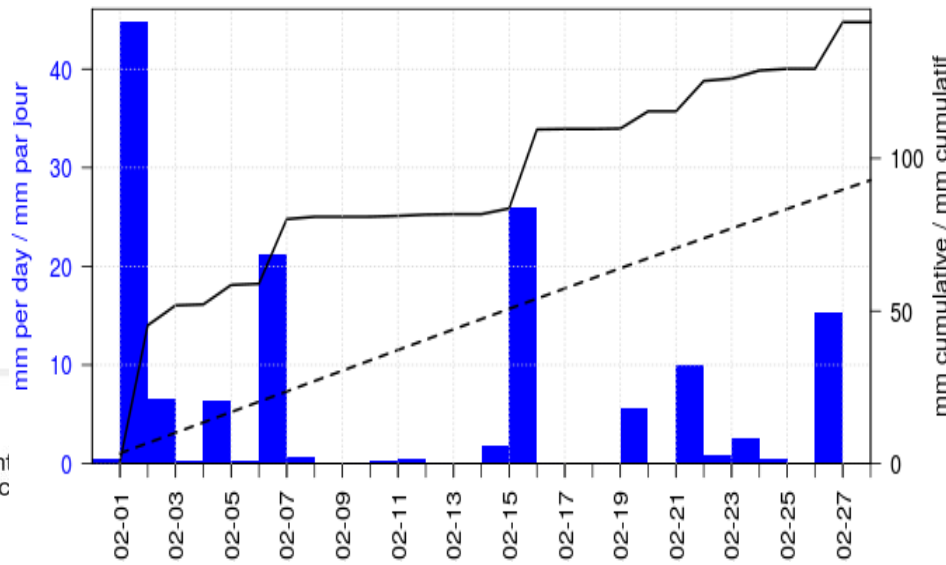
Fredericton (and area)



Saint John

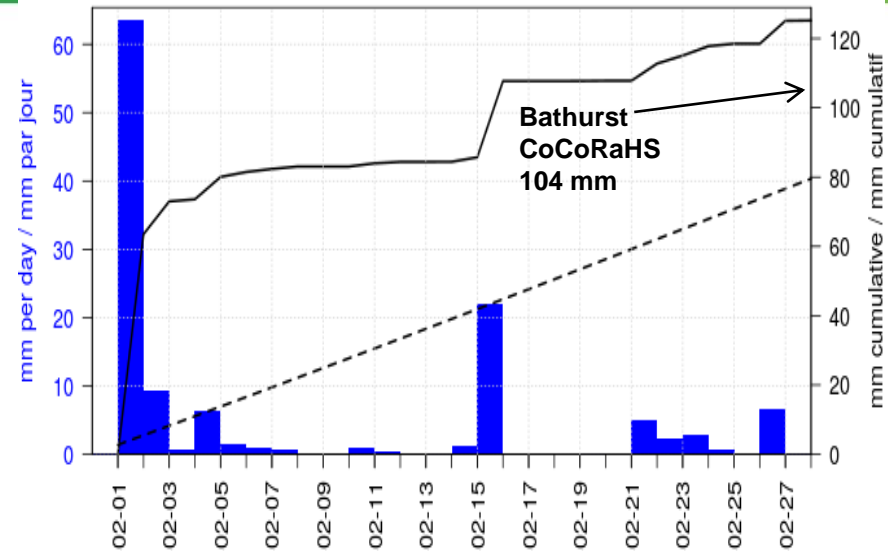
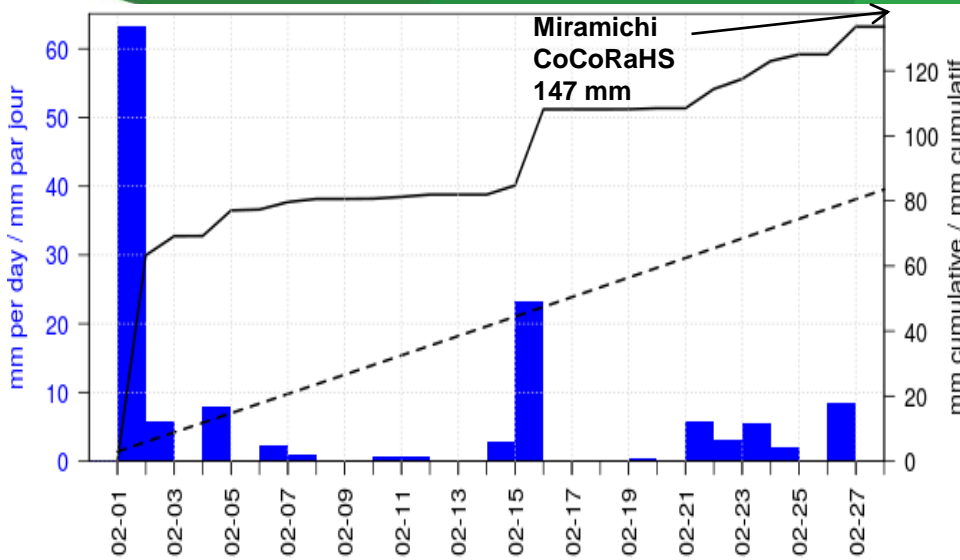
All sites were above normal

