#### **New Brunswick**

# April 2020 Review May 2020 and Spring/Summer Outlook

Jill Maepea Meteorological Service of Canada Environment and Climate Change Canada May 1, 2020





### **April 2020; Climate Summary**

			Mean Temperature (°C)		Total Precip (mm)			
								Total as
		Station						% of
Station Name	TC ID	Type	Mean	Mean	Normal	Total	Total	Normal
BAS CARAQUET	WXS	AU8	1.4	1.9	-0.6	52.3		
BAS CARAQUET		DAILY			1 17	63.2	82.6	77
BATHURST A	ZBF	NCA	1.5	3.2	-1./			
BOUCTOUCHE CDA CS	ABT	AU8	2.6	3.0				
CHARLO AUTO	ZCR	AU8	0.9	1.9		59.6	71.7	83
MIRAMICHI RCS	ACQ	AU8	2.3	3.2				
DOAKTOWN AUTO RCS	ADN	AU8	2.4	3.7	-1.3	61.9		74
EDMUNDSTON	ERM	AU8	0.9			63.9		
FREDERICTON INTL A	YFC	NCA	3.5	4.5				
FREDERICTON CDA CS	AFC	AU8	3.8	4.8	-1.0	87.5	81.6	107
GAGETOWN AWOS A	YCX	AU5	3.6	4.8	-1.2			
GRAND MANAN SAR CS	XGM	AU8	3.5					
KOUCHIBOUGUAC	AKC	AU8	1.9	3.3	-1.4			
MECHANIC SETTLEMENT	AMS	AU8	1.4			131.1		
MISCOU ISLAND (AUT)	WMI	AU8	1.0					L
MONCTON INTL A	YQM	NCH	3.0	3.5	-0.6	43.8	97.6	45
MONCTON A	YQM	NCA	2.8	3.5	-0.7			
OAK POINT		DAILY	3.7	4.8	-1.1	119.6	89.4	134
POINT LEPREAU CS	WPE	AU8	4.0	4.0	2 0.0	74.7	116.0	64
RED PINES	ARP	AU8	1.4	2.8	-1.4	76.6	75.6	101
SAINT JOHN A	YSJ	NCH	3.1	3.7	-0.6	86.3	105.3	82
SUSSEX FOUR CORNERS	ASF	AU8	3.6	4.8	-1.2	69.5	89.7	77
WOODSTOCK		DAILY	3.1	3.7	-0.6	76.4	80.4	95
WOODSTOCK NEWBRIDGE	EWD	AU8	2.8	3.7	-0.9	87.3	80.4	109
Average			2.5	3.6	-0.9	74.6	87.3	83
Max			4.0	4.8	0.0	131.1	116.0	134
Min			0.9	1.9	-1.7	39.5	71.7	45

#### **Highlights:**

The average temperature anomaly was below normal (-0.9C). All but one site reported a negative anomaly. The province did not see a day of 20 C or warmer which usually occurs in April.

Total precipitation amounts were below normal, with an average of 83% of total precipitation. Eastern areas were the driest with less than half of their normal precipitation. However, areas in the southwest were above normal.



#### **April 2020; Climate Summary**

#### **Events:**

**April 2-3**; Rain event. A slow moving trough brought a prolonged period of rain to the province which was the heaviest in portions of the south. The Fredericton area reported up to 53 mm.

**April 9-10**; "Spring" storm. Snow fell across the province (5-25 cm) with some rain mixing in the south. The northeast was most impacted with both the Miramichi and Bas Caraguet areas reporting 34 cm of snow and Bas Caraquet also had a wind gust to 89 km/h. Storm surge also caused some minor coastal damage in western Bay of Fundy.

April 13-14; Warm, wet and windy. Rain, wind and mild temperatures (10-30 mm) across the province caused rapid snowmelt in many places. Mechanic Settlement received the most rain with 53 mm and Saint John recorded the strongest wind gust at 96 km/h.

**April 21-22**; Winterlike conditions. A snow/rain mix fell across the province and the northwest was most impacted with the Grand Falls area reporting 19 cm of snow.

