

New Brunswick

January 2022 Review February and Winter Outlook

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Meteorological Service of Canada
Environment and Climate Change Canada
February 1, 2022



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January 2022; Climate Summary

Highlights:

The average temperature anomaly was below normal (**-1.5°C**). All sites reported negative anomalies with Bathurst recording the largest anomaly at -3.2°C. The first week of the month was above normal, but the remainder of the month was below.

Total precipitation amounts were slightly below normal, with an average of **95%** of total precipitation. Precipitation events were quite frequent throughout the month but amounts were relatively light with the exception of the south.



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
BAS CARAQUET	NB	WXS	AU8	-10.6	-9.8	-0.8	70.8	97.3	73
BAS CARAQUET	NB		DAILY				87.0	97.3	89
BATHURST A	NB	ZBF	NCA	-14.0	-10.8	-3.2			
CHARLO AUTO	NB	ZCR	AU8	-14.3	-12.6	-1.7	48.8	84.5	58
DOAKTOWN AUTO RCS	NB	ADN	AU8	-12.7	-10.7	-2.1	82.0	105.6	78
EDMUNDSTON	NB	ERM	AU8	-17.6			40.1	79.4	50
FREDERICTON CDA CS	NB	AFC	AU8	-11.3	-9.4	-1.8	67.2	101.9	66
FREDERICTON INTL A	NB	YFC	NCA	-11.4	-9.4	-2.0			
FUNDY PARK (ALMA) CS	NB	AFY	AU8	-7.8	-7.4	-0.4	201.9	144.9	139
GRAND MANAN SAR CS	NB	XGM	AU8	-6.5					
KOUCHIBOUGUAC	NB	AKC	AU8	-11.2	-10.1	-1.1	109.4	137.7	79
MECHANIC SETTLEMENT	NB	AMS	AU8	-10.0			259.3		
MIRAMICHI RCS	NB	ACQ	AU8	-12.2	-10.8	-1.4	58.8	87.0	68
MISCOU ISLAND (AUT)	NB	WMI	AU8	-9.6			58.5		
MONCTON/GREATER									
MONCTON ROMEO LEBLANC	NB	YQM	NCH	-9.8	-8.9	-0.9	142.0	103.3	138
INTL A									
OAK POINT	NB		DAILY	-9.5	-8.6	-1.0	144.7	104.6	138
POINT LEPREAU CS	NB	WPE	AU8	-6.4	-7.1		105.7	126.6	84
RED PINES	NB	ARP	AU8	-13.9	-12.0	-1.8	107.6	86.6	124
SAINT JOHN A	NB	YSJ	NCH	-9.1	-7.9	-1.2	175.3	123.5	142
ST. STEPHEN	NB	WSS	AU8	-9.9			90.5		
SUSSEX FOUR CORNERS	NB	ASF	AU8	-9.9	-8.5	-1.4	140.4	108.8	129
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	-13.0	-11.5	-1.5	73.9	104.0	71
Average				-11.0	-9.7	-1.5	108.6	105.8	95
Max				-6.4	-7.1	-0.4	259.3	144.9	142
Min				-17.6	-12.6	-3.2	40.1	79.4	50

January 2022; Climate Summary

Events:

January 5-6: “Mixed weather event”. Snow fell over northeastern portions with 10-15 cm. A few hours of freezing rain occurred over some central areas and up to 35 mm of rain fell along the Bay of Fundy.

January 7-8: “Winter Storm event”. A system brought wind and snow to the southeast. Snowfall was estimated up to 40 cm in the extreme southeast and Moncton reported a wind gust of 84 km/h.

January 11-12: “Extreme Cold”. Frigid conditions affected the northwest and some central areas with air temperatures as low as -35C and wind chill values as low as -38.

January 14-15: “Winter Storm event”. A system brought wind and 30-35 cm of snow to the southeast. A private weather station on Grand Manan reported a wind gust of 108 km/h.

January 17-18: “Mixed weather event”. The most snow was reported in the north with 10-16 cm reported while areas in the south saw snow, ice pellets, freezing rain and rain. Along the Bay of Fundy some snow was reported but mostly rain fell with 15-25 mm.

January 27: “Extreme Cold”. Glacial conditions invaded western areas with air temperatures as low as -40C

January 29-30: “Winter Storm event”. A system brought wind and generally 20-30 cm of snow to most areas. Sackville reported the highest snowfall at 42 cm and a private weather station on Grand Manan reported a wind gust of 127 km/h.

Days of month with lightning in New Brunswick; 7 (one day)

Day of month with temperature record broken or tied in New Brunswick; 11 12 27

(red=maximum, blue=minimum)



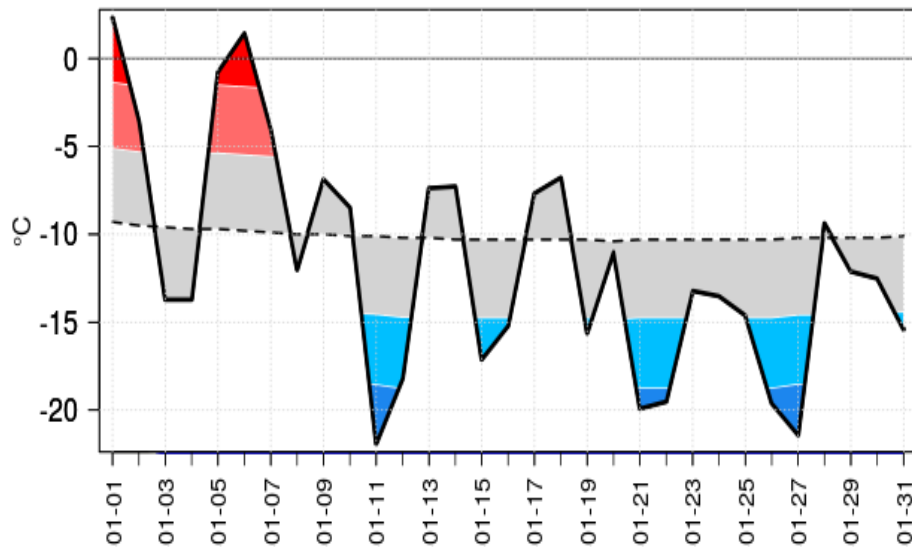
January 2022; Provincial Climate Extremes

Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	10.1°C	Sussex	5
Daily Minimum Temperature	-39.7°C	Edmundston	27
Maximum Daily Total Precipitation	42.3 mm	Mechanic Settlement	7
Daily Maximum Wind Gust	104 km/h	Grand Manan	29
Daily Maximum Wind Chill	-42	Edmundston	27