Moncton



February 2021 - Precipitation

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

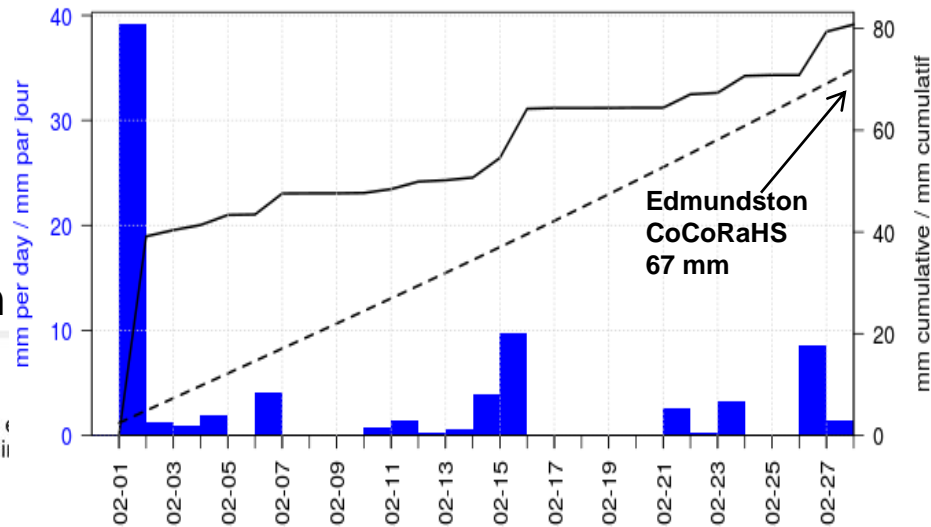


Miramichi

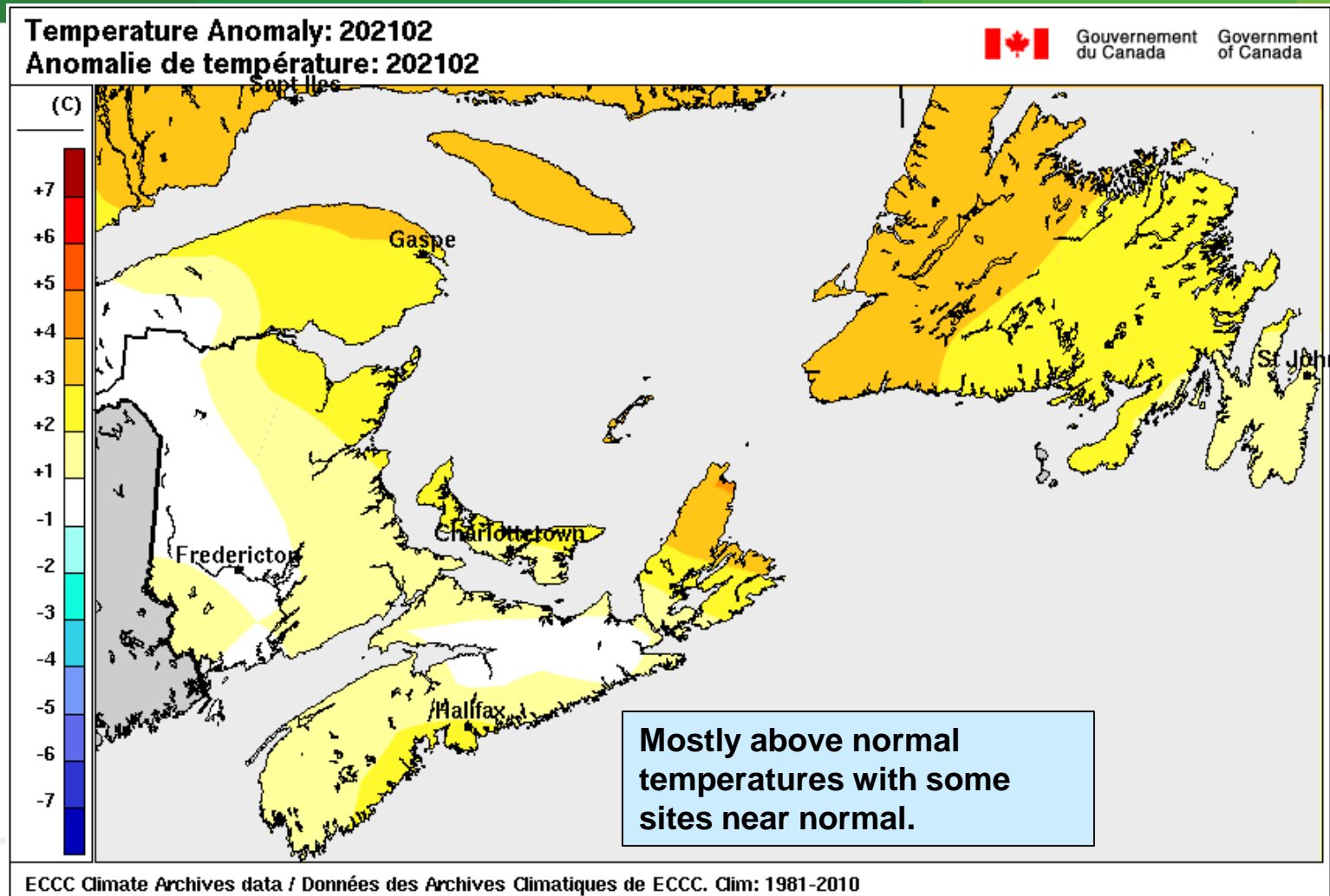
Bathurst

All sites were above normal

Edmundston



February 2021 – Temperature departure from 1981-2010 mean



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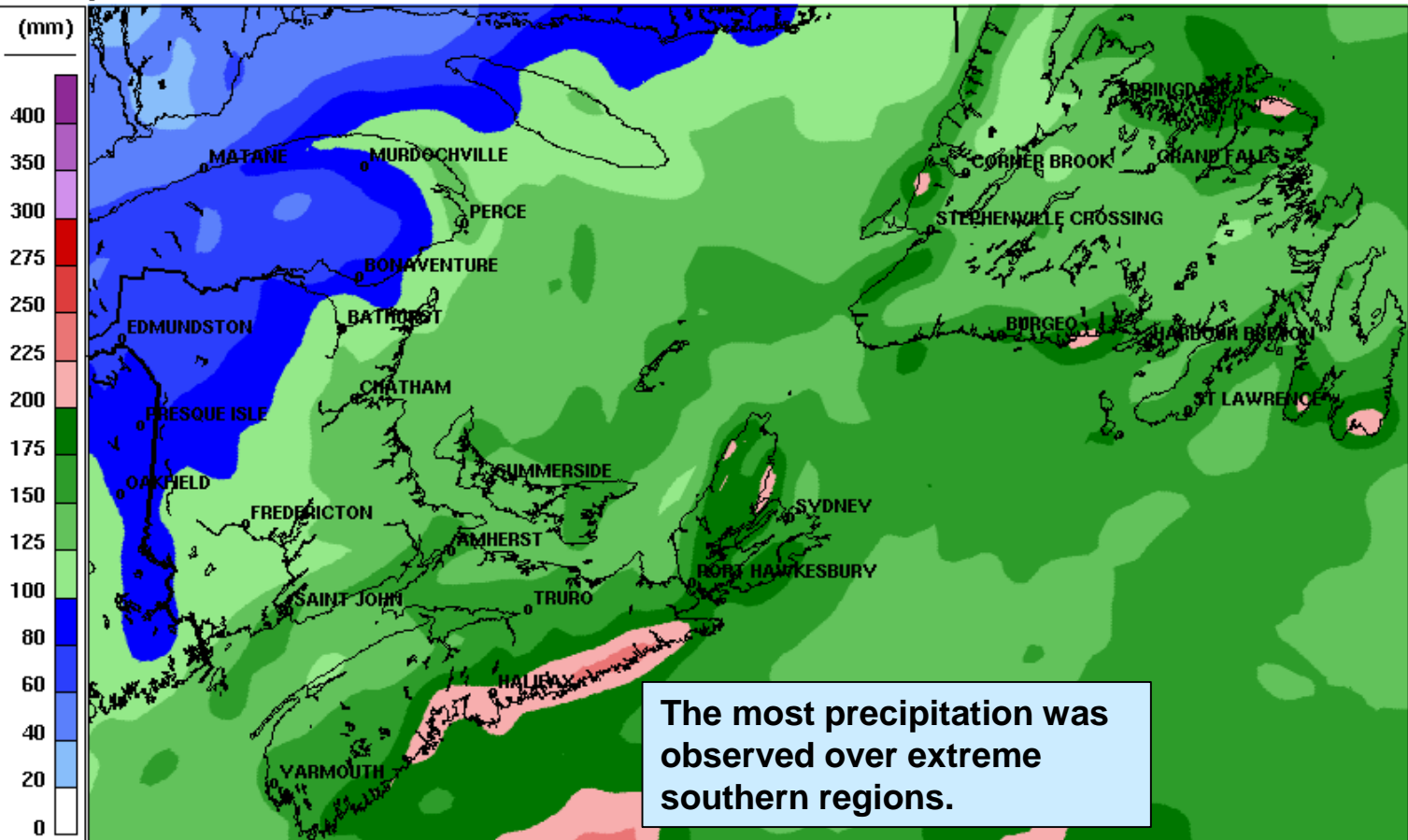
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February 2021 – Total precipitation

Total precipitation: 202102
Précipitation totale: 202102



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The most precipitation was observed over extreme southern regions.

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

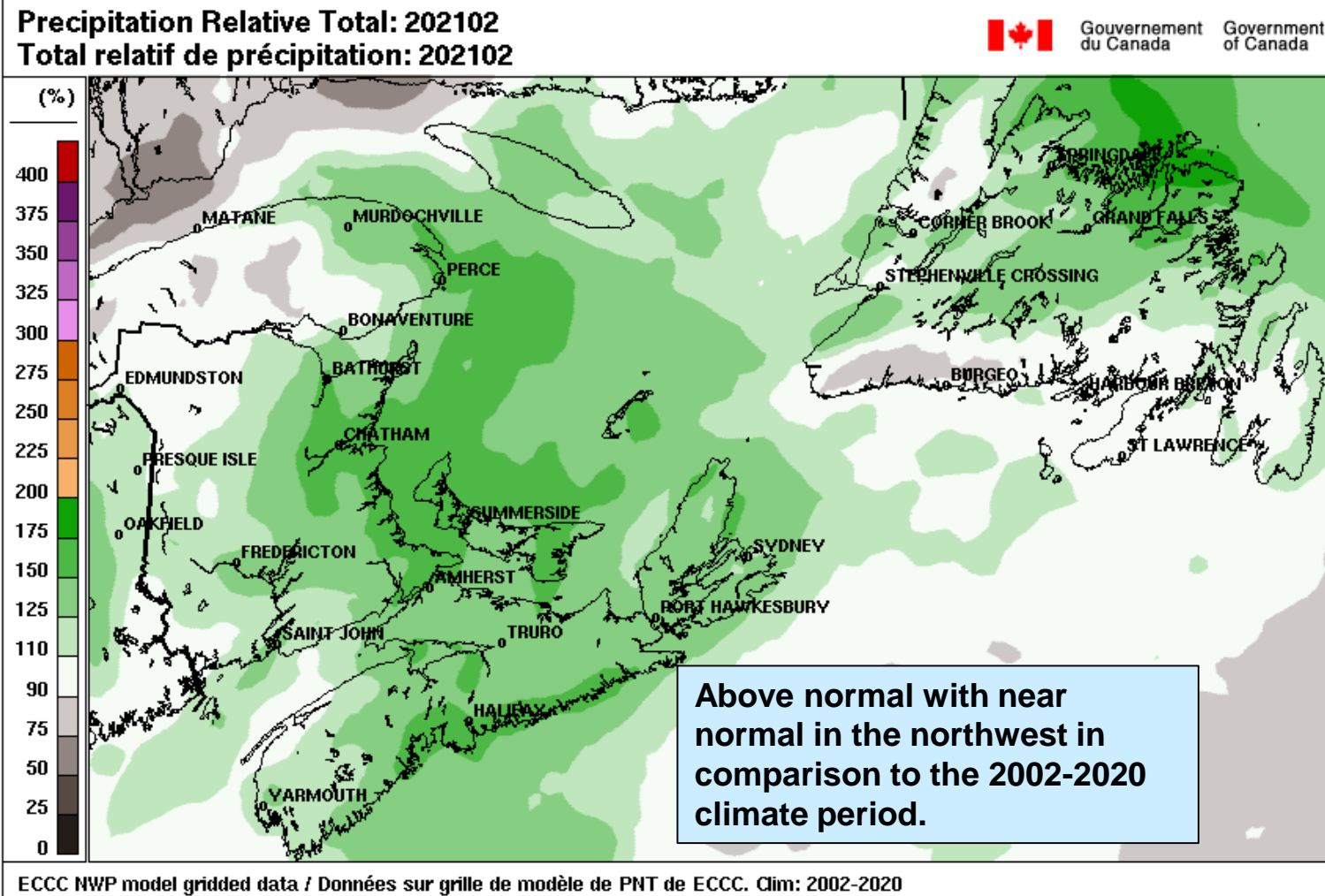


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February 2021 – Precipitation departure from 2002-2020 mean



