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New Brunswick

February 2019 Review March 2019 and Spring Outlook

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Environment and Climate Change Canada

March 4, 2019

February 2019; Climate Summary

Station Name	TC ID	Station Type	Mean Temperature (°C)			Total Precip (mm)			
			Monthly Mean	Normal Mean	Departure from Normal	Monthly Total	Normal Total	Total as % of Normal	Departure from Normal as % of Normal
BAS CARAQUET	WXS	AU8	-11.1	-9.7	-1.4	92.7	79.0	117	17
BAS CARAQUET		DAILY				107.6	79.0	136	36
BATHURST A	ZBF	NCA	-11.4	-9.4	-2.0				
BOUCTOUCHE CDA CS	ABT	AU8	-9.1	-7.7	-1.4	72.6	88.0	83	-17
CHARLO AUTO	ZCR	AU8	-11.7	-10.9	-0.8	39.8	66.9	60	-40
MIRAMICHI RCS	ACQ	AU8	-10.0	-8.9	-1.1	54.1	70.9	76	-24
DOAKTOWN AUTO RCS	ADN	AU8	-10.8	-8.9	-1.9	62.1	77.3	80	-20
EDMUNDSTON	ERM	AU8	-14.4	-11.3	-3.2	110.1	62.3	177	77
FREDERICTON INTL A	YFC	NCA	-9.1	-7.9	-1.2				
FREDERICTON CDA CS	AFC	AU8	-9.4	-7.5	-1.9	73.3	70.1	105	5
FUNDY PARK (ALMA) CS	AFY	AU8	-7.5	-6.1	-1.4	106.2	107.8	98	-2
GAGETOWN AWOS A	YCX	AU5	-8.6	-6.6	-1.9				
GRAND MANAN SAR CS	XGM	AU8	-5.4			124.7			
KOUCHIBOUGUAC	AKC	AU8	-9.6	-8.6	-1.0	95.8	98.8	97	-3
MECHANIC SETTLEMENT	AMS	AU8	-9.7			117.9			
MISCOU ISLAND (AUT)	WMI	AU8	-9.8						
MONCTON INTL A	YQM	NCH	-8.3	-7.6	-0.7	75.2	90.9	83	-17
OAK POINT		DAILY	-7.5	-6.6	-0.9	92.1	77.3	119	19
POINT LEPREAU CS	WPE	AU8	-5.5	-5.5	0.0	104.2	101.3	103	3
RED PINES	ARP	AU8	-11.1	-9.9	-1.2	88.8	59.6	149	49
SAINT JOHN A	YSJ	NCH	-7.8	-7.1	-0.8	93.7	91.0	103	3
ST. STEPHEN	WSS	AU8	-7.1			93.4			
SUSSEX FOUR CORNERS	ASF	AU8	-8.0	-6.8	-1.2	89.5	85.0	105	5
WOODSTOCK		DAILY	-10.3	-9.5	-0.8	90.6	71.6	127	27
WOODSTOCK NEWBRIDGE	EWD	AU8	-10.9	-9.5	-1.4	57.7	71.6	81	-19
Average			-9.3	-8.3	-1.3	87.7	80.5	105	5
Max			-5.4	-5.5	0.0	124.7	107.8	177	77
Min			-14.4	-11.3	-3.2	39.8	59.6	60	-40

Highlights:

The average temperature was slightly below normal (-1.3C). All sites reported a negative anomaly with Edmundston reporting the largest negative anomaly at -3.2C below normal.

Total precipitation amounts were slightly above normal, with an average of 105% of total precipitation. Edmundston also reported 177% of their normal precipitation which was mostly in the form of snow. Snow depths were above normal with some sites reporting nearly two times their normal especially in northern and central regions.

February 2019; Climate Summary

Events:

Feb. 13; A winter storm brought significant snowfall amounts ranging from 15-30 cm across the province. The Saint-Quentin area reported the most snow at 37 cm. Strong easterly winds also caused widespread blowing snow. Saint John reported the strongest wind gust at 85 km/h.

Feb. 15-16; Snow mainly in the north and rain mainly in the south crossed the province. The most snow was reported in the Woodstock area with 18 cm. The most precipitation was recorded at Mechanic Settlement with 62 mm.

Feb. 24-25; A winter storm ended the month with most of the province reporting 10-25 cm of snow. Bas Caraquet saw the most snow with 38 cm.

Feb. 26-27; Cold and windy conditions provided blowing snow across several areas of the province and whiteout conditions in the northeast. Wind chills were near minus 35 in the northwest and westerly winds gusted from 60-80 km/h across most of province except for the northeast where Bathurst reported a wind gust of 96 km/h.

Days with thunderstorm activity (lightning) in New Brunswick; none

Days with temperature records broken or tied in New Brunswick; 5 28
(red=maximum, blue=minimum)



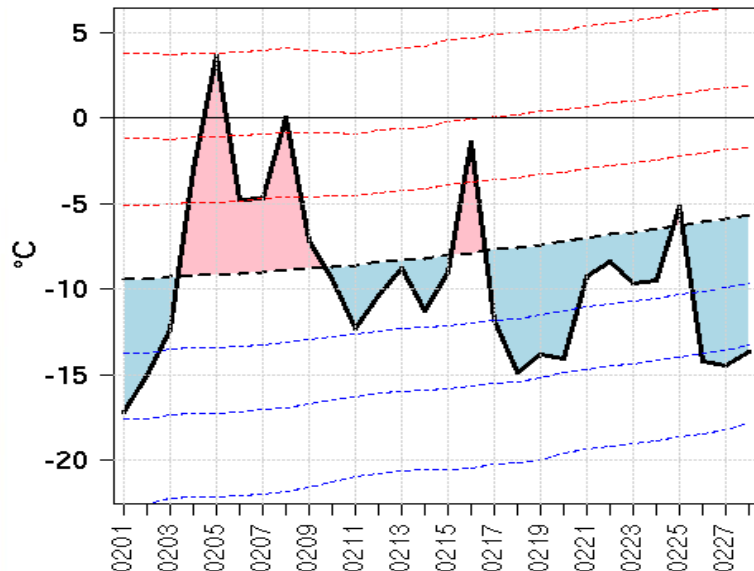
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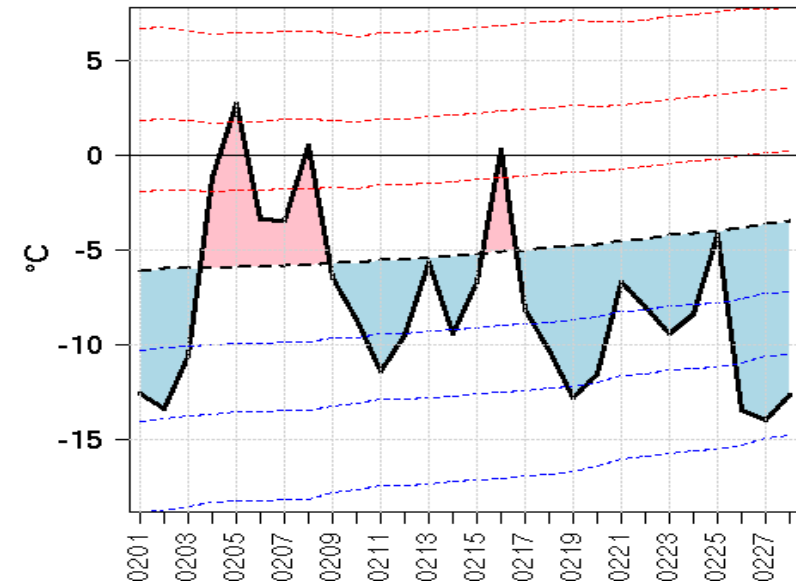
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February 2019 - Temperature

Daily Mean Temperature (bold line) versus Normal (thin line) and $\pm 0.7, 1.3, 2.1$ SD (red/blue dashes)



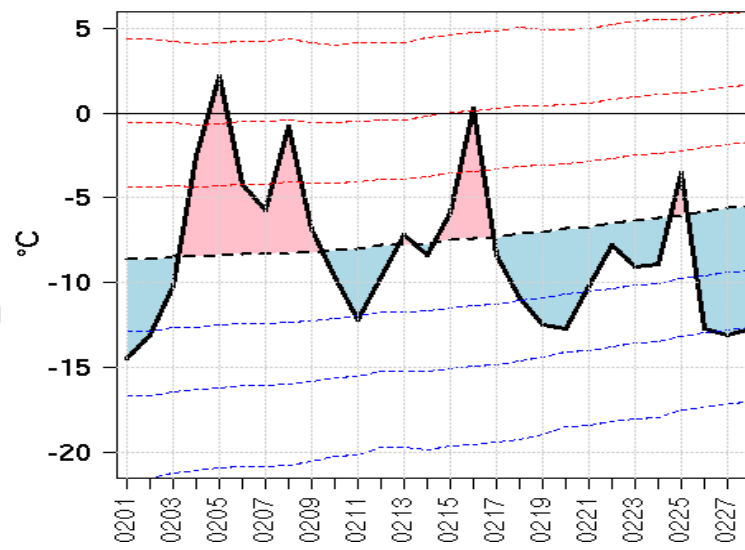
Fredericton (and area)



Saint John

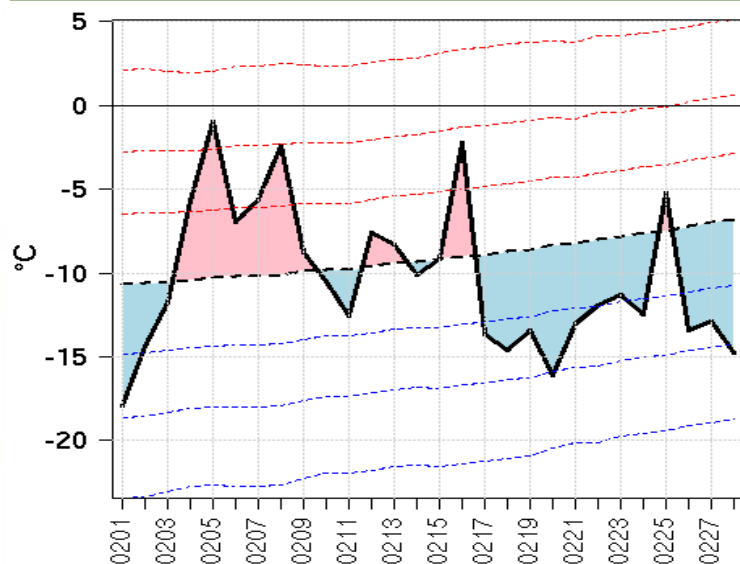
All sites were
slightly below
normal

Moncton

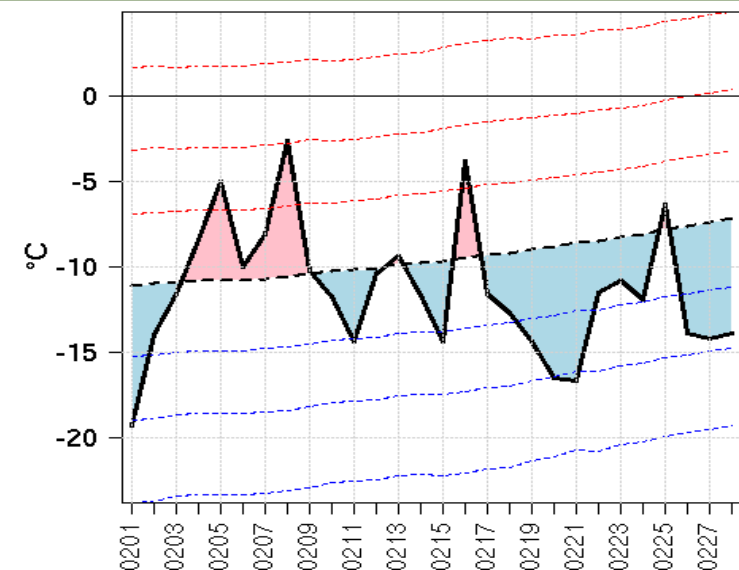


February 2019 - Temperature

Daily Mean Temperature (bold line) versus Normal (thin line) and $\pm 0.7, 1.3, 2.1$ SD (red/blue dashes)



