



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada



New Brunswick

October 2018 Review November and Fall/Winter Outlook

Jill Maepea

Meteorological Service of Canada

Environment and Climate Change Canada

November 2, 2018

October 2018; Climate Summary

Station Name	Prov	TC ID	Station Type	Mean Temperature (°C)			Total Precip (mm)			Departure from Normal as % of Normal
				Monthly Mean	Normal Mean	Departure from Normal	Monthly Total	Normal Total	Total as % of Normal	
BAS CARAQUET	NB	WXS	AU8	5.6	7.4	-1.8	113.3	96.2	118	18
BAS CARAQUET	NB		DAILY				97.6	96.2	101	1
BATHURST A	NB	ZBF	NCA	4.1	6.8	-2.7	67.9	122.9	55	-45
BOUCTOUCHE CDA CS	NB	ABT	AU8	6.0	7.9	-1.9				
CHARLO AUTO	NB	ZCR	AU8	3.7	5.7	-2.0	73.0	84.0	87	-13
MIRAMICHI RCS	NB	ACQ	AU8	5.3	6.9	-1.6	131.5	89.7	147	47
DOAKTOWN AUTO RCS	NB	ADN	AU8	5.0	7.0	-2.0	146.2	100.8	145	45
FREDERICTON INTL A	NB	YFC	NCA	5.6	7.5	-1.9	132.8	89.1	149	49
FREDERICTON CDA CS	NB	AFC	AU8	5.9	7.8	-1.9	144.9	89.7	162	62
FUNDY PARK (ALMA) CS	NB	AFY	AU8	7.0	8.2	-1.2				
GAGETOWN AWOS A	NB	YCX	AU5	6.0	8.6	-2.6	123.5	105.7	117	17
GRAND MANAN SAR CS	NB	XGM	AU8	7.0			211.1			
KOUCHIBOUGUAC	NB	AKC	AU8	5.4	7.6	-2.2	187.3	99.6	188	88
MECHANIC SETTLEMENT	NB	AMS	AU8	4.7			199.6			
MONCTON INTL A	NB	YQM	NCH	6.3	7.6	-1.3	164.2	113.4	145	45
OAK POINT	NB		DAILY	6.5	8.6	-2.1	188.5	105.7	178	78
POINT LEPREAU CS	NB	WPE	AU8	7.7	7.6	0.1	171.0	115.8	148	48
RED PINES	NB	ARP	AU8	3.5	6.5	-3.0	102.5	90.2	114	14
SAINT JOHN A	NB	YSJ	NCH	5.9	7.6	-1.7	202.1	116.4	174	74
ST. STEPHEN	NB	WSS	AU8	6.1			137.3			
SUSSEX FOUR CORNERS	NB	ASF	AU8	6.6	8.1	-1.4	140.1	106.5	132	32
WOODSTOCK	NB		DAILY	4.8	6.6	-1.8	115.8	95.3	122	22
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	4.2	6.6	-2.3	128.6	95.3	135	35
Average				5.6	7.4	-1.9	141.8	100.7	134	34
Max				7.7	8.6	0.1	211.1	122.9	188	88
Min				3.5	5.7	-3.0	67.9	84.0	55	-45

Highlights:

The average temperature was below normal (-1.9C below normal). The first half of the month was near normal but it was the second half that was much below normal. Red Pines had the lowest negative anomaly with an average temperature of -3.0C below normal.

Total precipitation amounts were above normal, with an average of 134% of total precipitation. Kouchibouguac reported the highest anomaly at 188% of normal. However, northern parts of the province continued their dry spell for the fifth month in a row as Bathurst only received 55% of their precipitation for the month.



October 2018; Climate Summary

Events:

Oct. 3; Rain event; A low pressure system tracked across the Maritimes and brought heavy rain to southern parts of the province. Fundy Park reported the most rain at 112mm.

Oct. 10-12; Rain event; A slow moving low brought moderate rainfall amounts (30-45mm) to central and southern portions of the province. Clearwater (central NB forestry station) reported the most rain at 52mm.

Oct. 15-16; An intense fall storm gave maximum wind gusts of up to 93 km/h in the Moncton area and caused numerous power outages across the province. The heaviest rain was confined to the Bay of Fundy area with Fundy Park receiving 71mm.

Oct. 18; Wind event; a system passed north of the province and gave maximum wind gusts of up to 85 km/h in the Bathurst area and caused scattered power outages.

Oct. 23-25; An early season winter-like storm brought the first accumulating snow for the season with Doyleville reporting up to 23cm. Snow was confined to the northwestern half of the province. The southeastern half saw only rain and Grande-Digue reported up to 43mm.

Oct. 27-28; A nor'easter brought a potpourri of conditions including up to 12 cm of snow in Miramichi, several hours of ice pellets and freezing rain for mainly northwestern sections, up to 50 mm of rain and a wind gust to 78 km/h in Grand Manan. Elevated water levels (+20cm higher than highest tides) also occurred in the Bay de Chaleur region but no damages were reported.

Days with thunderstorm activity (lightning) in New Brunswick; 9, 17, 27, 28

Days with temperature records broken or tied in New Brunswick; 23 26 27

(red=maximum, blue=minimum)



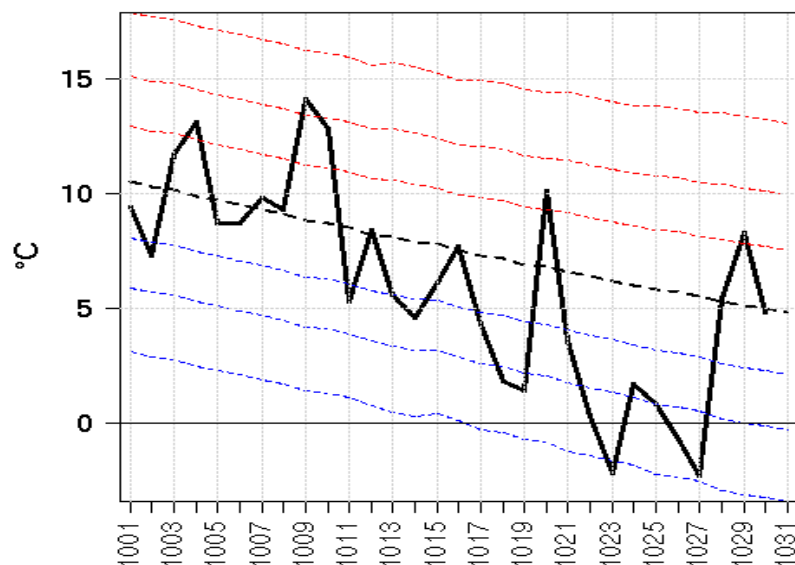
Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

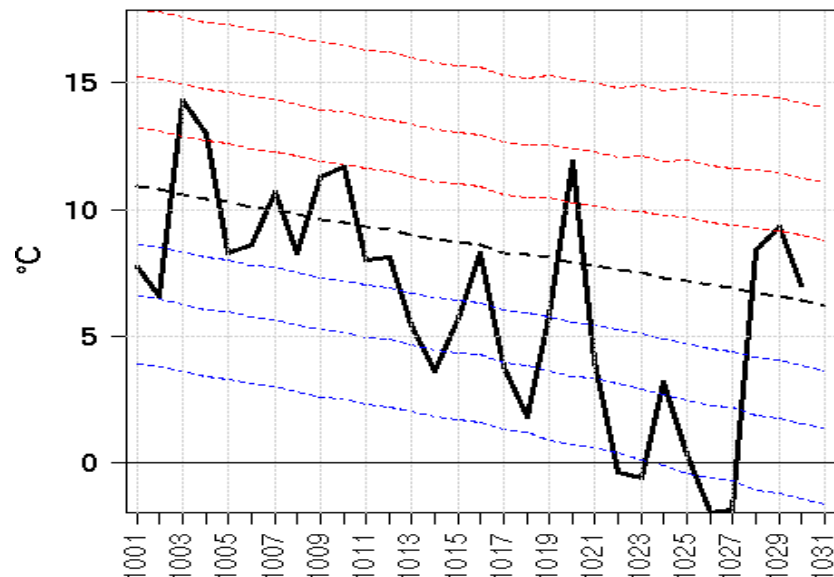
Canada

October 2018 - Temperature

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



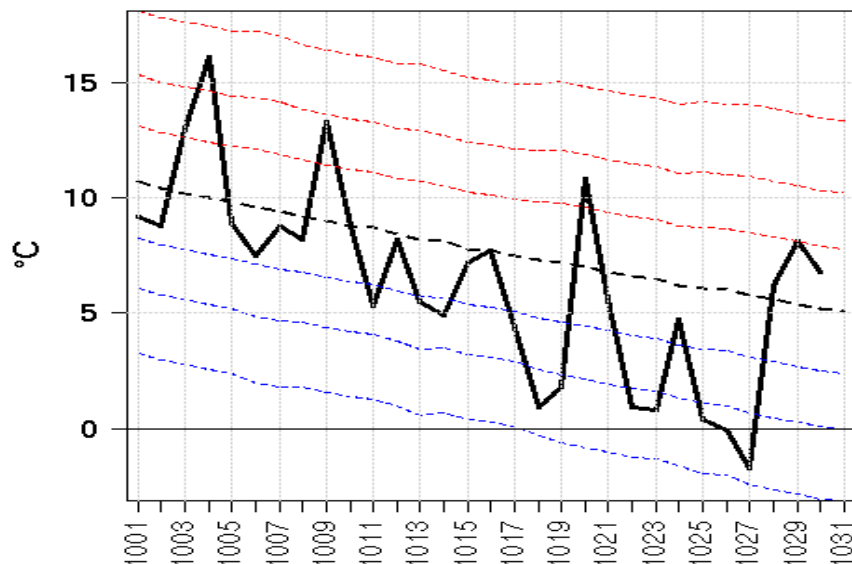
Fredericton (and area)