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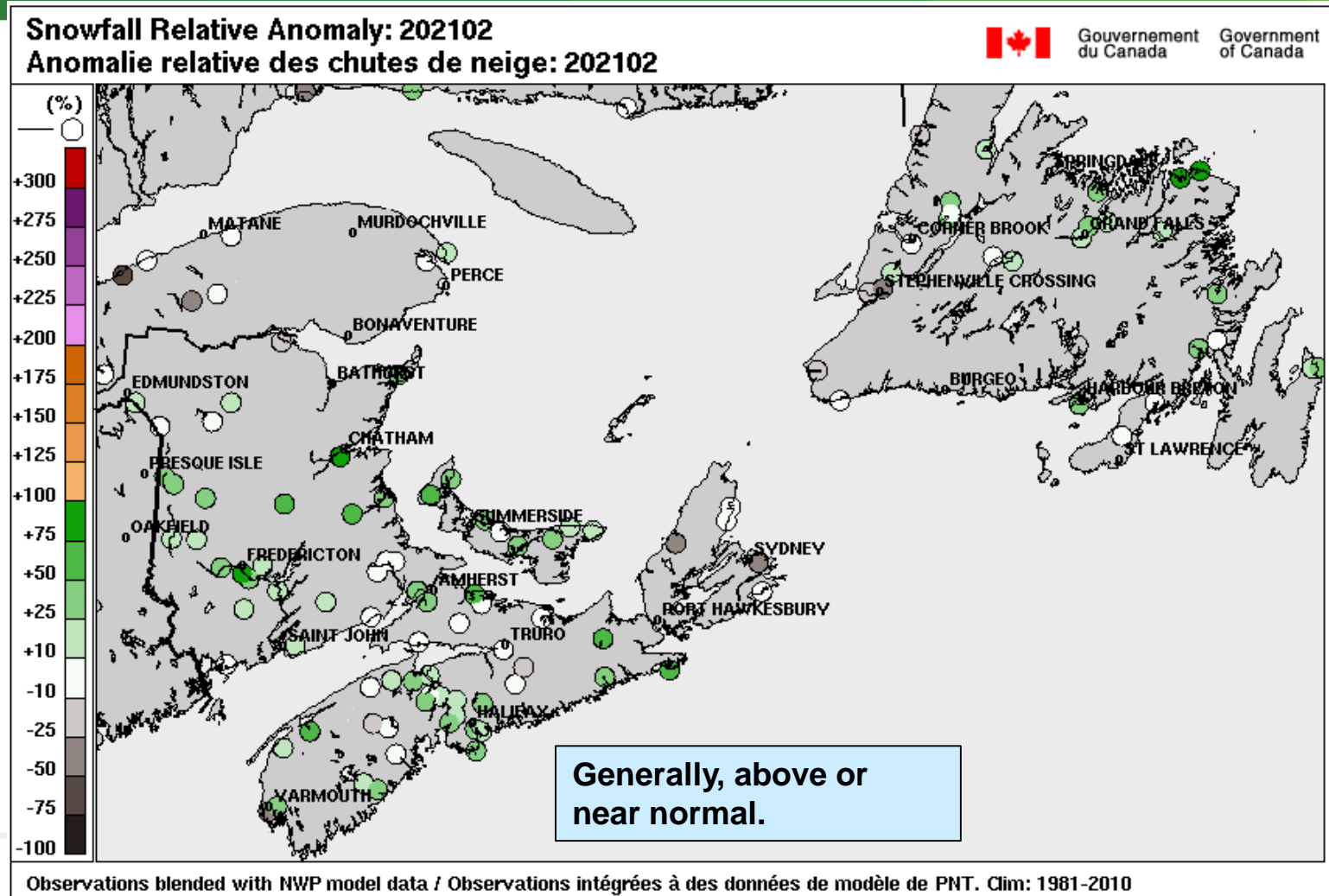


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February 2021 – Snowfall departure from 1981-2010 mean



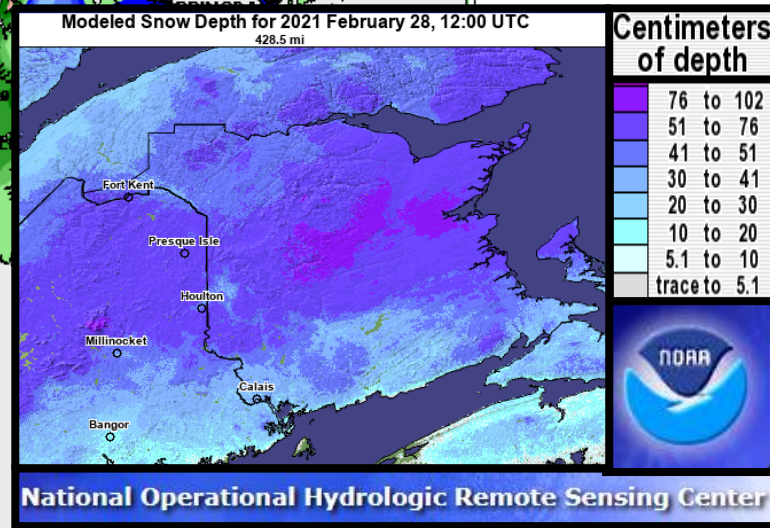
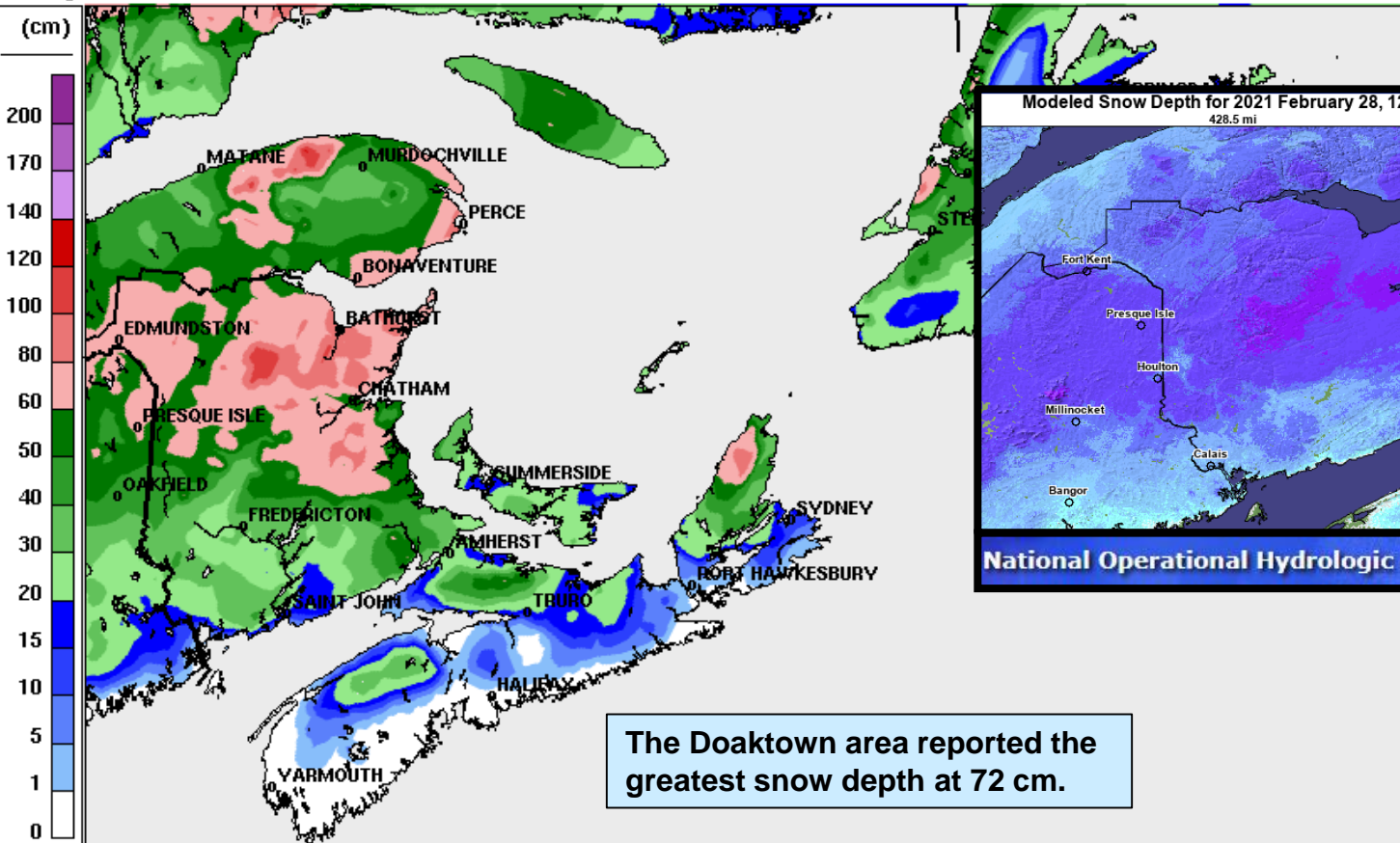
February 2021 – Snow depth at month end