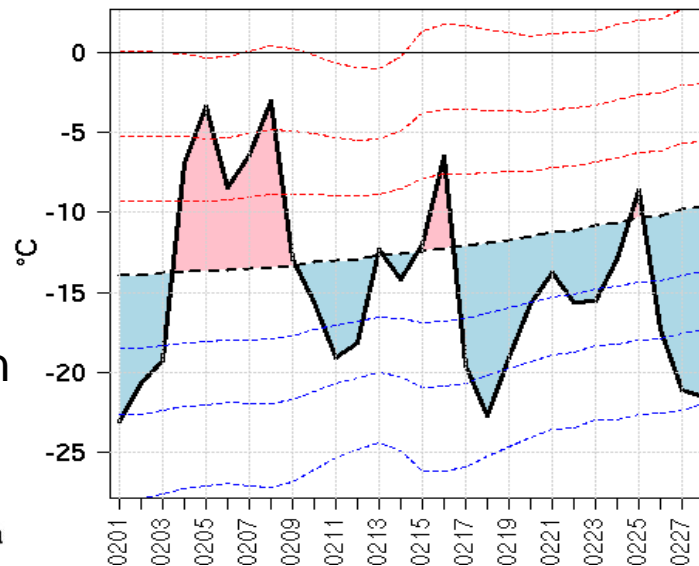
Miramichi



Bathurst

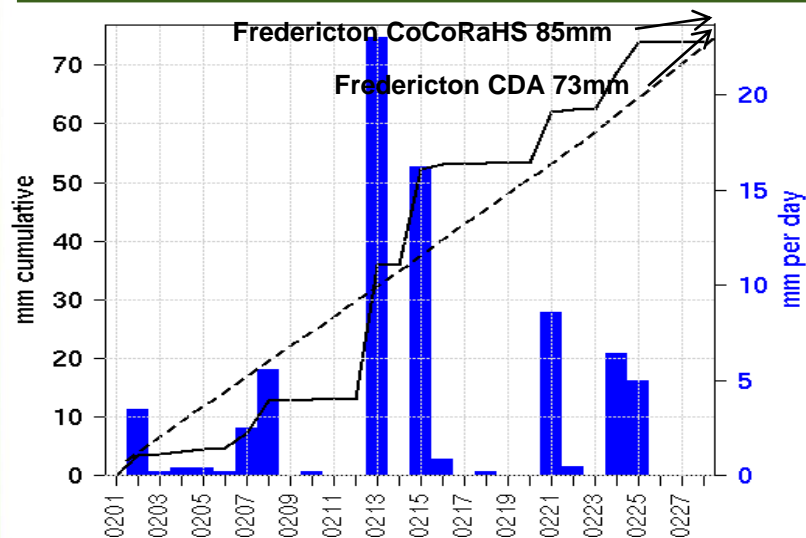
All sites were
below normal

Edmundston

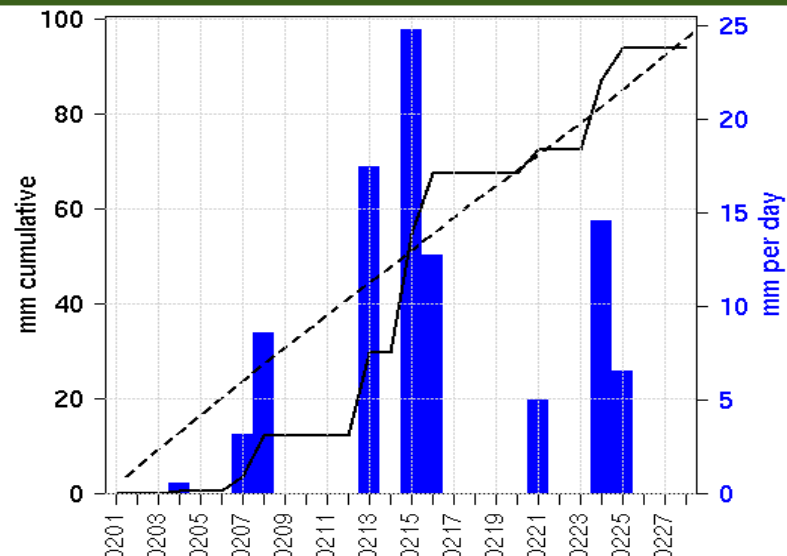


February 2019 - Precipitation

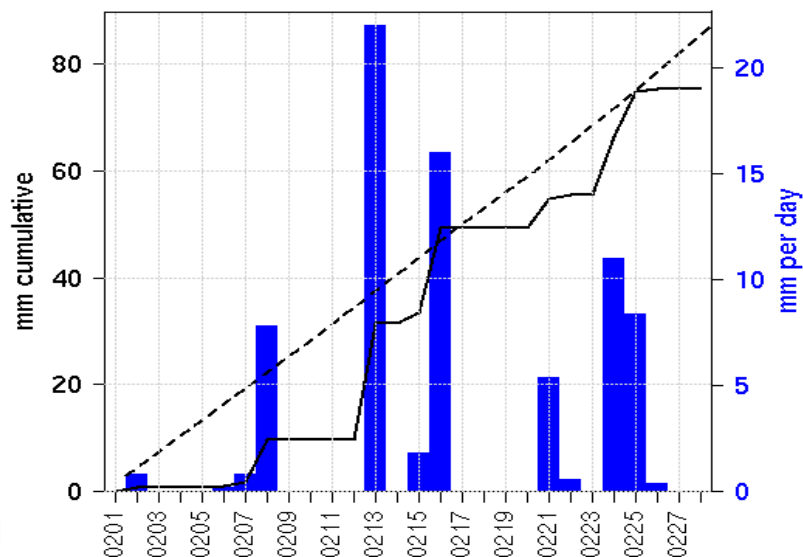
Observed Cumulative Precipitation (line) versus Normal (dashed line) and Daily Amounts (bars)



Fredericton (and area)



Saint John



Moncton

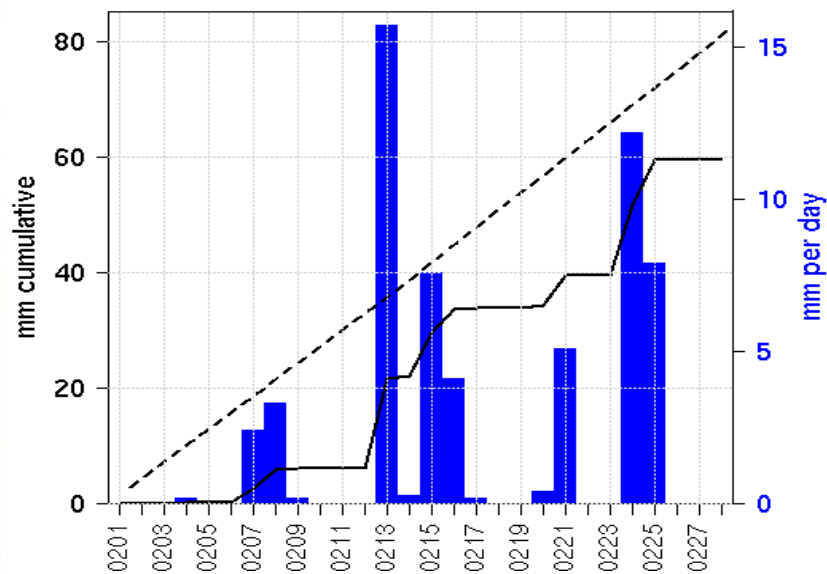
Moncton was below normal

Fredericton and Saint John were near normal

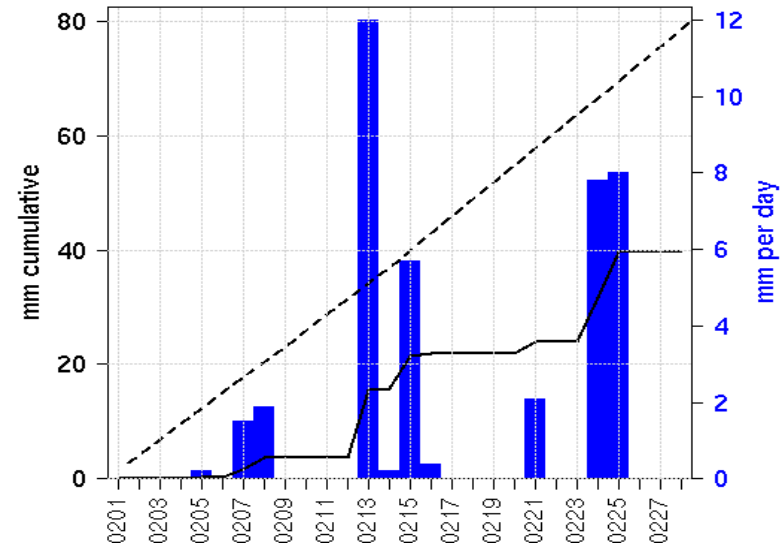


February 2019 - Precipitation

Observed Cumulative Precipitation (line) versus Normal (dashed line) and Daily Amounts (bars)