Saint John

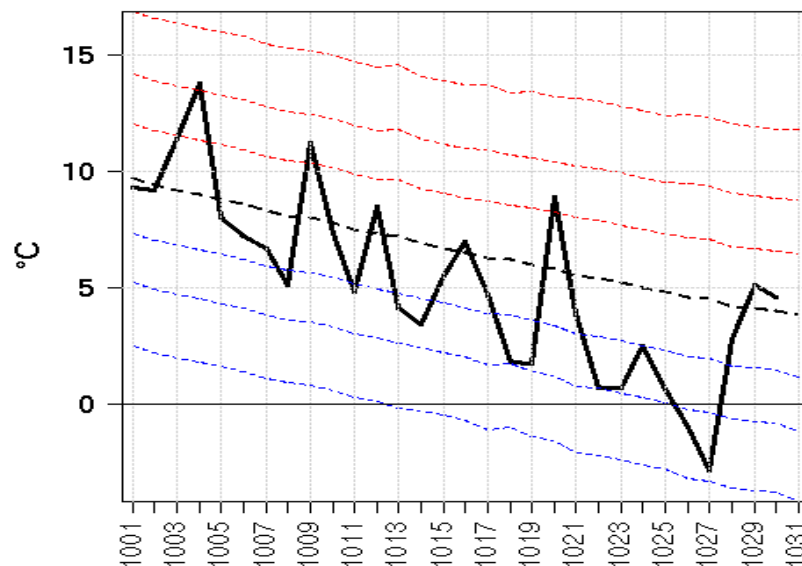
All sites were
below normal

Moncton

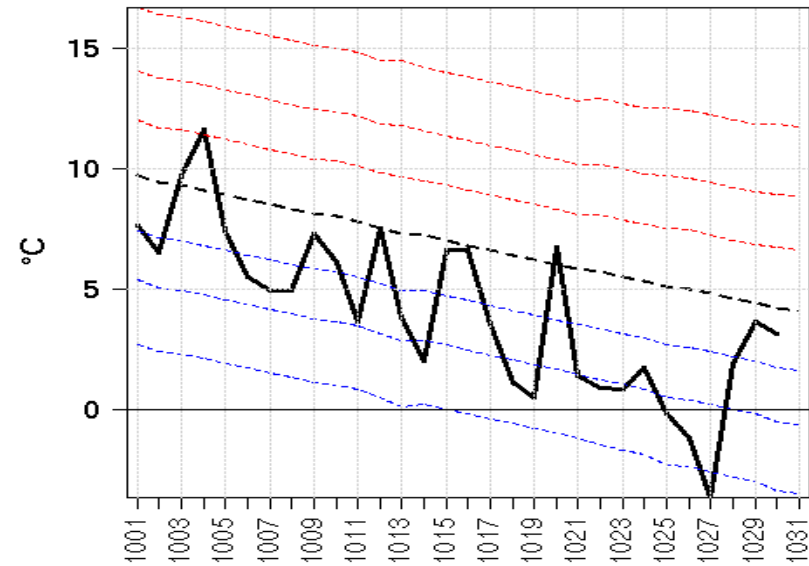


October 2018 - Temperature

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



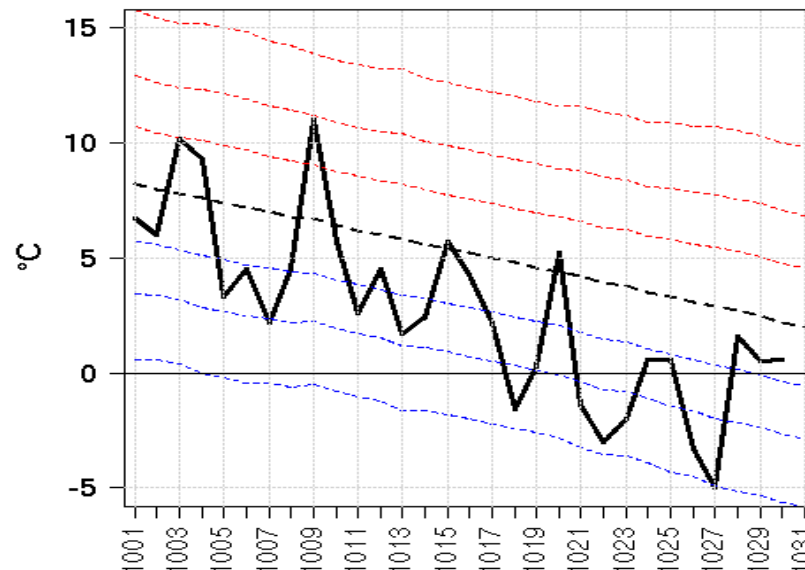
Miramichi



Bathurst

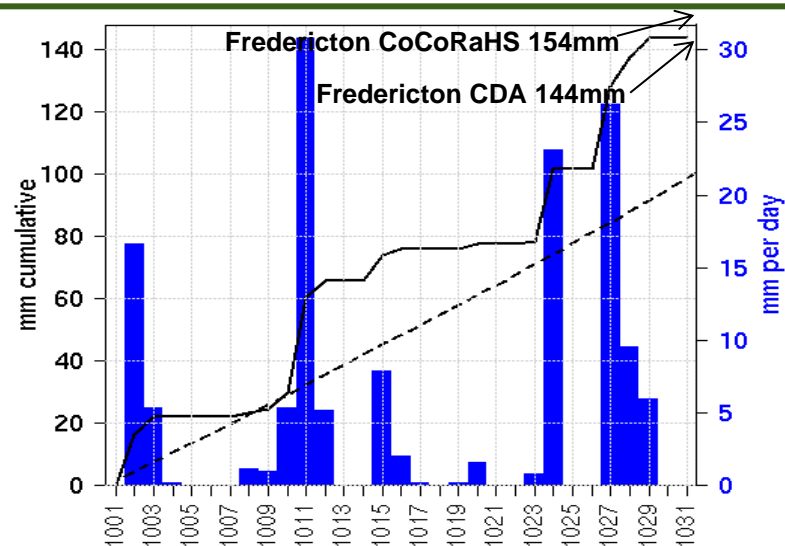
All sites were
below normal

Edmundston

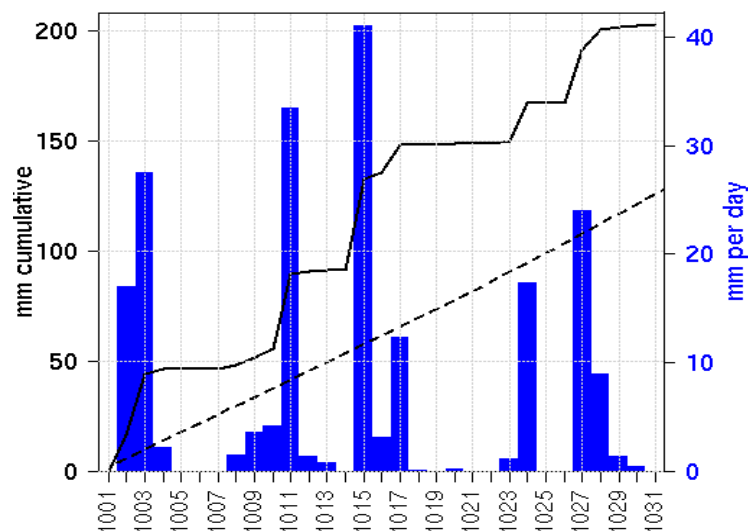


October 2018 - Precipitation

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



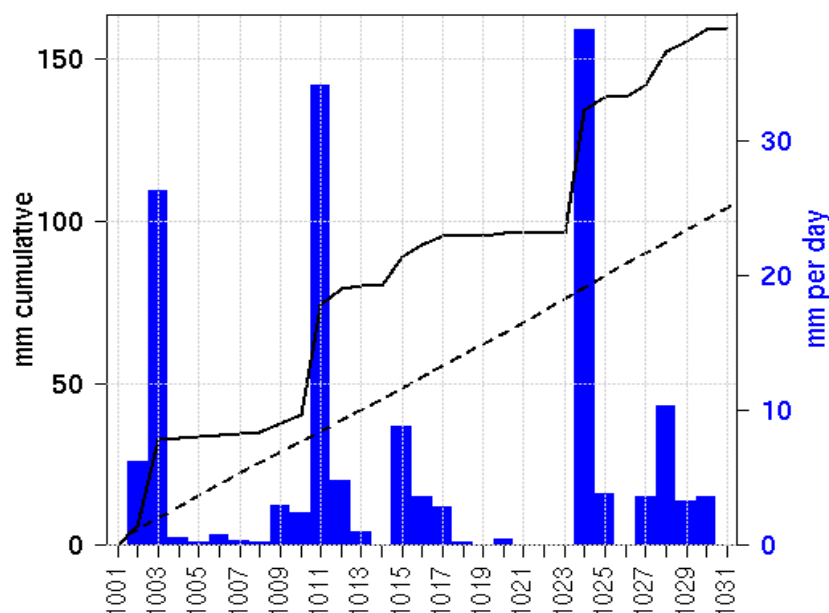
Fredericton (and area)