Extracted from Canadian computer model

Snow Depth: 20210228
Neige au sol: 20210228



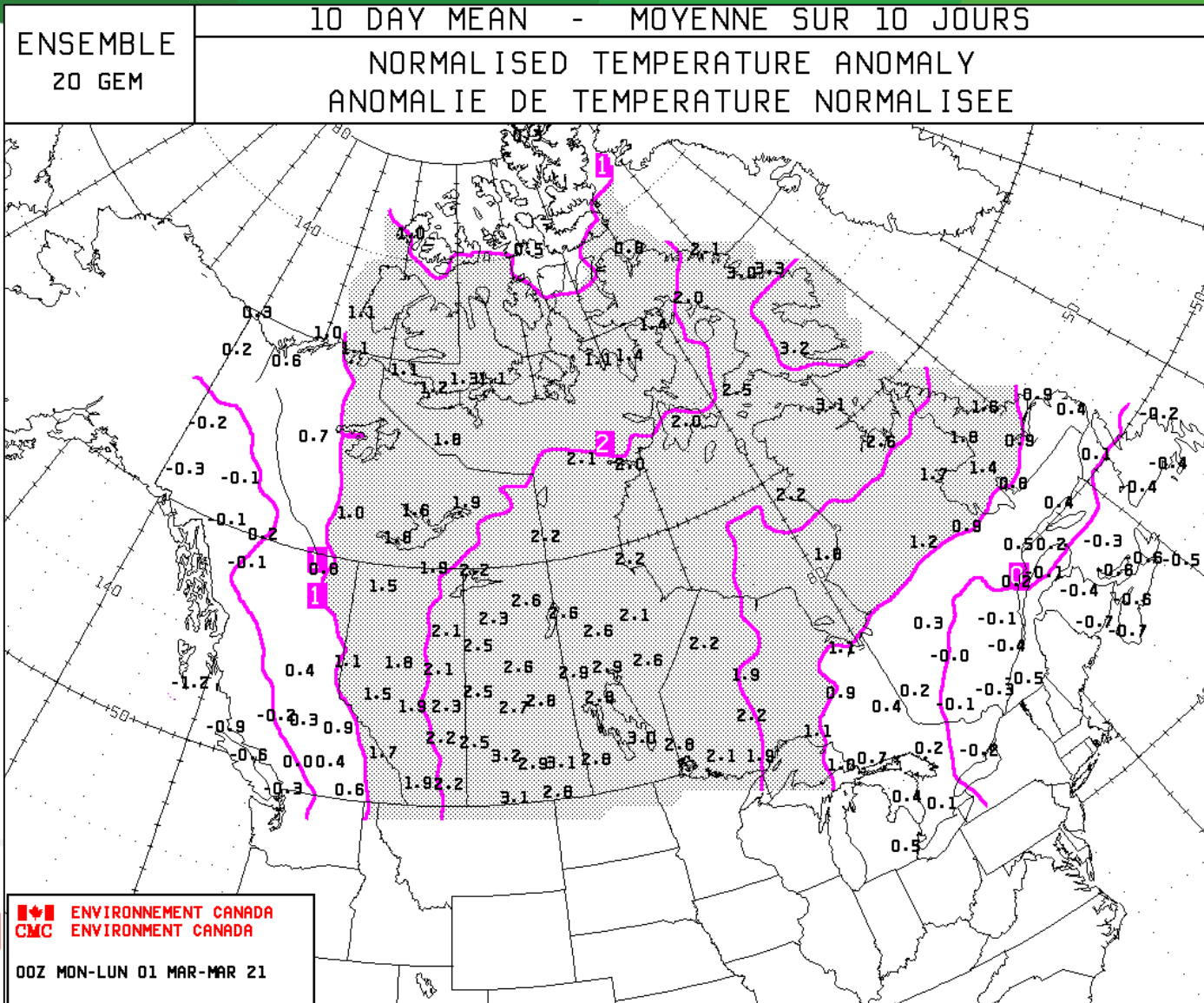
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ECCC NWP model data / Données de modèle de PNT d'ECCC

Outlook – 10 day mean temperature

(Suggesting below normal conditions (-0.1 to -0.7°C))



10 day
forecast
ending
March 11,
2021



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CMC ENVIRONMENT CANADA

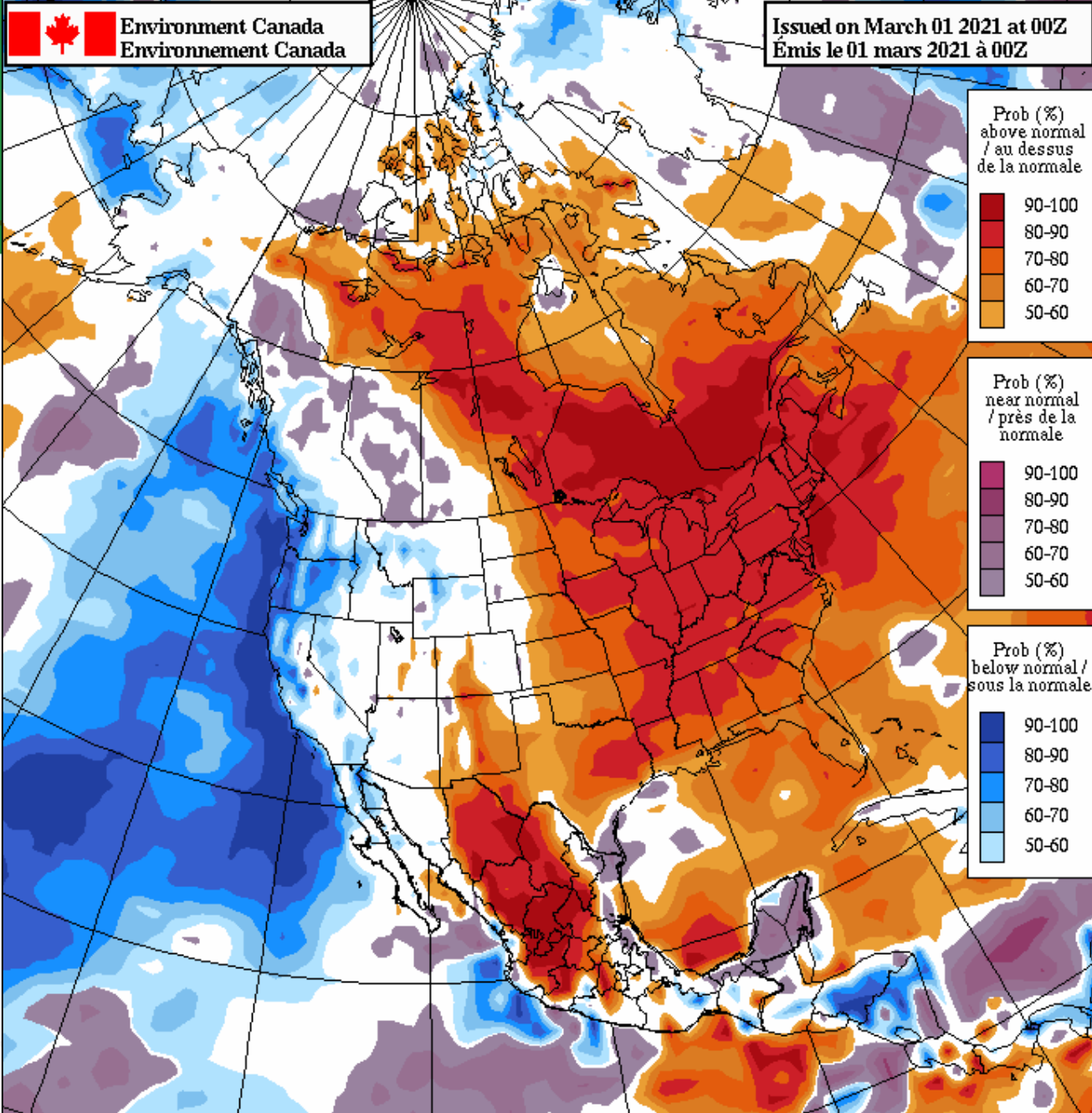
00Z MON-LUN 01 MAR-MAR 21



Day 8 to 14 Forecast

Period ending
March 16, 2021

Suggesting a moderate
to strong signal of above
normal.