Days of month with lightning in New Brunswick; none

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





## **April 2020; Provincial Climate Extremes**

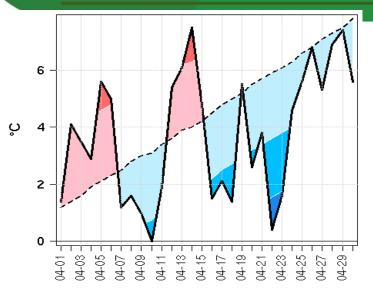
Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	+18.3 °C	Kouchibouguac	30
Daily Minimum Temperature	-12.1 °C	Edmundston	9 & 18
Maximum Daily Total Precipitation	52.1 mm	Mechanic Settlement	13
Daily Maximum Wind Gust	96 km/h	Saint John	13
Daily Minimum Wind Chill	-14	Edmundston Charlo Mechanic Settlement	18 23 22

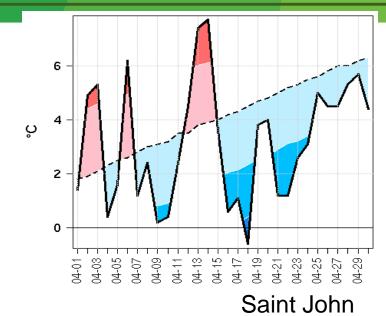




#### **April 2020 - Temperature**

Daily Mean Temperature (bold line) versus Normal (thin line) and +/- 0.7, 1.3, 2.1 SD (red/blue shades)

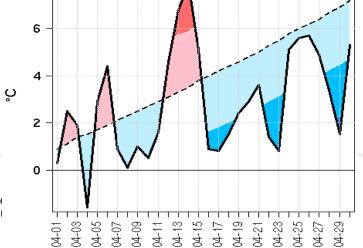




Fredericton

All sites were below normal

Moncton



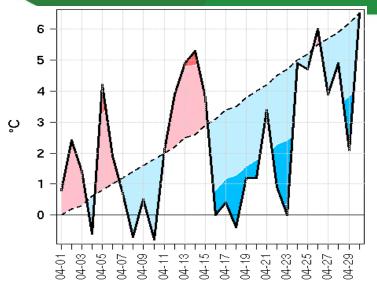


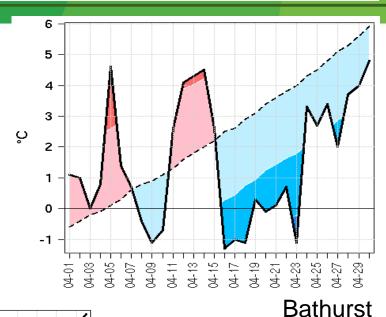
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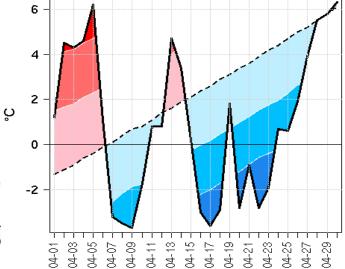