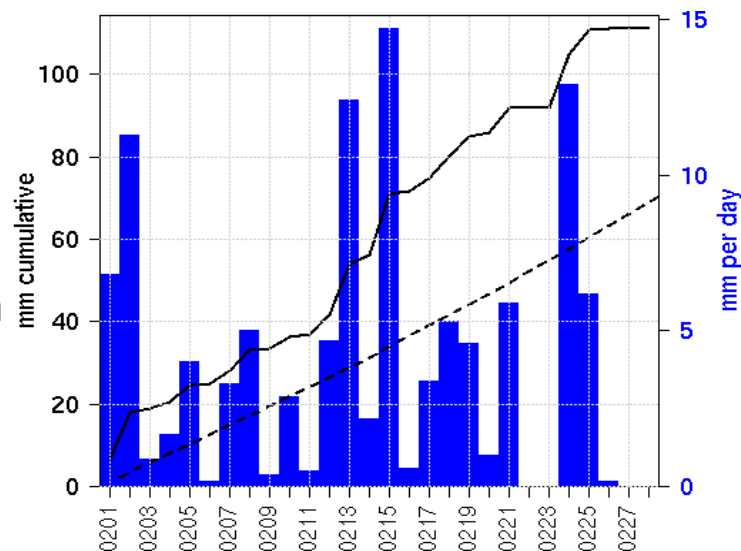
Miramichi



Bathurst

Edmundston
was above
normal

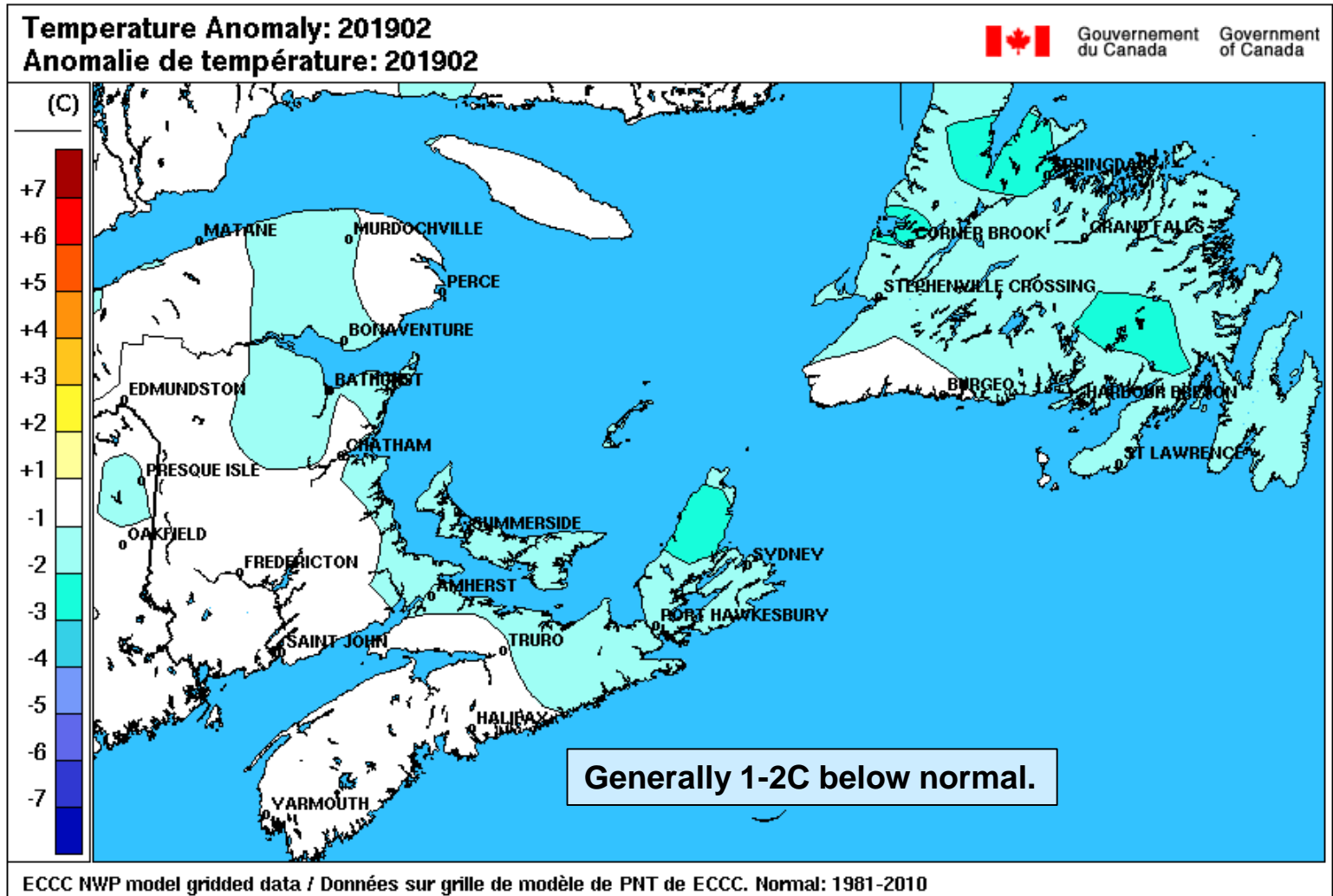
Edmundston



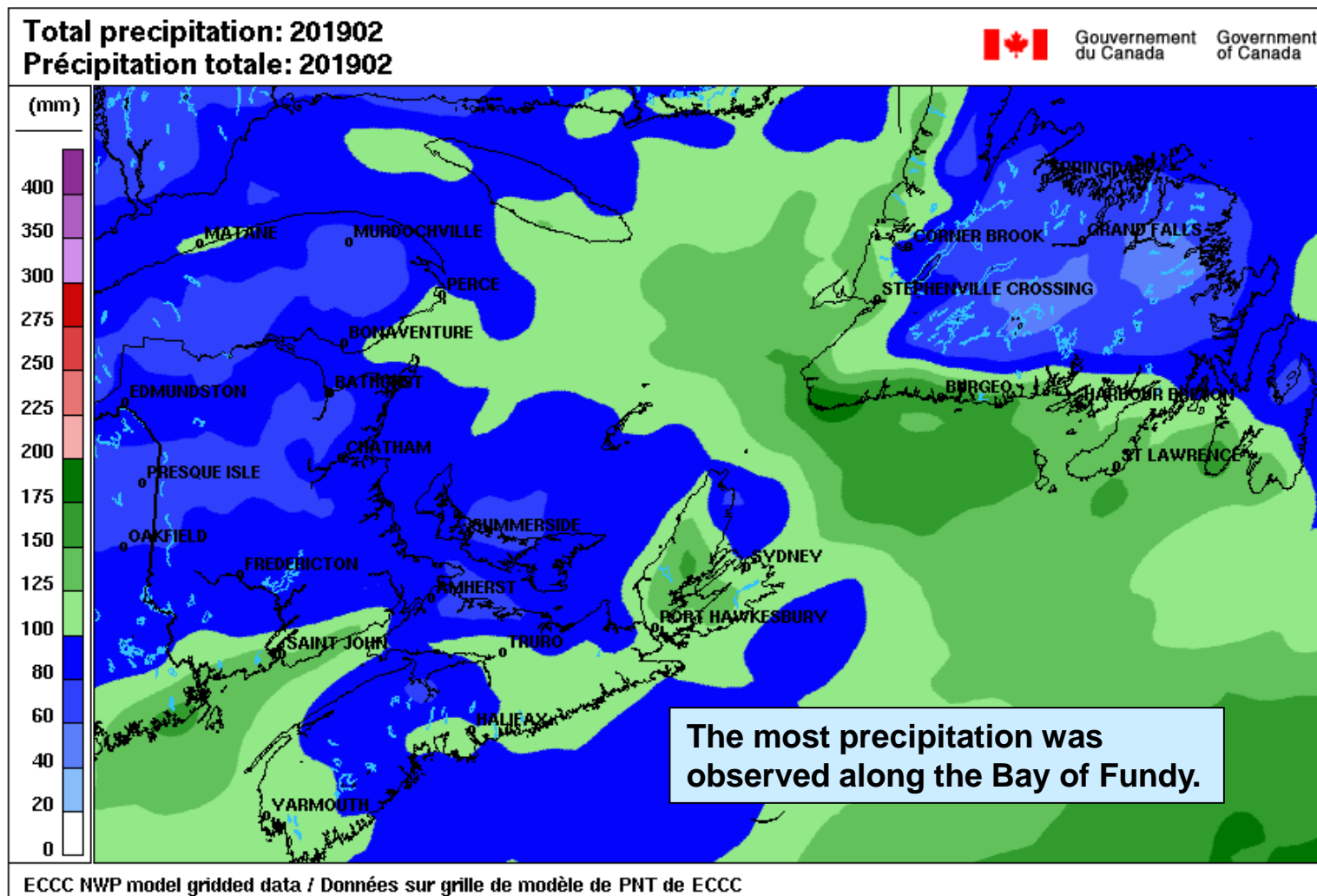
Miramichi
and Bathurst
were below
normal



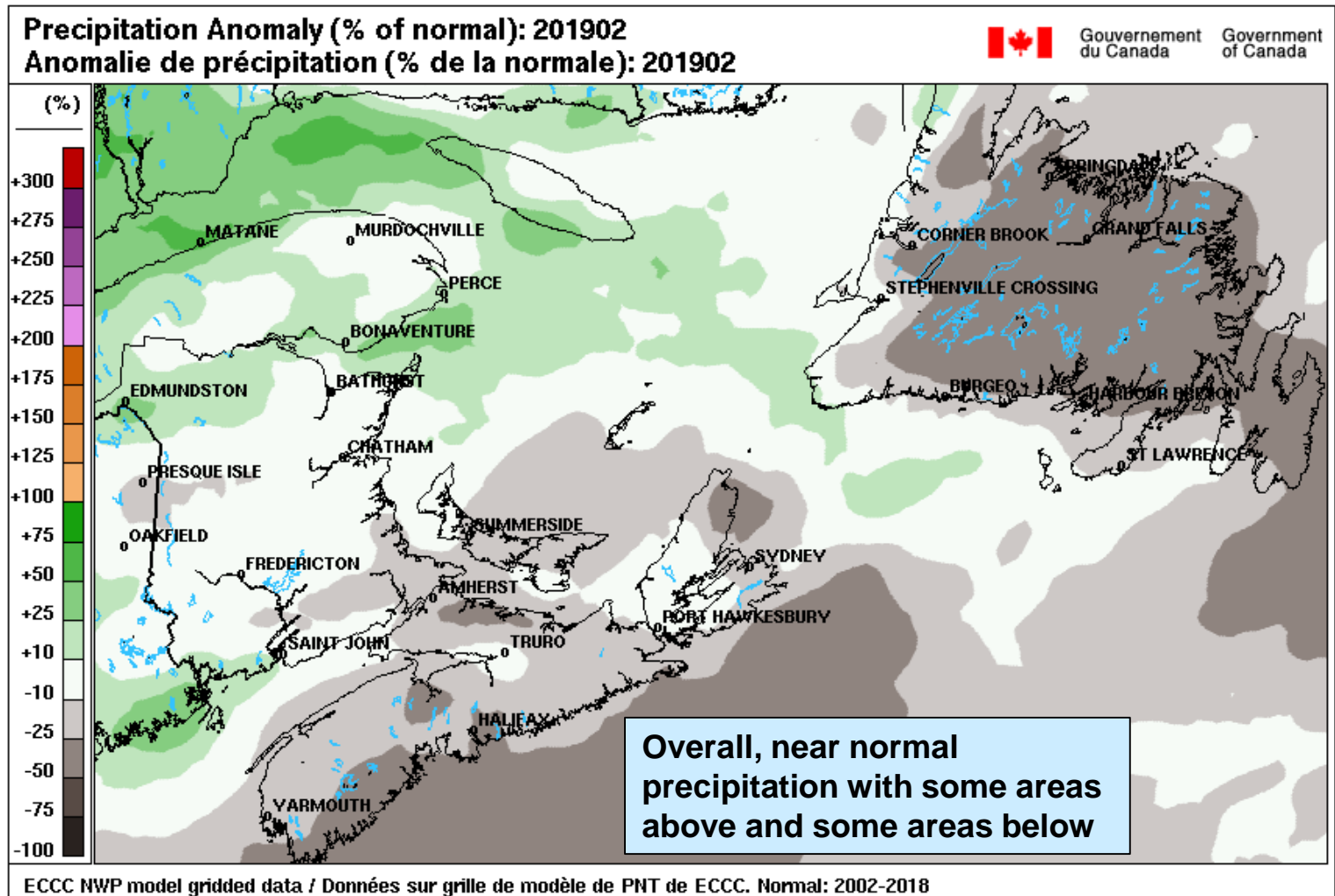
February 2019 Temperature departure from 1981-2010 mean.