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Forecast probability of above, below and
near normal temperature (no calibration)

Period: 20210309-20210316

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

Période: 20210309-20210316



Fredericton

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

for/pour

NAEFS / SPENA

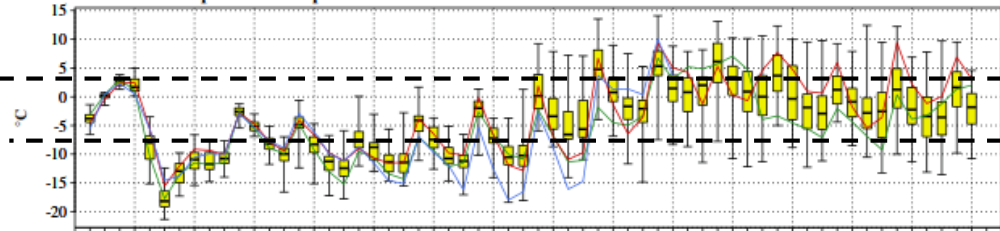
FREDERICTON (YFC) 45.87 N 66.53 W/O

March

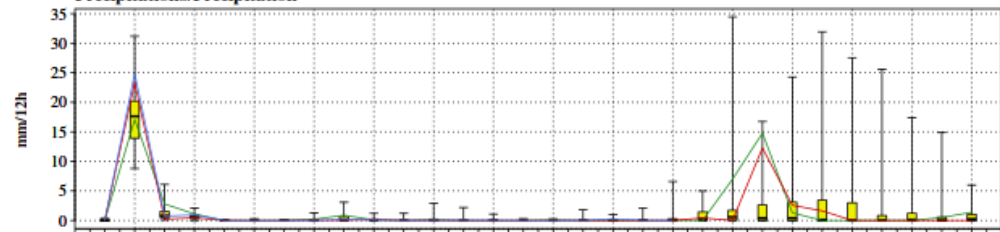
Normal high: +3.0C

Normal low: -7.8C

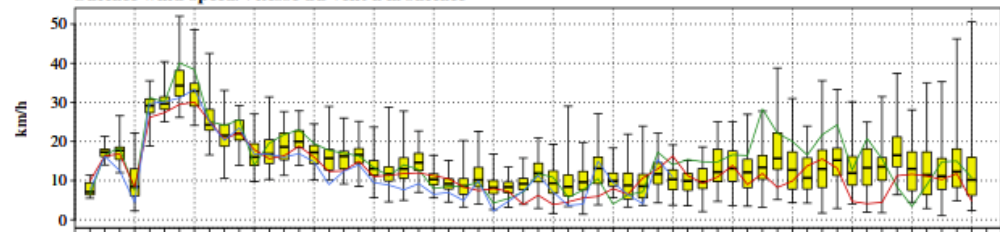
Surface air temperature/Température de l'air à la surface



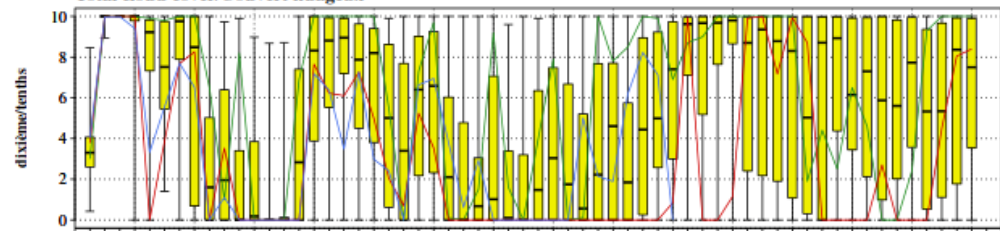
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

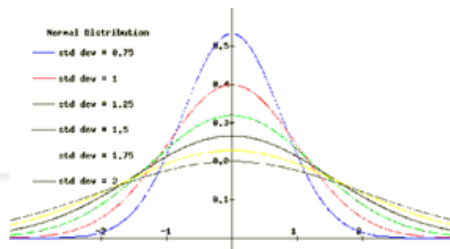
March/Mars 2021

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

max
75%
median/médiane
25%
min

Next 15 days; ending
March 15, 2021

Generally suggesting below normal
until near March 8th then a lot of variability
for the remainder of the period.

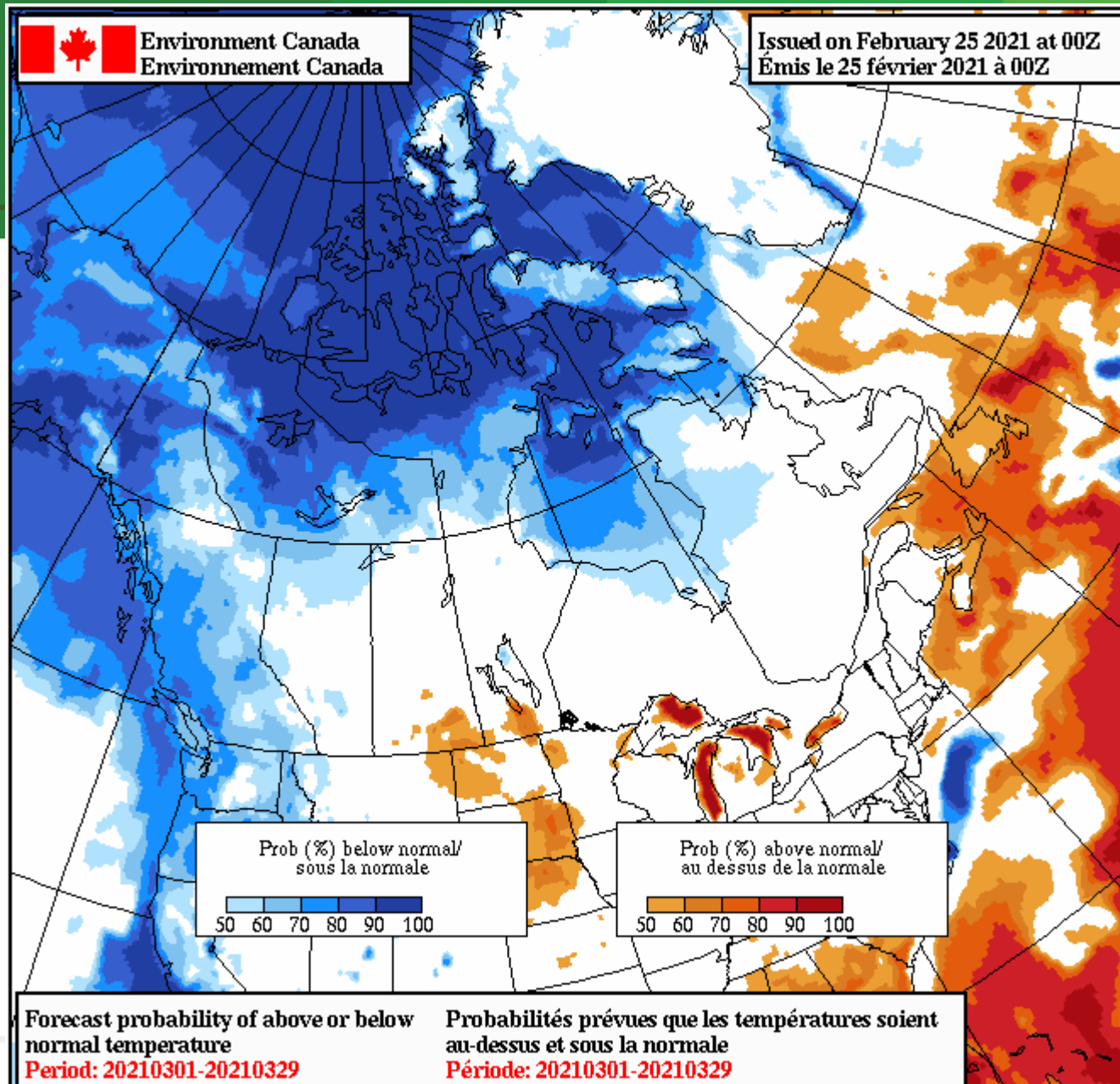




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Environnement Canada

Issued on February 25 2021 at 00Z
Émis le 25 février 2021 à 00Z

Temperature March 1 to March 29



CMC
Monthly
Forecast
Product
using GEPS
50km res.

