

# New Brunswick

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## September 2019 Review October 2019 and Fall Outlook

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Meteorological Service of Canada  
Environment and Climate Change Canada  
October 2, 2019



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# September 2019; Climate Summary

## Highlights:

The average temperature anomaly was below normal (-1.1C). All sites reported a negative anomaly except Point Lepreau. Edmundston reported the largest negative anomaly at -2.2C.

Total precipitation amounts were well above normal, with an average of 163% of total precipitation. This was mainly due to two events; the 7<sup>th</sup> and the 24<sup>th</sup>. Several sites in the southeast saw their top 5 wettest, with both Moncton and Bouctouche recording their 4<sup>th</sup> wettest.

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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	Diff from Normal as % of Normal
AROOSTOOK	NB		DAILY	12.5	13.2	-0.7				
BAS CARAQUET	NB	WXS	AU8	12.5	14.2	-1.7				
BAS CARAQUET	NB		DAILY				141.0	73.8	191	91
BATHURST A	NB	ZBF	NCA	11.9	13.5	-1.6	140.6	84.2	167	67
BOUCTOUCHE CDA CS	NB	ABT	AU8	12.7	13.8	-1.1	201.9	86.3	234	134
CHARLO AUTO	NB	ZCR	AU8	11.7	12.1	-0.3				
MIRAMICHI RCS	NB	ACQ	AU8	12.9	13.5	-0.6				
DOAKTOWN AUTO RCS	NB	ADN	AU8	12.2	13.5	-1.2	180.2	100.2	180	80
EDMUNDSTON	NB	ERM	AU8	10.0	12.2	-2.2	102.6	94.6	108	8
FREDERICTON INTL A	NB	YFC	NCA	12.7	13.6	-0.9	161.3	87.5	184	84
FREDERICTON CDA CS	NB	AFC	AU8	13.3	14.0	-0.7	168.8	94.7	178	78
GAGETOWN AWOS A	NB	YCX	AU5	12.9	14.7	-1.9	124.5	86.1	145	45
GRAND MANAN SAR CS	NB	XGM	AU8	11.9						
KOUCHIBOUGUAC	NB	AKC	AU8	12.4	13.3	-1.0				
MECHANIC SETTLEMENT	NB	AMS	AU8	12.1			201.9			
MISCOU ISLAND (AUT)	NB	WMI	AU8	12.4						
MONCTON INTL A	NB	YQM	NCH	13.1	13.6	-0.5	187.5	93.5	201	101
OAK POINT	NB		DAILY	13.5	14.7	-1.2	150.8	86.1	175	75
POINT LEPREAU CS	NB	WPE	AU8	12.7	12.4	0.2				
RED PINES	NB	ARP	AU8	11.0	13.1	-2.1	148.7	76.5	195	95
SAINT JOHN A	NB	YSJ	NCH	11.9	13.0	-1.1	123.5	105.6	117	17
ST. STEPHEN	NB	WSS	AU8	13.2						
SUSSEX FOUR CORNERS	NB	ASF	AU8	12.9	14.3	-1.3	158.0	99.9	158	58
WOODSTOCK	NB		DAILY	12.3	13.2	-0.9	97.0	95.7	101	1
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	11.8	13.2	-1.5	99.5	95.7	104	4
<b>Average</b>				<b>12.4</b>	<b>13.5</b>	<b>-1.1</b>	<b>149.2</b>	<b>90.7</b>	<b>163</b>	<b>63</b>
<b>Max</b>				<b>13.5</b>	<b>14.7</b>	<b>0.2</b>	<b>201.9</b>	<b>105.6</b>	<b>234</b>	<b>134</b>
<b>Min</b>				<b>10.0</b>	<b>12.1</b>	<b>-2.2</b>	<b>97.0</b>	<b>73.8</b>	<b>101</b>	<b>1</b>

# September 2019; Climate Summary

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## Events:

**September 7-8;** Tropical cyclone event. Post-tropical storm Dorian tracked through central Nova Scotia on the evening of the 7<sup>th</sup> bringing heavy rain and strong winds to parts of the province. Amounts varied across the province (10-130 mm) with the southeast receiving the most rain of 136 mm in the Grande-Digue area. Winds gusted out of the north and as high as 106 km/h in Miscou Island.

**September 23-24;** Rain event. A low pressure system from the Great Lakes brought steady rain and isolated thunderstorms to most areas of the province. Most areas saw generally 20-50 mm with the Fredericton area receiving the most rain at 81 mm.

**Days with thunderstorm activity (lightning) in New Brunswick; 4-5, 7, 11, 23-25 (7 days)**

**Days with temperature records broken or tied in New Brunswick; 13 18 19 22**  
(red=maximum, blue=minimum)



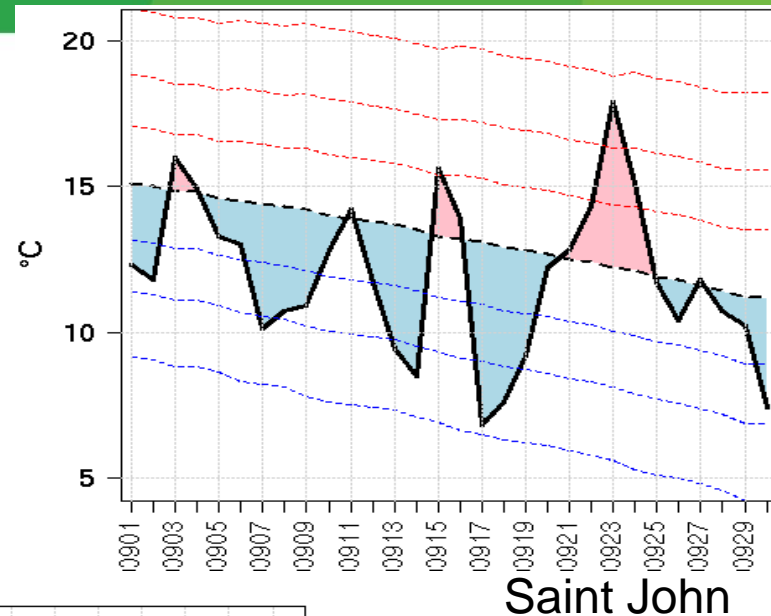
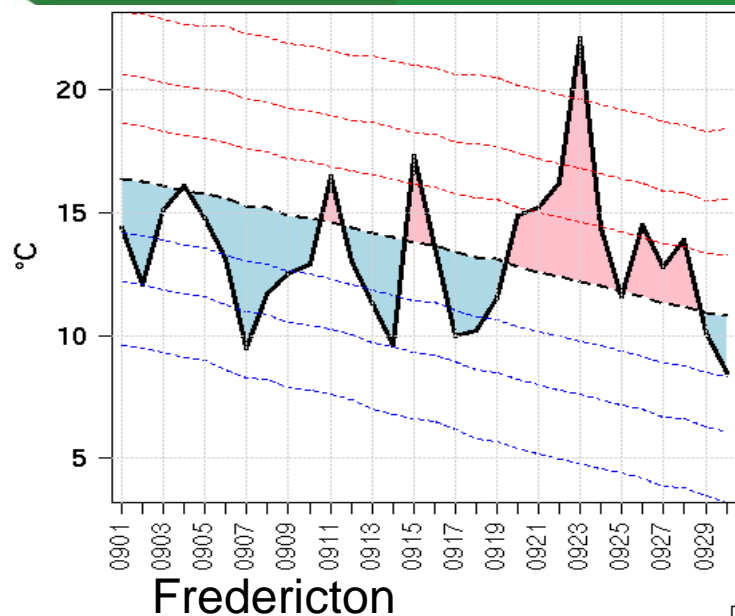
# September 2019; Provincial Climate Extremes

Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	<b>+28.1 °C</b>	Bathurst	22
Daily Minimum Temperature	<b>-3.4 °C</b>	Edmundston	18
Maximum Daily Total Precipitation	<b>121.3 mm</b>	Moncton	7
Daily Maximum Wind Gust	<b>106 km/h</b>	Miscou Island	7
Daily Maximum Humidex	<b>35</b>	St. Stephen	23