Miramichi

All sites were below normal

Edmundston



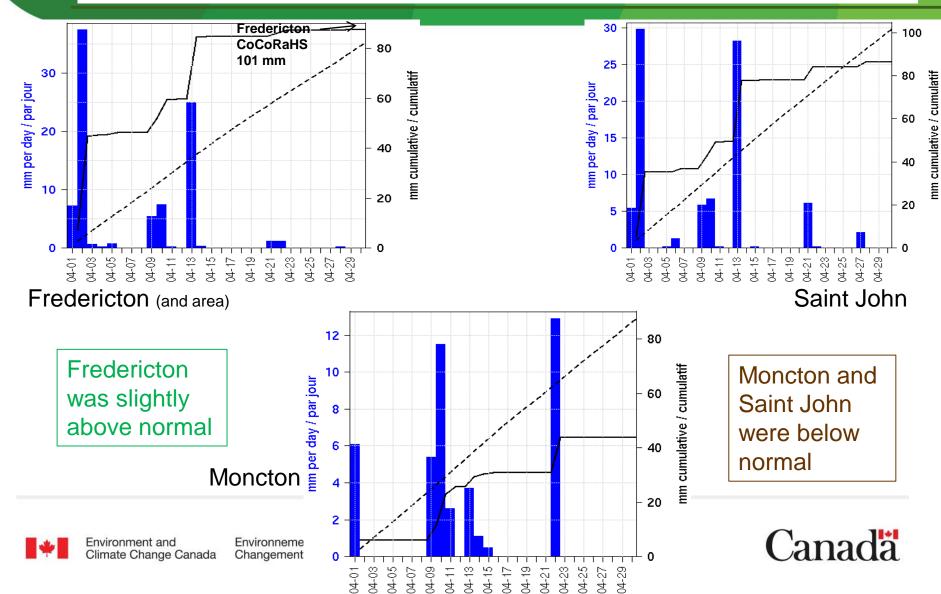
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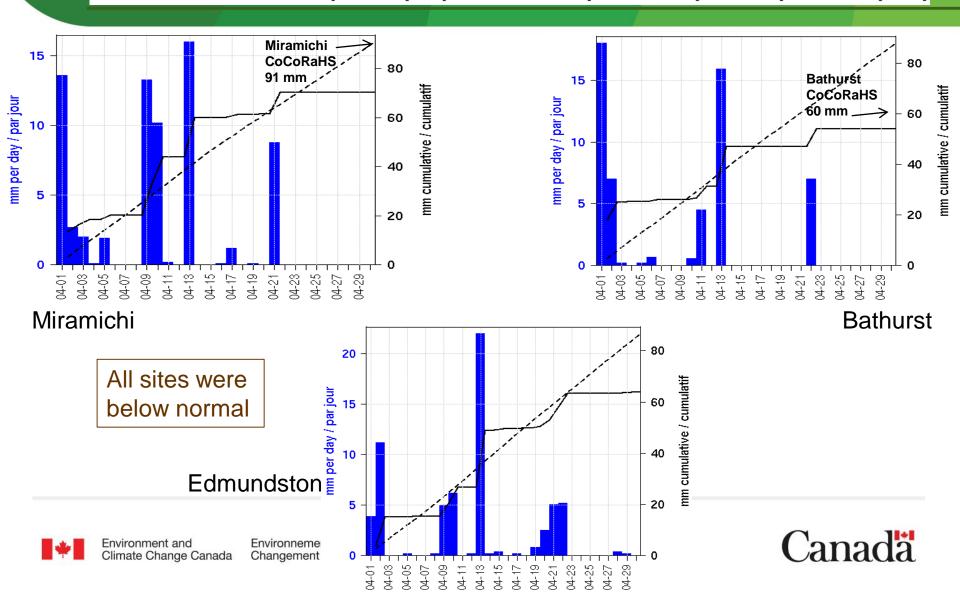
### **April 2020 - Precipitation**