February 2019 Total Precipitation

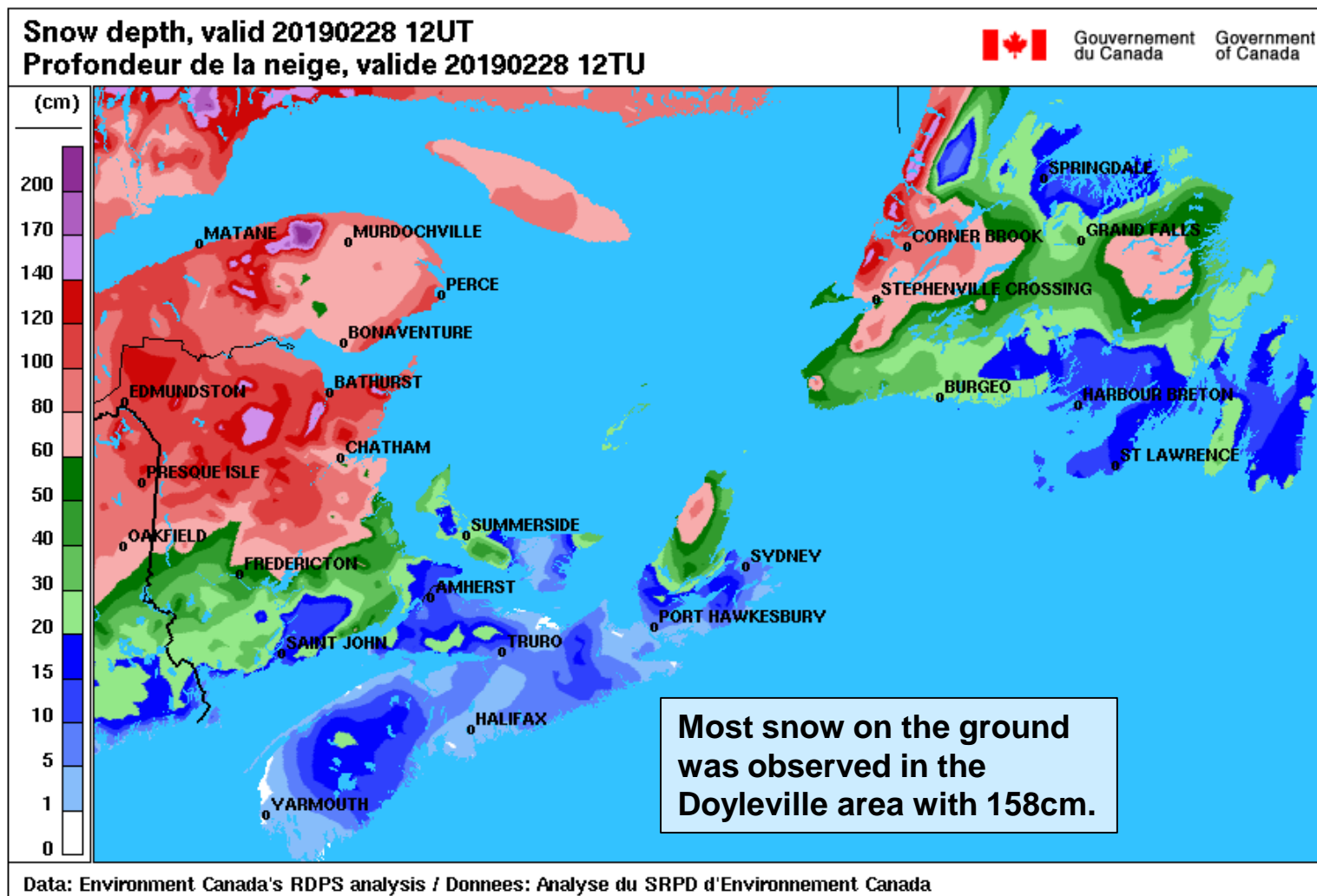


February 2019 Precipitation departure from 1981-2010 mean.



February 2019 Snow depth at month end

Extracted from Canadian computer model



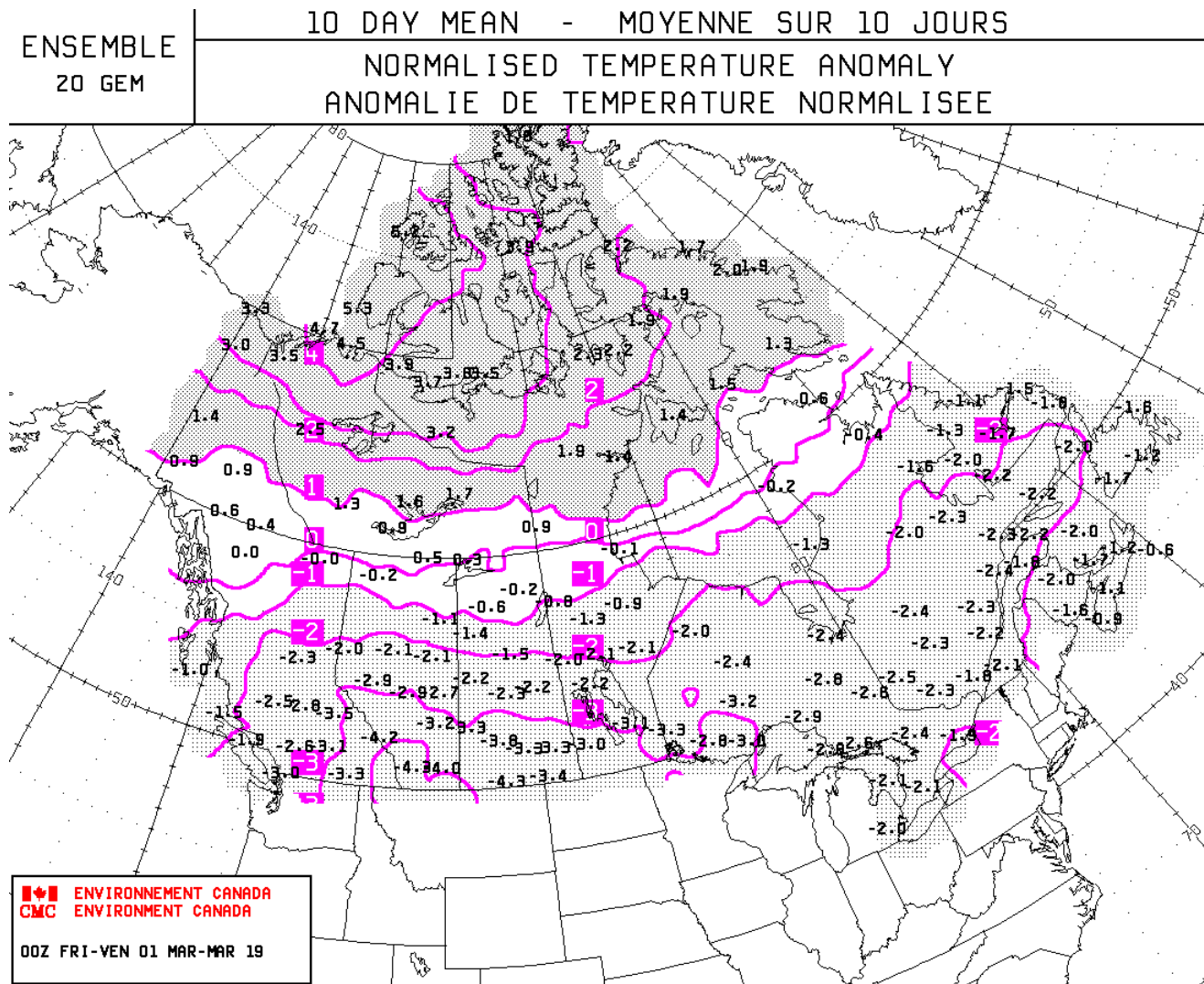
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Outlook - 10 day mean temperature

(Suggesting below normal conditions (-1.5 to -2.1C))