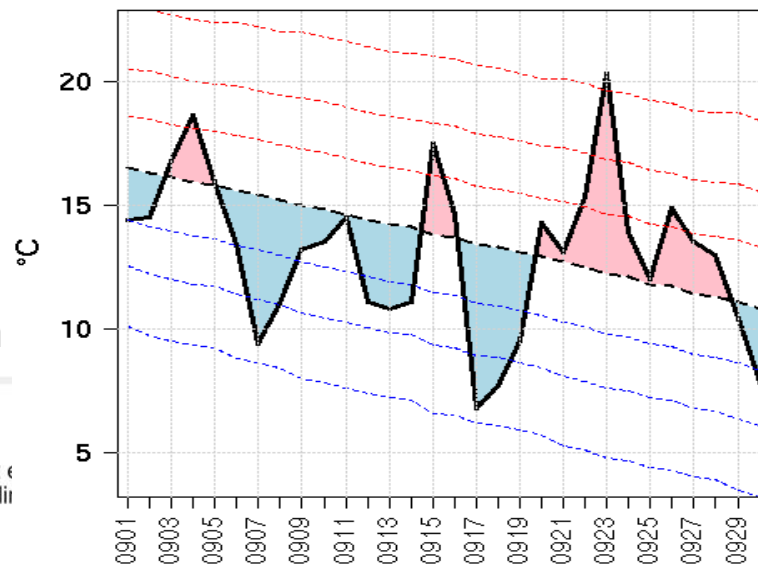
# September 2019 - Temperature

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



All sites were  
below normal

Moncton



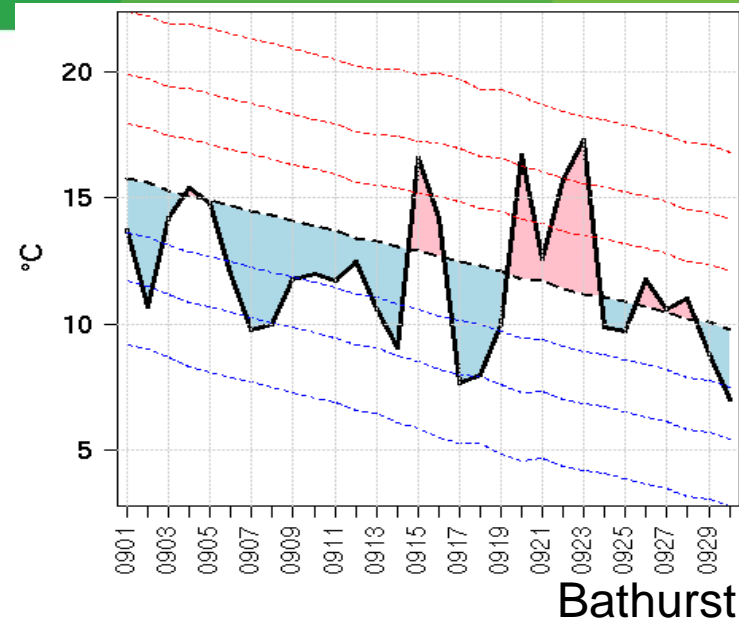
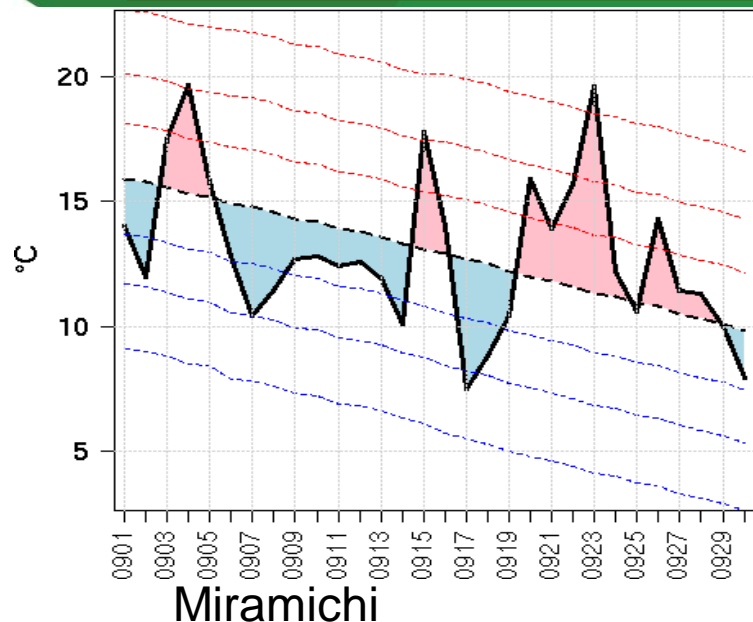
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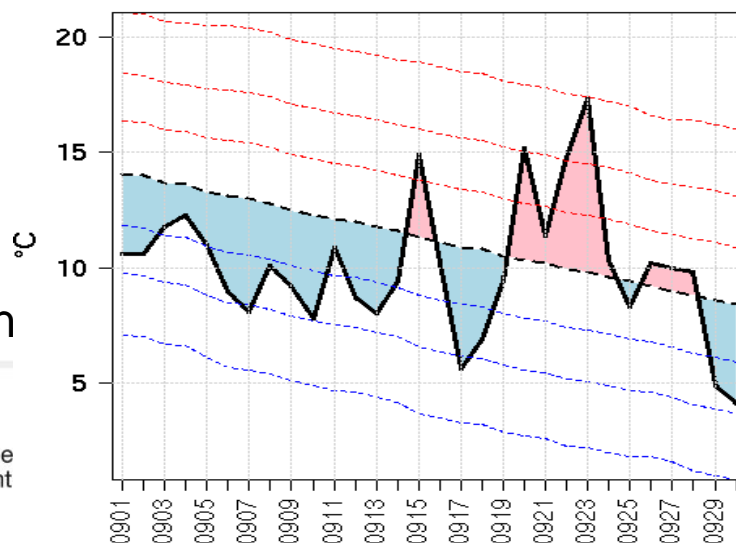
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Daily Mean Temperature (bold line) versus Normal (thin line) and  $\pm 0.7, 1.3, 2.1$  SD (red/blue dashes)



All sites were  
below normal

Edmundston



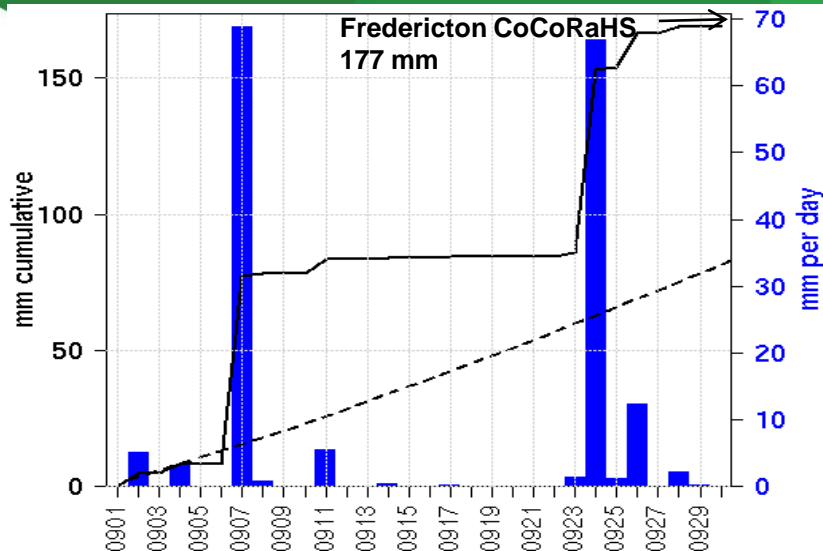
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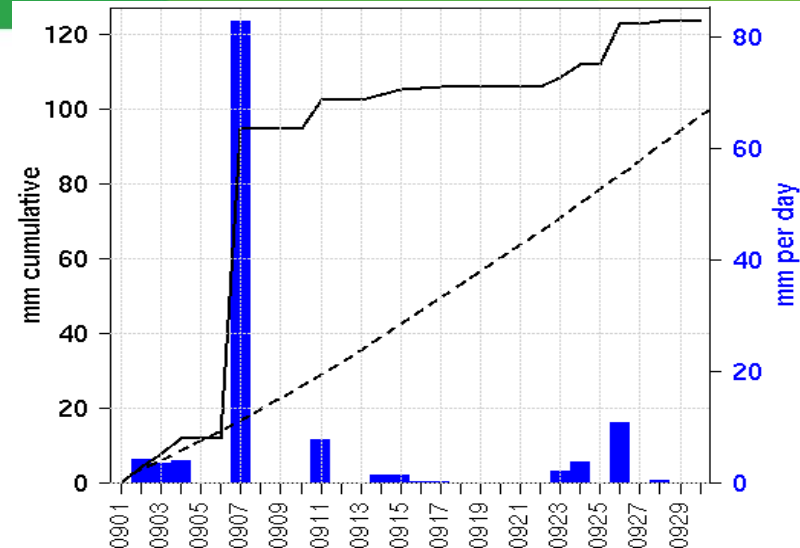
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# September 2019 - Precipitation

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



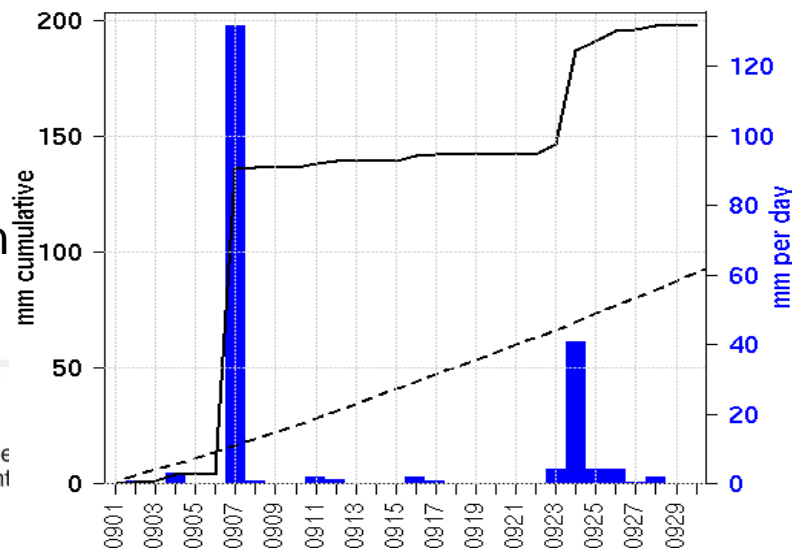
Fredericton (and area)