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

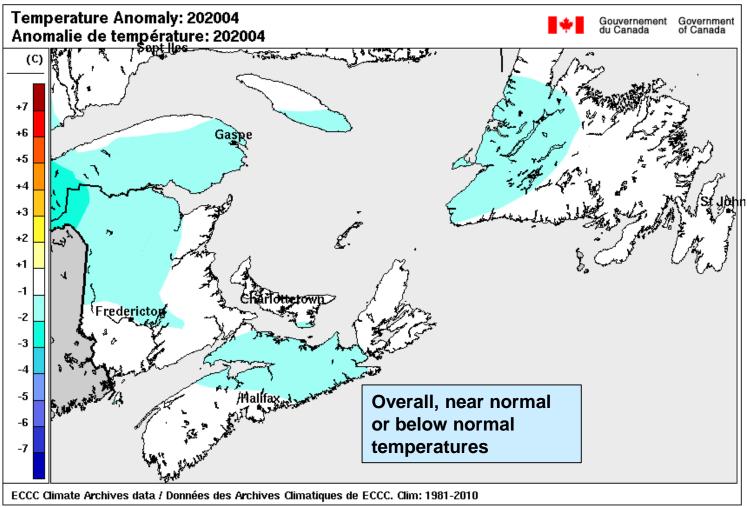


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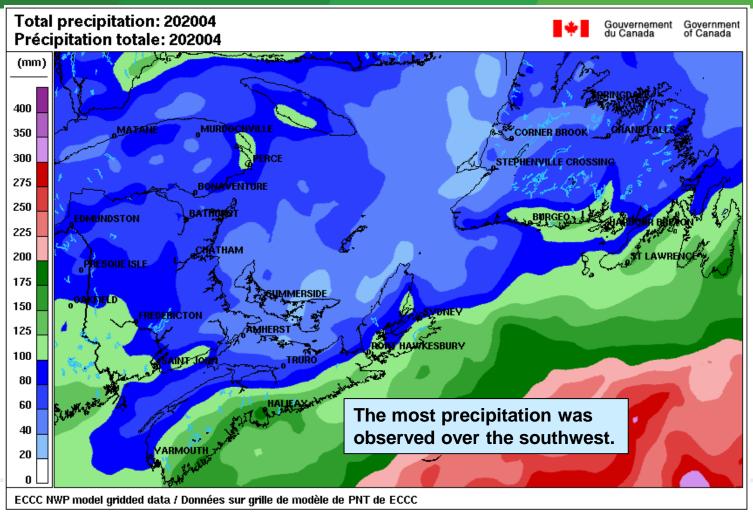
## April 2020 – Temperature departure from 1981-2010 mean







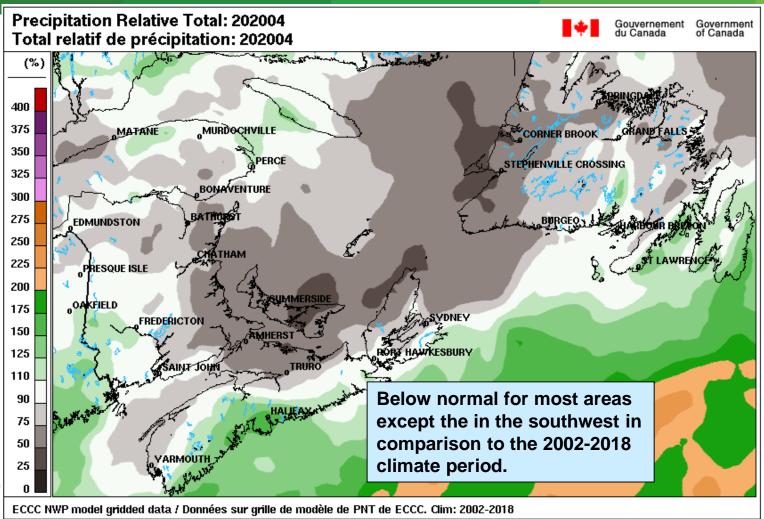
## April 2020 – Total precipitation







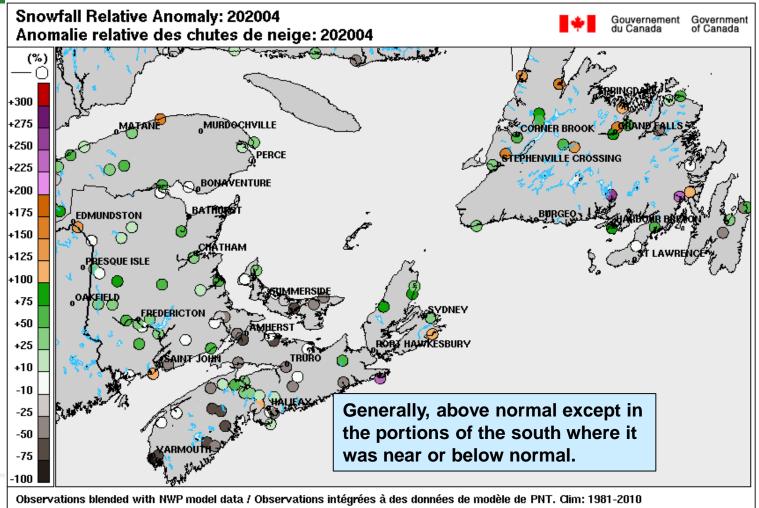
# April 2020 – Precipitation departure from 2002-2018 mean