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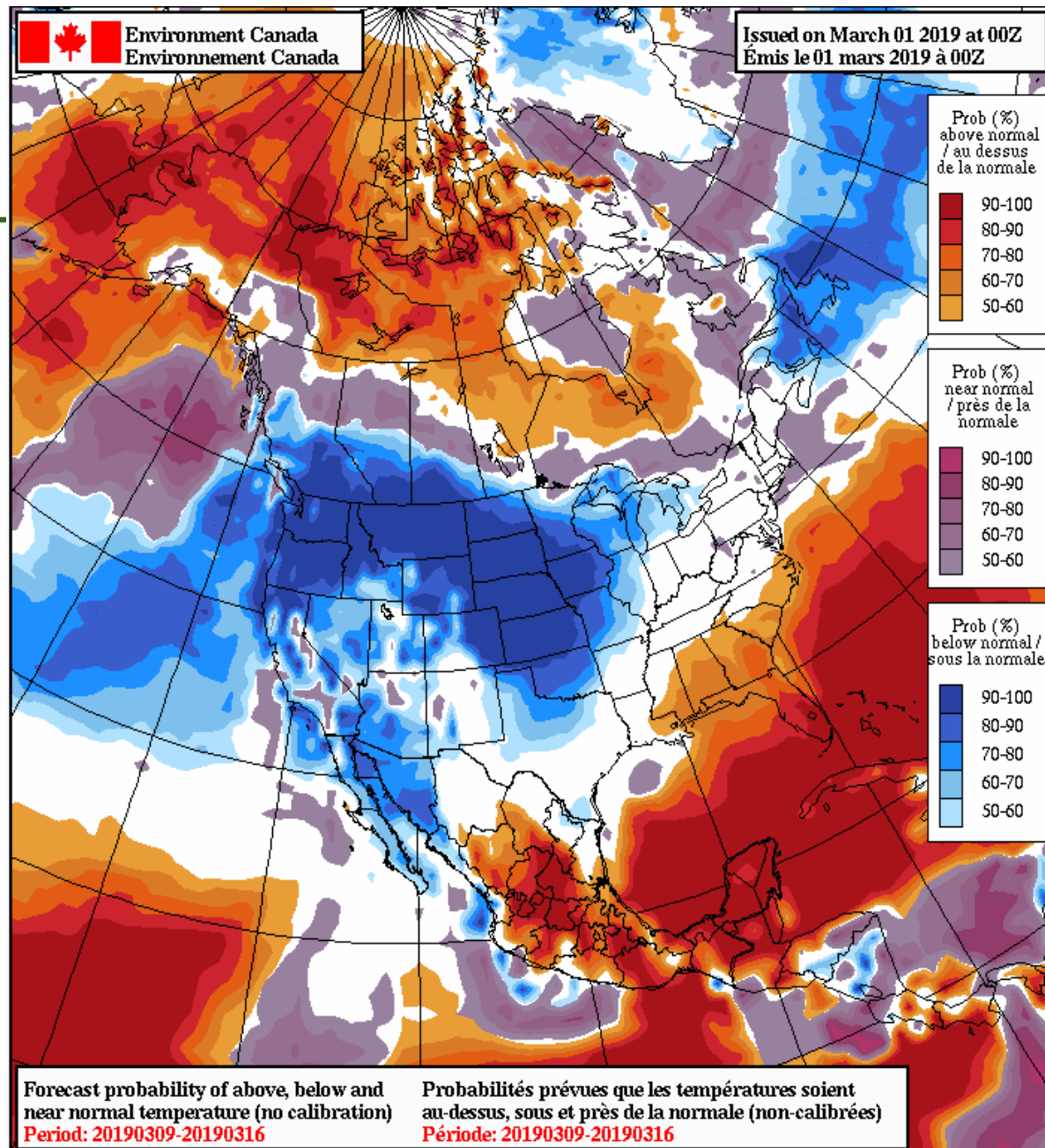
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Day 8 to 14 Forecast

Period ending
March 16, 2019

Generally, showing weak
signals of near normal
or slightly below normal.



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Fredericton

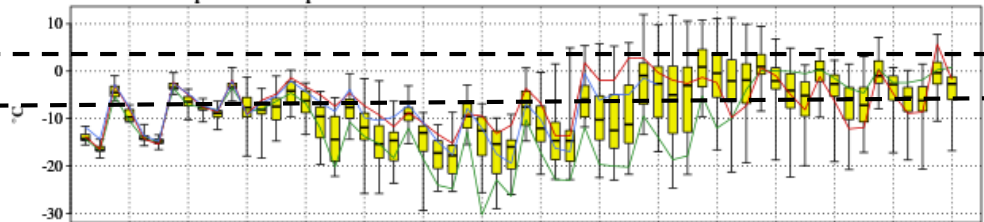
Ensemble and Deterministic Forecasts issued 1 March 2019 00 UTC
Prévision d'ensemble et déterministe émises le 1 Mars 2019 00 UTC
for/pour

NAEFS / SPENA

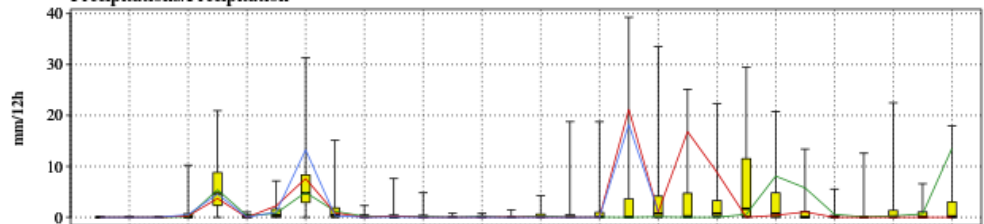
FREDERICTON (YFC) 45.87 N 66.53 W/O

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

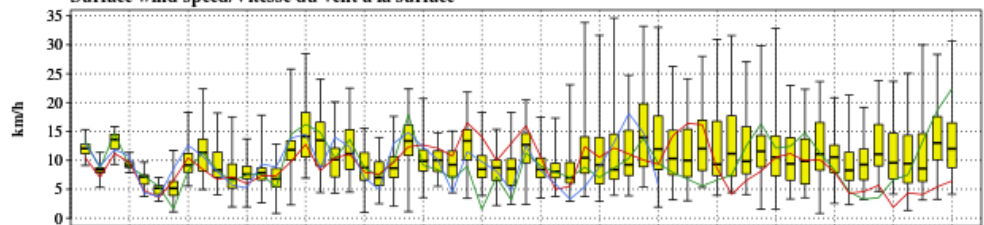
March
Normal high: +3.0C
Normal low: -7.8C



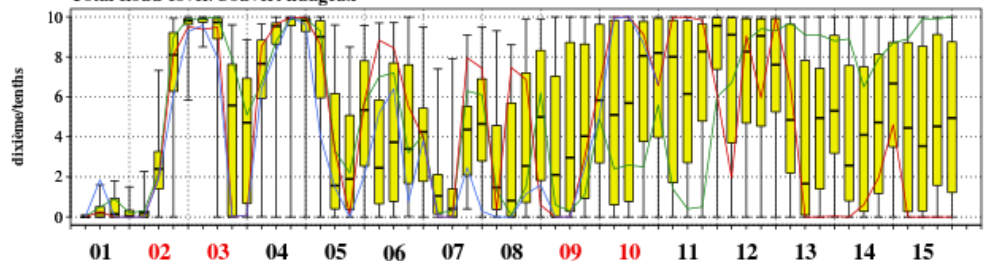
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



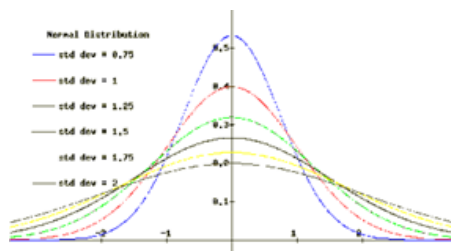
March/Mars 2019

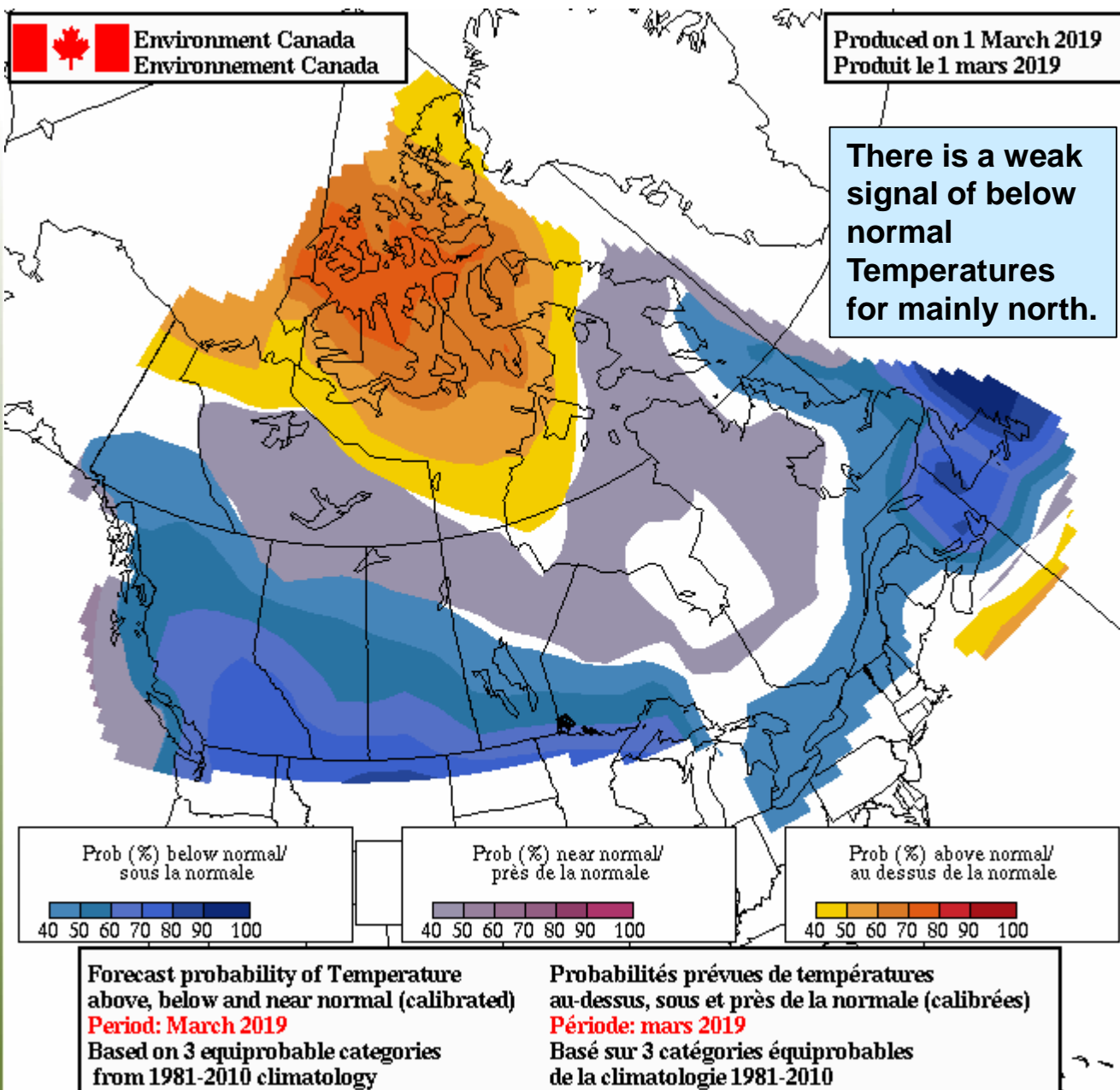
max
75%
median/médiane
25%
min

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

**Next 15 days; ending
March 16, 2019**

Below normal for the period with the exception of near normal near the 9th and 10th.