Saint John

All sites were  
above normal

Moncton



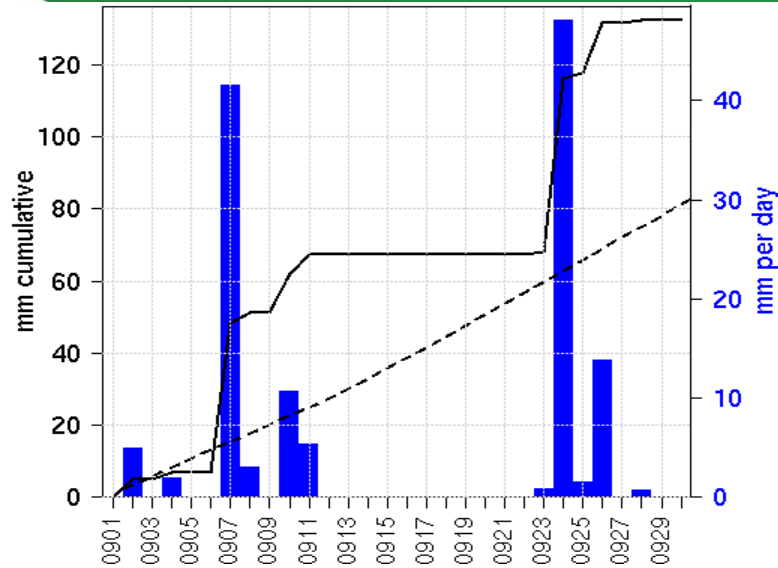
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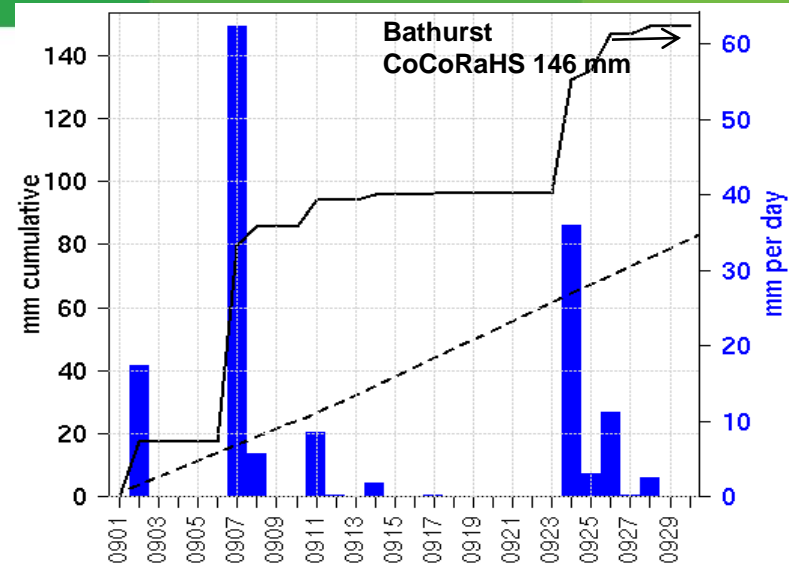
Canada

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

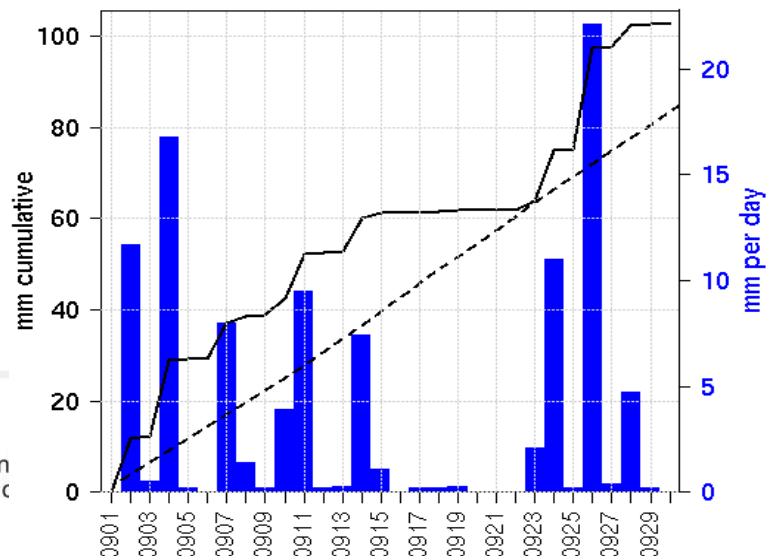


Miramichi



Bathurst

All sites were  
above normal



Edmundston



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# September 2019 – Temperature departure from 1981-2010 mean

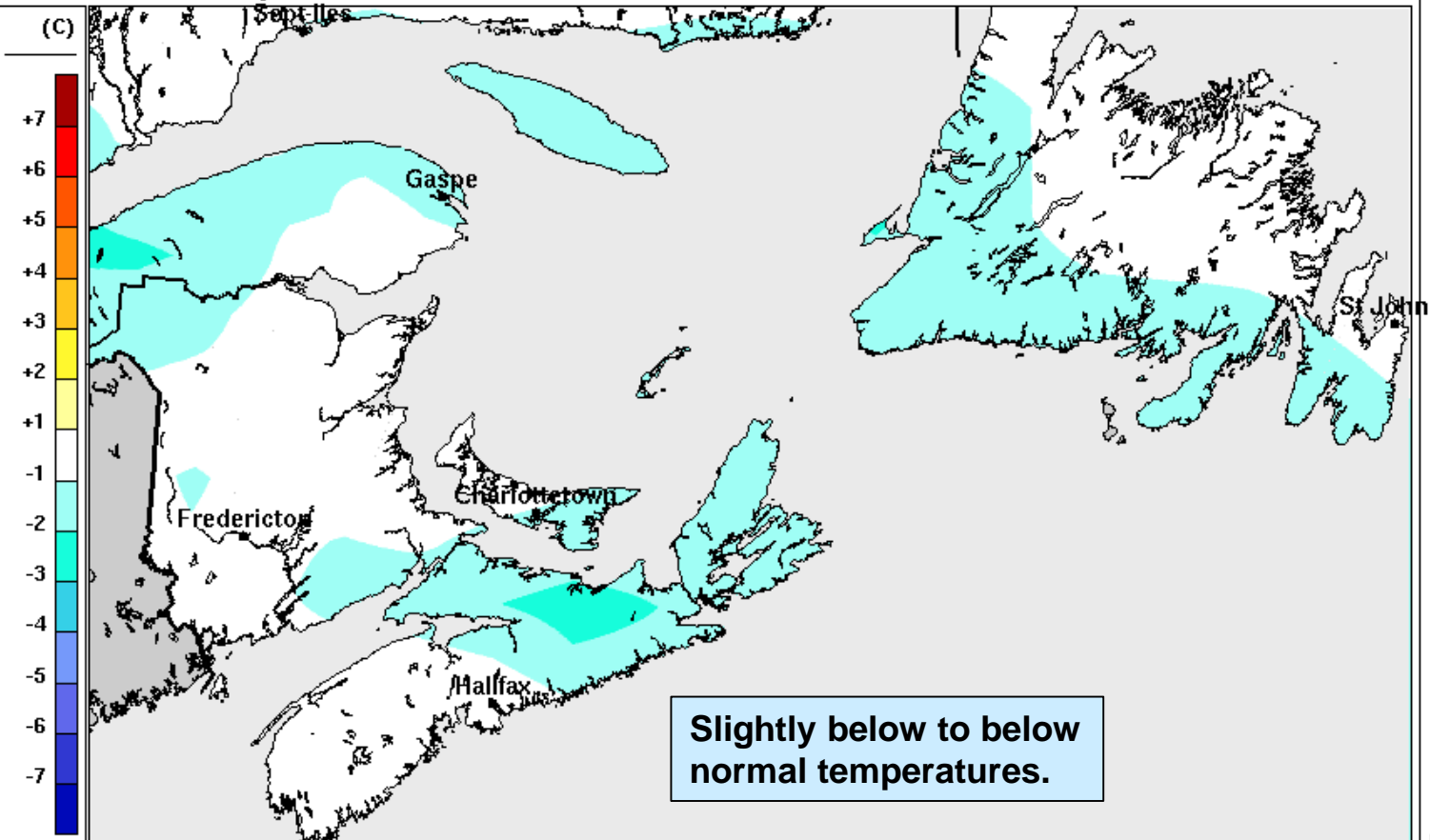
Temperature Anomaly: 201909

Anomalie de température: 201909



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ECCC Climate Archives data / Données des Archives Climatiques de ECCC. Clim: 1981-2010