## April 2020 – Snowfall departure from 1981-2010 mean

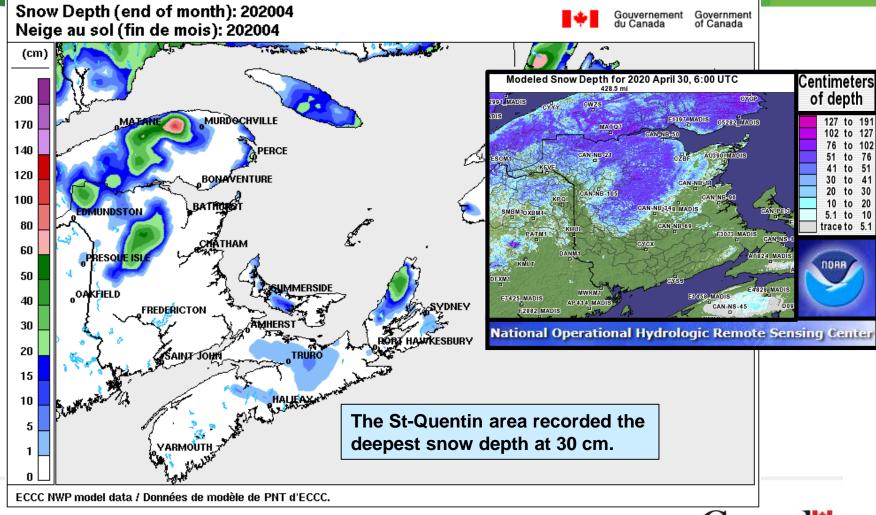






## April 2020 - Snow depth at month end

Extracted from Canadian computer model

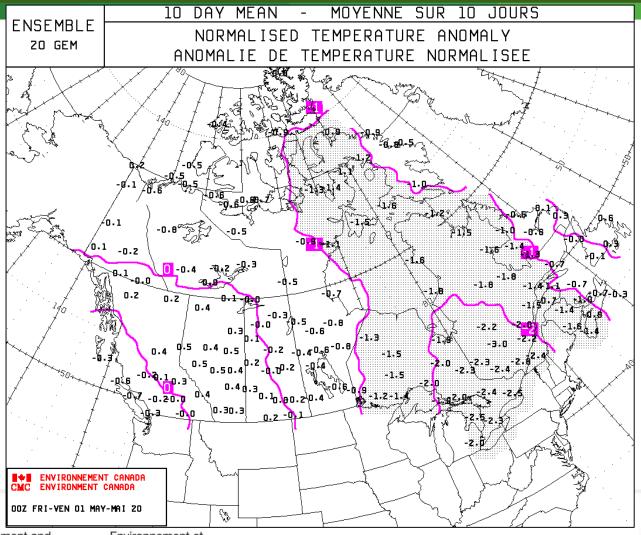






### Outlook – 10 day mean temperature

(Suggesting below normal conditions (-1.1 to -1.8°C))





10 day

ending

May 11,

2020

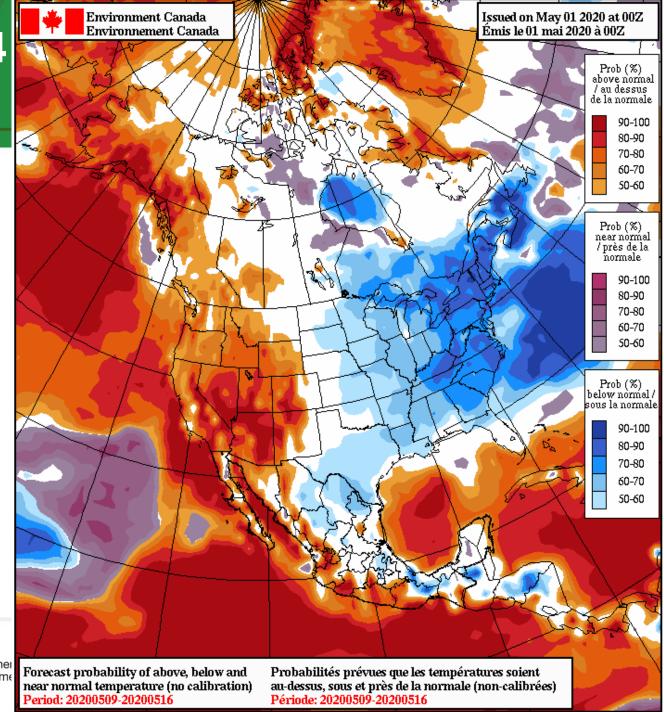
forecast



## Day 8 to 14 Forecast

## Period ending May 16, 2020

Weak to moderate signal of below normal.