Saint John

All sites were
above normal

Moncton

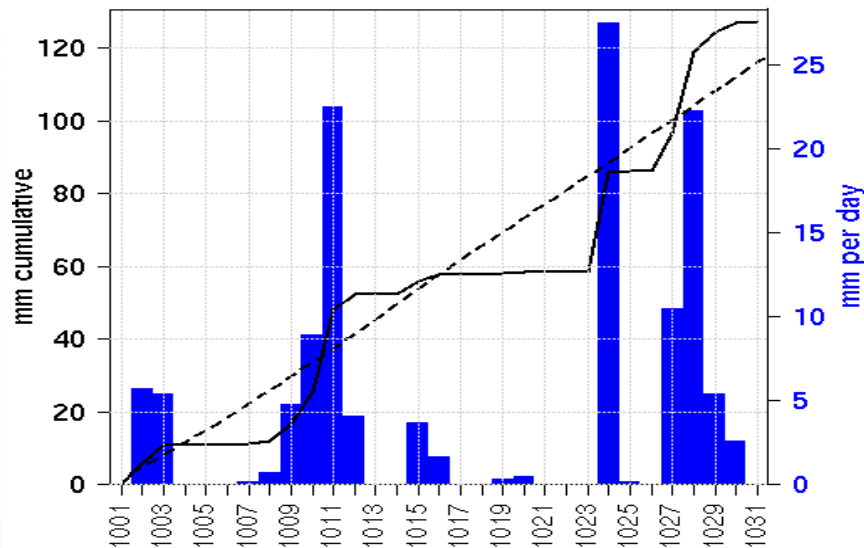


Environment and
Climate Change Canada

Canada

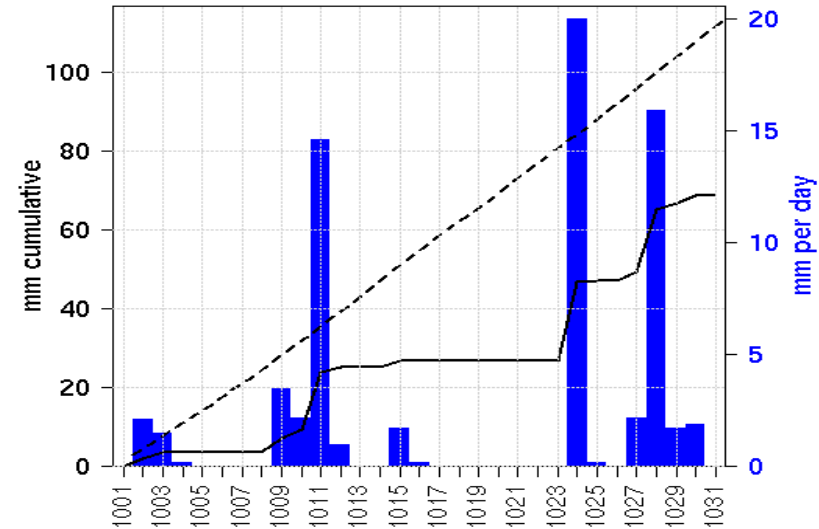
October 2018 - Precipitation

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



Miramichi

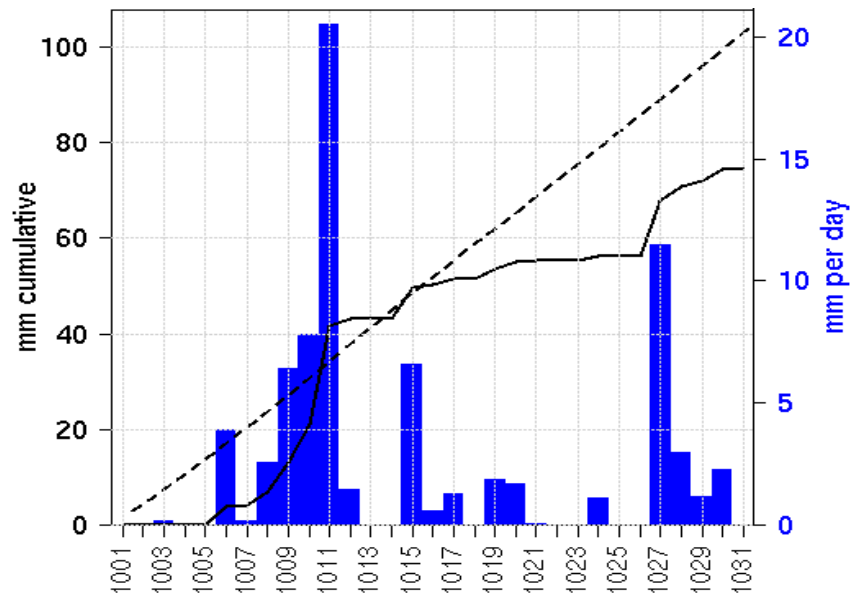
Miramichi was
above normal



Bathurst

Bathurst and
Edmundston
were
below normal

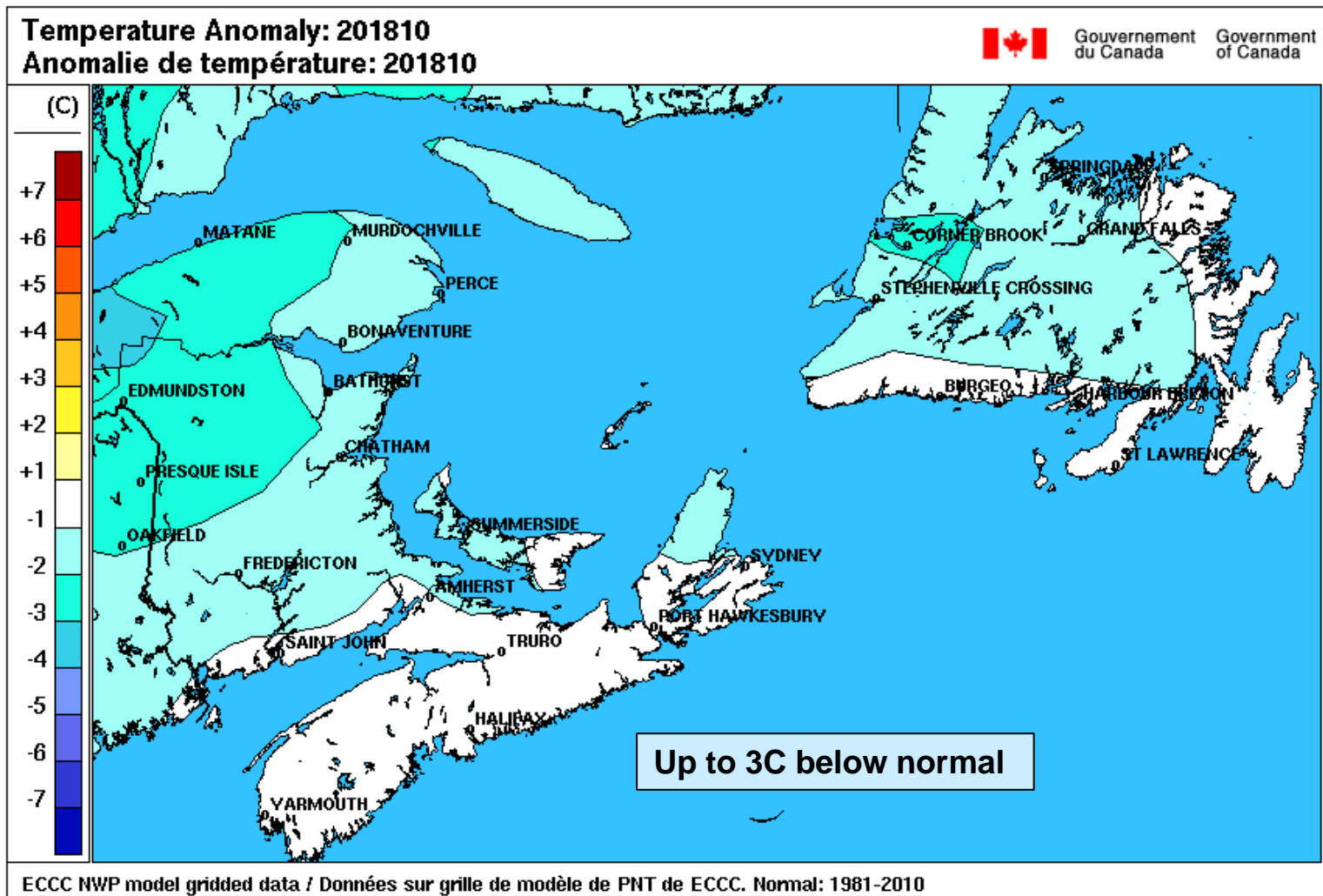
Edmundston



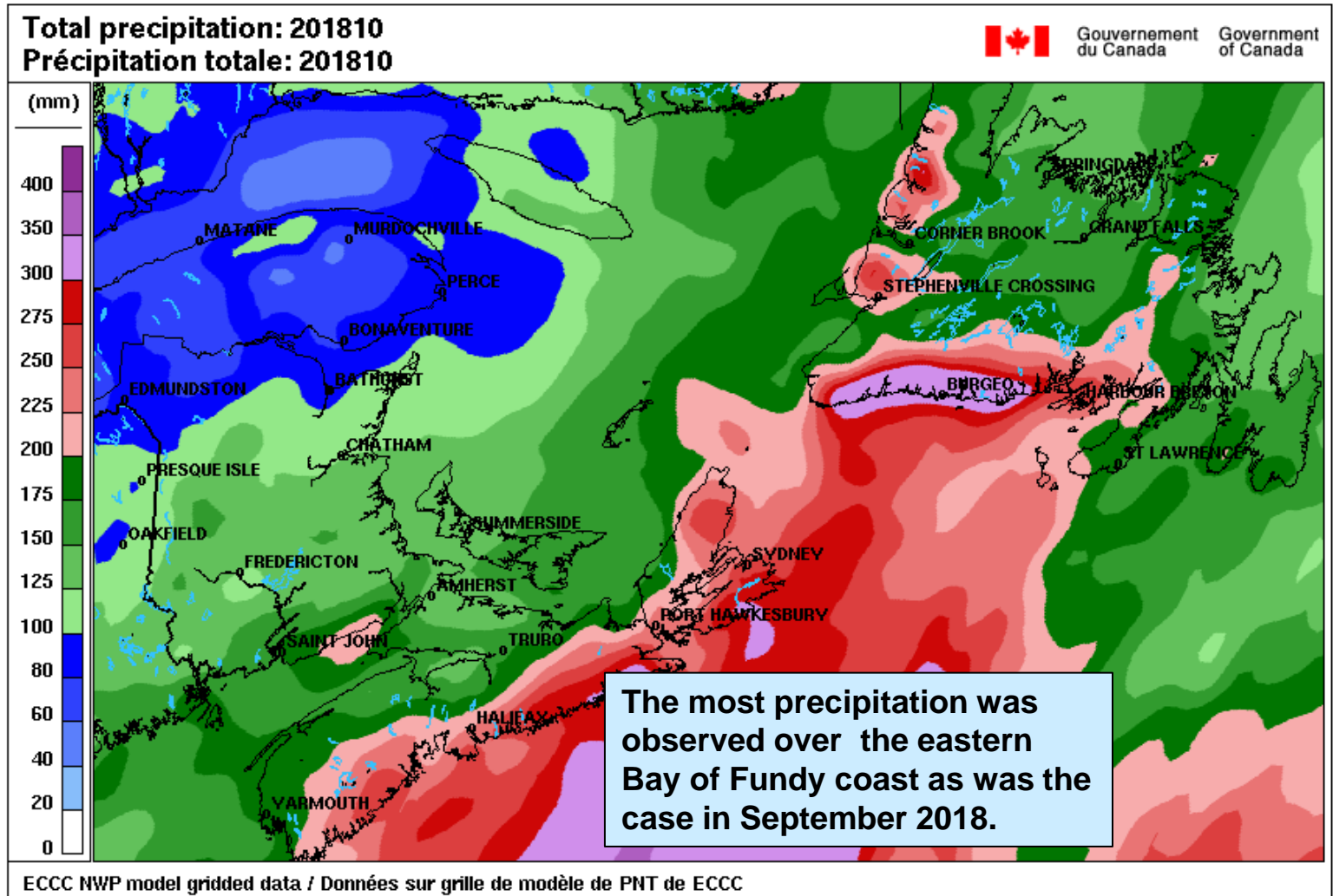
Environment and
Climate Change Canada

Canada

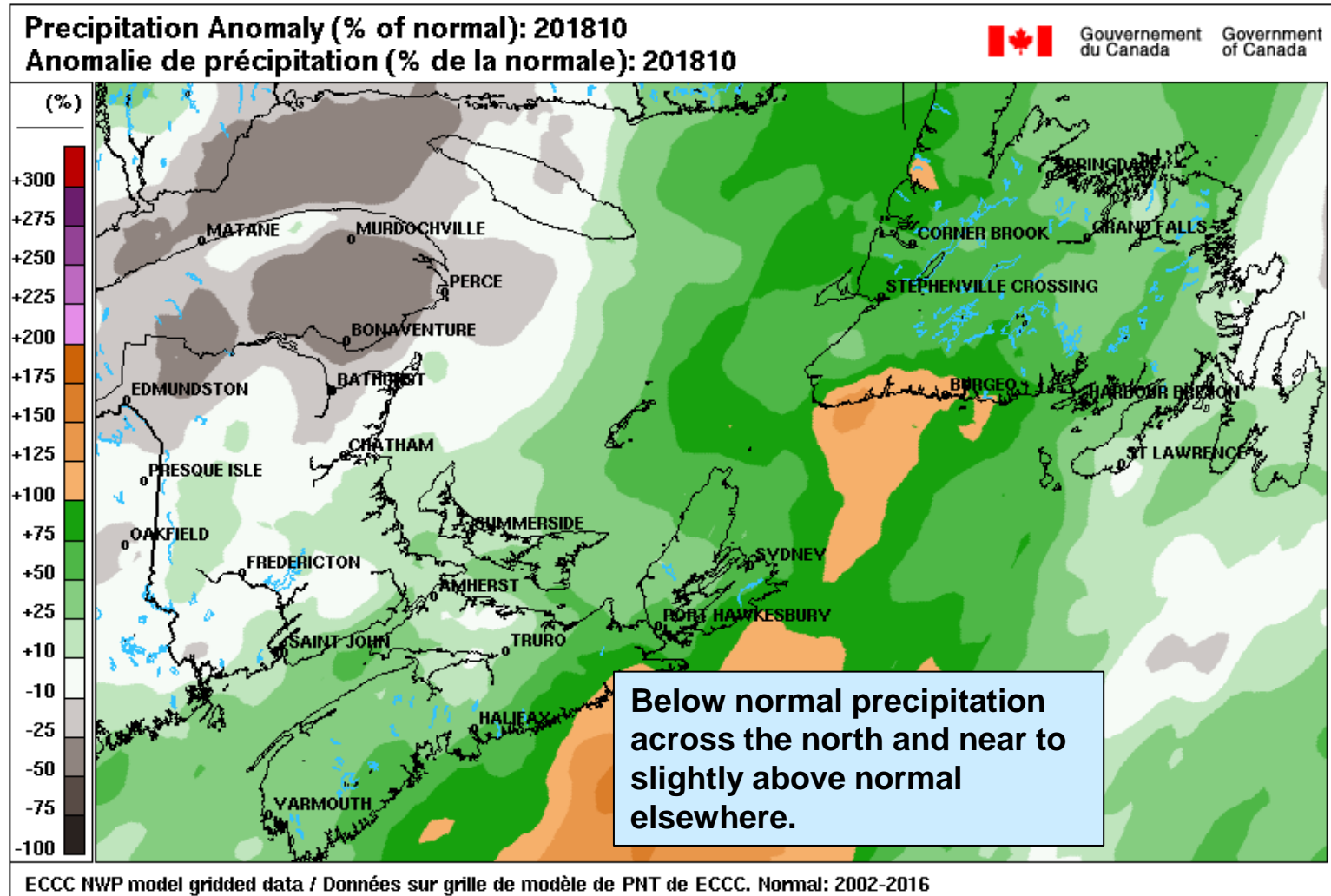
October 2018 Temperature departure from 1981-2010 mean.