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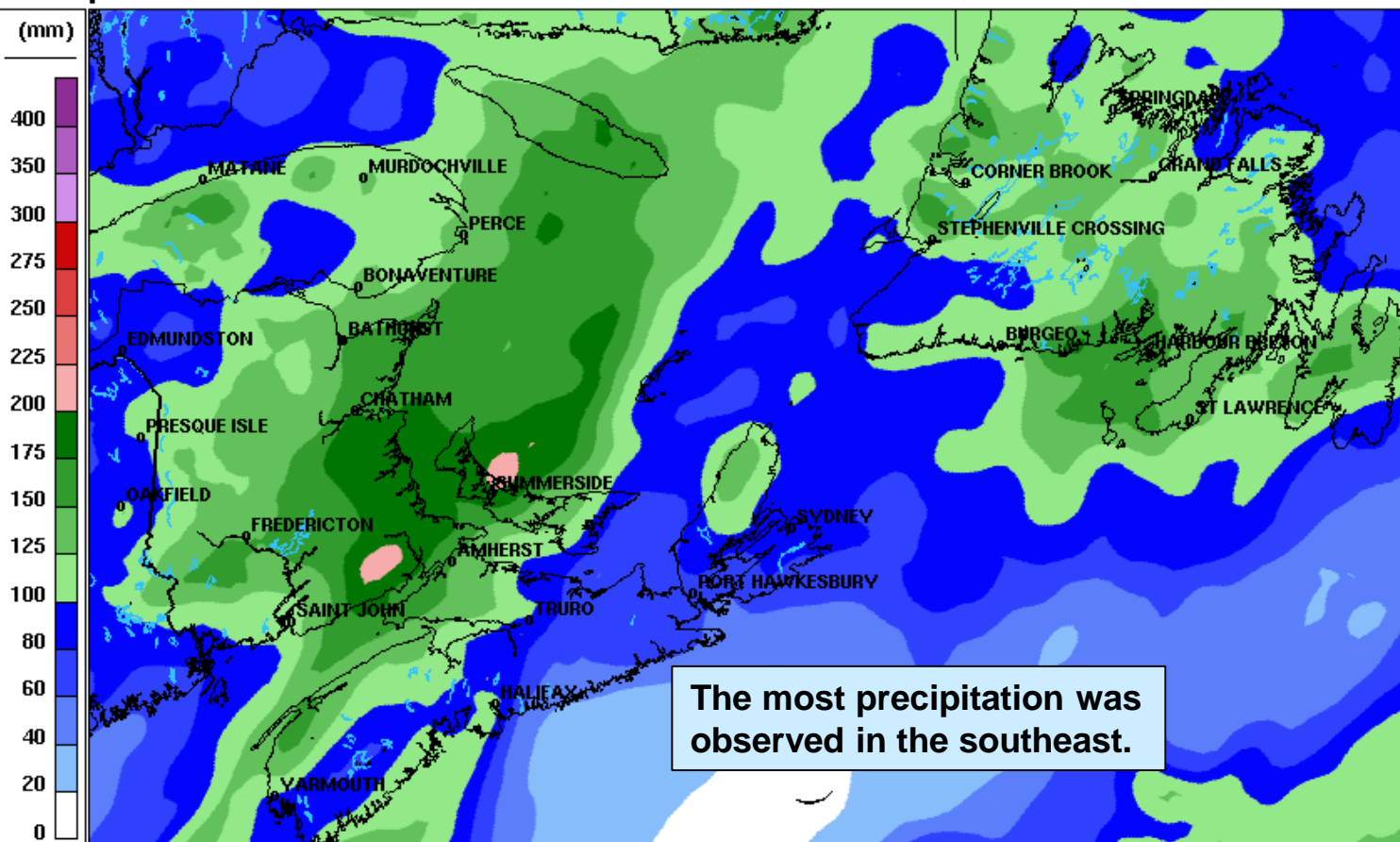
# September 2019 – Total precipitation

Total precipitation: 201909  
Précipitation totale: 201909



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ECCC NWP model gridded data / Données sur g



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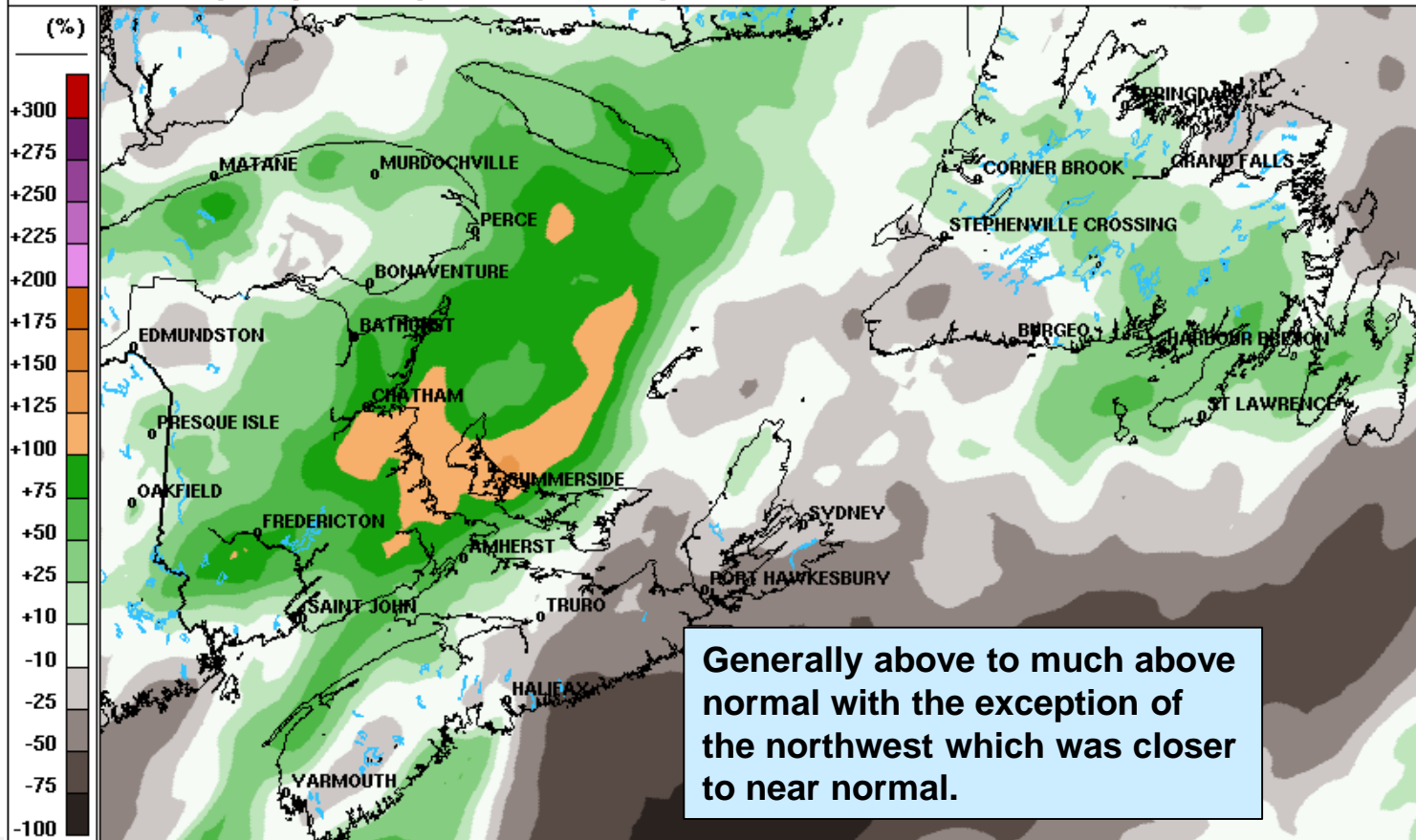
# September 2019 – Precipitation departure from 1981-2010 mean

Precipitation Anomaly (% of normal): 201909  
Anomalie de précipitation (% de la normale): 201909



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ECCC NWP model gridded data / Données sur grill

18



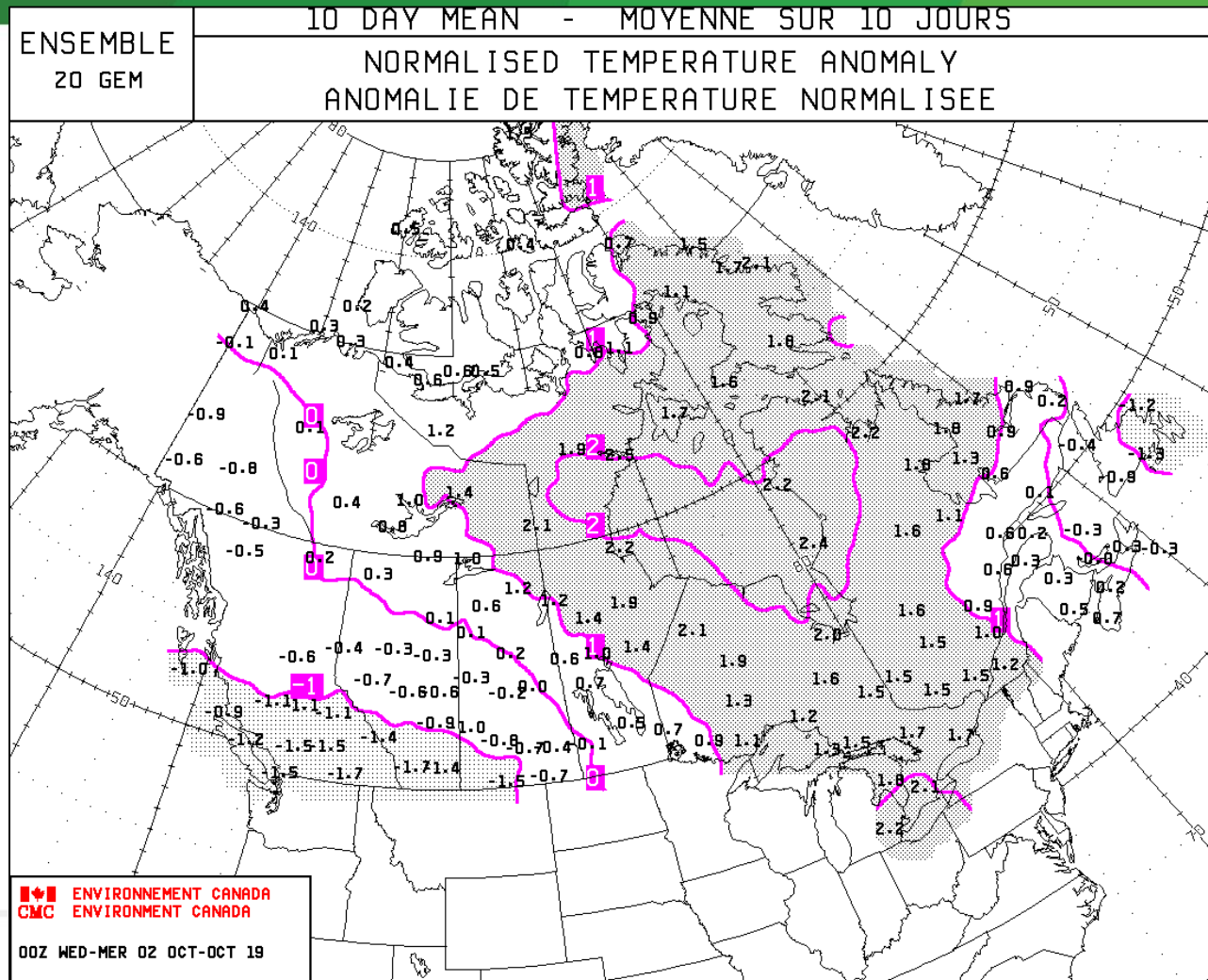
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# Outlook – 10 day mean temperature