#### **Fredericton**

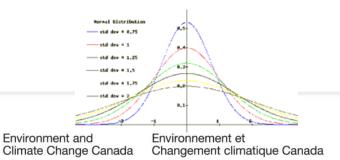
Normal high: +17.6C

May

Normal low: 4.6C

#### Next 15 days; ending May 16, 2020

Below normal then becoming near normal towards the end of the period.





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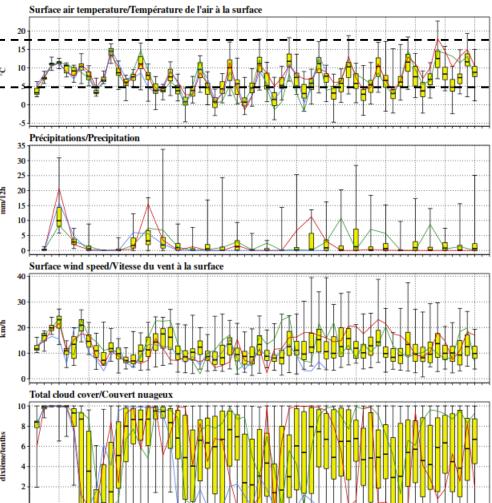
median/médiane



Ensemble and Deterministic Forecasts issued 1 May 2020 00 UTC Prévision d'ensemble et déterministe émises le 1 Mai 2020 00 UTC

NAEFS / SPENA

#### FREDERICTON (YFC) 45.87 N 66.53 W/O

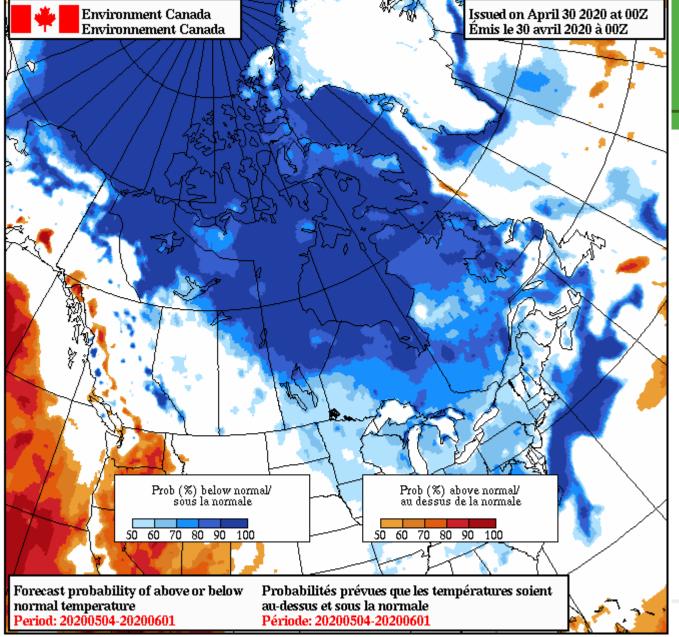


May/Mai 2020

Global Model / Modèle global

Control Member / Membre contrôle CMC

Control Member / Membre contrôle NCEP

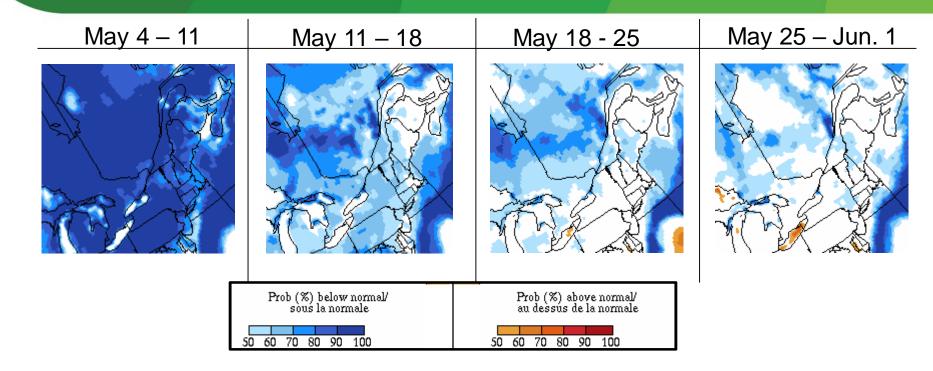


Temperature
May 4
to
June 1

CMC Monthly Forecast Product using GEPS 50km res.