October 2018 Total Precipitation

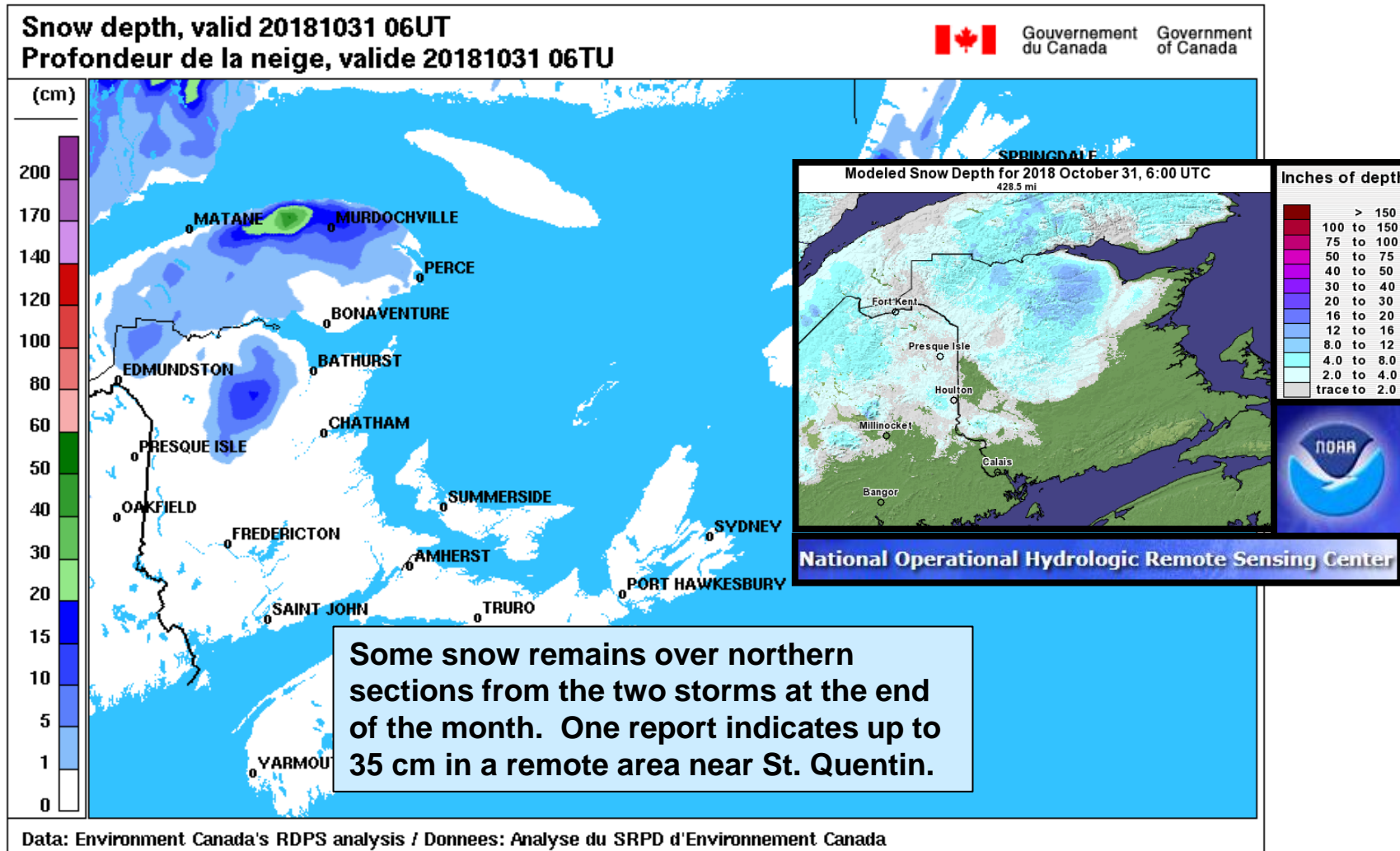


October 2018 Precipitation departure from 1981-2010 mean.



October 2018 Snow depth at month end

Extracted from Canadian computer model



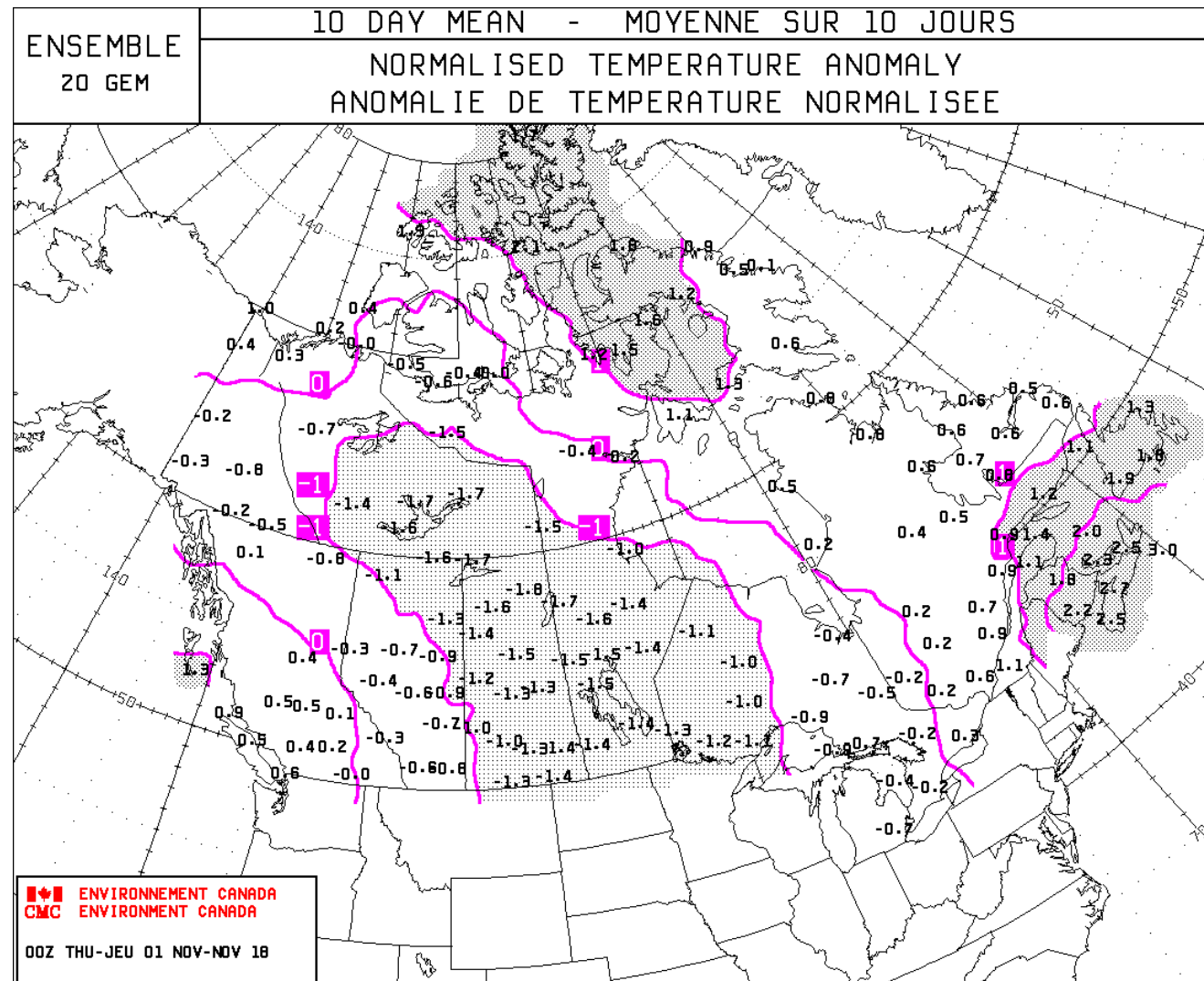
Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

Outlook - 10 day mean temperature

(Suggesting above normal conditions (+1-2C))