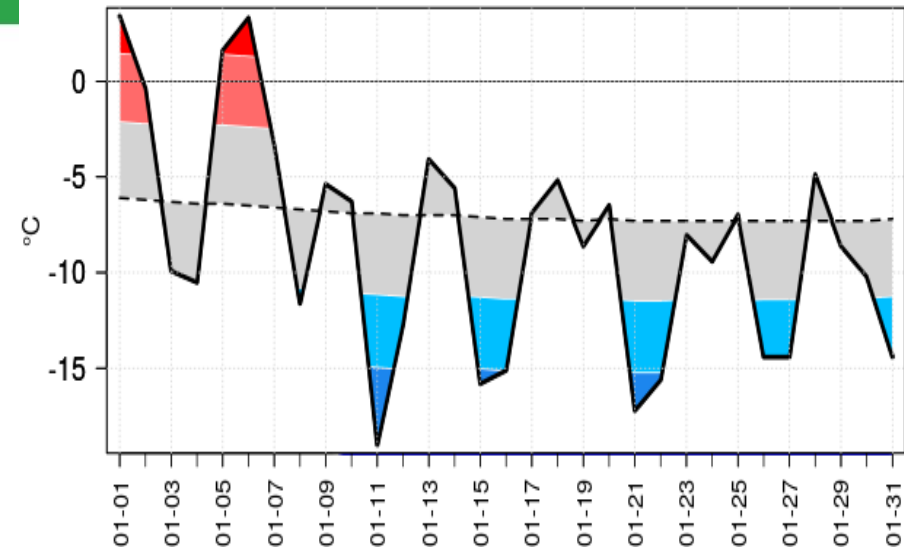


January 2022 - Temperature

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



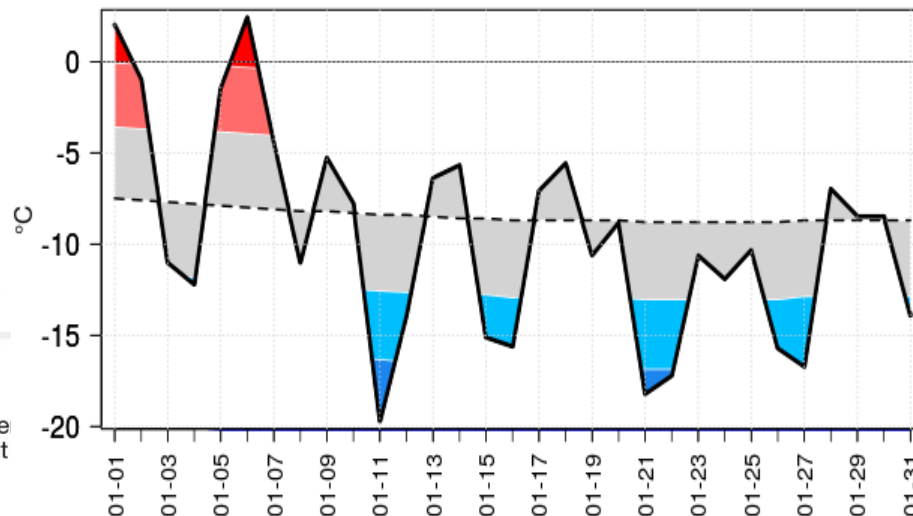
Fredericton



Saint John

All sites were
below normal

Moncton



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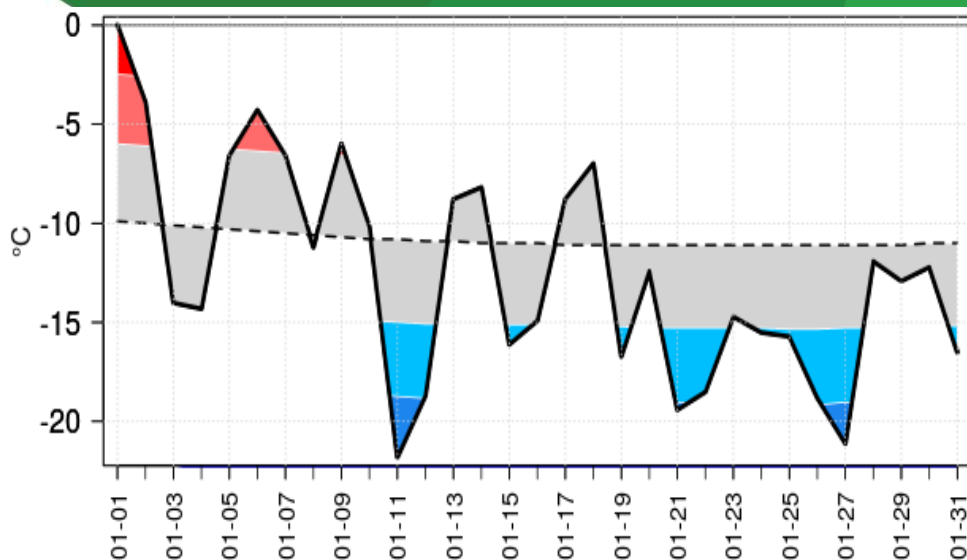
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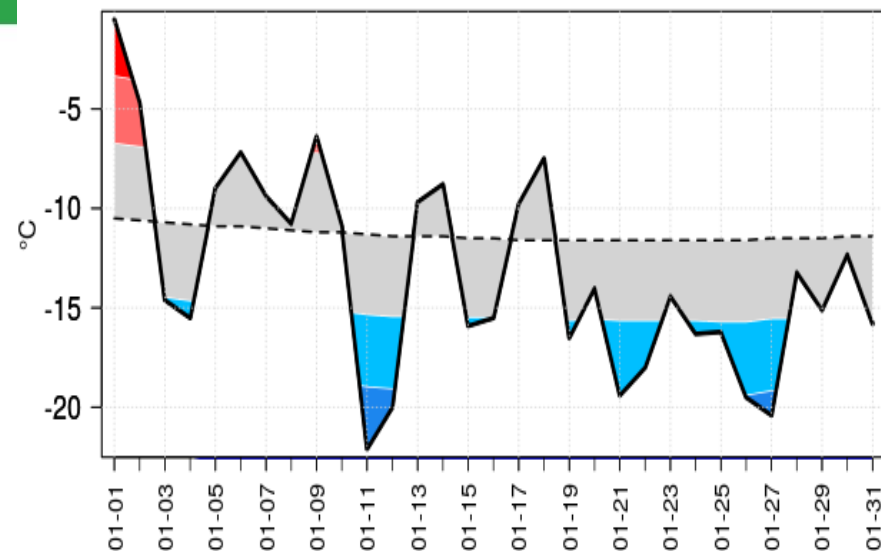
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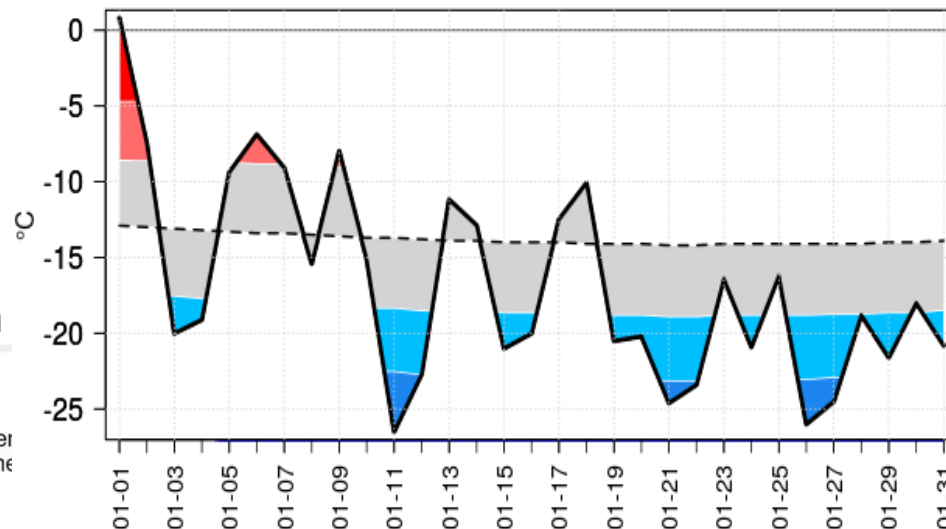
Miramichi



Bathurst

All sites were
below normal

Edmundston



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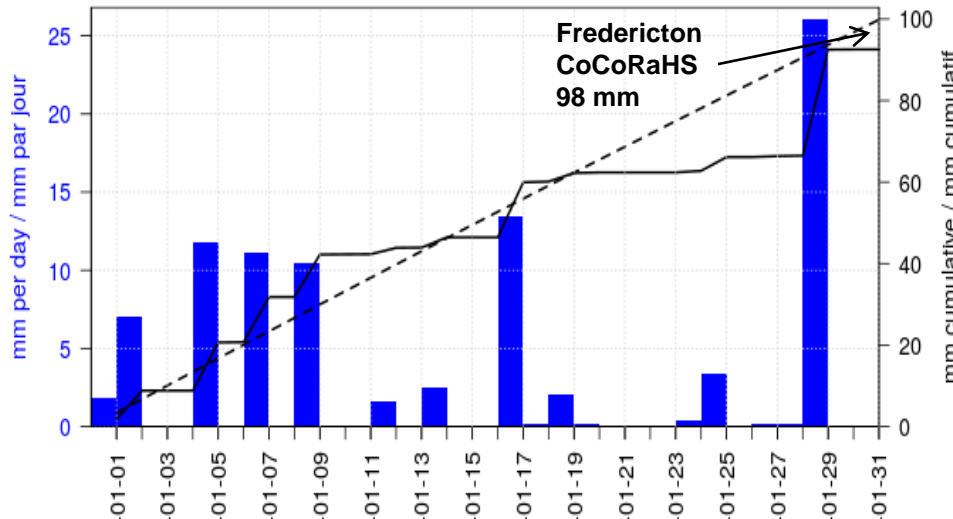
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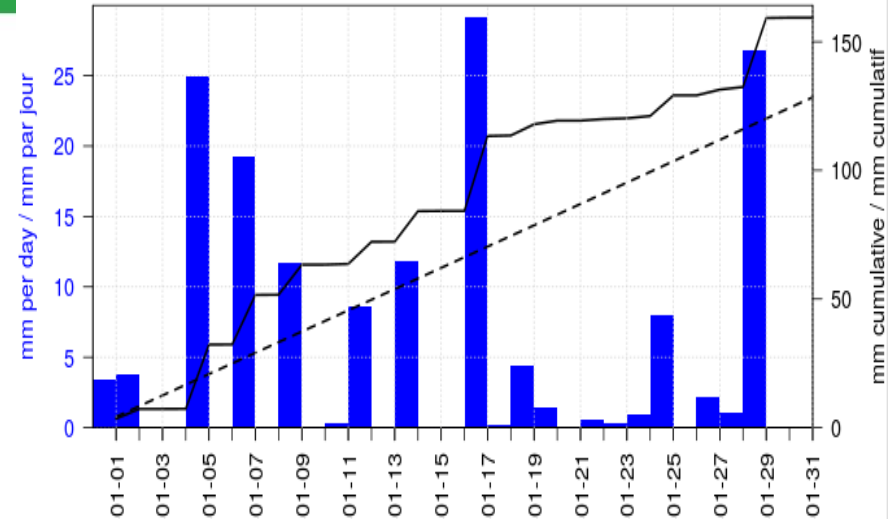
January 2022 - Precipitation

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)