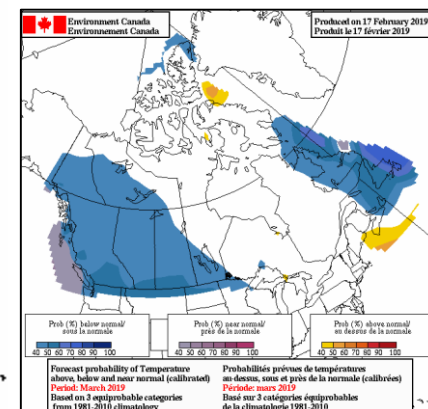


Temperature March 2019

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced February 17



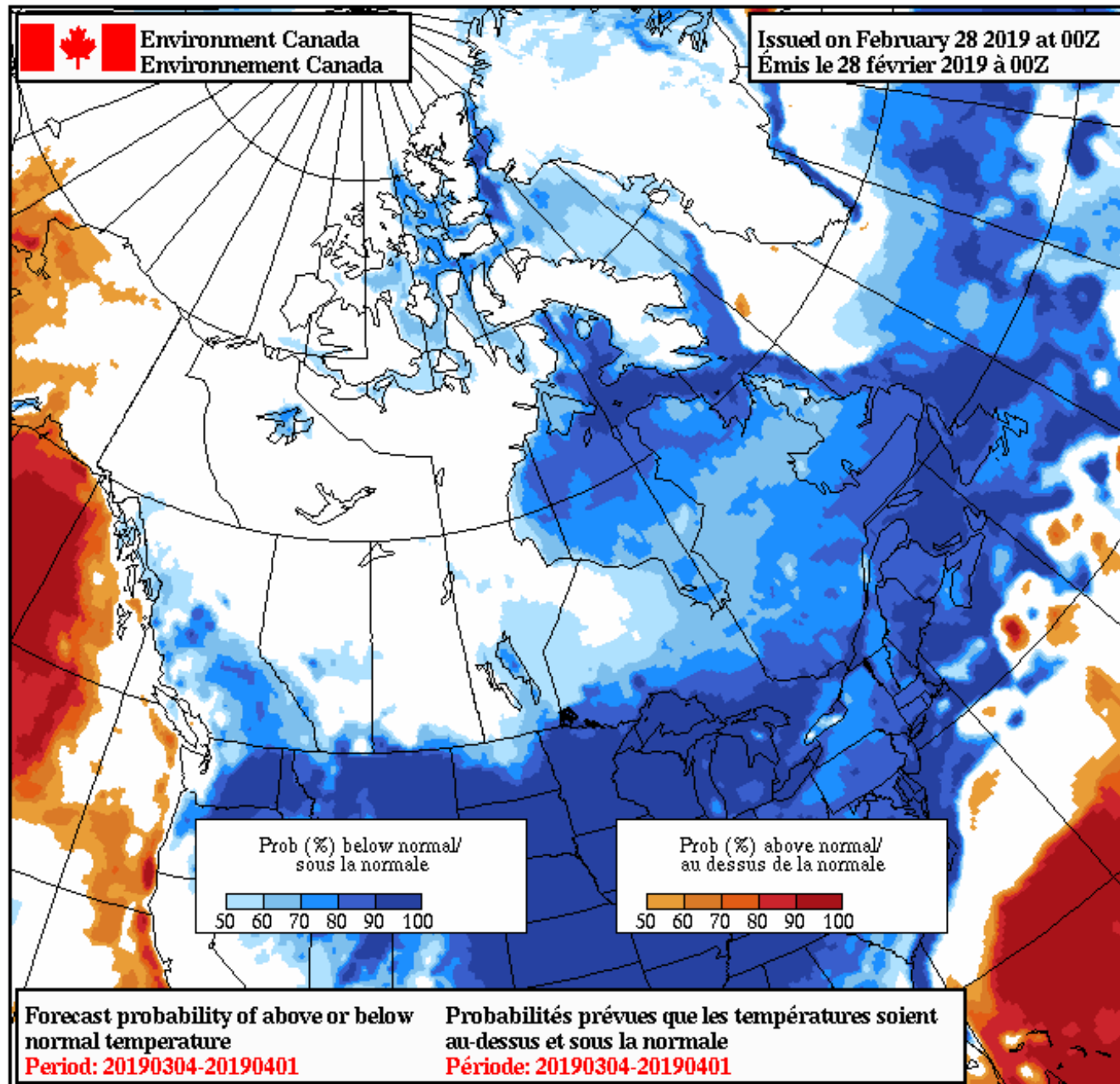
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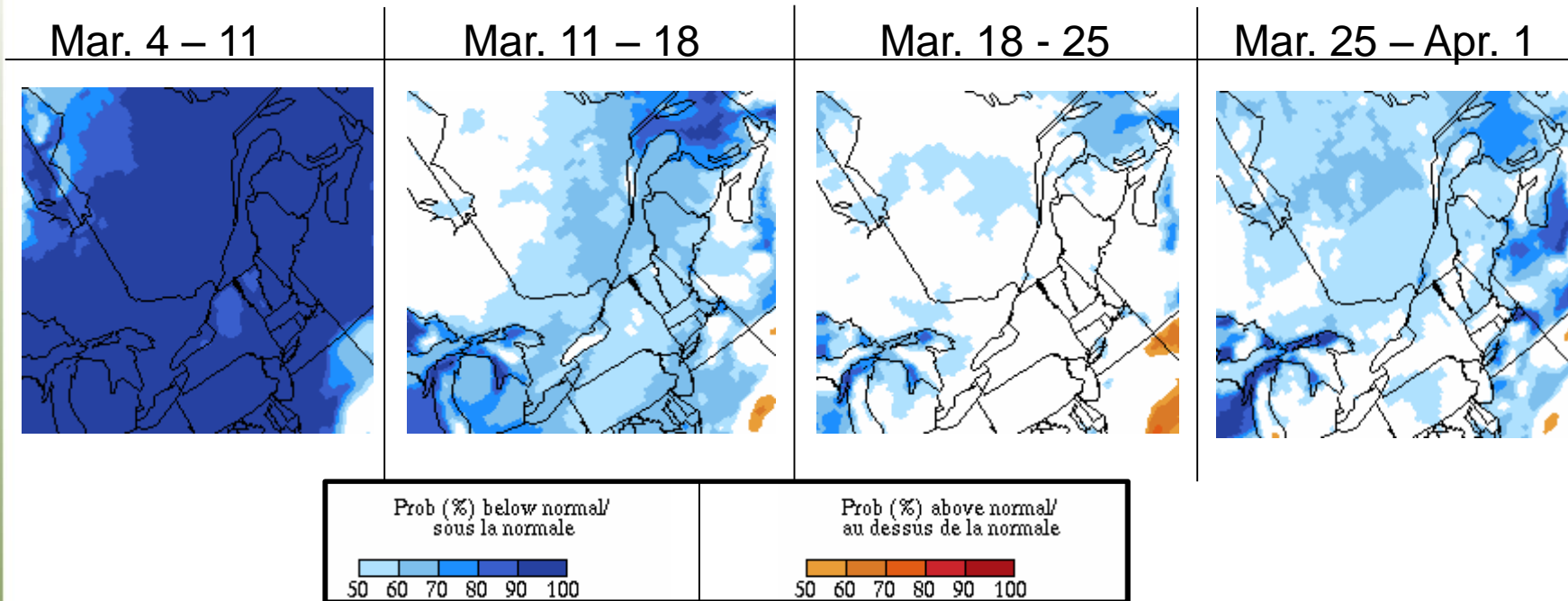
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Temperature March 4 to April 1

CMC
Monthly
Forecast
Product
using GEPS
50km res.

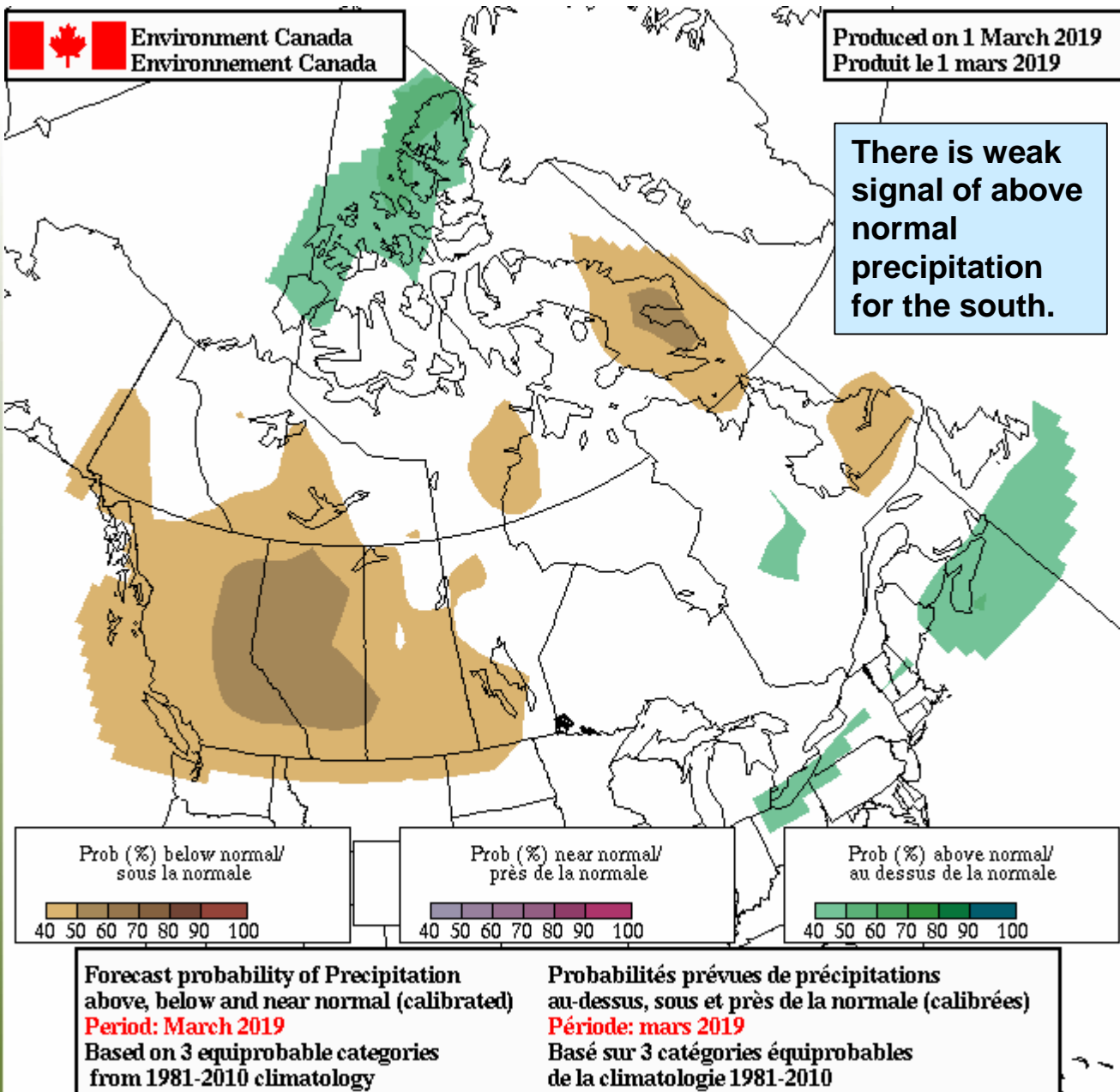


Weekly signature from GEPS 50km resolution



A strong signal of below normal for the first week then a weak signal of below normal or near normal for the remainder of the period.



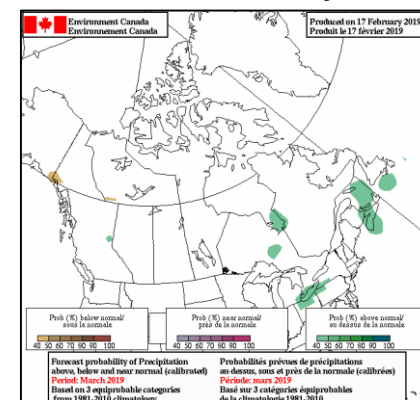


Precipitation March 2019

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

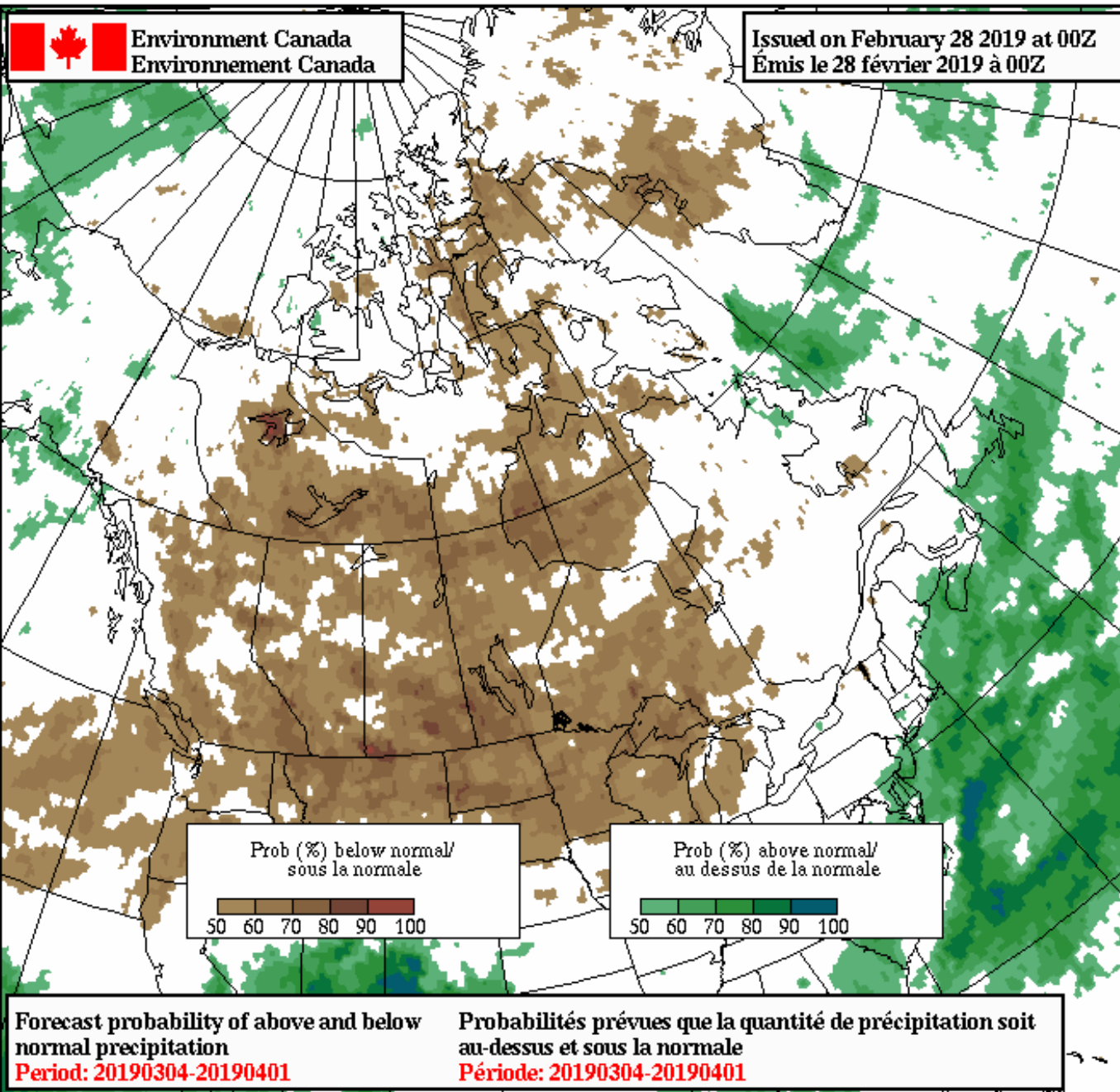
Produced February 17



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Precipitation March 4 to April 1

CMC
Monthly
Forecast
Product
using GEPS
50km res.

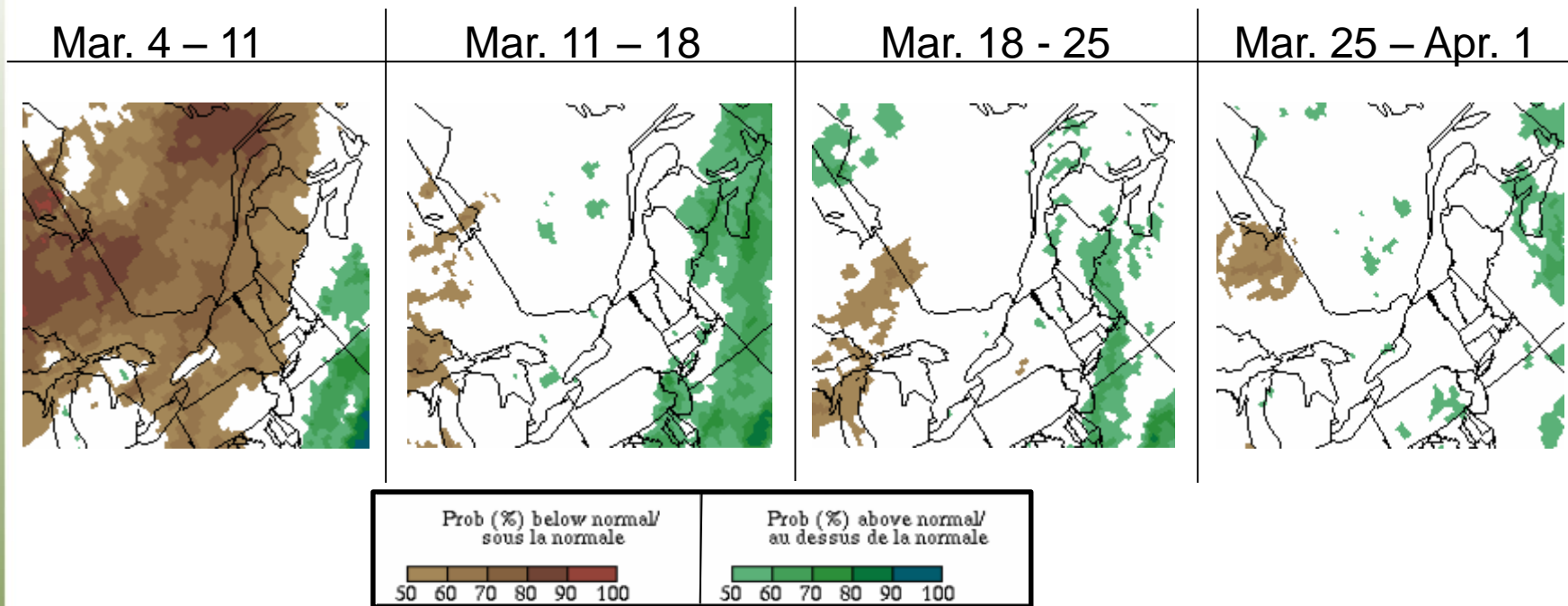


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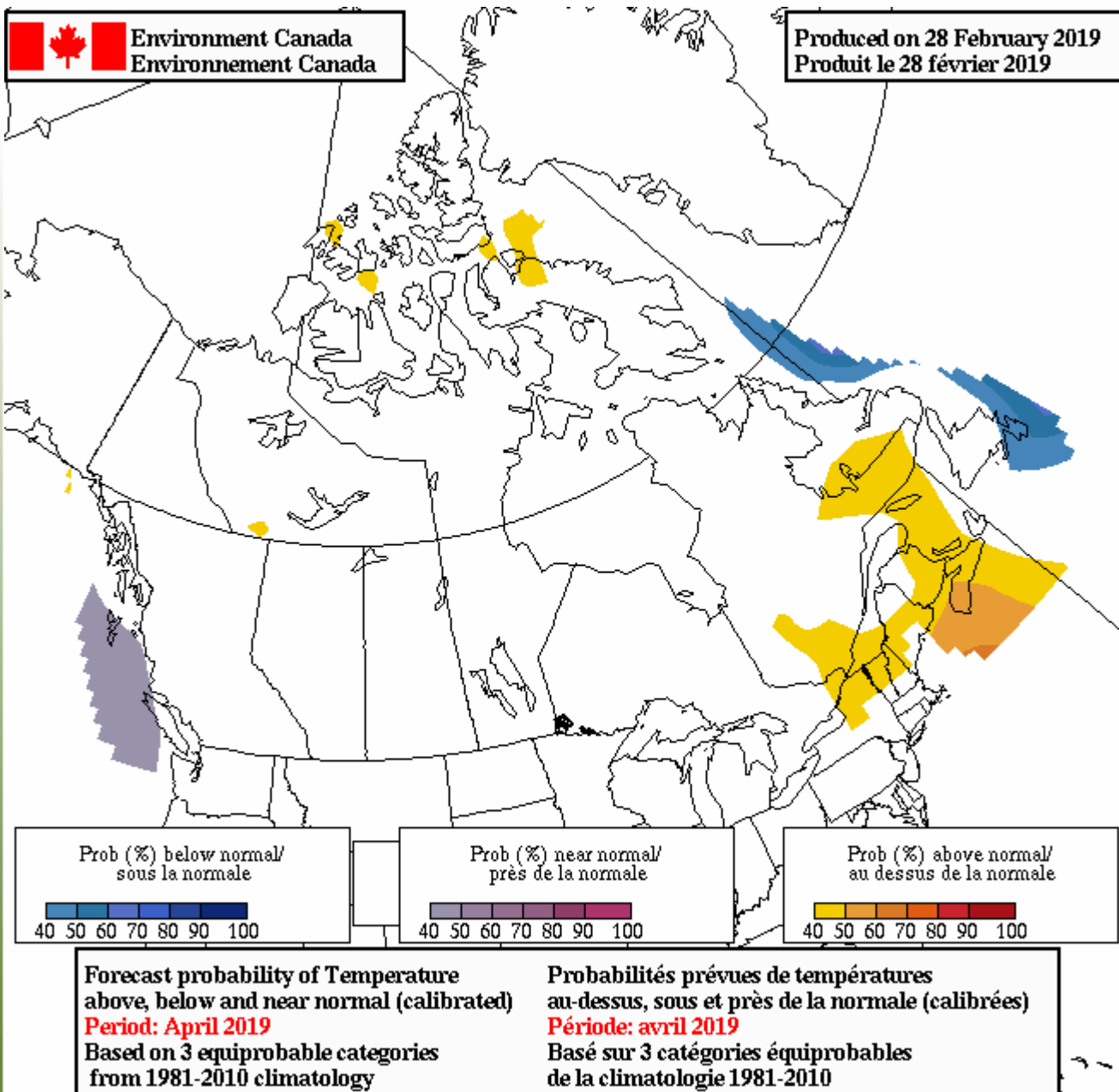
Canada

Weekly signature from GEPS 50km resolution



A moderate signal of below normal for the first week then a weak signal of above normal or near normal for the remainder of the period.