(Suggesting slightly above normal conditions (+0.2 to +0.6°C))



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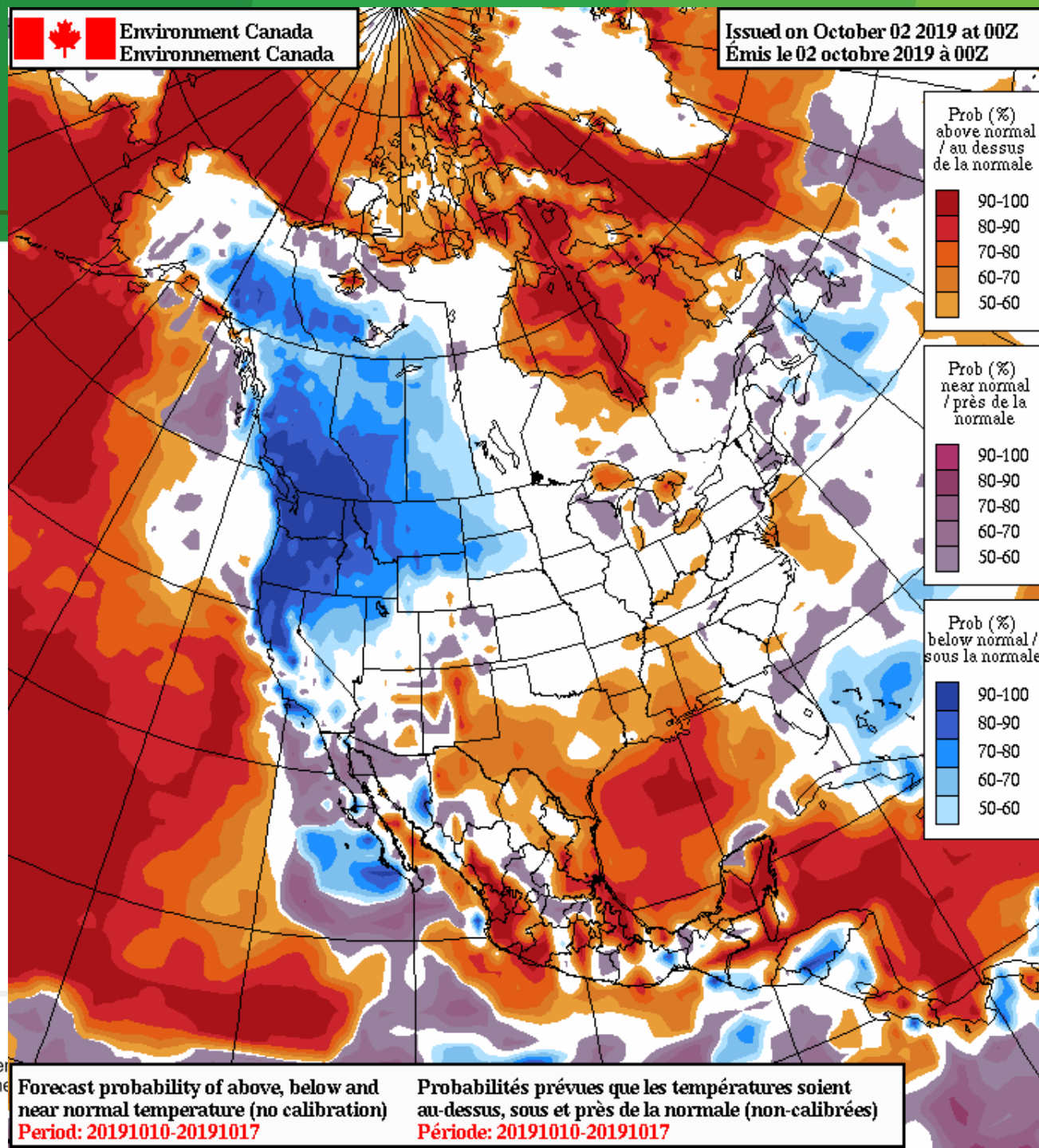
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# Day 8 to 14 Forecast

Period ending  
October 17, 2019

No real conclusive  
signal (near normal).



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# Fredericton

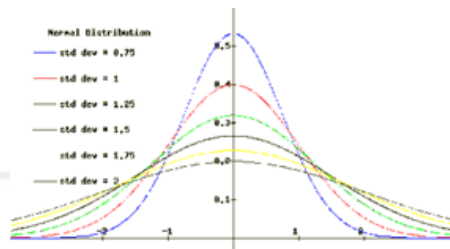
October

Normal high: 13.2C

Normal low: 1.6C

**Next 15 days; ending  
October 17, 2019**

Below normal for the first five days,  
then a lot of variability and no  
real conclusive signal for the rest of  
the period.

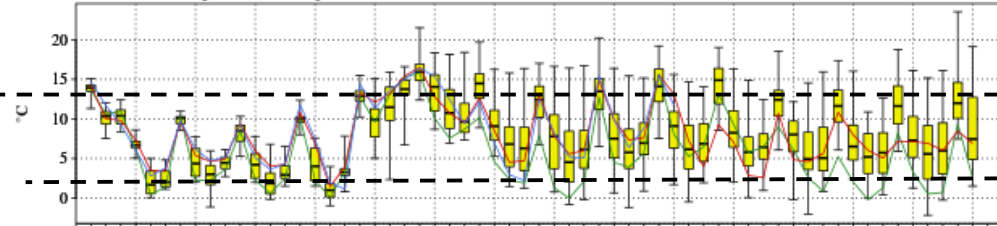


Ensemble and Deterministic Forecasts issued 2 October 2019 00 UTC  
Prévision d'ensemble et déterministe émises le 2 Octobre 2019 00 UTC  
for/pour

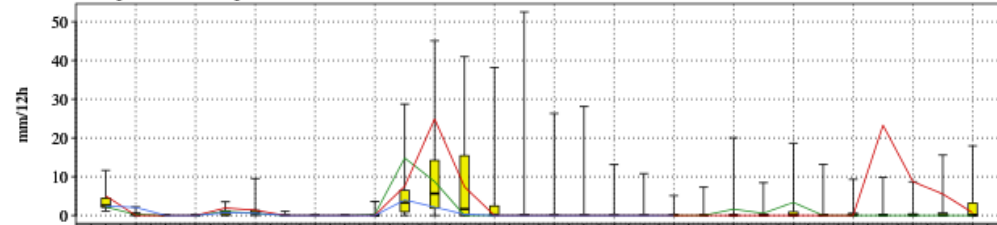
NAEFS / SPENA

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

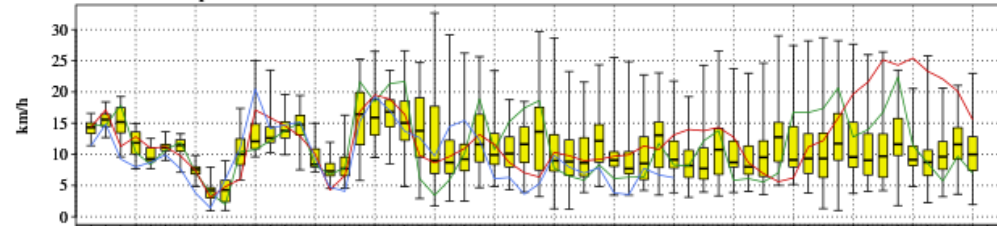
Surface air temperature/Température de l'air à la surface



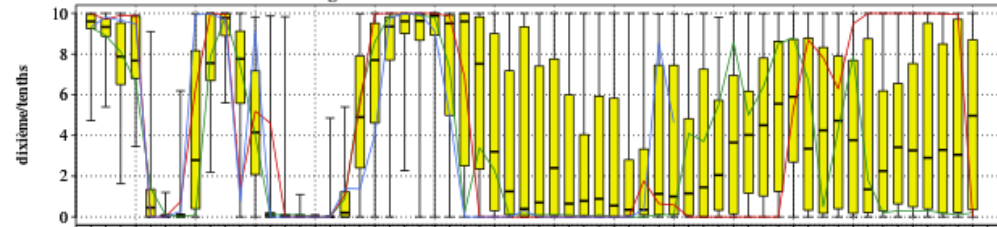
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