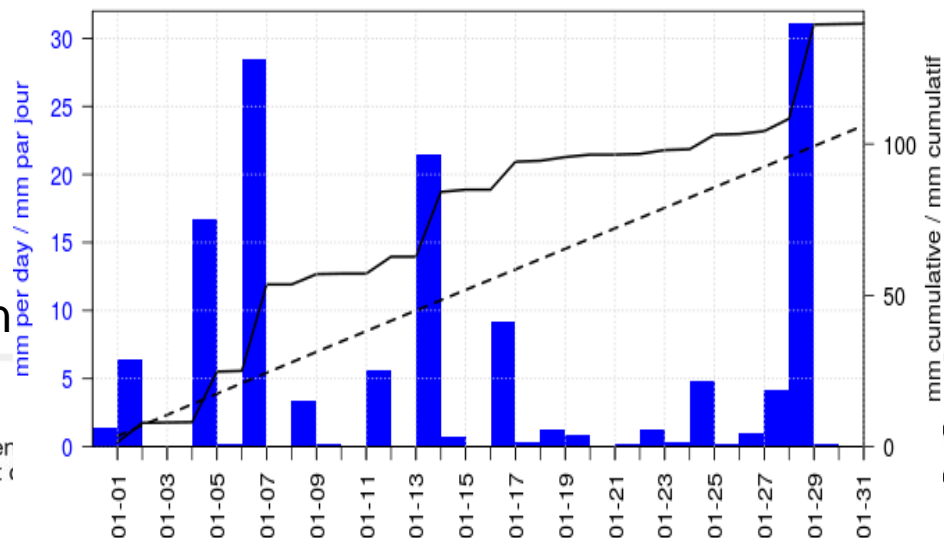


Saint John

Fredericton was
near normal

Saint John and
Moncton were
above normal

Moncton



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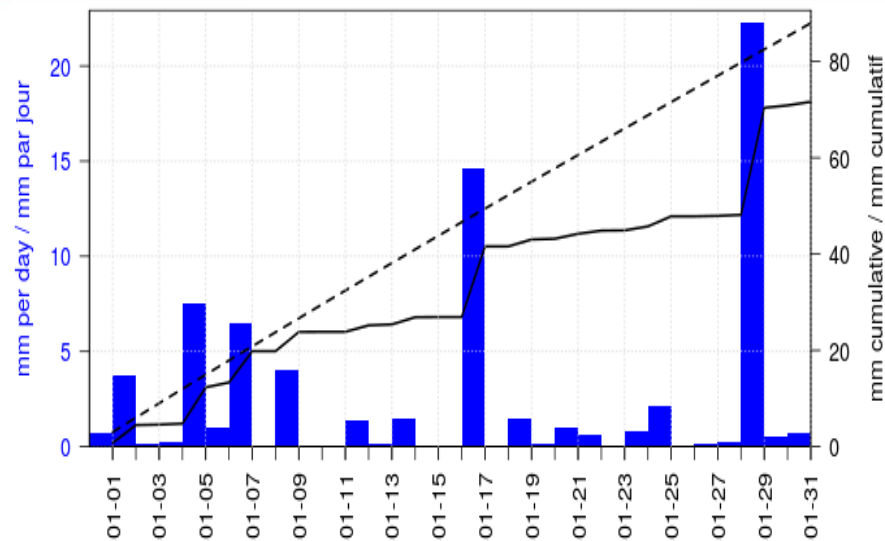
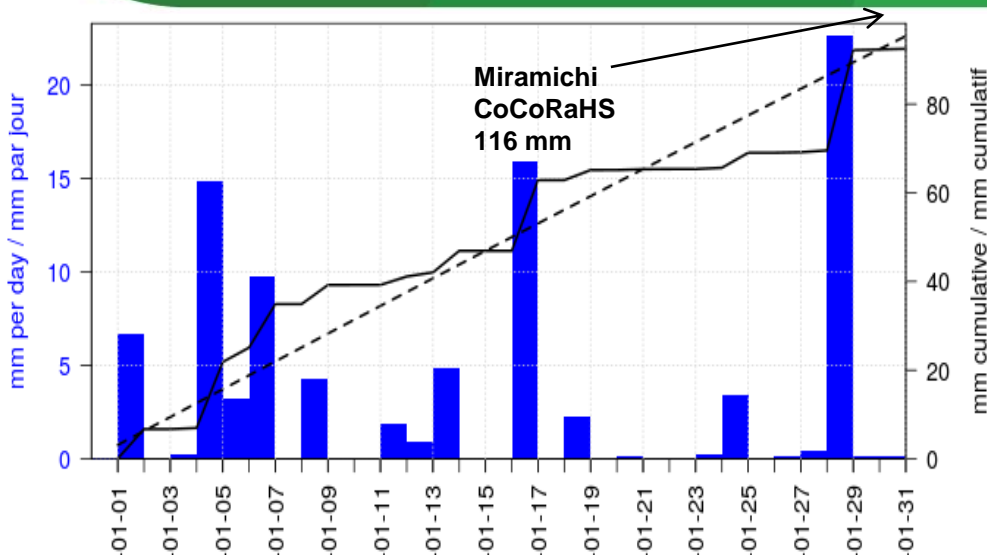
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January 2022 - Precipitation

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

Based on ECCC gridded precipitation analysis
Climatology 2002-2020

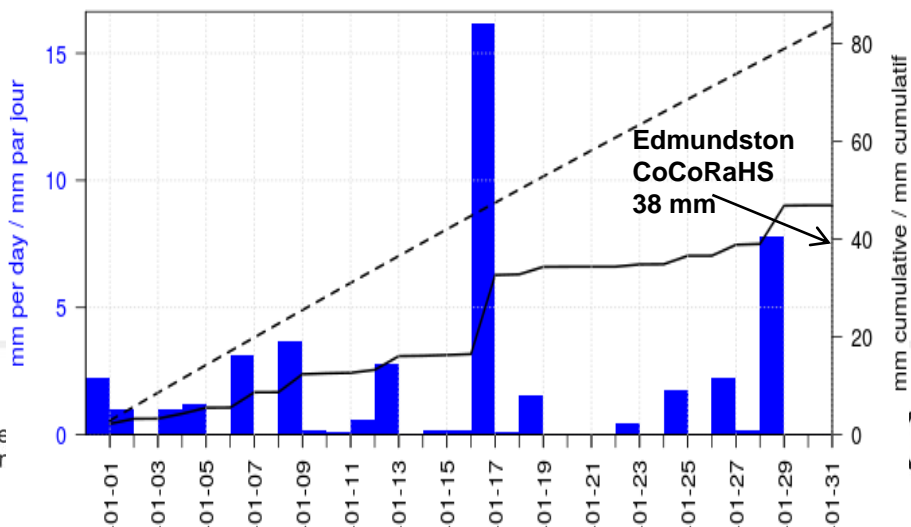


Miramichi

Miramichi was
near normal

Edmundston and
Bathurst were
below normal

Edmundston



Bathurst



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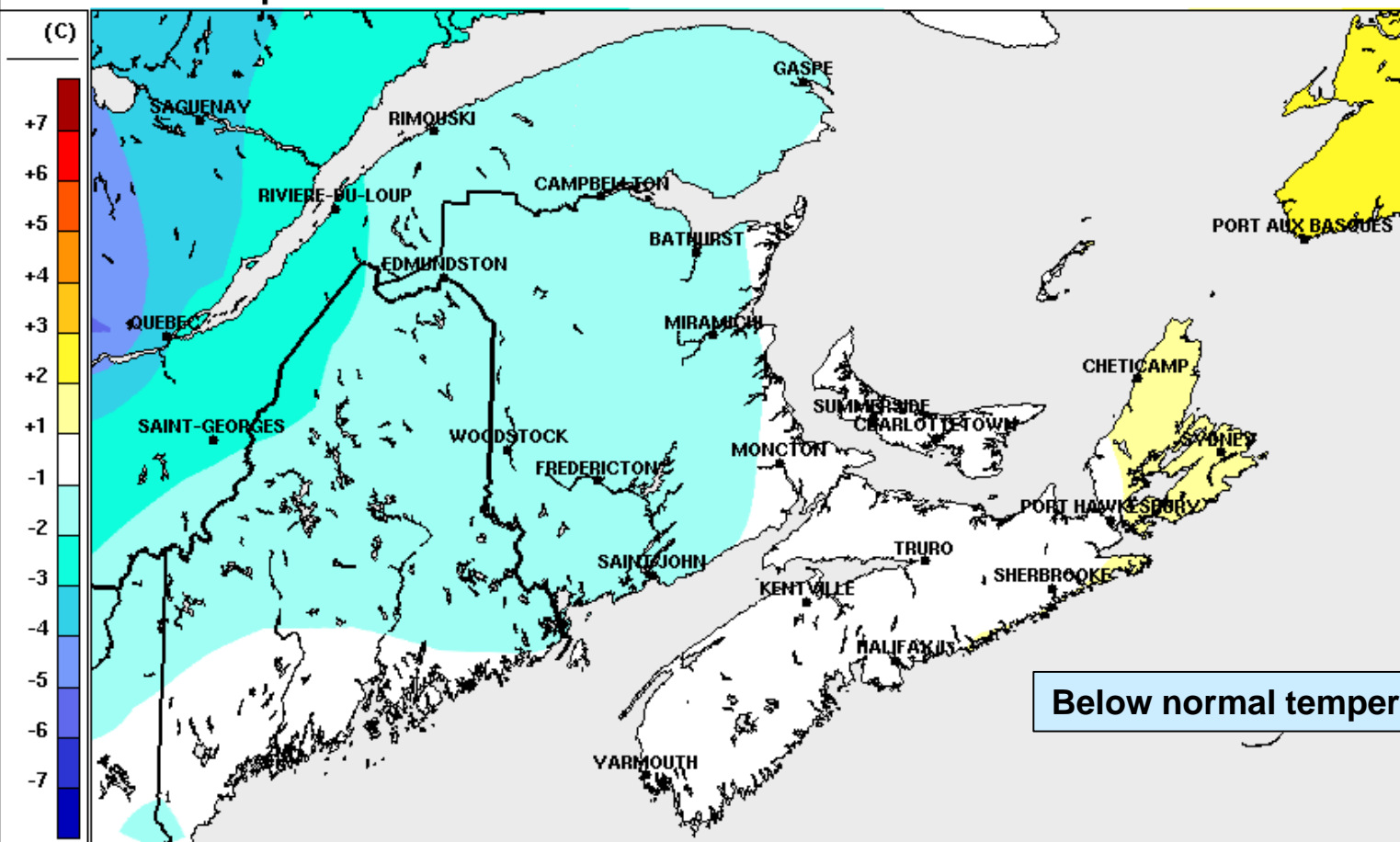
January 2022 – Temperature departure from 1981-2010 mean

Temperature Anomaly: 2022-01
Anomalie de température: 2022-01



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

2022-02-01 13:58UTC



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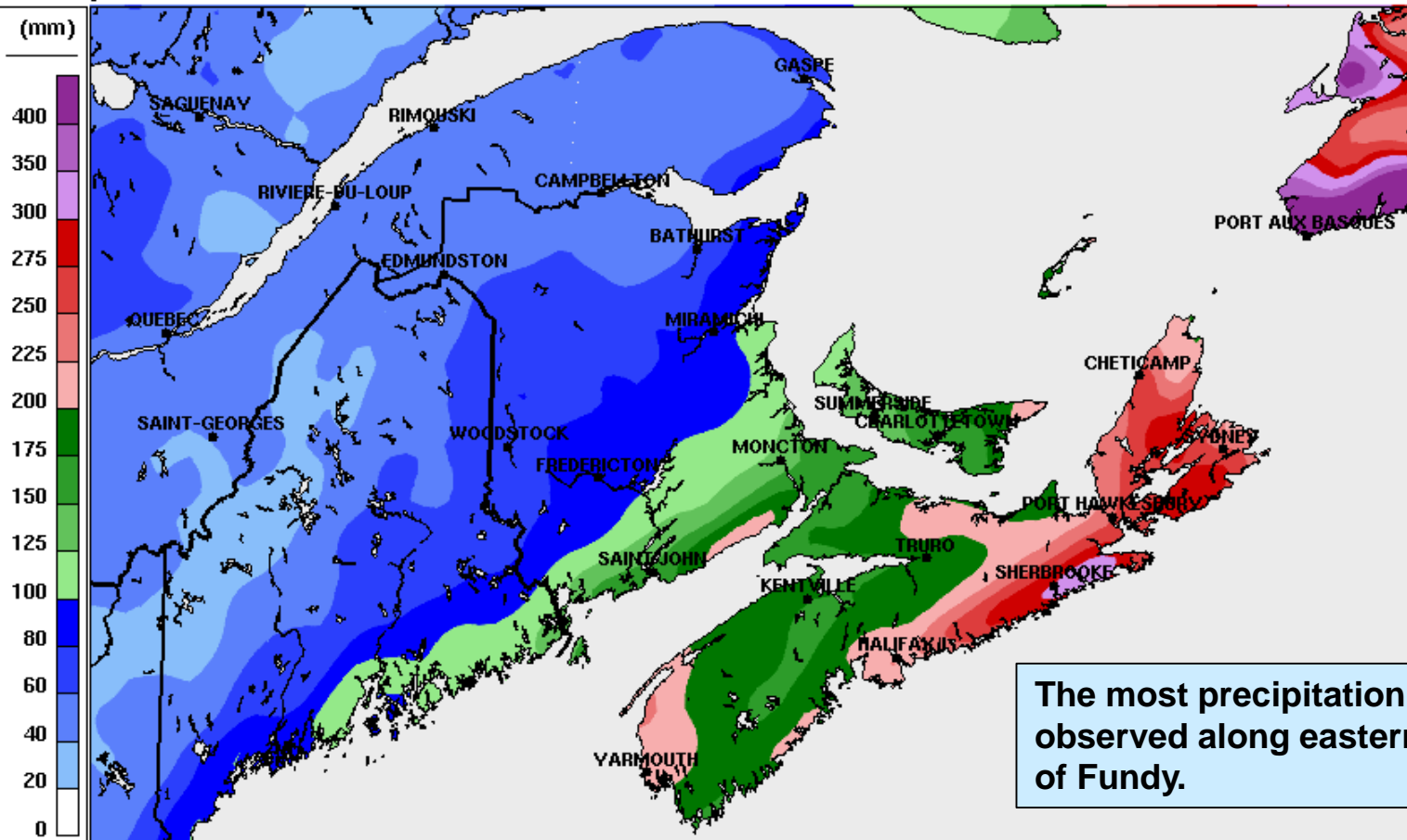
January 2022 – Total precipitation