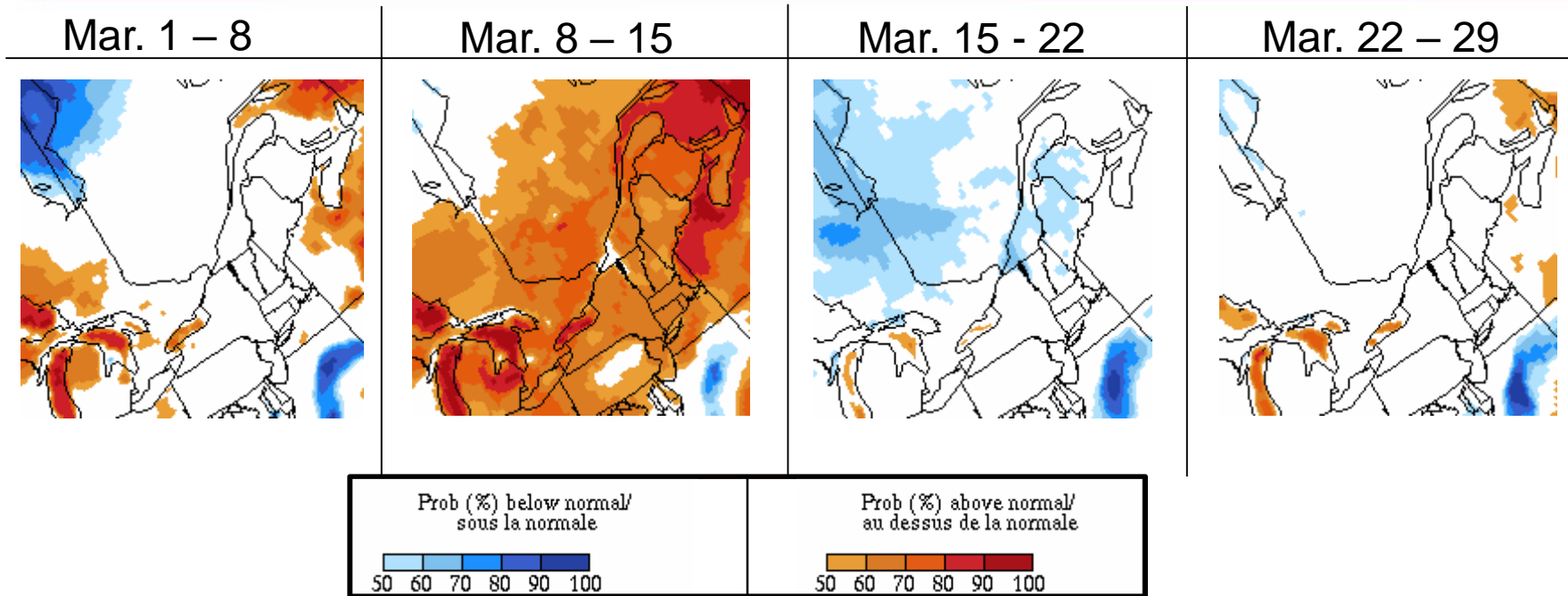


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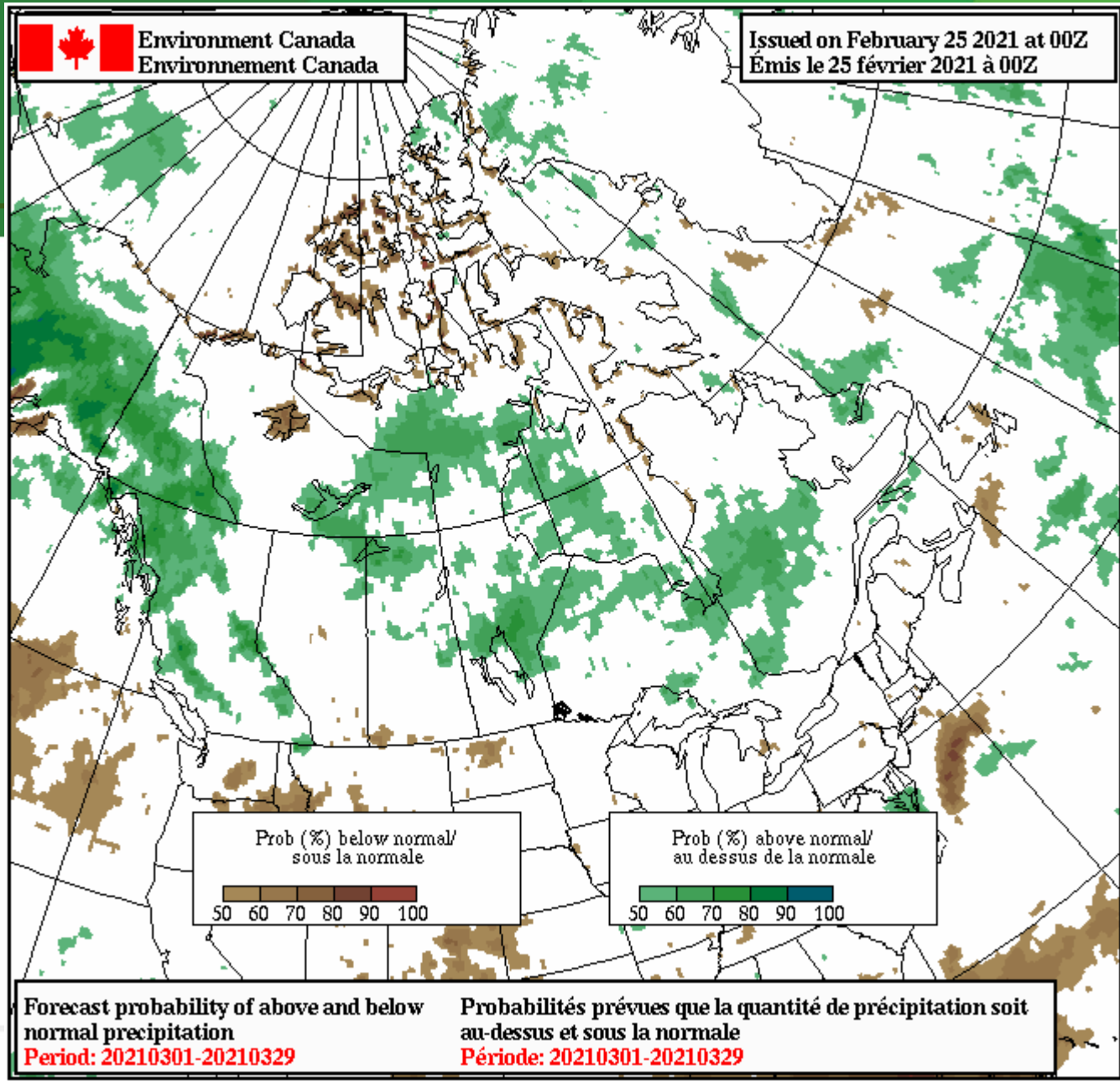
Weekly signature from GEPS 50km resolution



No signal (near normal) for the first week then a moderate signal of above normal for the second week which shifts to a weak signal of below normal for the third week before transitioning back to no signal (near normal) for the remainder of the period.



Precipitation March 1 to March 29



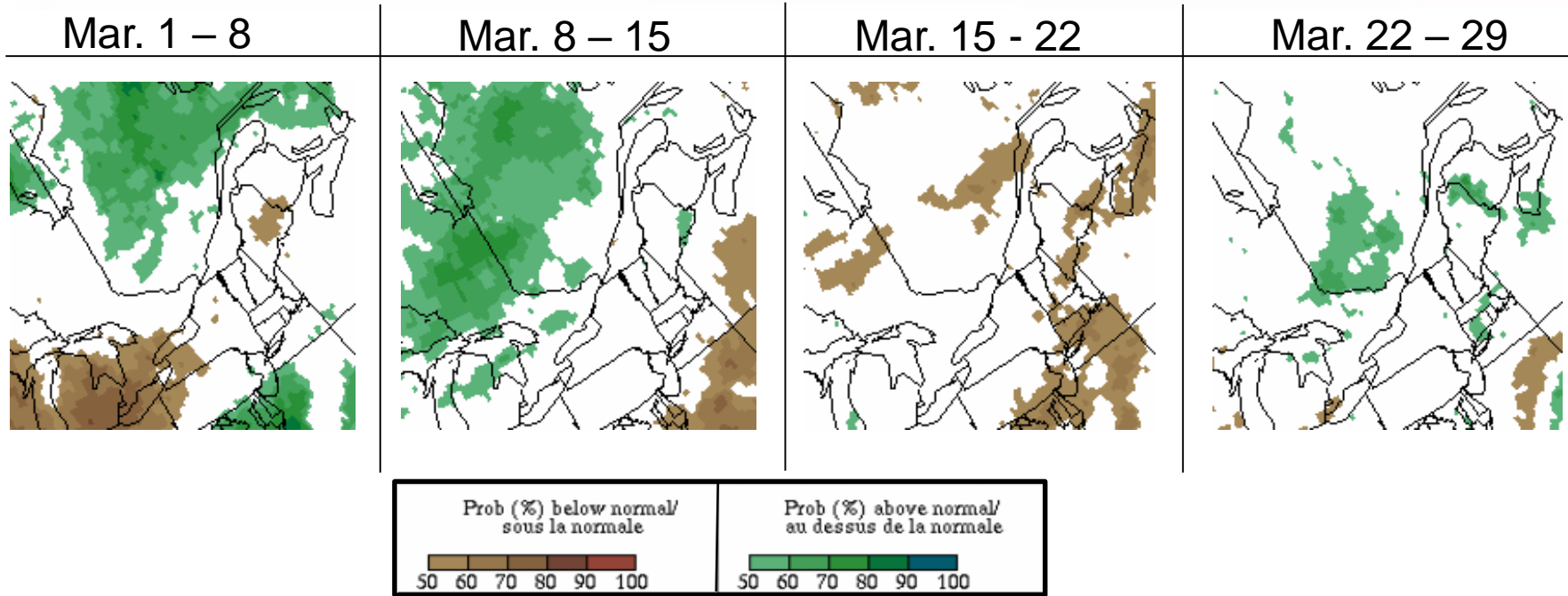
CMC
Monthly
Forecast
Product
using GEPS
50km res.

Forecast probability of above and below
normal precipitation
Period: 20210301-20210329

Probabilités prévues que la quantité de précipitation soit
au-dessus et sous la normale
Période: 20210301-20210329



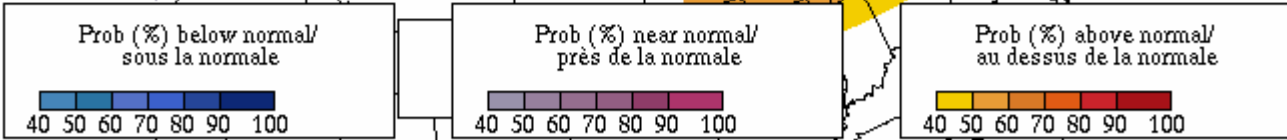
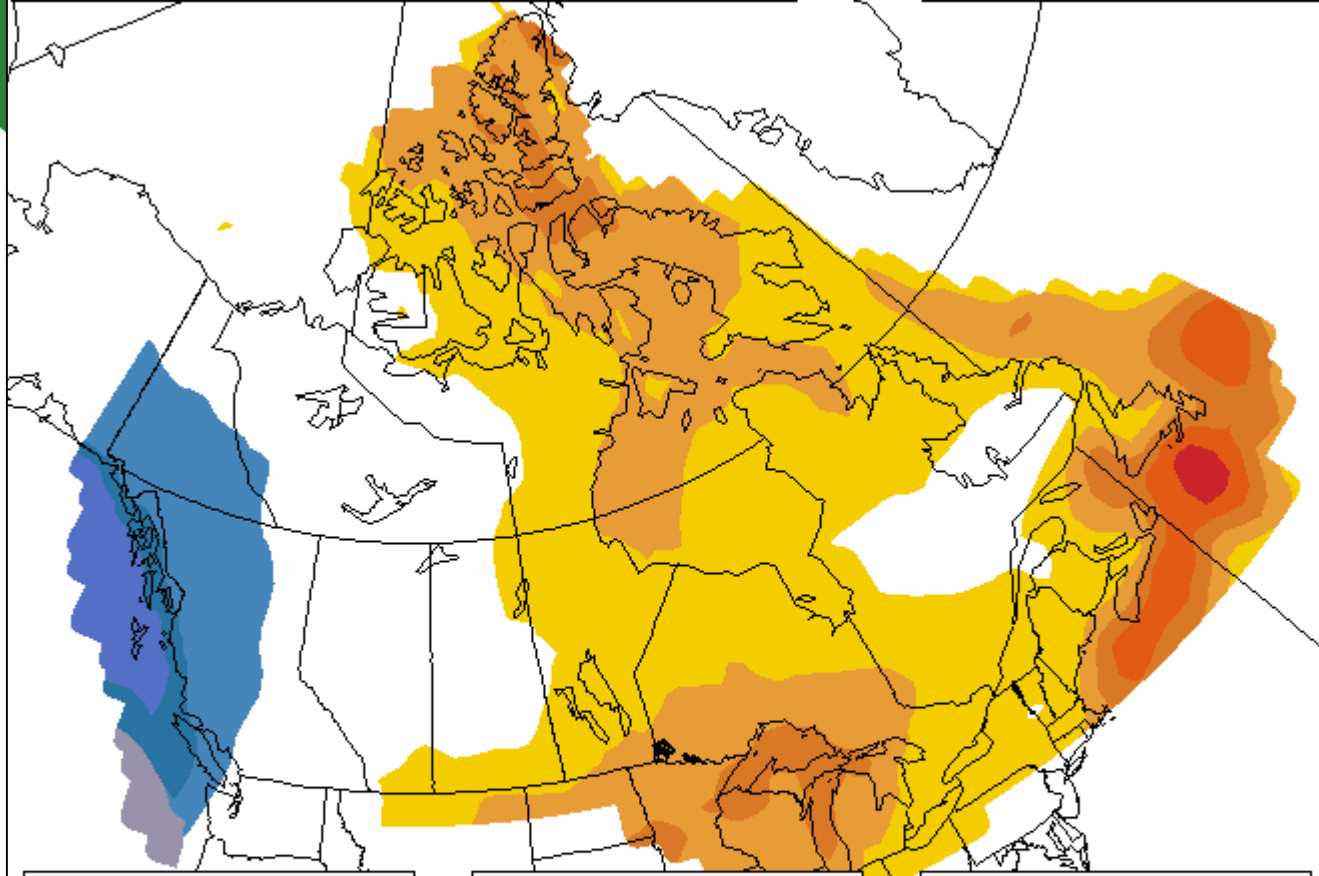
Weekly signature from GEPS 50km resolution



Generally, no conclusive signal (near normal) for the period with the exception of possible subtle indications of below normal for the third week and above normal for the last week in some parts of the province.



Temperature April 2021



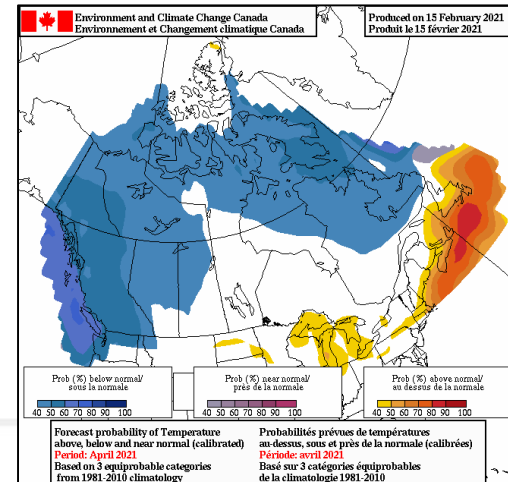
**Forecast probability of Temperature
 above, below and near normal (calibrated)**
Period: April 2021
 Based on 3 equiprobable categories
 from 1981-2010 climatology

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

CanSIPS
 (Canadian Seasonal and
 Interannual Prediction
 System)

CanAM3
 CanAM4
 +
 CanOM4

Produced February 15



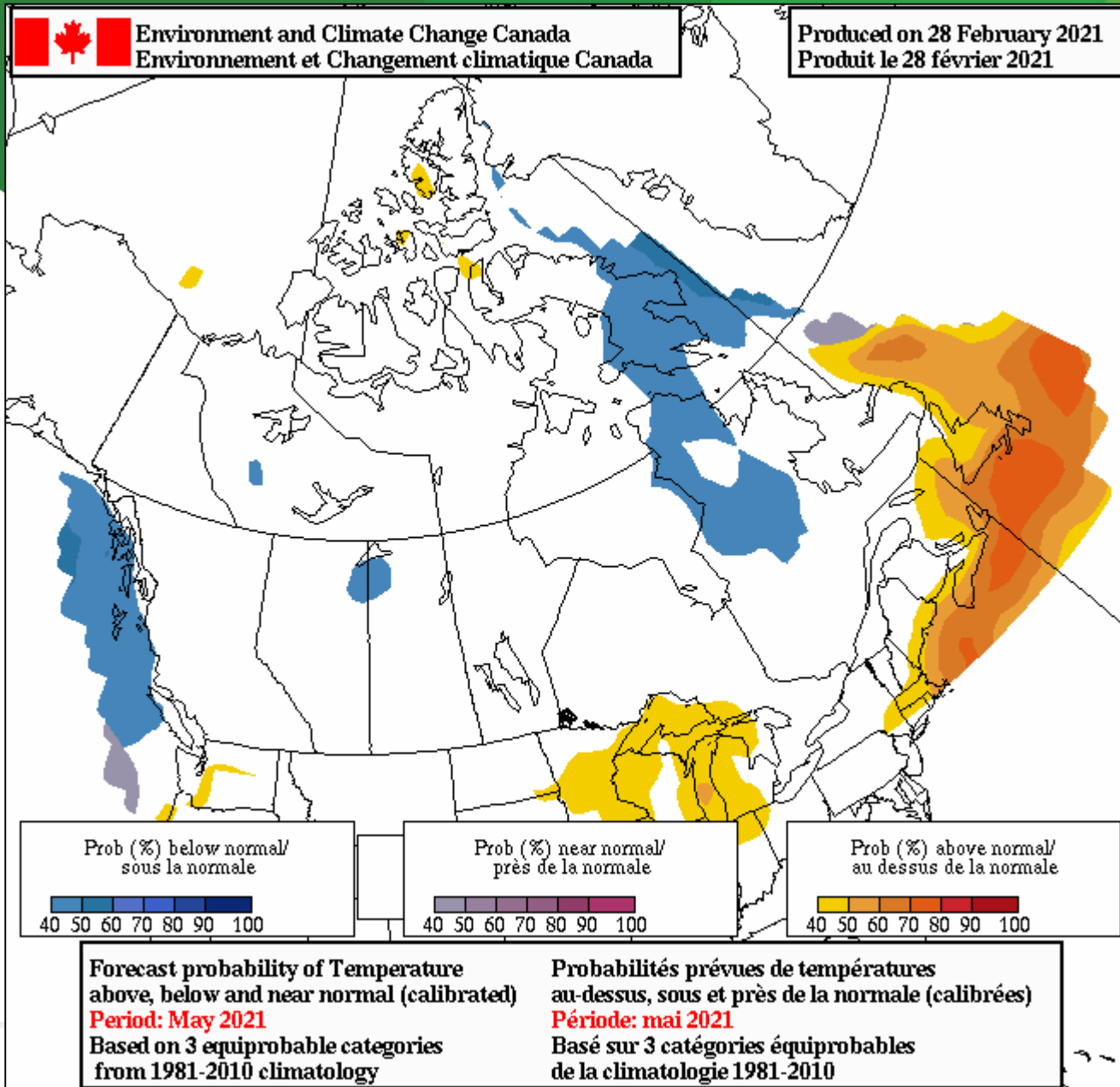


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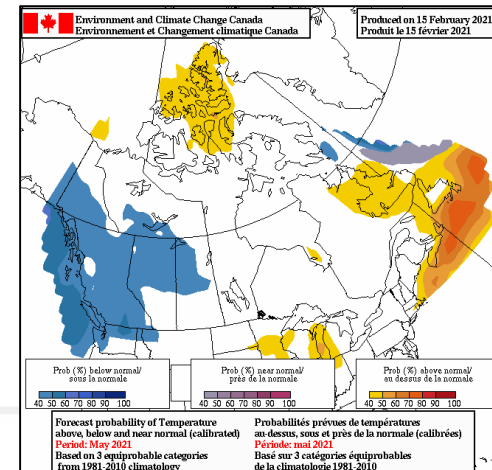
Produced on 28 February 2021
Produit le 28 février 2021

Temperature May 2021

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



Produced February 15



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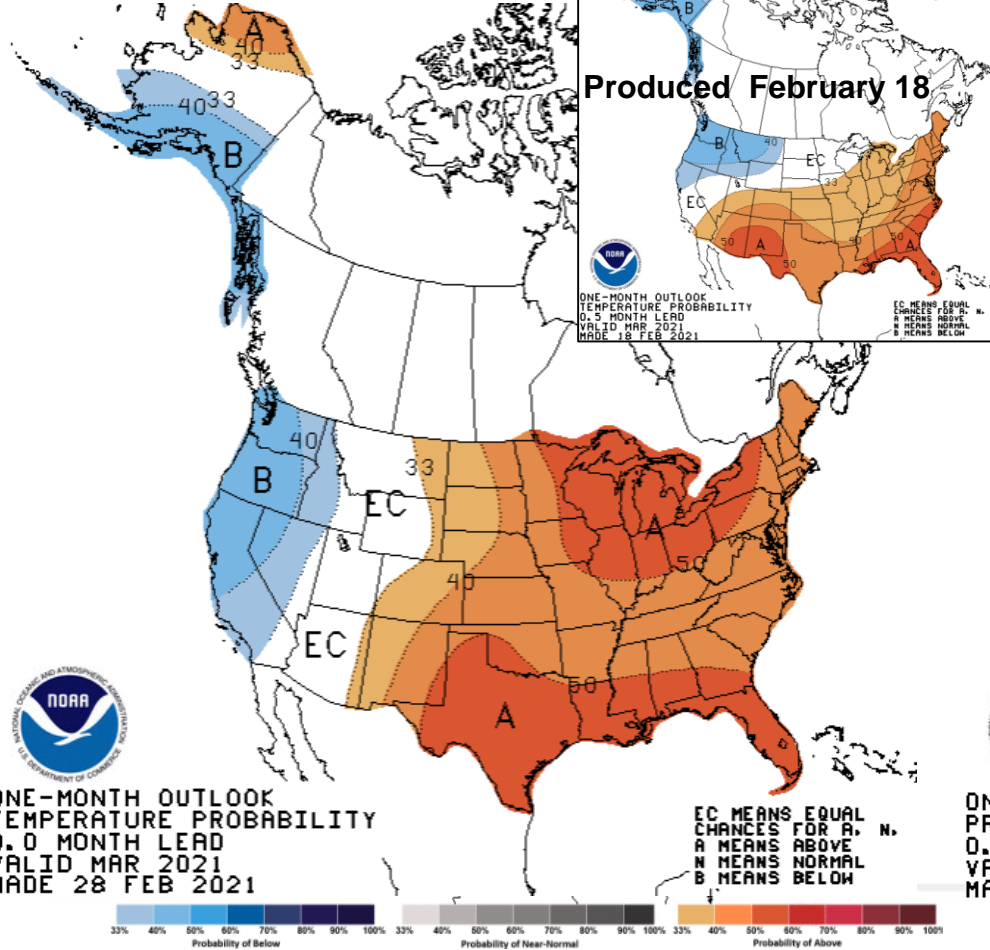
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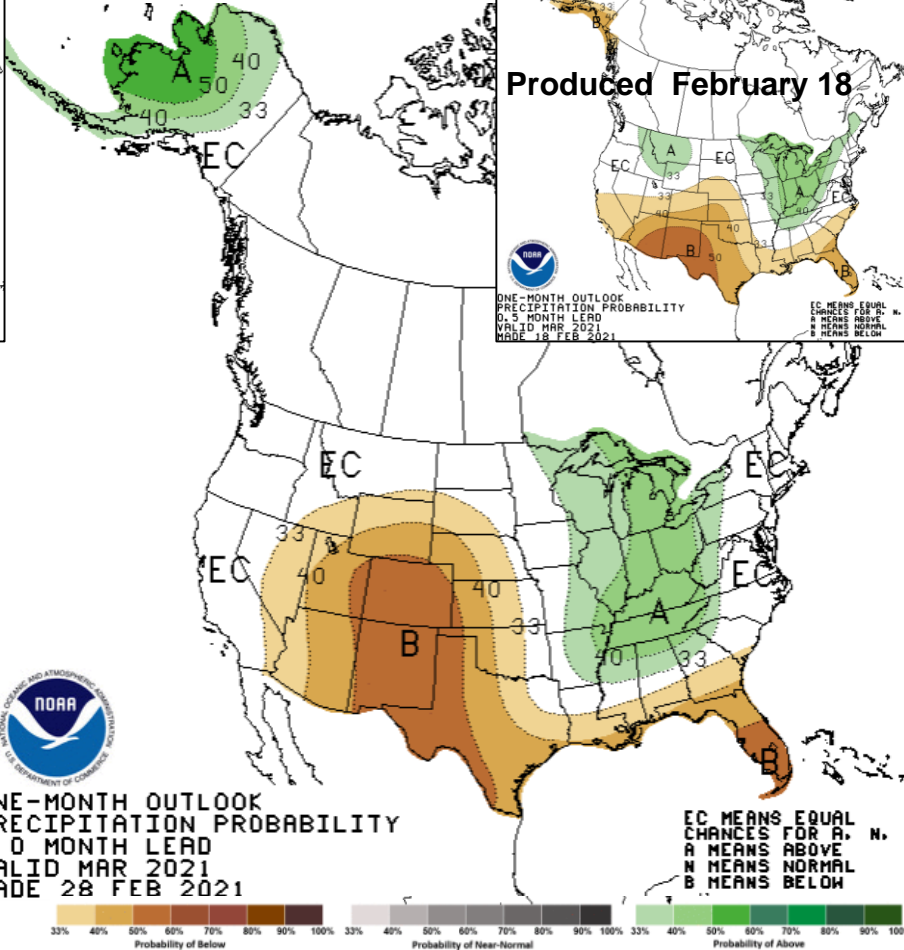


March 2021

Temperature



Precipitation



ONE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.0 MONTH LEAD
VALID MAR 2021
MADE 28 FEB 2021



ONE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.0 MONTH LEAD
VALID MAR 2021
MADE 28 FEB 2021



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Contact

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Canada Weather Pages

www.weather.gc.ca