October/Octobre 2019

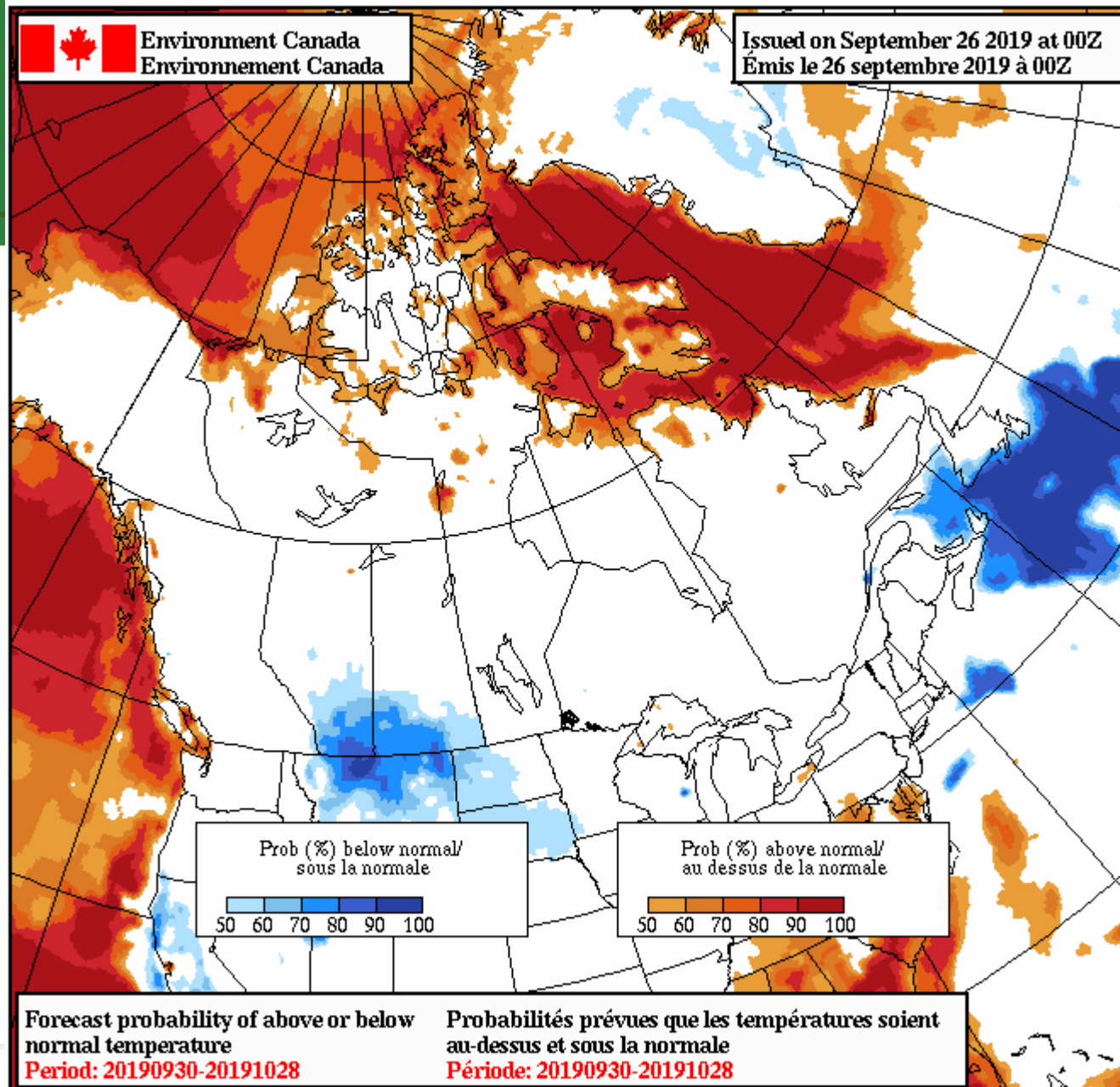
max  
75%  
median/médiane  
25%  
min

Global Model / Modèle global

Control Member / Membre contrôlé CMC

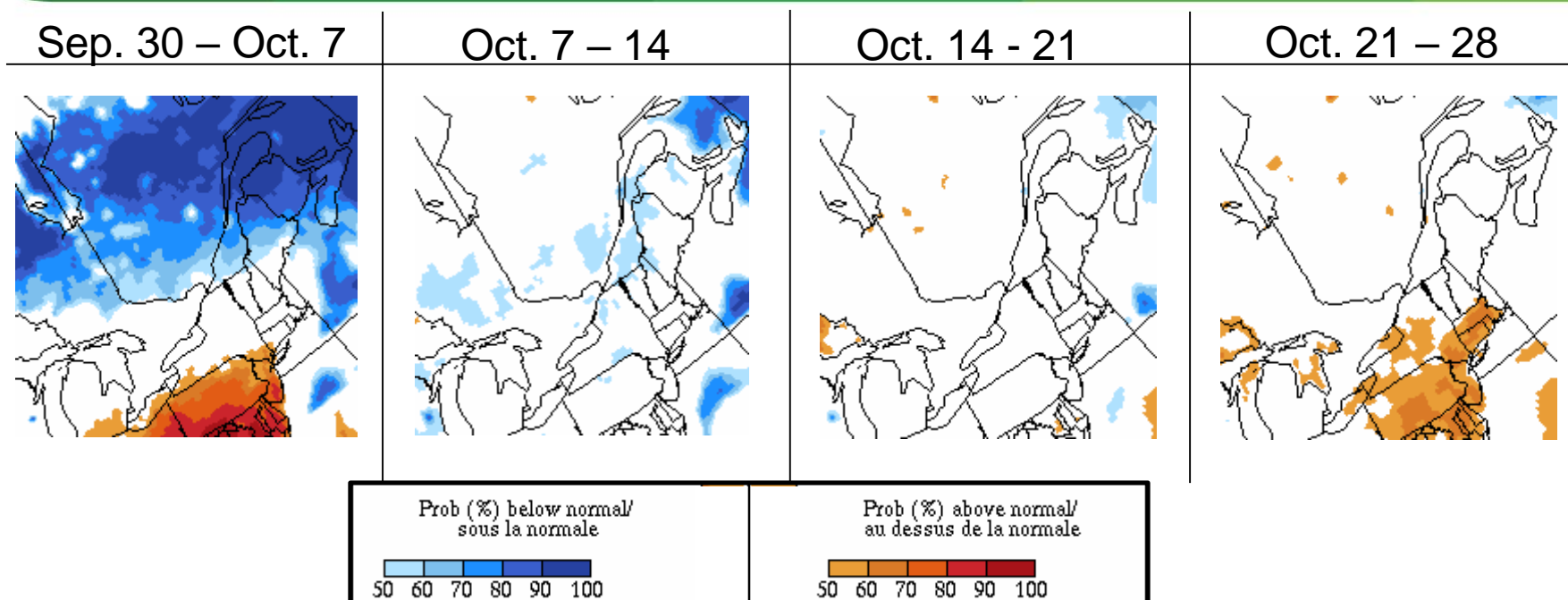
Control Member / Membre contrôlé NCEP

# Temperature September 30 to October 28



CMC  
Monthly  
Forecast  
Product  
using GEPS  
50km res.

# Weekly signature from GEPS 50km resolution



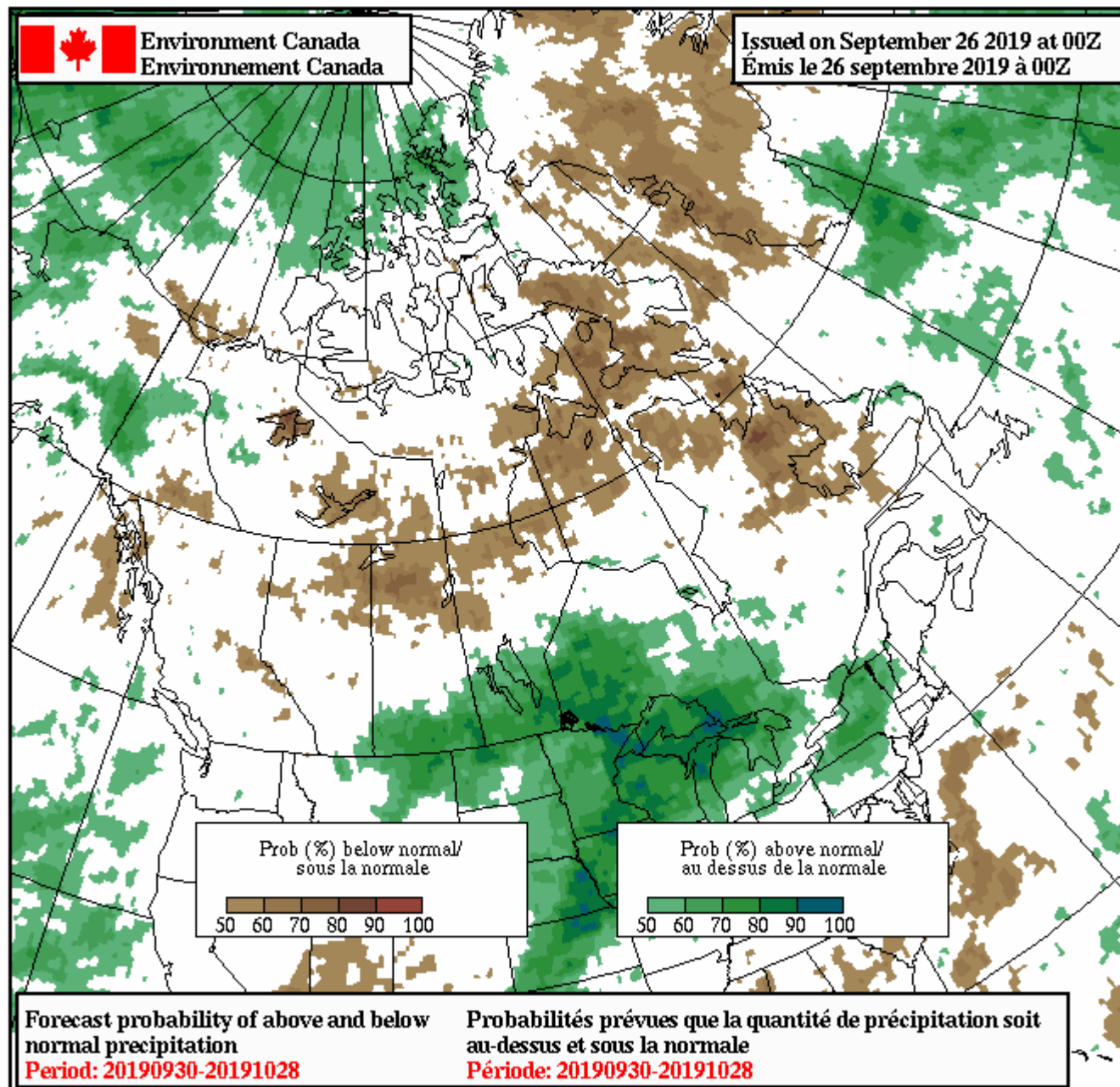
Other than the first week which indicates a moderate to strong signal of below normal conditions, no real conclusive signal is indicated.