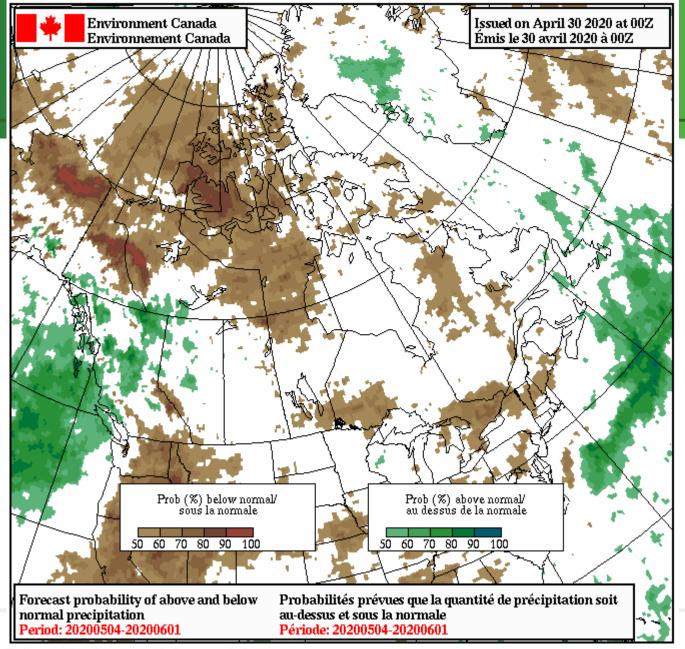
#### Weekly signature from GEPS 50km resolution



Generally, there is moderate signal of below normal for the first week which transitions into no conclusive signal (near normal) by the third week and remains for the remainder of the period.





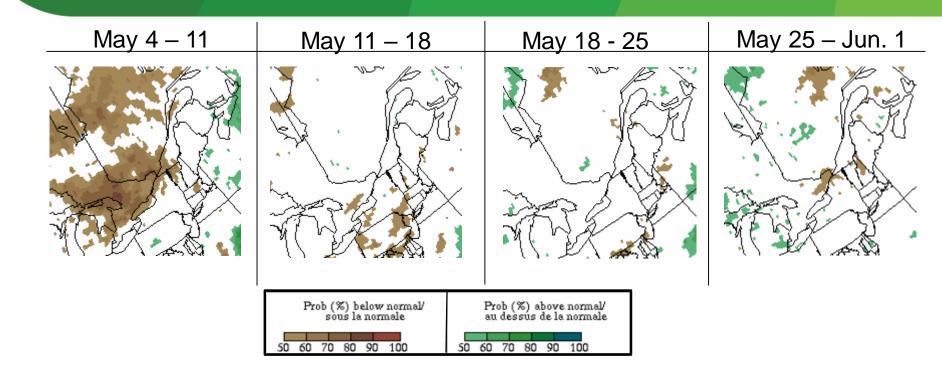


Precipitation
May 4
to
June 1

CMC Monthly Forecast Product using GEPS 50km res.



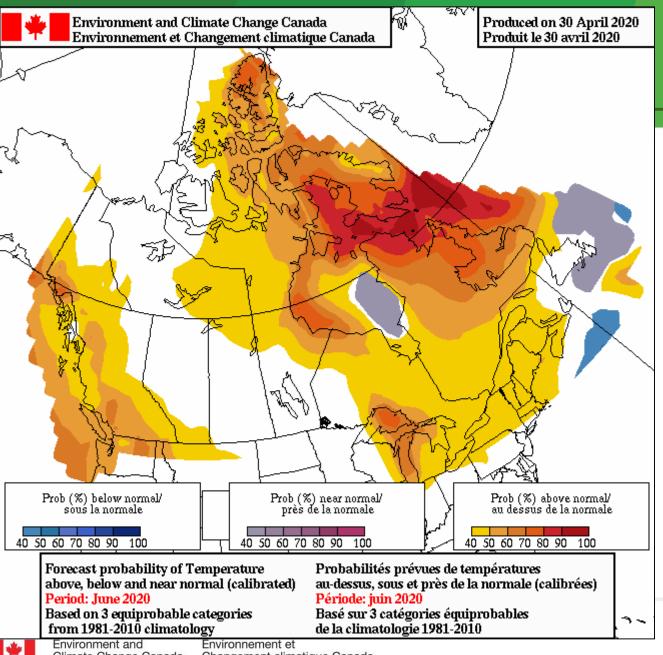
## Weekly signature from GEPS 50km resolution



Generally, no conclusive signal (near normal).