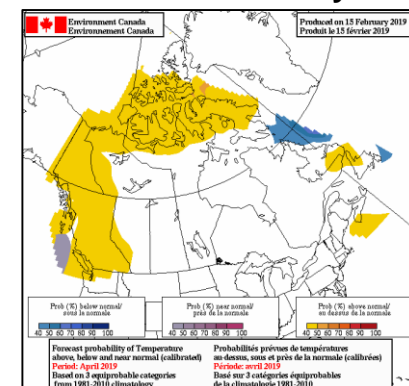


Temperature April 2019

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced February 15



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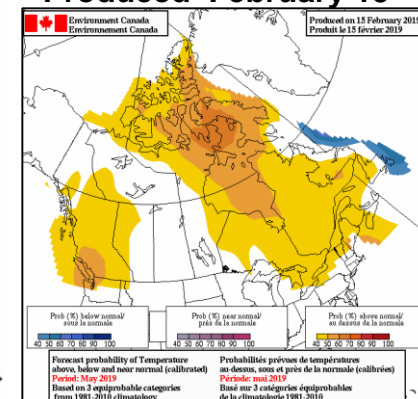
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Temperature May 2019

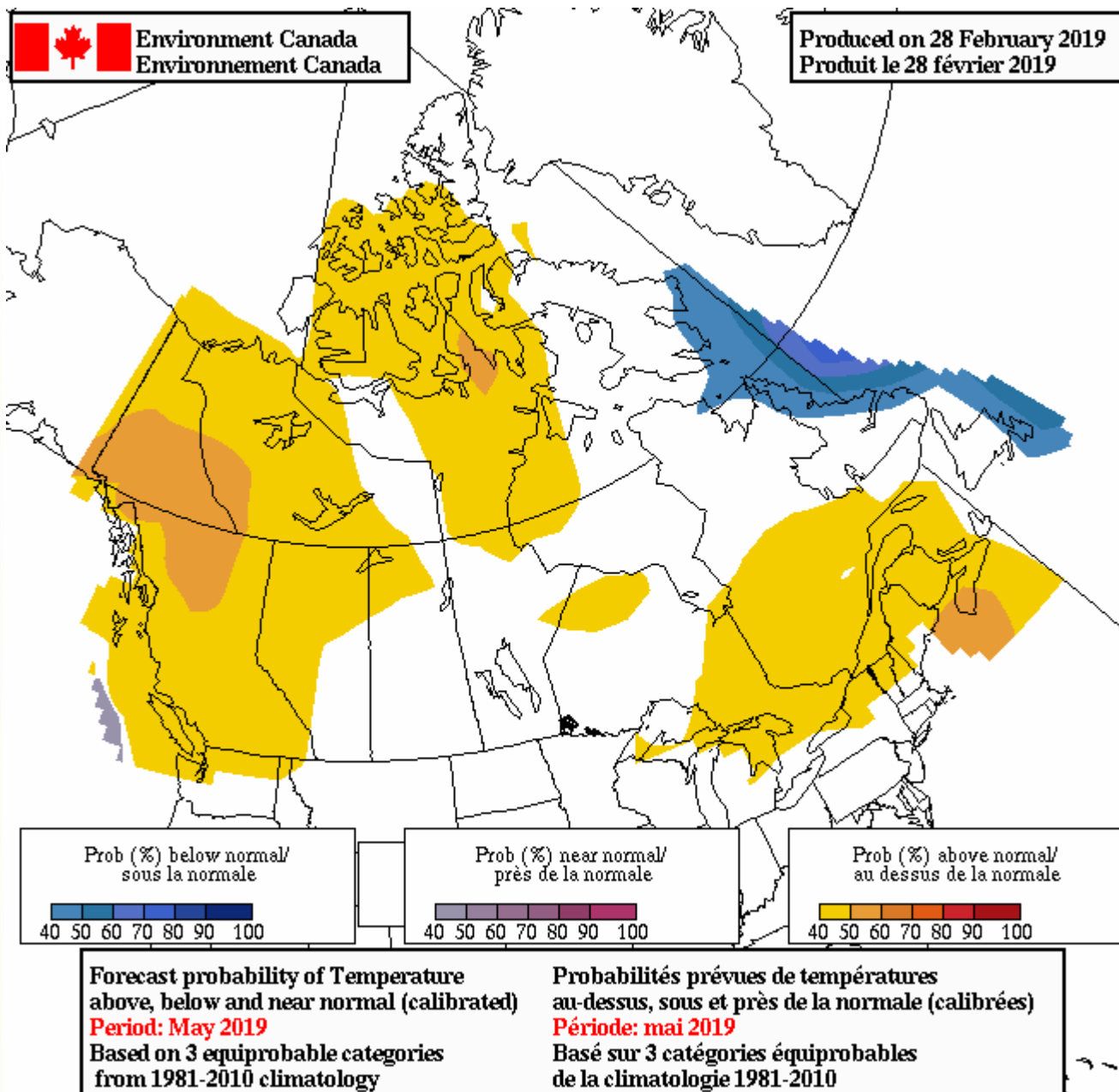
CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced February 15



Canada

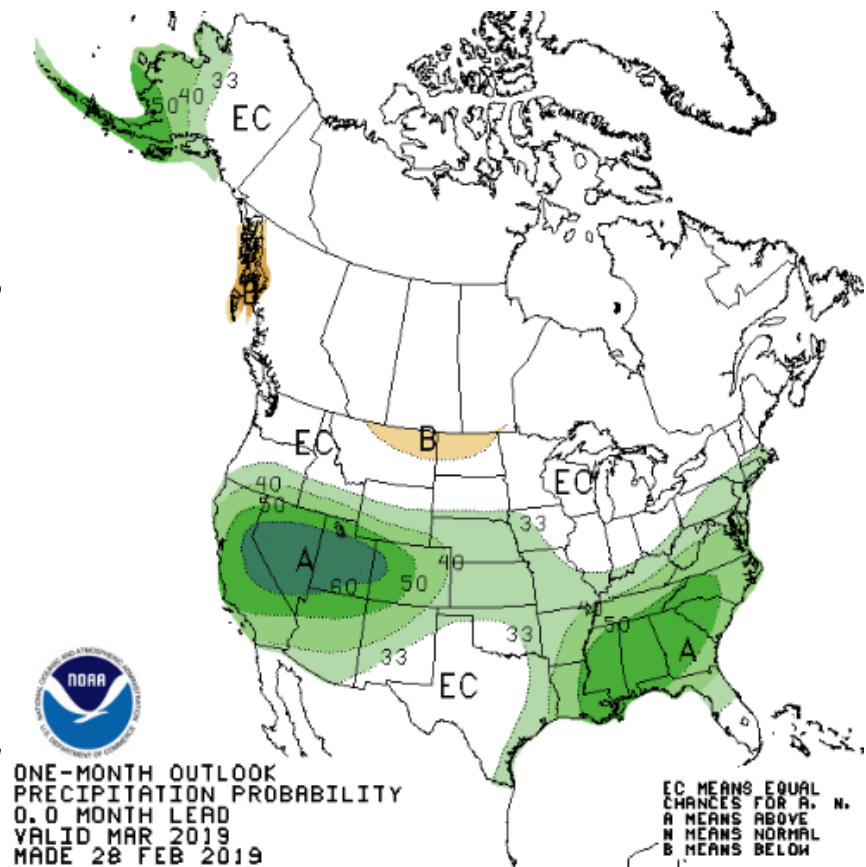
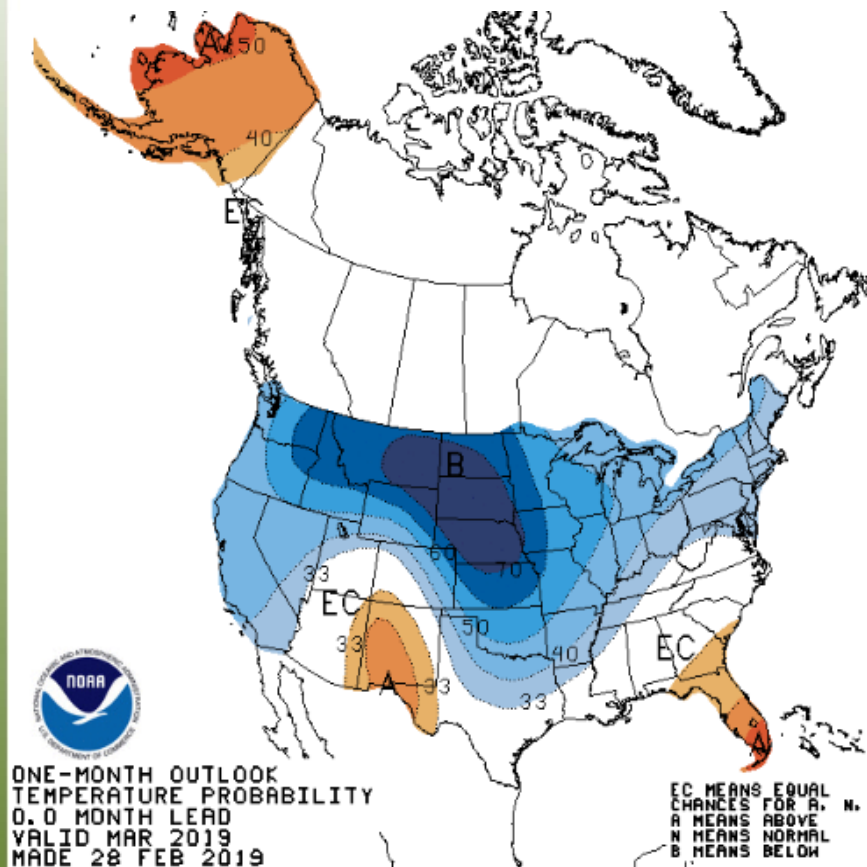




March 2019

Temperature

Precipitation



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