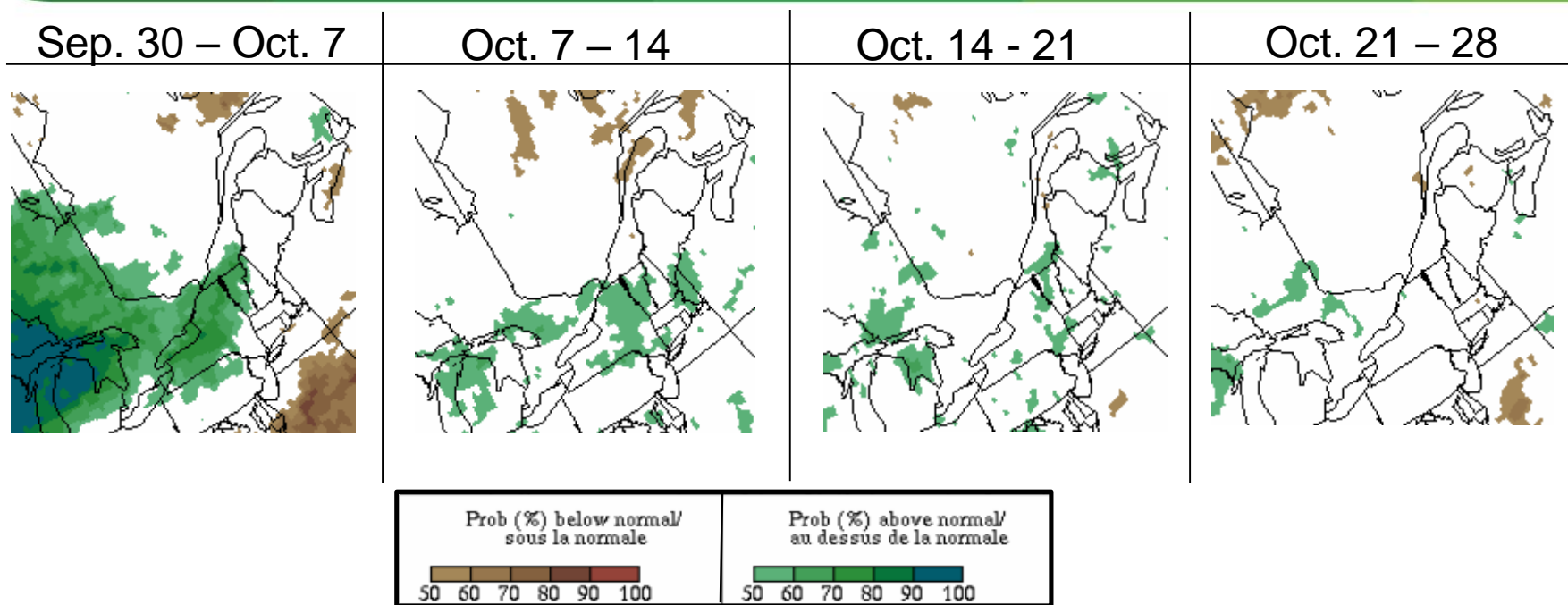


# Precipitation September 30 to October 28

CMC  
Monthly  
Forecast  
Product  
using GEPS  
50km res.



# Weekly signature from GEPS 50km resolution



No real conclusive signal for the period.



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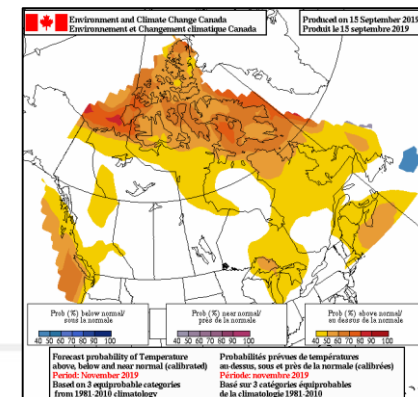
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# Temperature November 2019

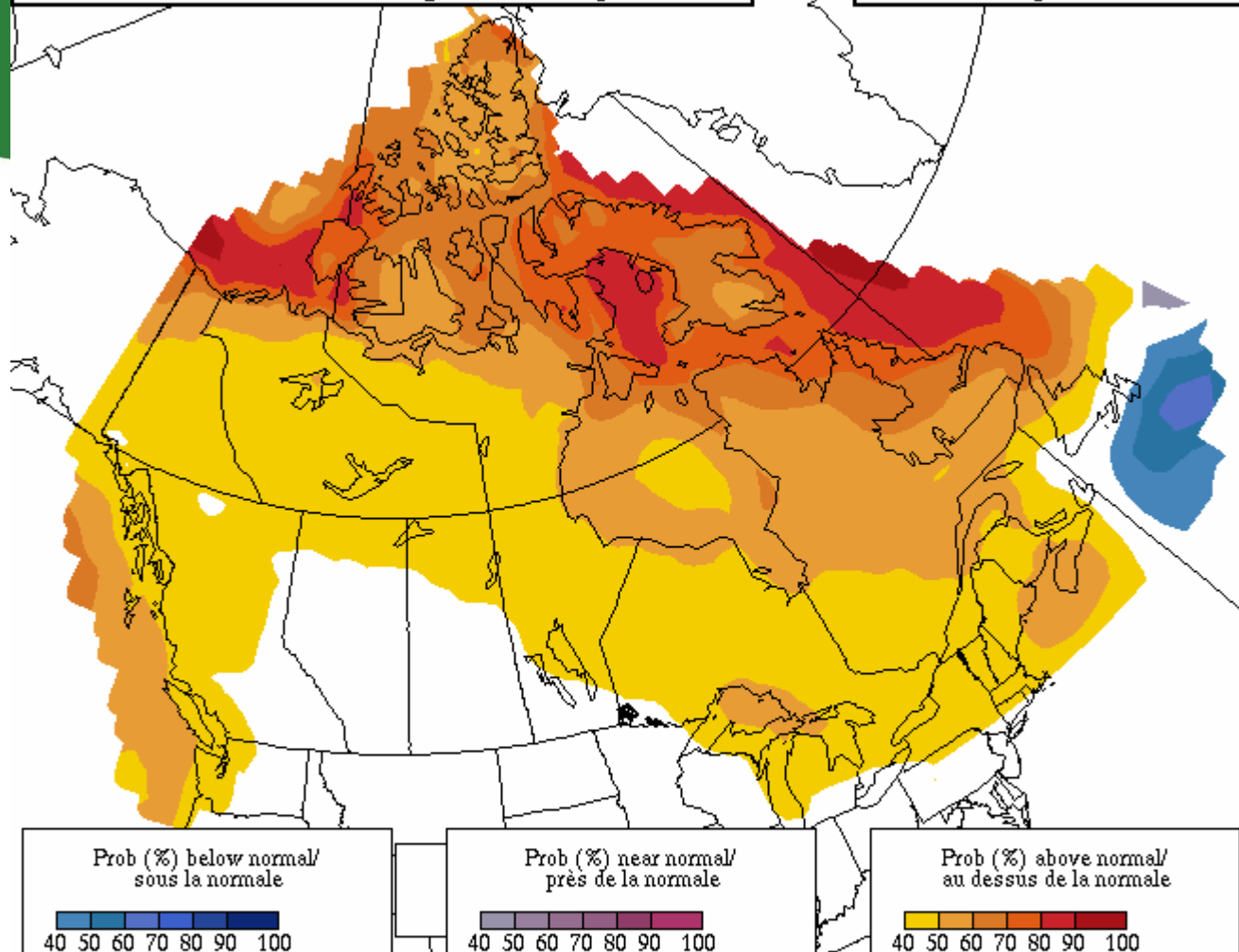
CanSIPS  
(Canadian Seasonal and  
Interannual Prediction  
System)

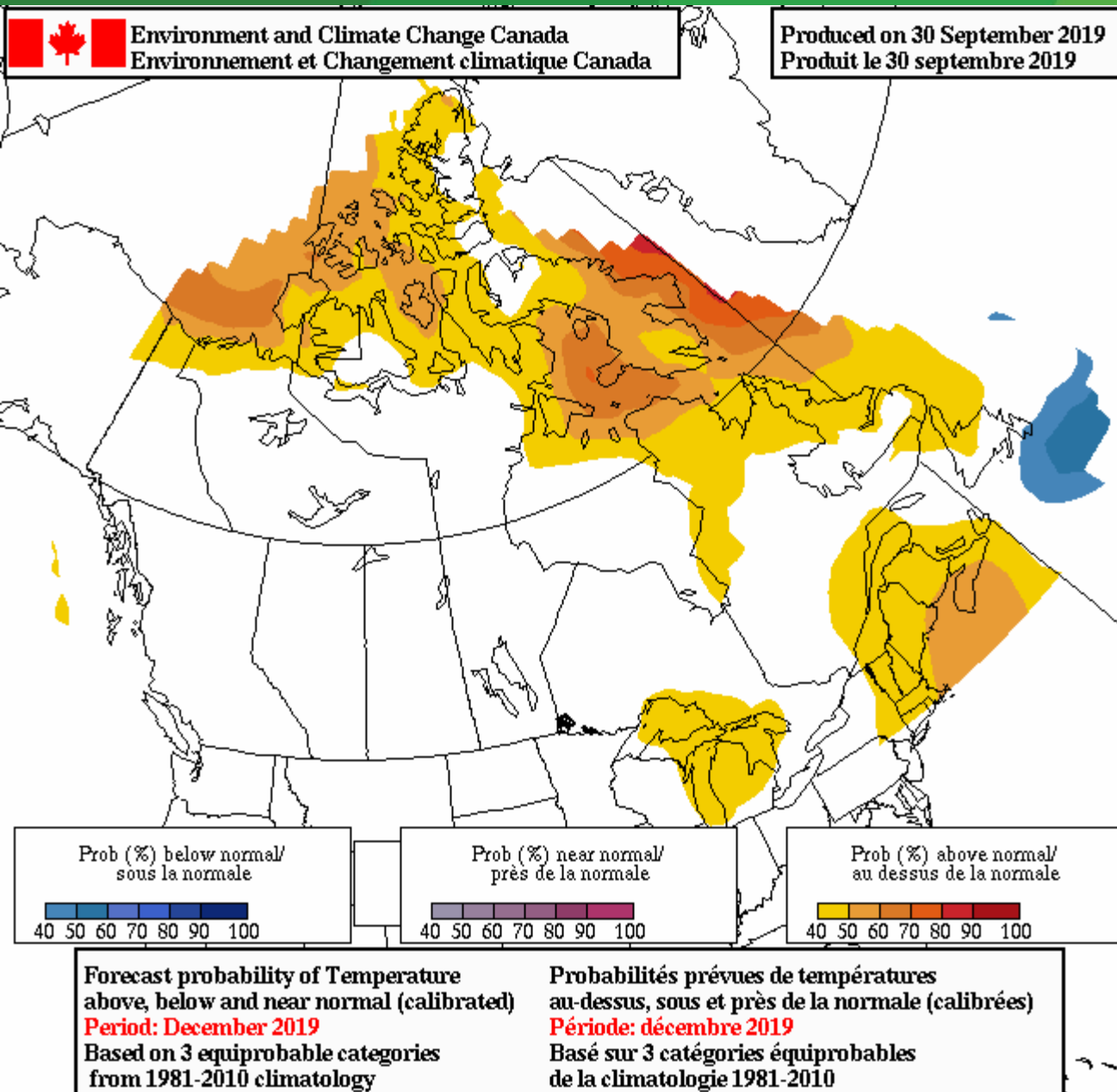
CanAM3  
CanAM4  
+  
CanOM4

Produced September 15



Canada



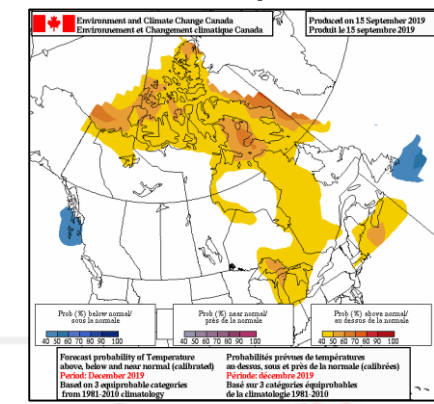


# Temperature December 2019

CanSIPS  
(Canadian Seasonal and  
Interannual Prediction  
System)

CanAM3  
CanAM4  
+  
CanOM4

Produced September 15



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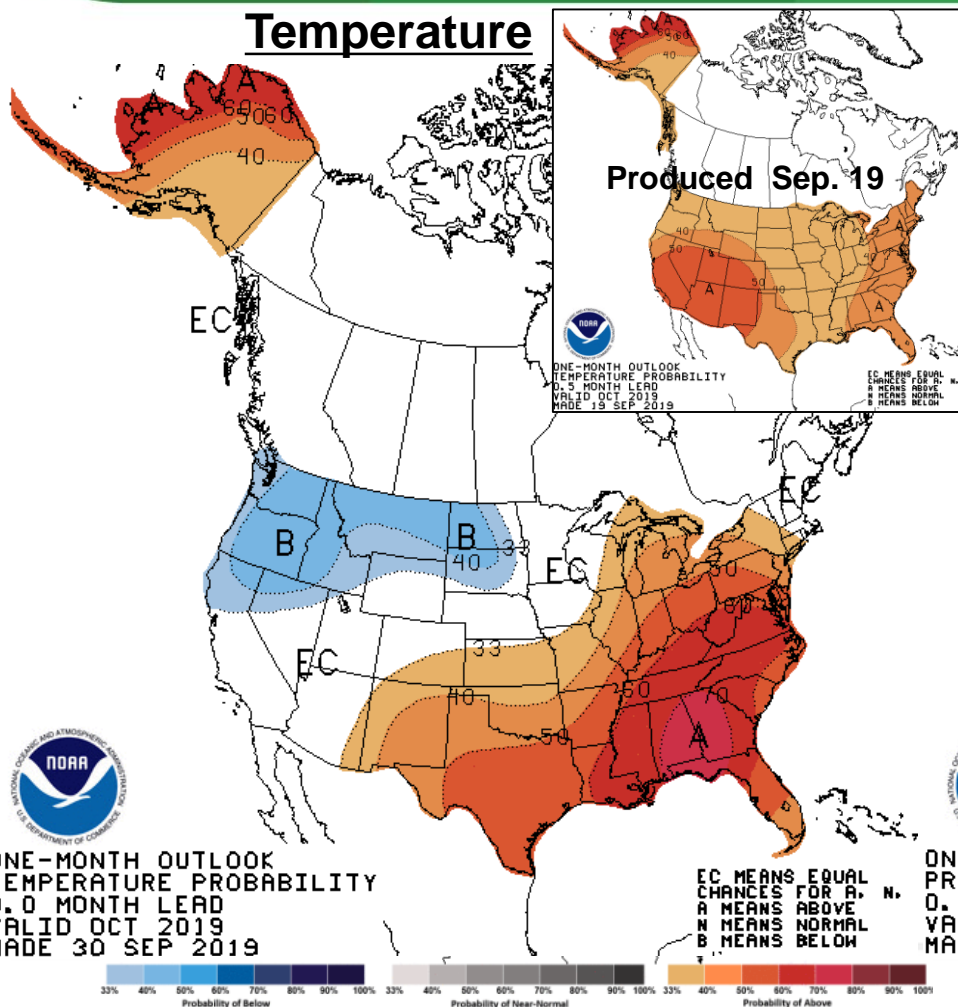
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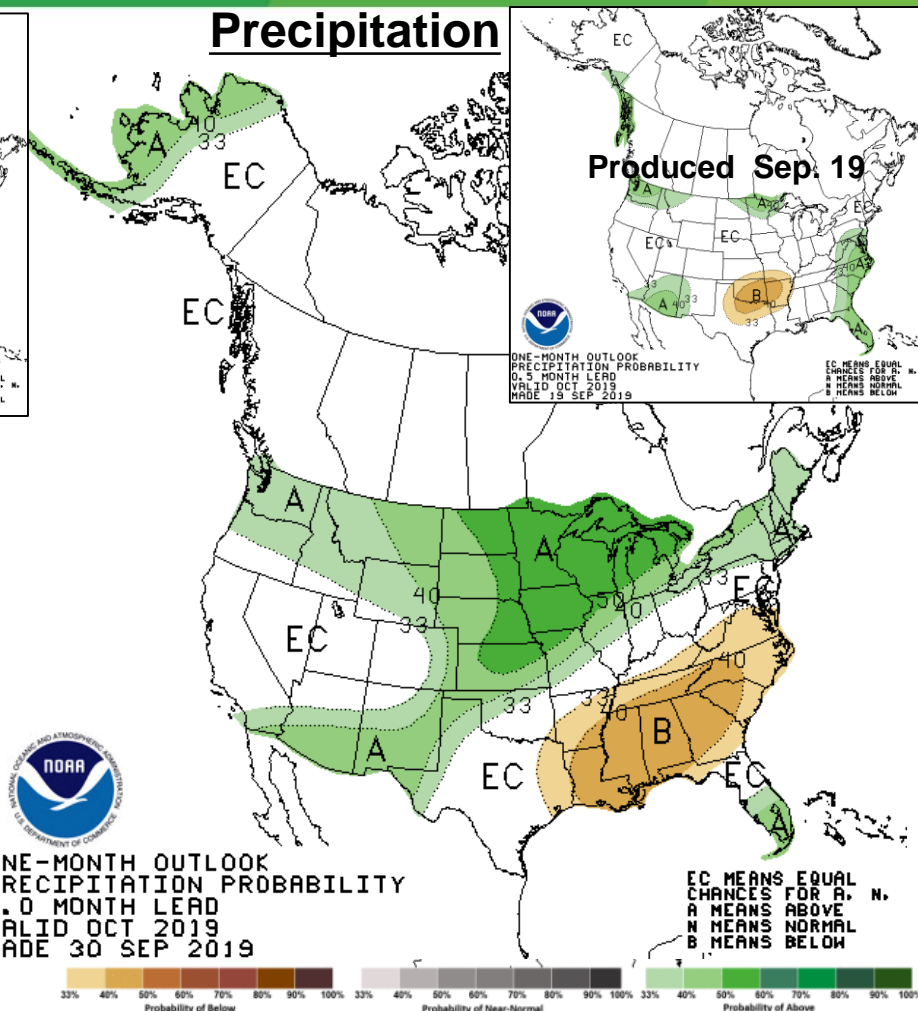


# October 2019

## Temperature



## Precipitation



ONE-MONTH OUTLOOK  
TEMPERATURE PROBABILITY  
0.0 MONTH LEAD  
VALID OCT 2019  
MADE 30 SEP 2019



ONE-MONTH OUTLOOK  
PRECIPITATION PROBABILITY  
0.0 MONTH LEAD  
VALID OCT 2019  
MADE 30 SEP 2019



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# Contact

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Canada Weather Pages

[www.weather.gc.ca](http://www.weather.gc.ca)



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