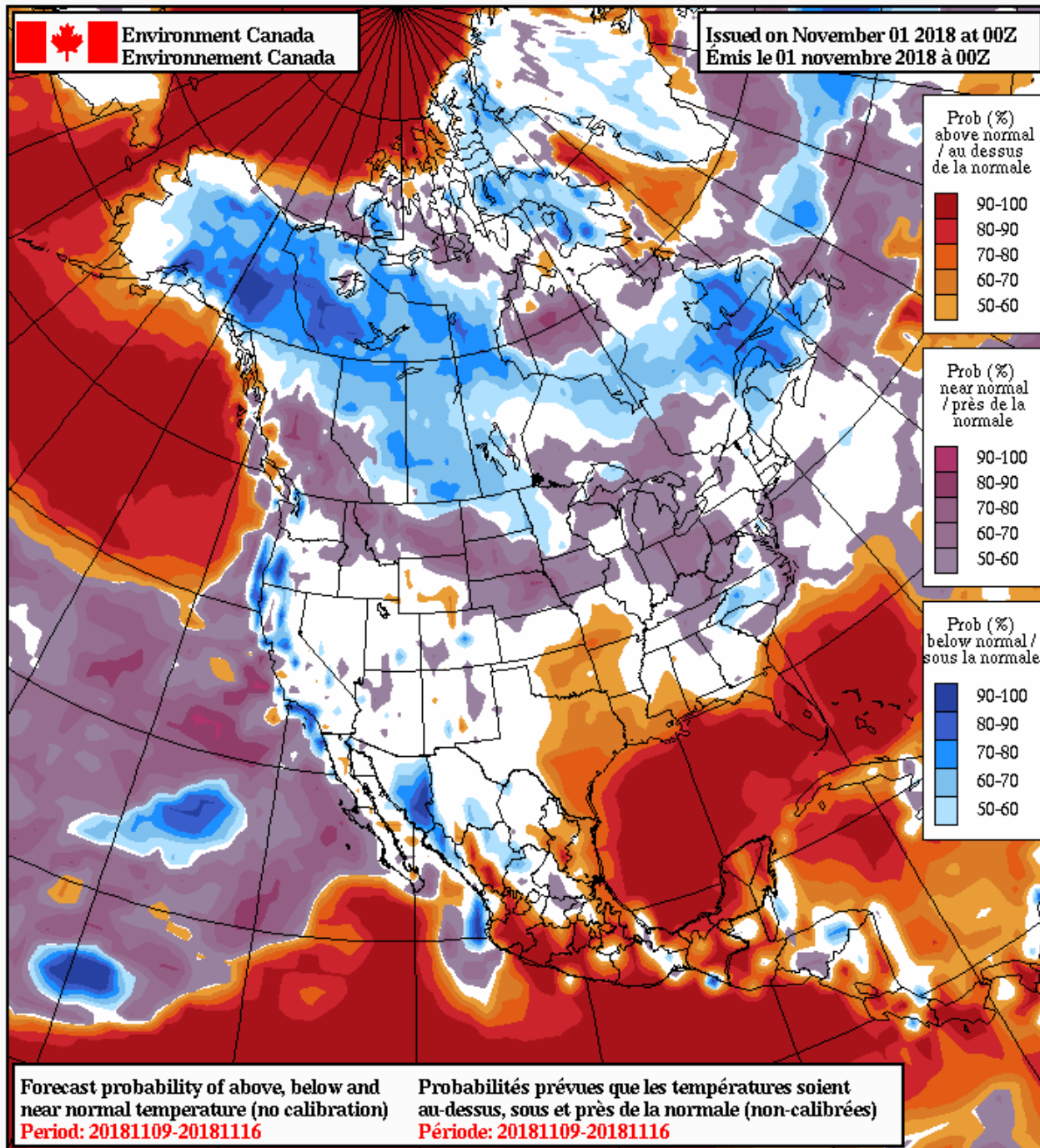


10 day
forecast
ending
November
11, 2018

Day 8 to 14 Forecast

Period ending
November 16,
2018

This is suggesting
a weak signal of below
normal conditions.



Fredericton

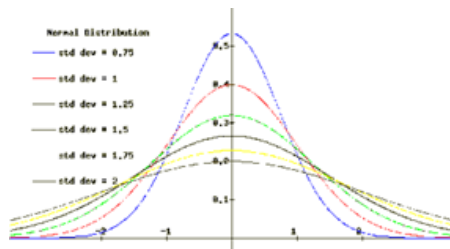
November

Normal high: 6.0C

Normal low: -3.0C

**Next 15 days; ending
 November 16, 2018**

In general, remaining above normal for
 the first half then near normal
 for the second half.

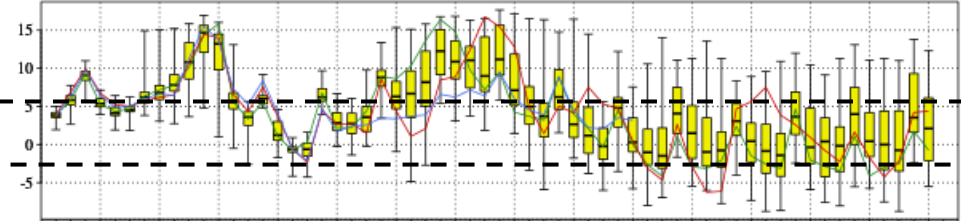


Ensemble and Deterministic Forecasts issued 1 November 2018 00 UTC
 Prévision d'ensemble et déterministe émises le 1 Novembre 2018 00 UTC
 for/pour

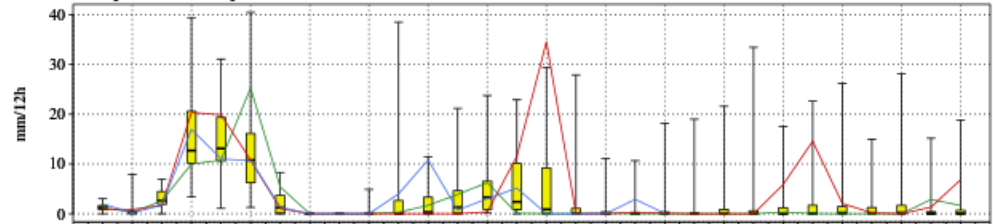
NAEFS / SPENA

FREDERICTON (YFC) 45.87 N 66.53 W/O

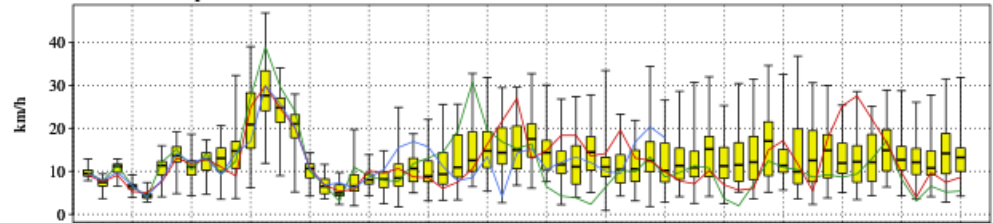
Surface air temperature/Température de l'air à la surface



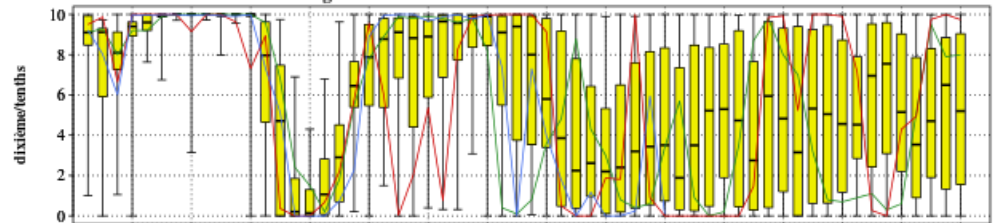
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



November/Novembre 2018

max
 75%
 median/médiane
 25%
 min

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



Environment and
 Climate Change Canada

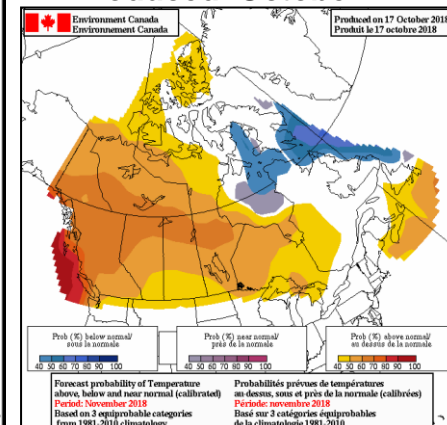
Environnement et
 Changement climat

Temperature November 2018

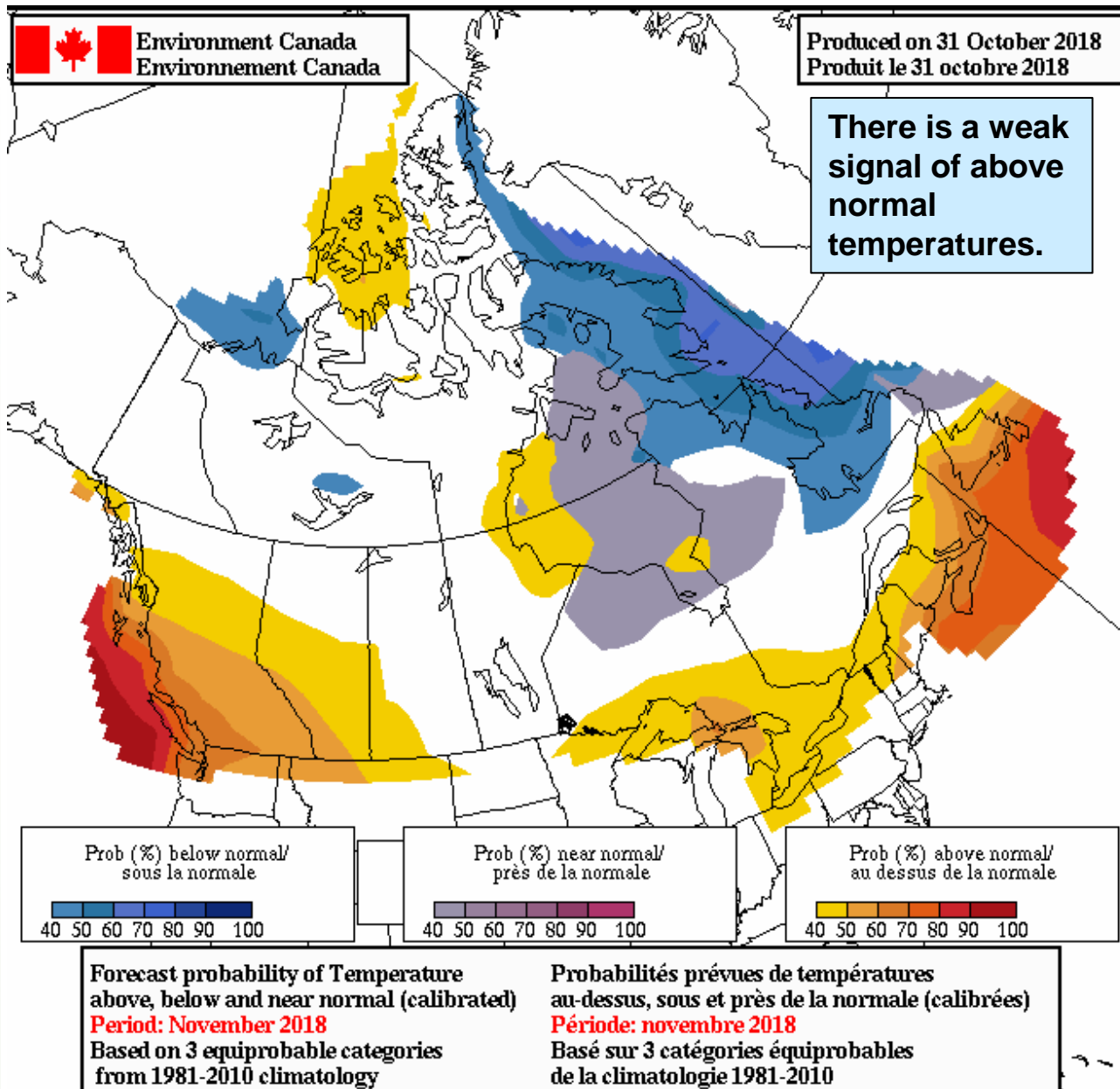
CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced October 17