Total precipitation: 2022-01
Précipitation totale: 2022-01



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ECCC 10-km CaPA / ACaP 10-km de ECCC

2022-02-01 13:30UTC



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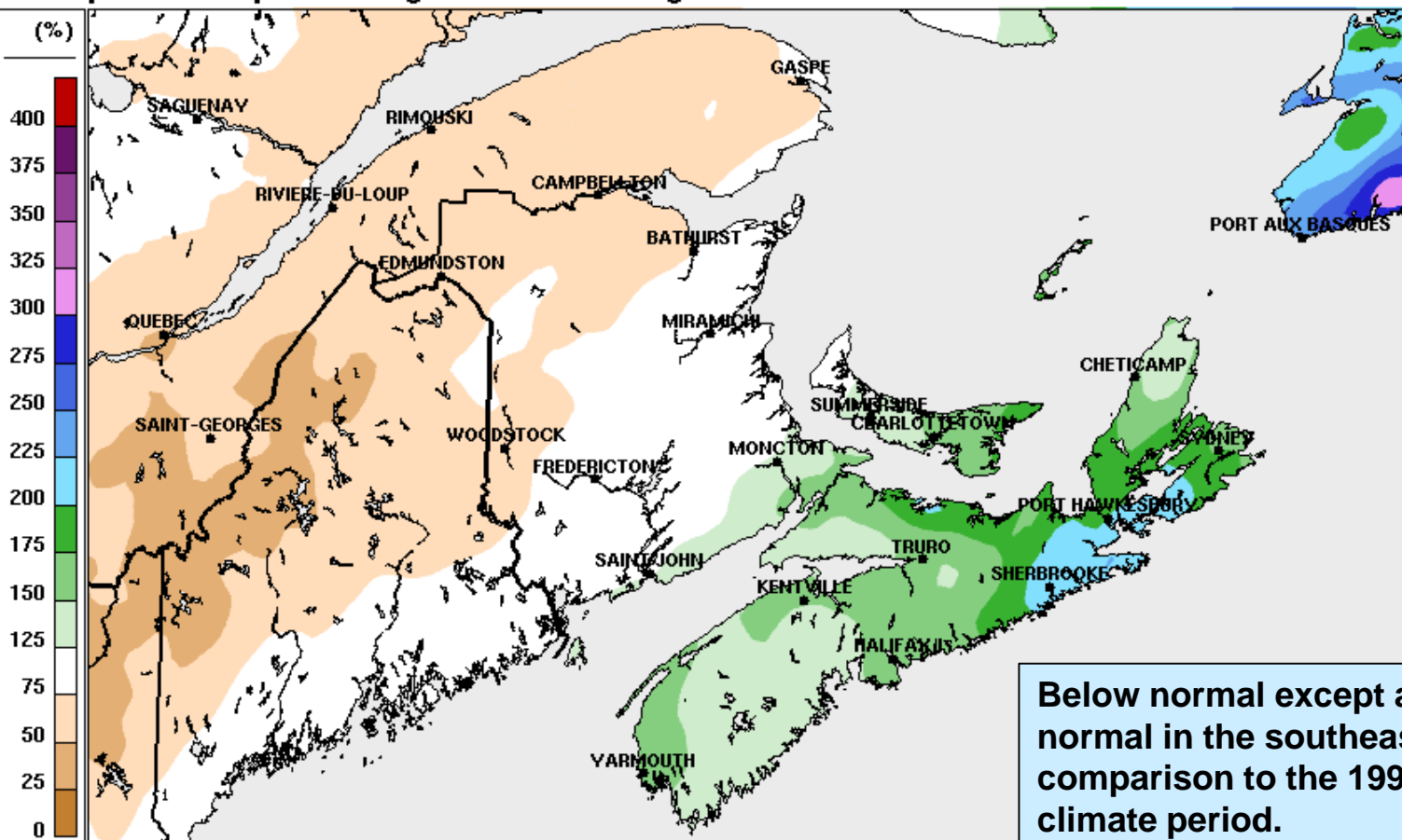
January 2022 – Precipitation departure from 1991-2020 mean

Precipitation as a Percentage of Climatology: 2022-01
Précipitation en pourcentage de la climatologie: 2022-01



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ECCC 10-km CaPA / ACaP 10-km de ECCC. Clim: 1991-2020

2022-02-01 13:31UTC



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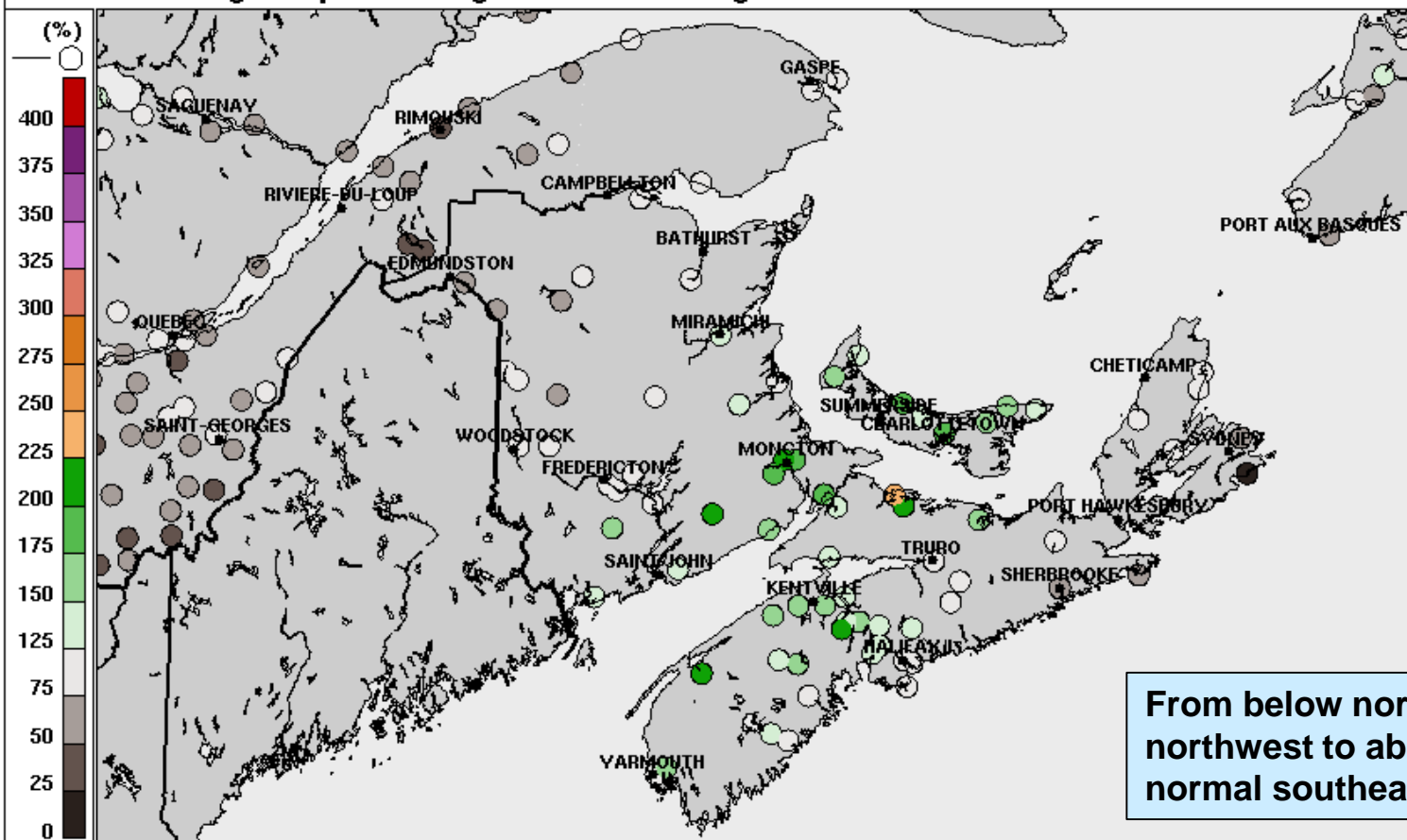
January 2022 – Snowfall departure from 1981-2010 mean

Snowfall as a Percentage of Climatology: 2022-01
Chutes de neige en pourcentage de la climatologie: 2022-01



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From below normal
northwest to above
normal southeast.