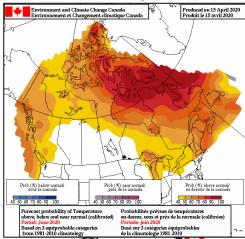


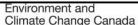


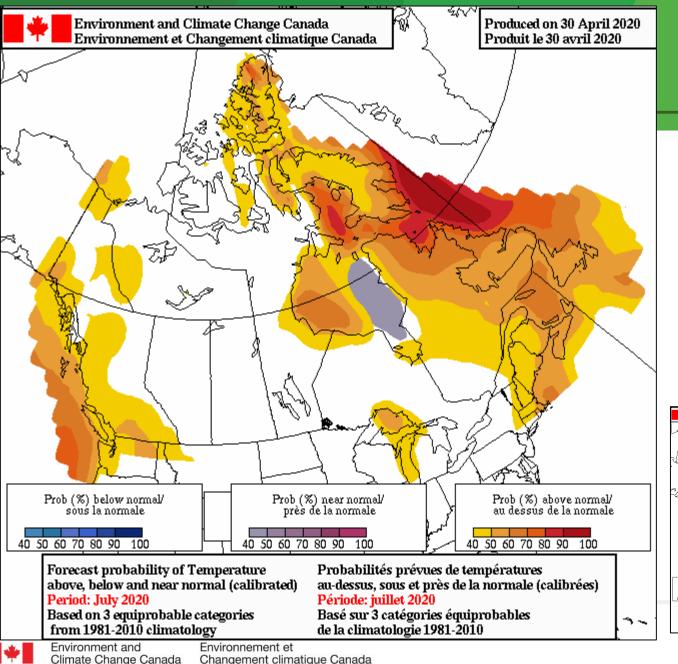
#### **Temperature** June 2020

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

#### **Produced April 15**



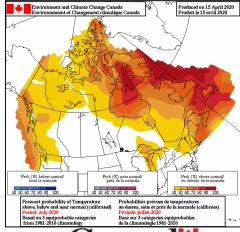




#### **Temperature** July 2020

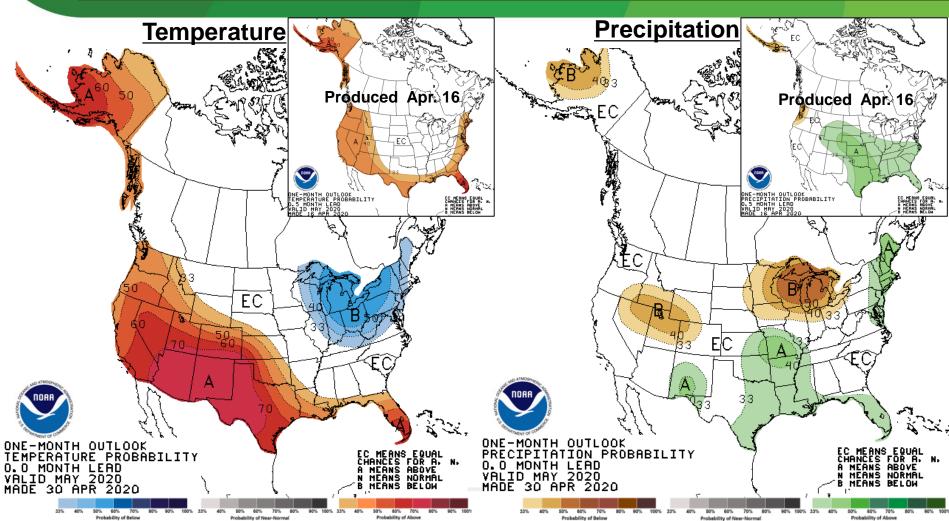
CanSIPS (Canadian Seasonal and Interannual Prediction System) CanAM3 CanAM4 CanOM4

#### **Produced April 15**





#### **May 2020**





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#### Contact

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Environment and Climate Change Canada Weather Pages

www.weather.gc.ca