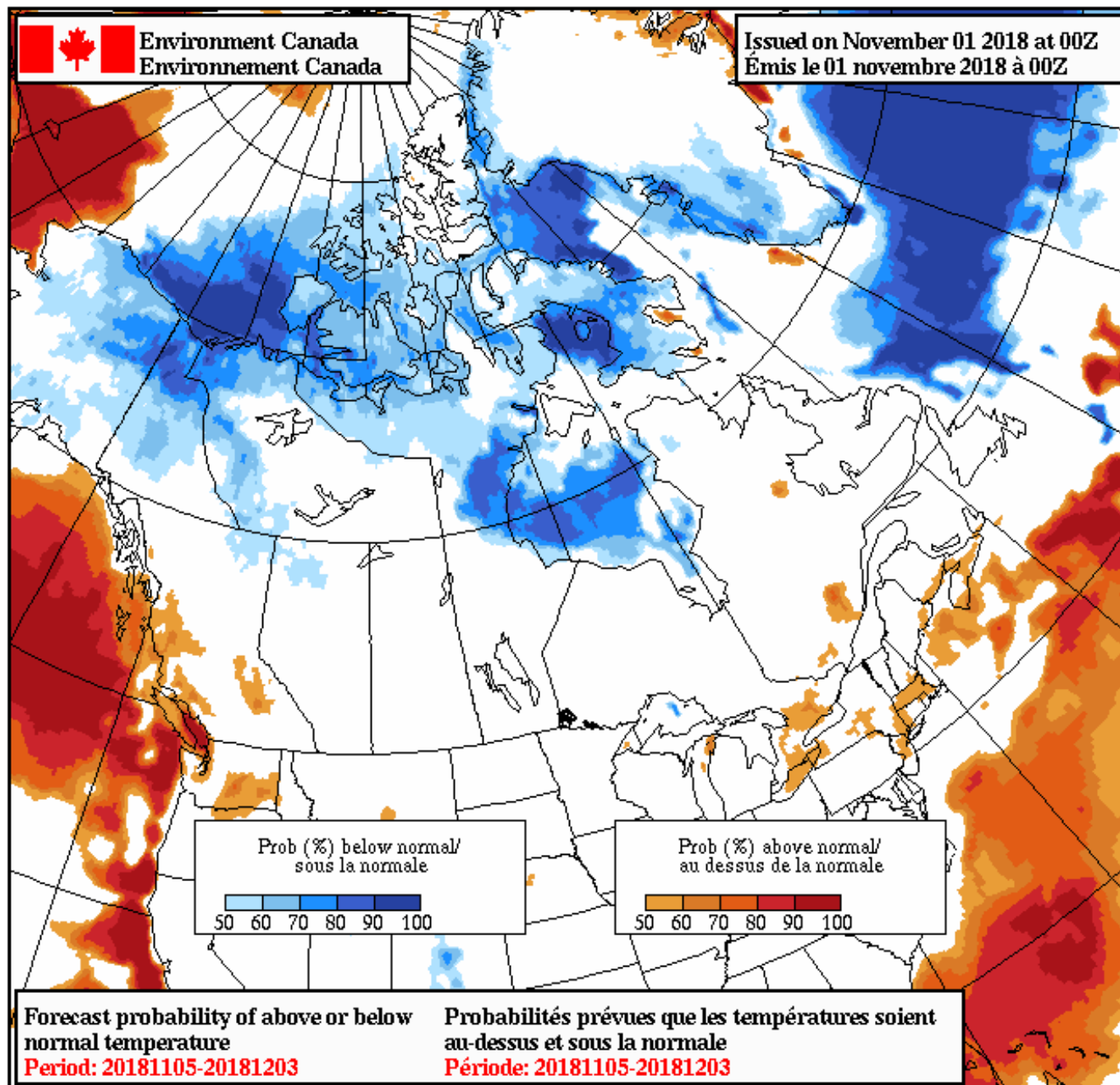


Canada



Temperature November 5 to December 3

CMC
Monthly
Forecast
Product
using GEPS
50km res.

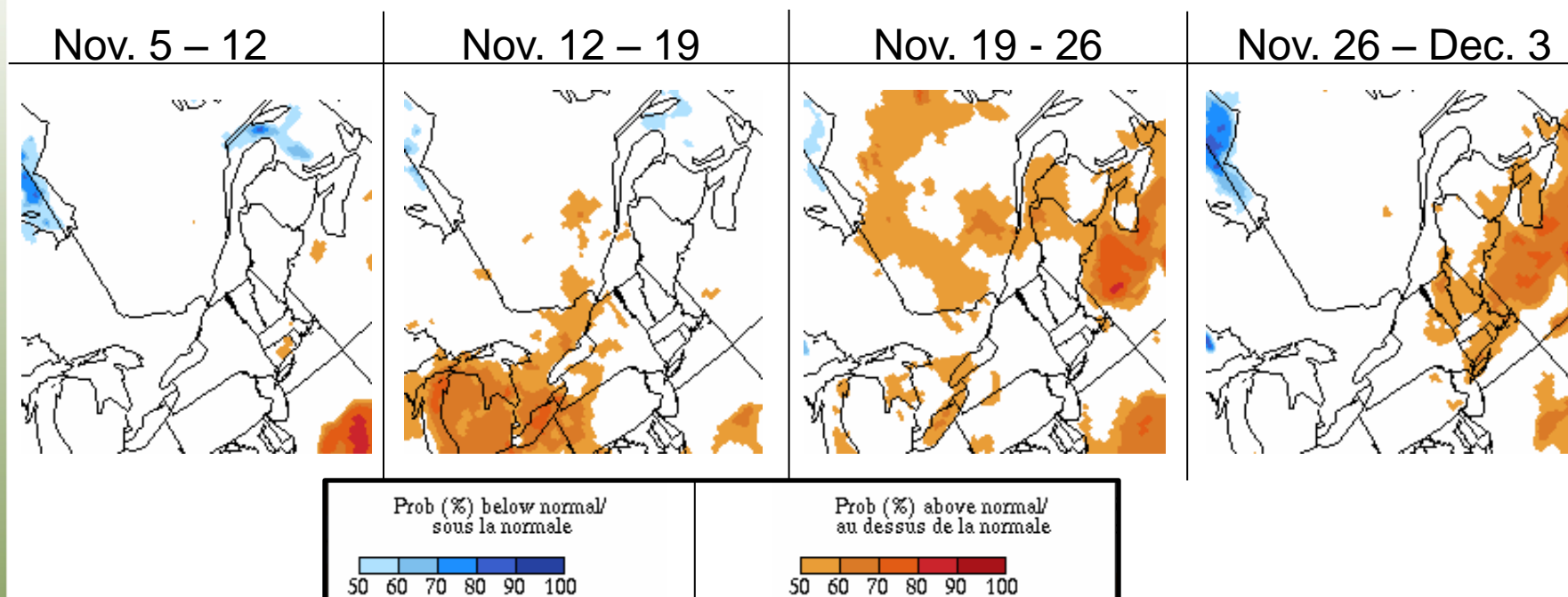


Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

Weekly signature from GEPS 50km resolution



No conclusive signal for the first two weeks then a weak signal of above normal for the last two weeks.

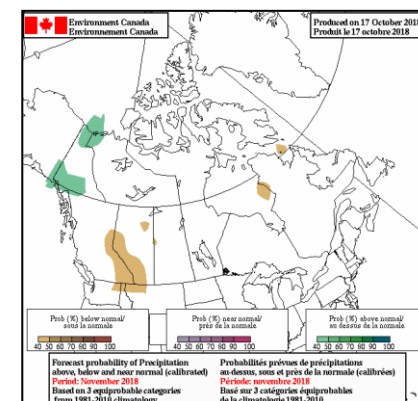


Precipitation November 2018

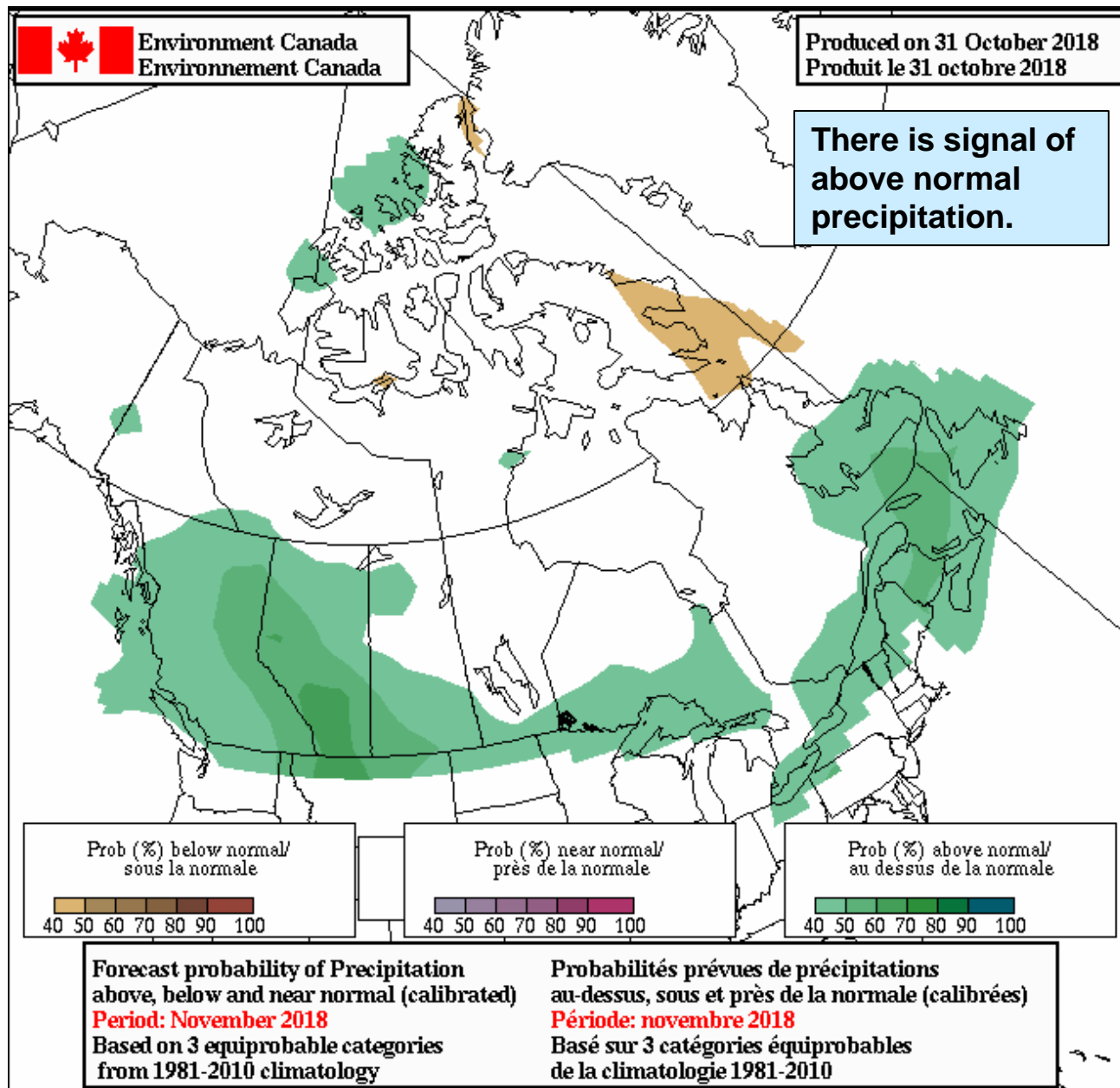
CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced October 17