Observations and NWP model data / Observations et données de modèle de PNT. Clim: 1981-2010

2022-02-01 14:53UTC



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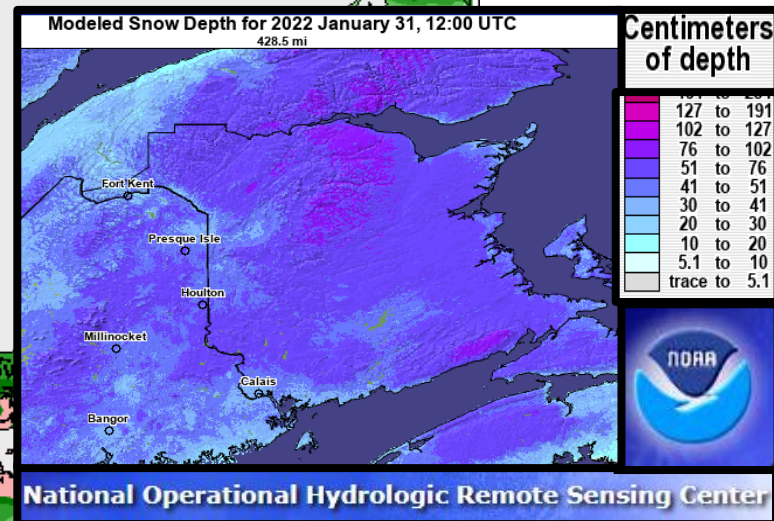
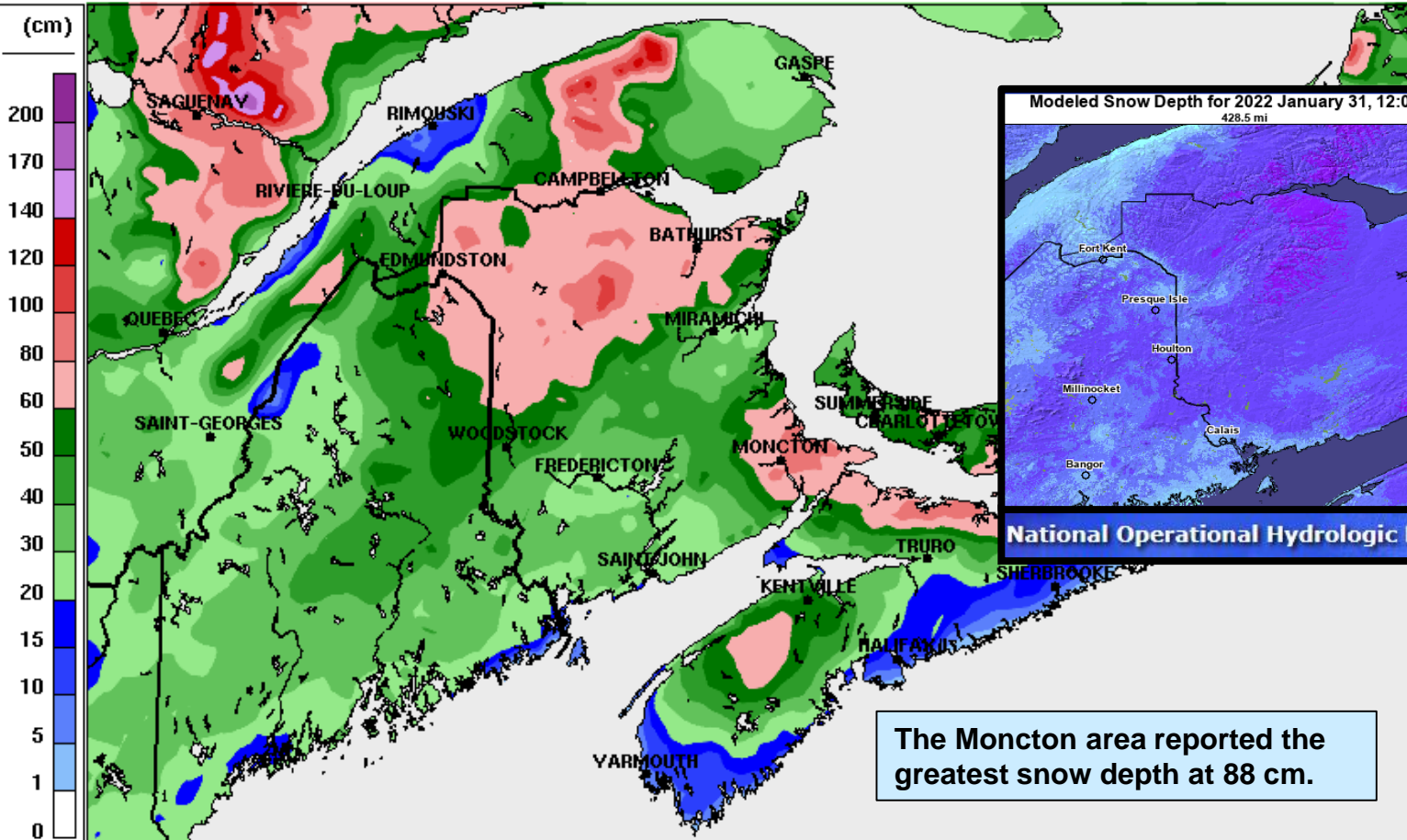
January 2022 – Snow depth at month end

Extracted from Canadian computer model

Snow Depth (end of month): 2022-01
Neige au sol (fin de mois): 2022-01



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The Moncton area reported the greatest snow depth at 88 cm.

2022-01-31 14:32UTC



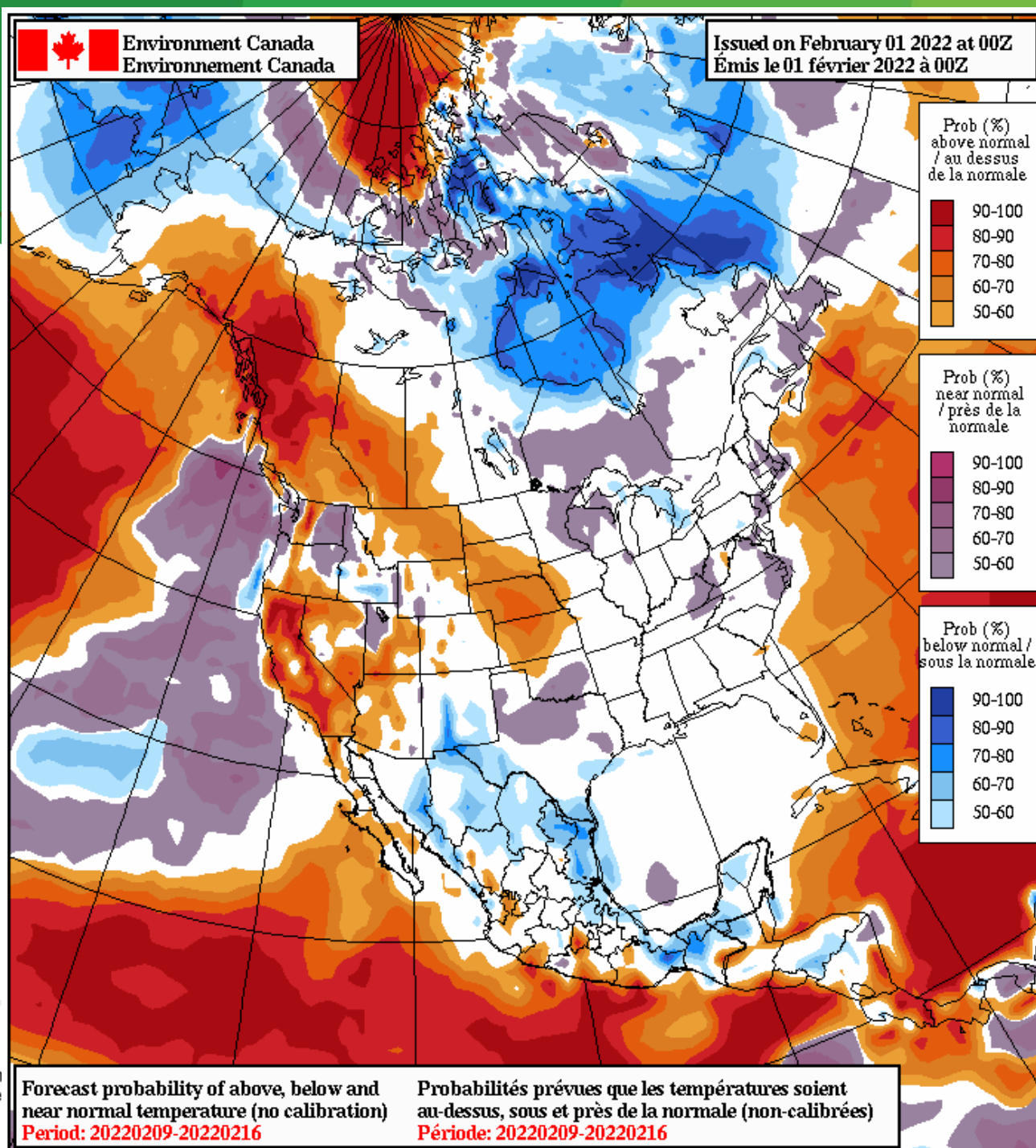
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Day 8 to 14 Forecast

Period ending
February 16,
2022

Suggesting a weak
signal of near normal in
the southeast otherwise,
no conclusive signal.



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Fredericton



Ensemble and Deterministic Forecasts issued 1 February 2022 00 UTC

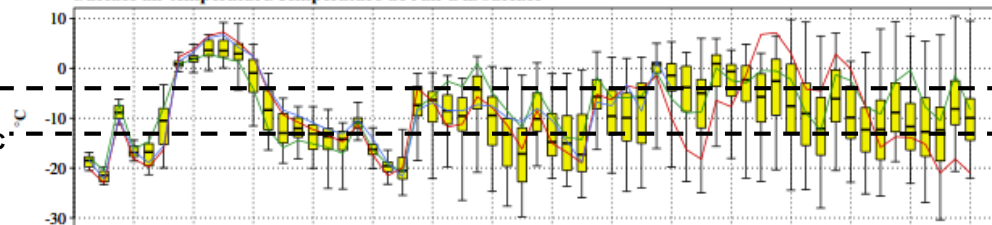
Prévision d'ensemble et déterministe émises le 1 Février 2022 00 UTC

for/pour

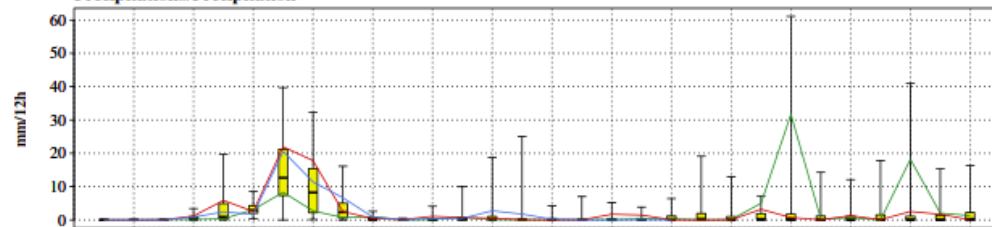
NAEFS / SPENA

FREDERICTON (YFC) 45.87 N 66.53 W/O

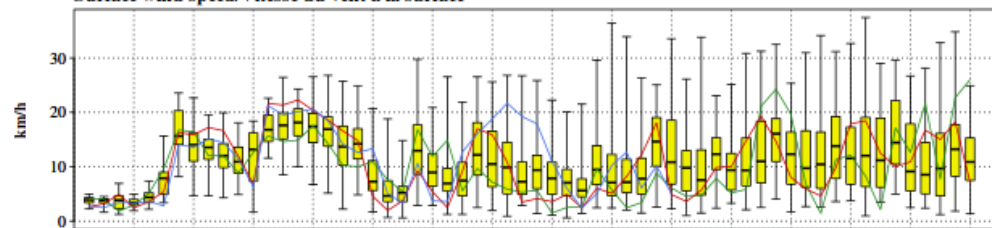
Surface air temperature/Température de l'air à la surface



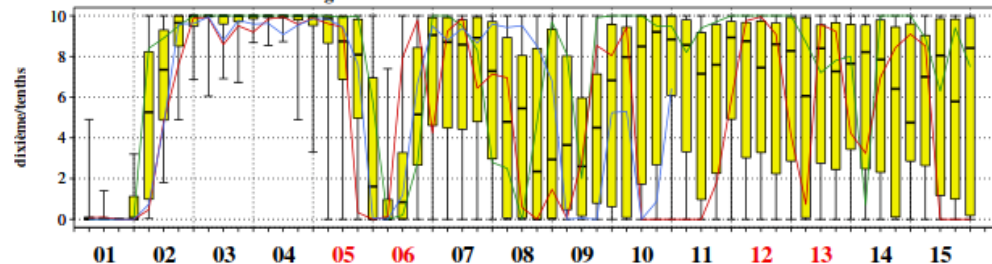
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



February/Février 2022

max
75%
median/médiane
25%
min

Global Model / Modèle global

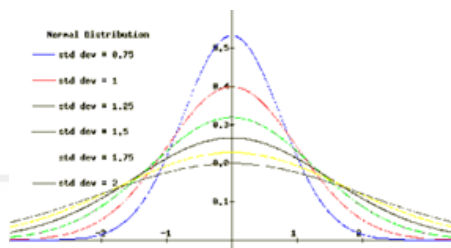
Control Member / Membre contrôle CMC

Control Member / Membre contrôle NCEP

Normal high: -2.0C
February Normal low: -13.7C

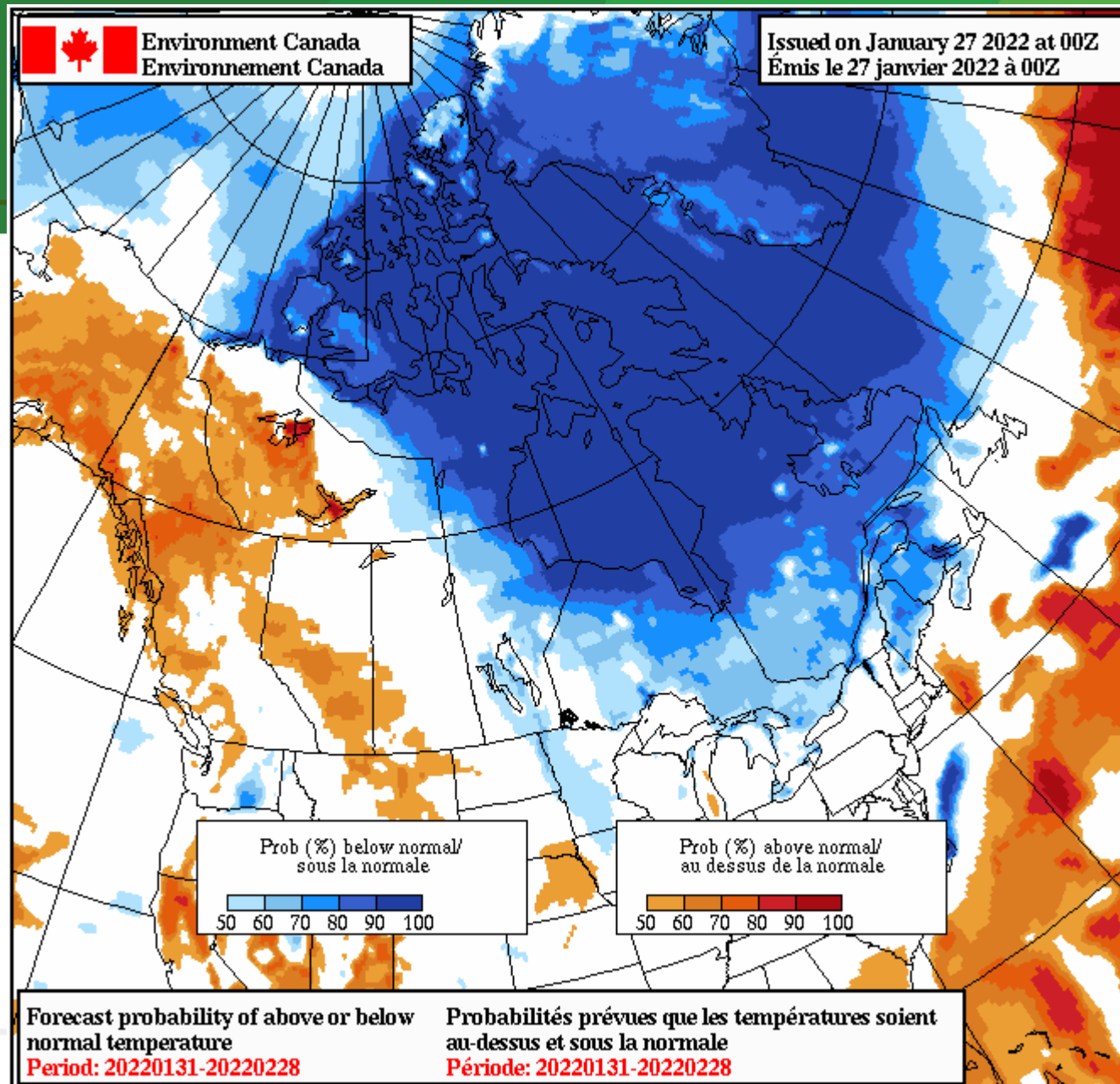
**Next 15 days; ending
February 15, 2022**

Generally suggesting oscillating temperatures until near the 6th then a lot of variability for the remainder of the period.



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Temperature
January 31
to
February 28

CMC
Monthly
Forecast
Product
using GEPS
50km res.

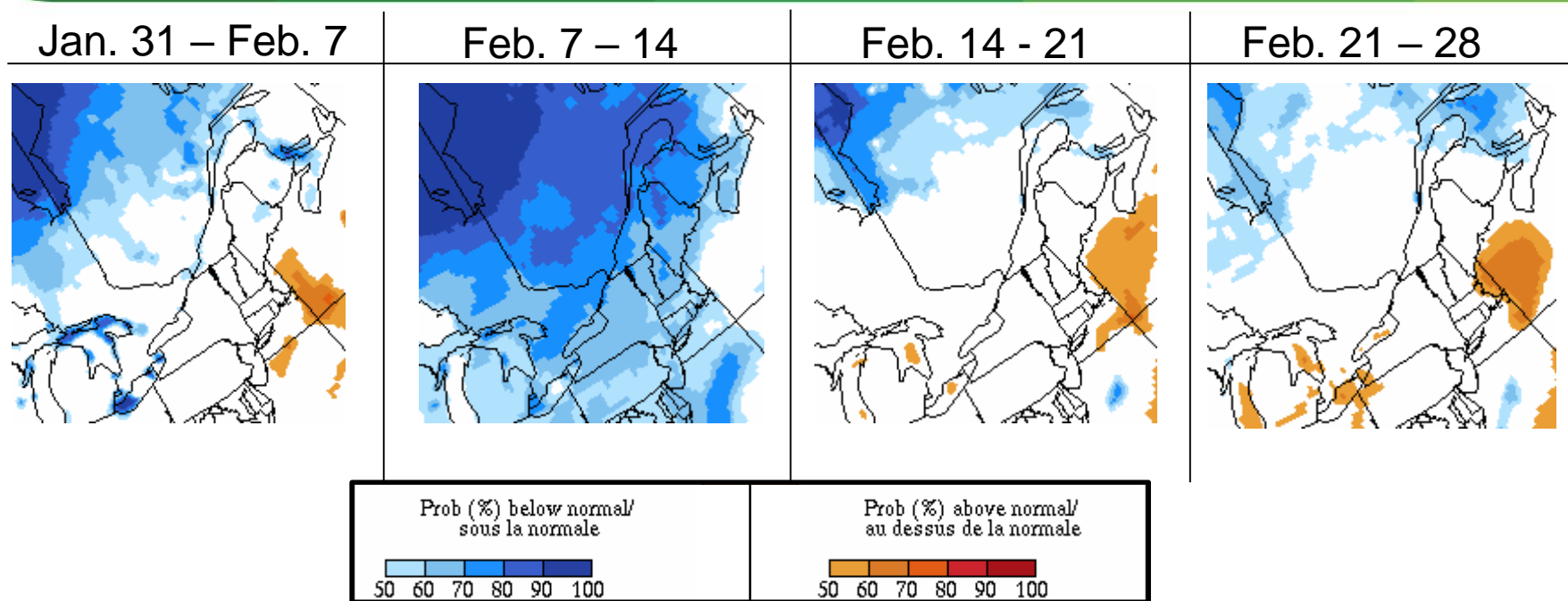


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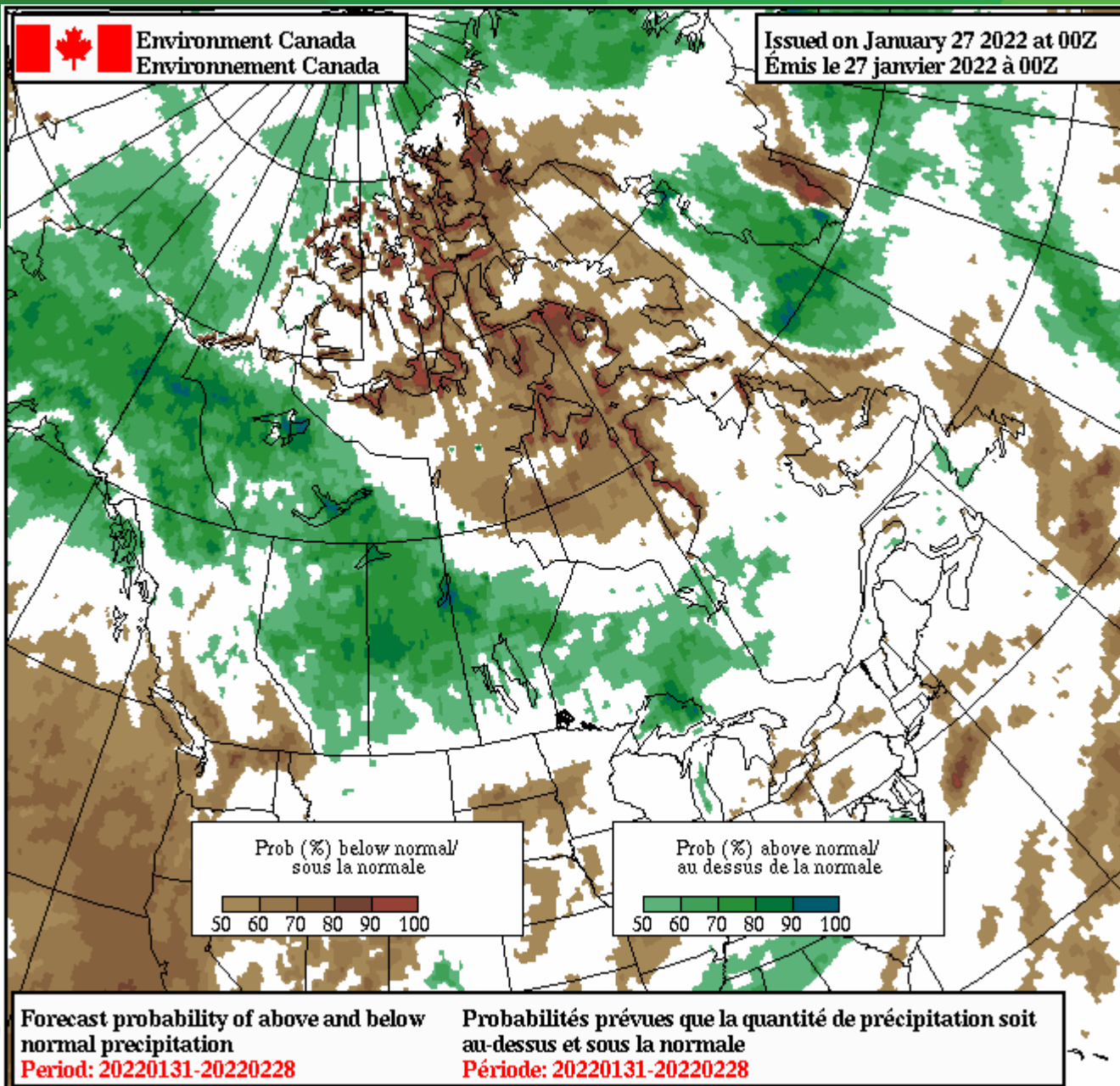
Weekly signature from GEPS 50km resolution



Generally no conclusive signal (near normal) for the period with the exception of the second week which indicates a moderate sign of below normal.



Precipitation January 31 to February 28



CMC
Monthly
Forecast
Product
using GEPS
50km res.

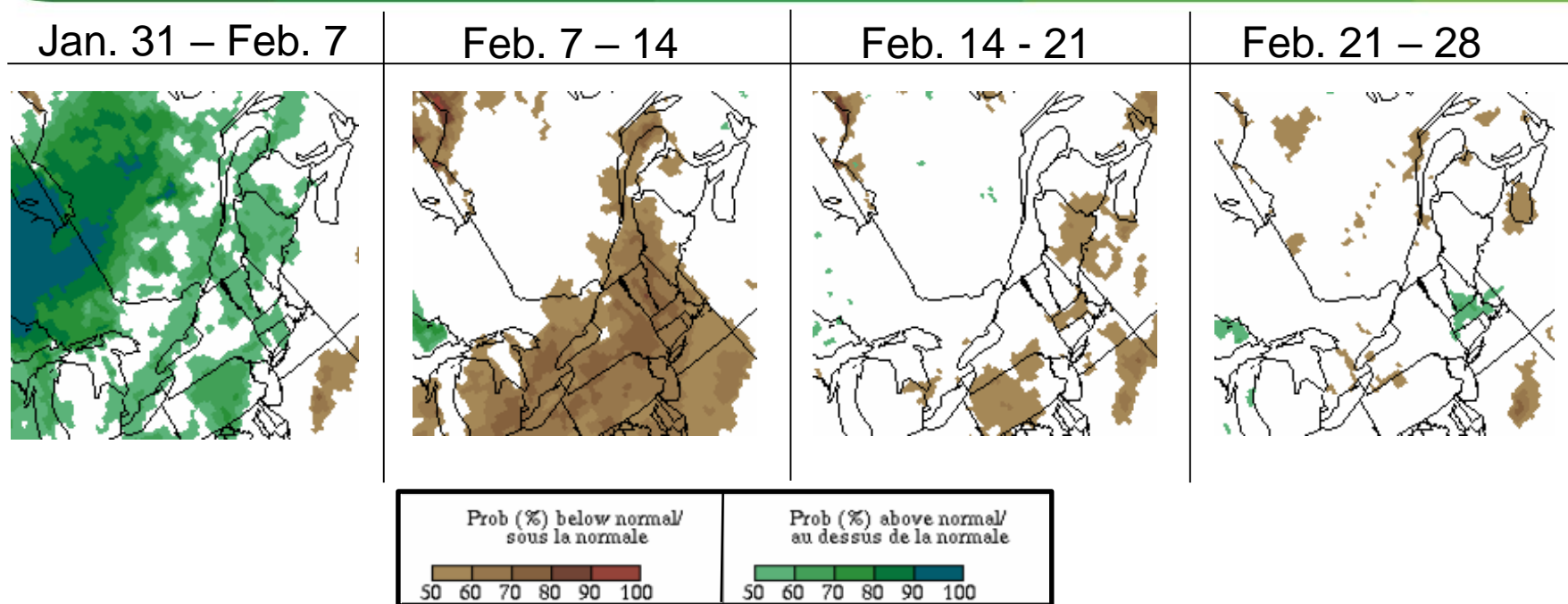


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Weekly signature from GEPS 50km resolution



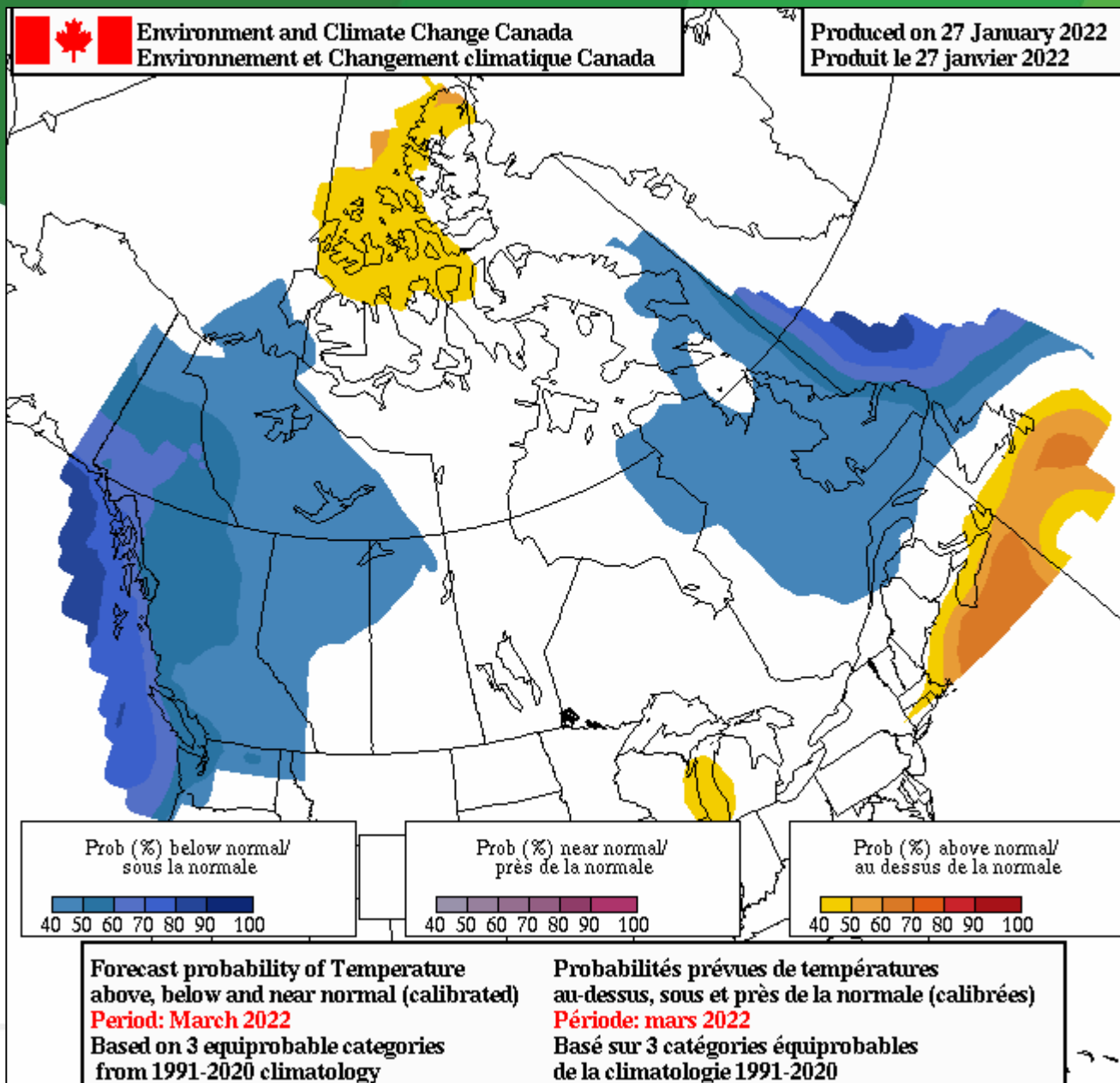
A weak signal of above normal over mainly western areas for the first week, then transitioning to no conclusive signal (near normal) with subtle weak indications of below normal for the remainder of the period.





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Produced on 27 January 2022
Produit le 27 janvier 2022

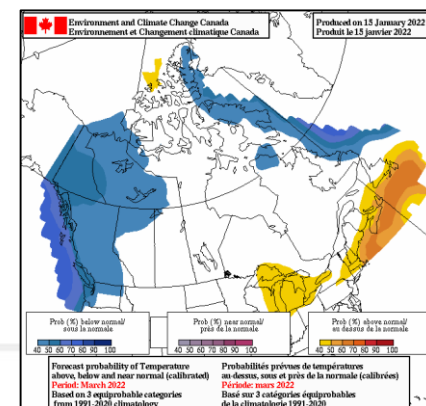


Temperature March 2022

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

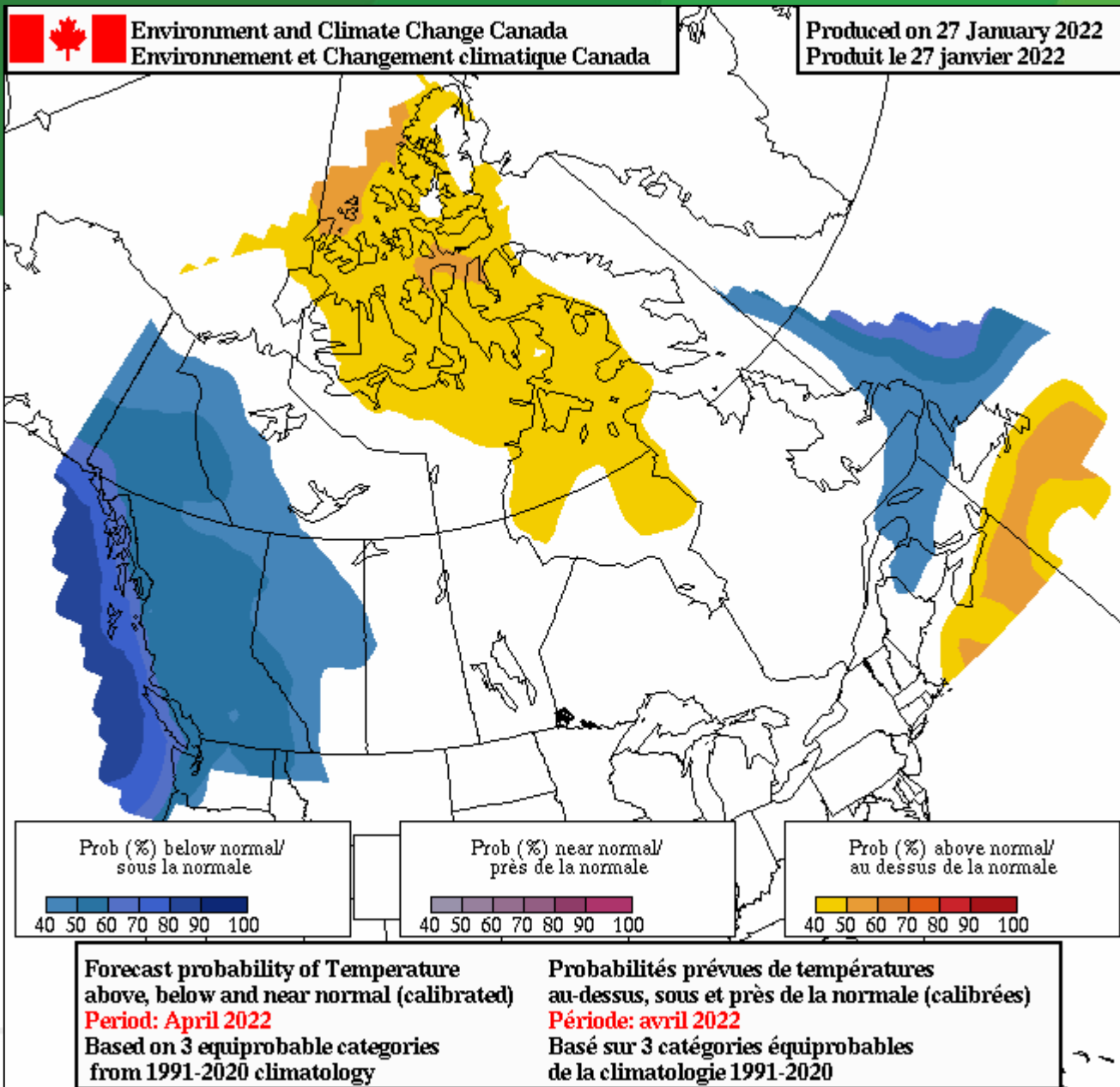
Produced January 15



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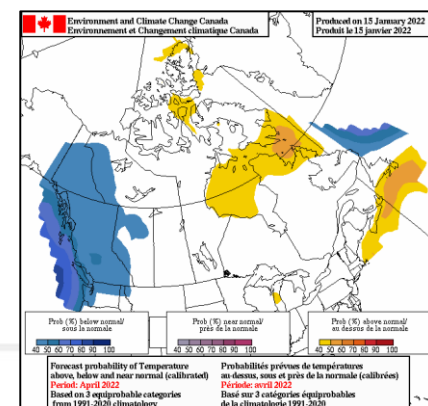
Canada



Temperature April 2022

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

Produced January 15



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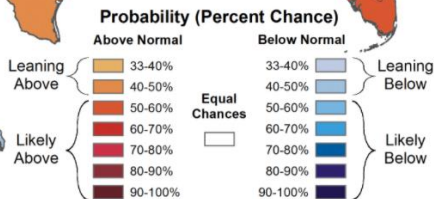
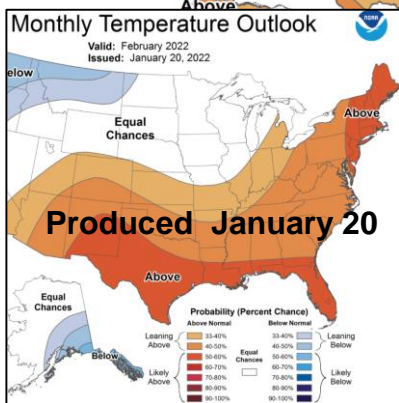
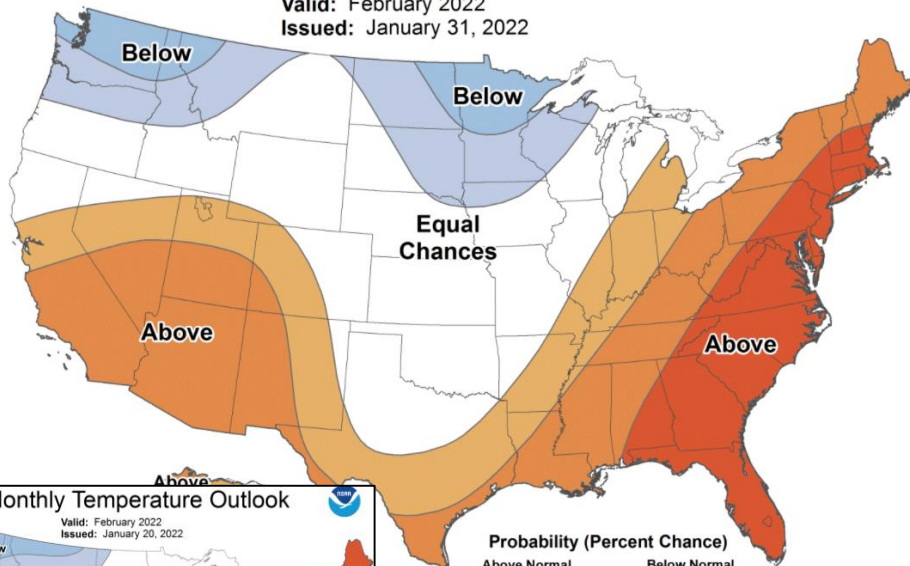


February 2022



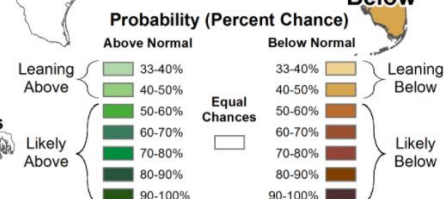
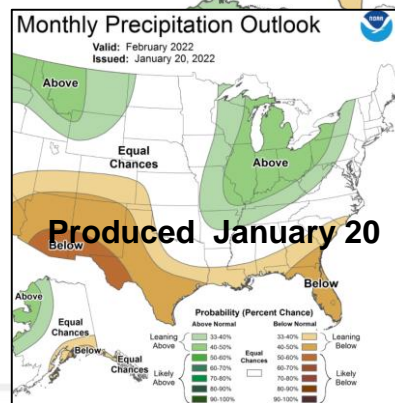
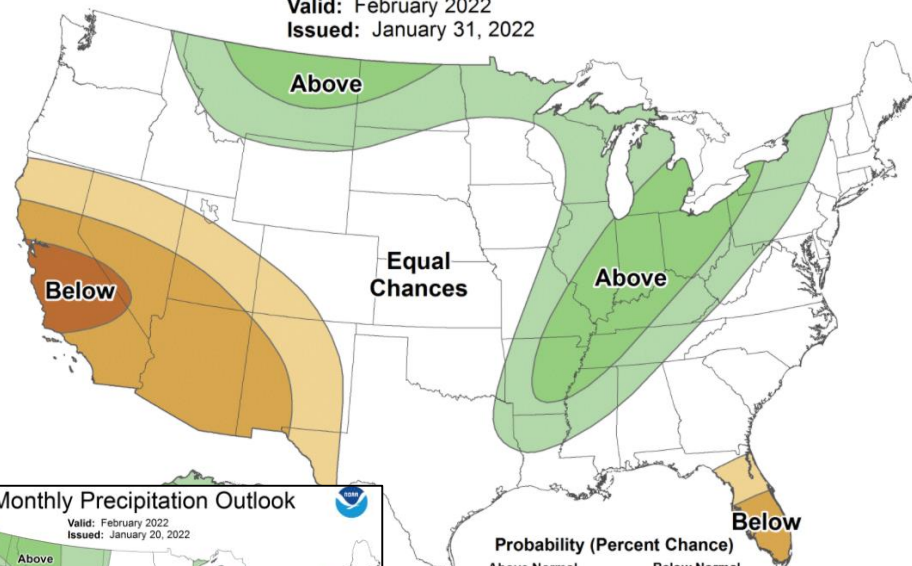
Monthly Temperature Outlook

Valid: February 2022
Issued: January 31, 2022



Monthly Precipitation Outlook

Valid: February 2022
Issued: January 31, 2022



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Canada Weather Pages

www.weather.gc.ca



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