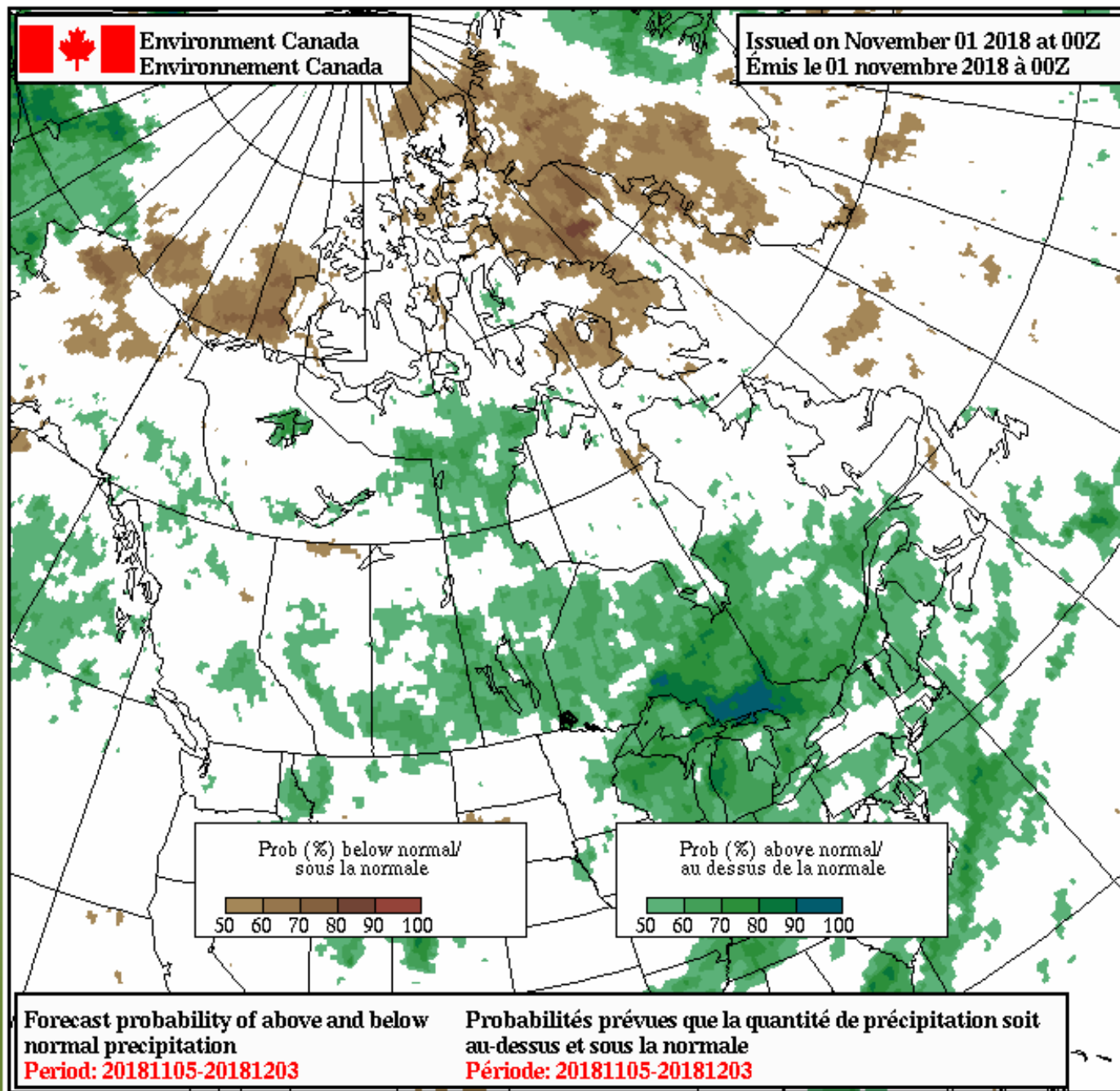


Canada



Precipitation November 5 to December 3

CMC
Monthly
Forecast
Product
using GEPS
50km res.

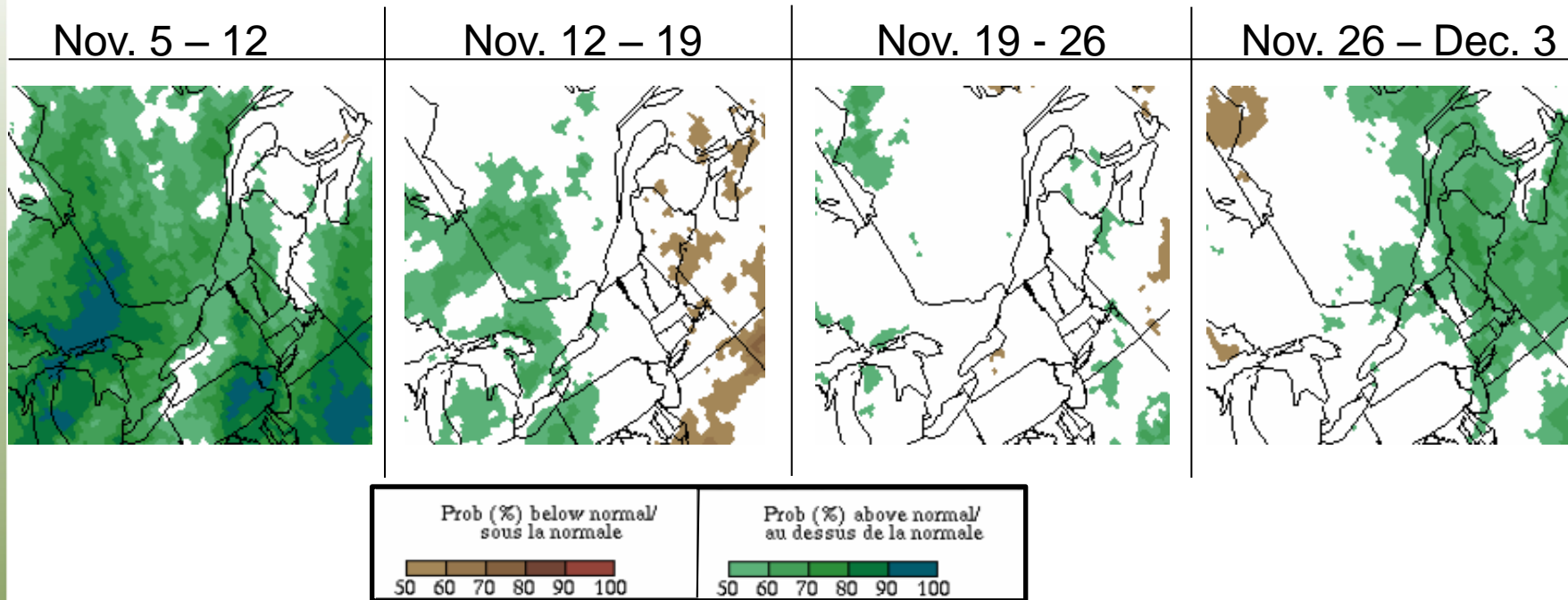


Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

Weekly signature from GEPS 50km resolution



Generally, there is a weak signal of near or slightly above normal for the period, with the exception of the second week where it is predicted to be slightly below normal.

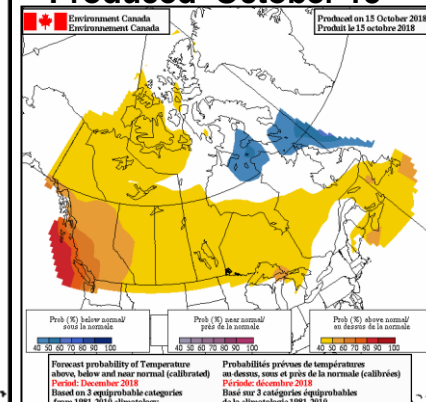


Temperature December 2018

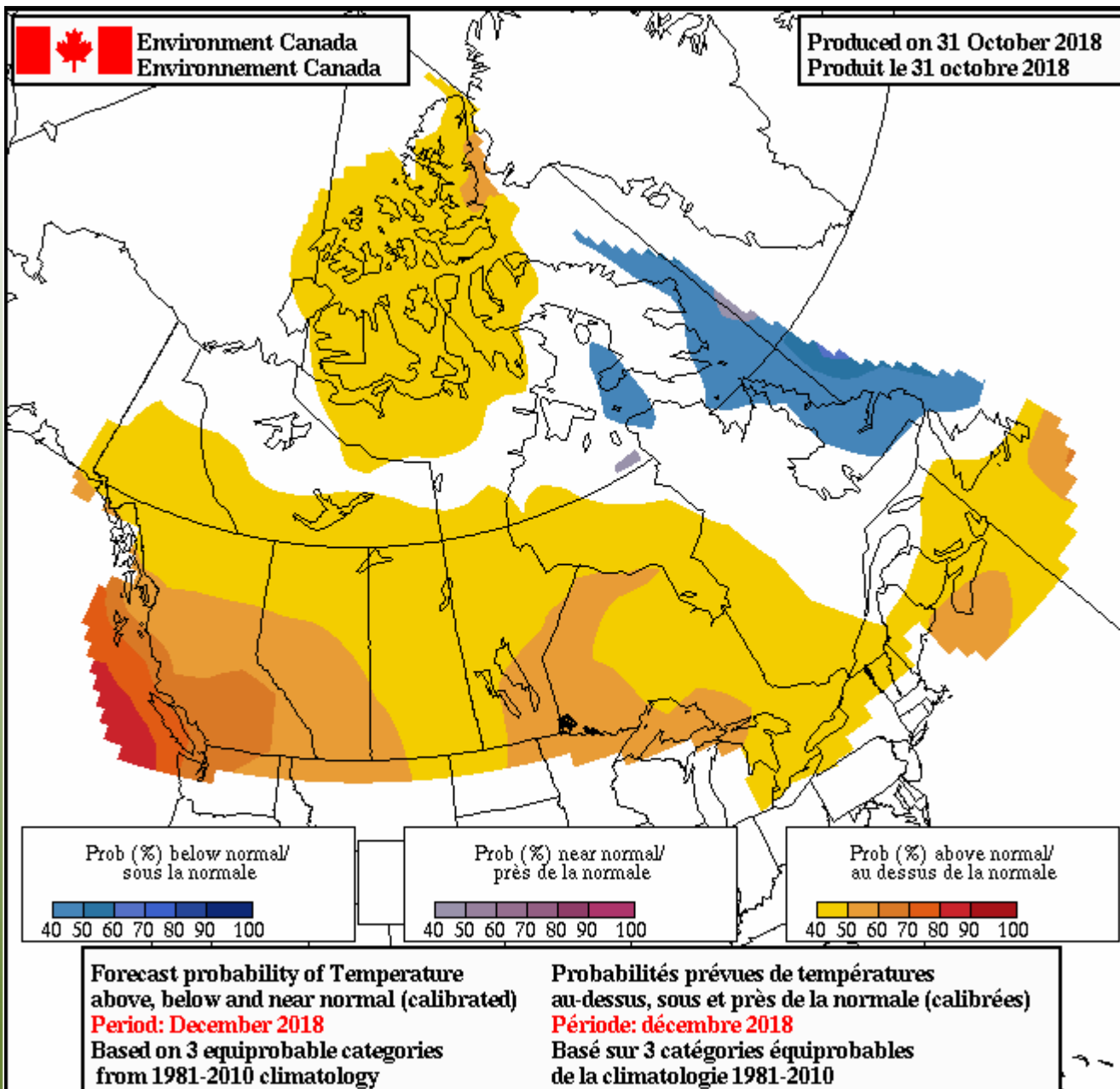
CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced October 15



Canada



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

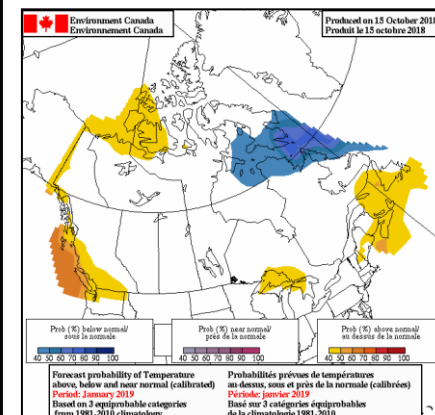
Produced on 31 October 2018
Produit le 31 octobre 2018

Temperature January 2019

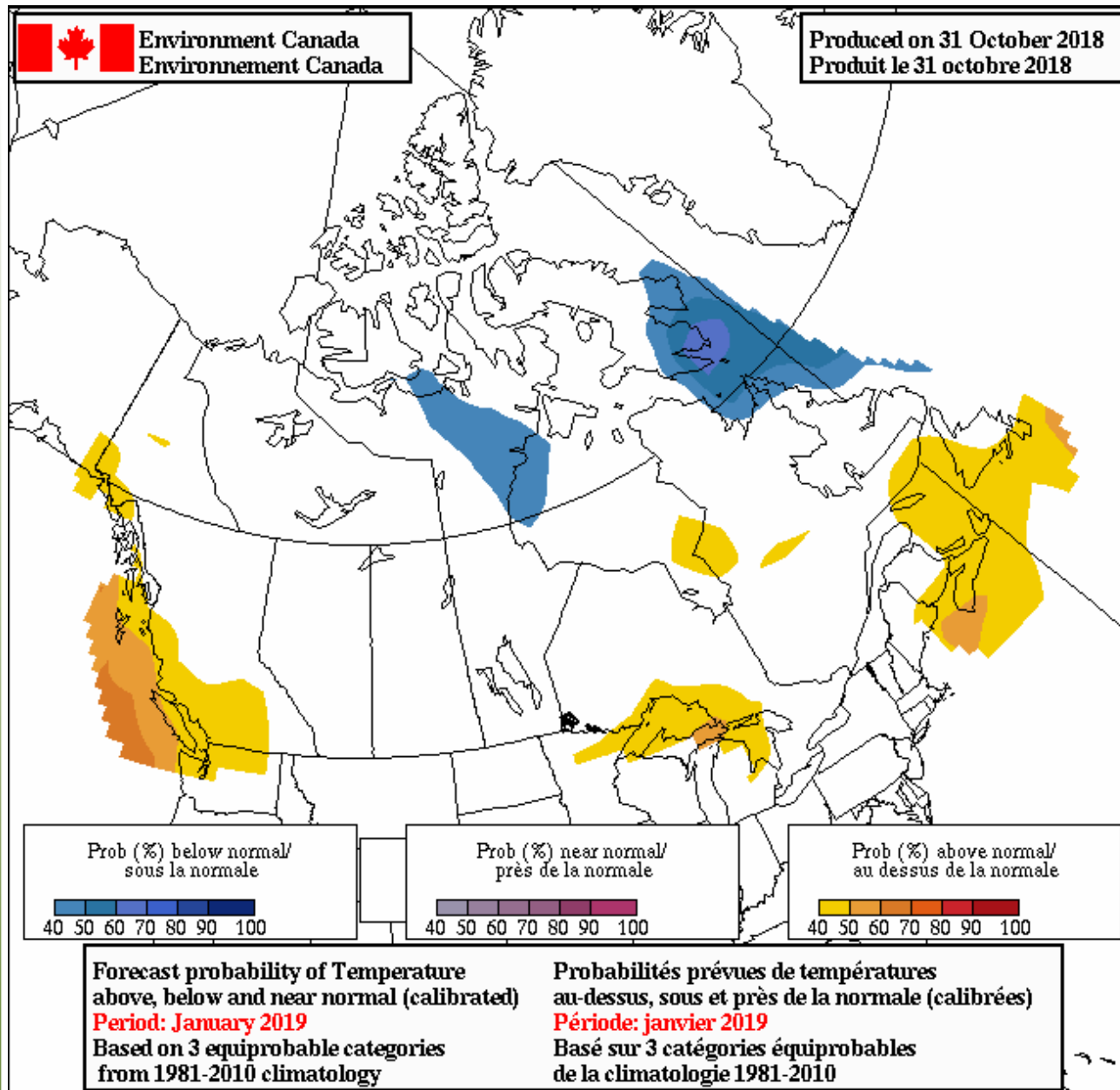
CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced October 15



Canada



Environment and
Climate Change Canada

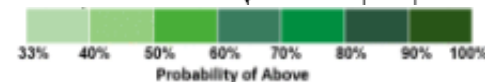
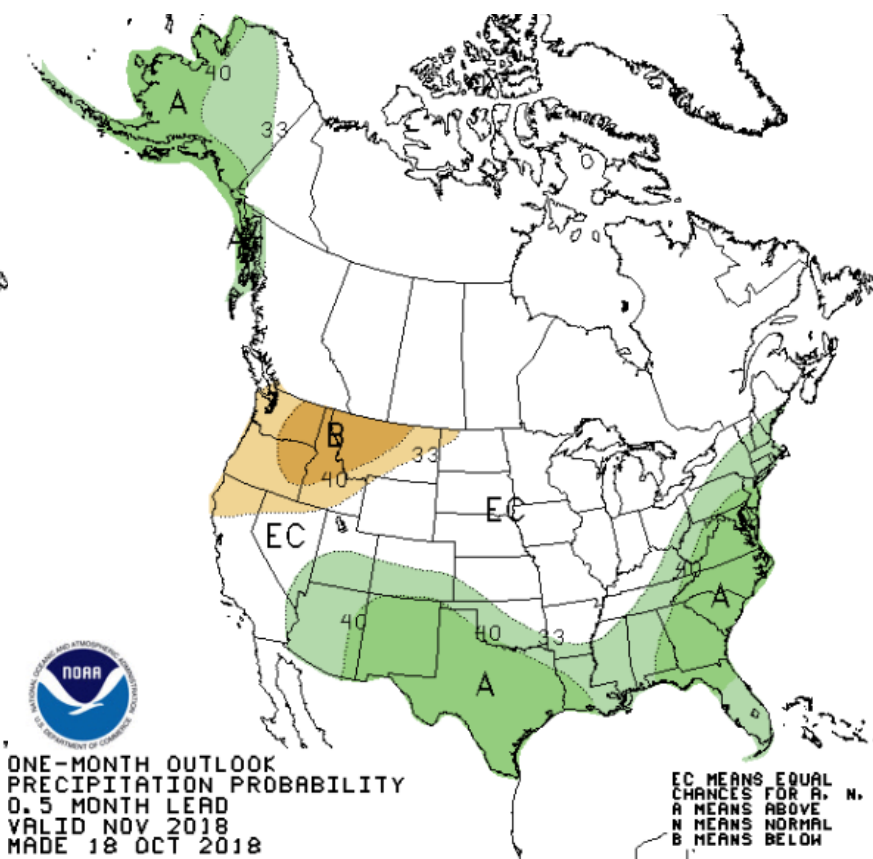
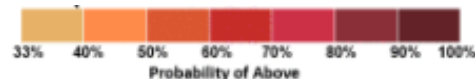
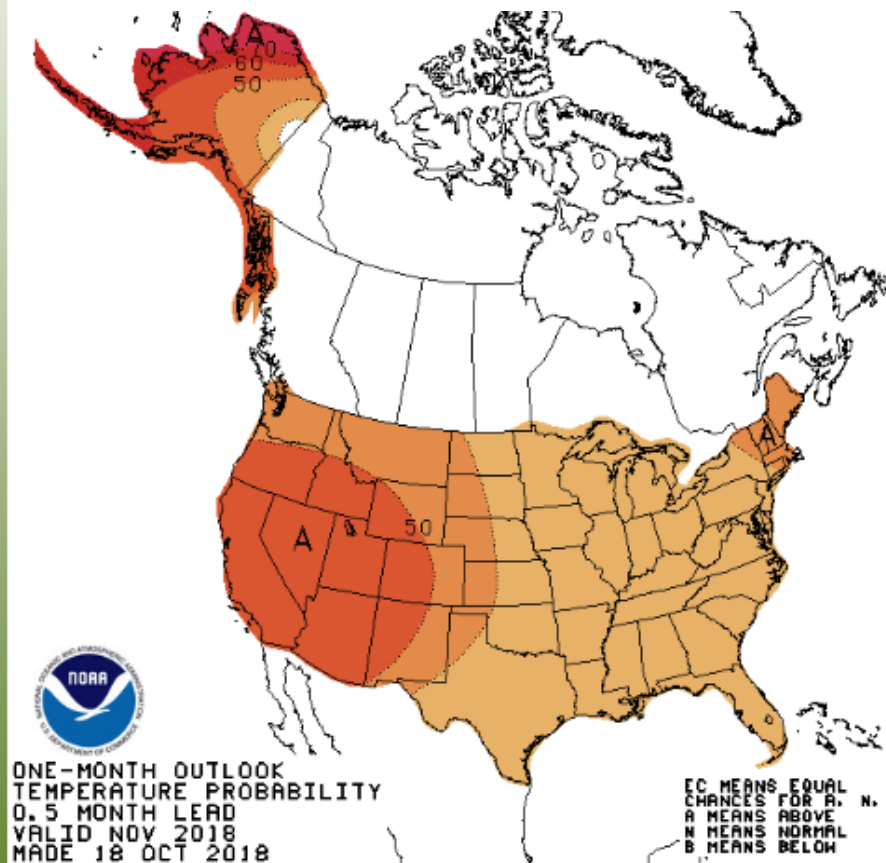
Environnement et
Changement climatique Canada



November 2018

Temperature

Precipitation



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

Contact

Jill Maepea

Warning Preparedness Meteorologist

506-452-4166 office

jill.maepea@canada.ca

Environment and Climate Change

Canada Weather Pages

www.weather.gc.ca



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada