

New Brunswick

September 2021 Review October and Fall Outlook

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Meteorological Service of Canada
Environment and Climate Change Canada
October 1, 2021



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September 2021; Climate Summary

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	14.8	14.2	0.7	235.2	73.8	319
BAS CARAQUET	NB		DAILY			*record*	244.6	73.8	331
BATHURST A	NB	ZBF	NCA	14.4	13.5	0.9	236.0	84.2	280
BOUCTOUCHE CDA CS	NB	ABT	AU8	15.5	13.8	1.7	153.2	86.3	178
CHARLO AUTO	NB	ZCR	AU8	14.0	12.1	2.0			
MIRAMICHI RCS	NB	ACQ	AU8	15.1	13.5	1.6	182.6	84.5	216
DOAKTOWN AUTO RCS	NB	ADN	AU8	14.6	13.5	1.1	147.4	100.2	147
EDMUNDSTON	NB	ERM	AU8	13.0			186.3	94.6	197
FREDERICTON INTL A	NB	YFC	NCA	15.1	13.6	1.5	123.4	87.5	141
FREDERICTON CDA CS	NB	AFC	AU8	15.6	14.0	1.6	124.6	94.7	132
FUNDY PARK (ALMA) CS	NB	AFY	AU8	15.8	13.7	2.0	203.8	122.7	166
GAGETOWN AWOS A	NB	YCX	AU5	15.4	14.7	0.7	177.5	86.1	206
GRAND MANAN SAR CS	NB	XGM	AU8	15.0			133.9		
KOUCHIBOUGUAC	NB	AKC	AU8	15.0	13.3	1.7	221.5	83.7	265
MECHANIC SETTLEMENT	NB	AMS	AU8	14.2			171.2		
MISCOU ISLAND (AUT)	NB	WMI	AU8	14.9			197.5		
MONCTON INTL A	NB	YQM	NCH	15.7	13.6	2.1	131.1	93.5	140
MONCTON A	NB	YQM	NCA	15.7	13.6	2.1			
OAK POINT	NB		DAILY	15.8	14.7	1.1	132.5	86.1	154
POINT LEPREAU CS	NB	WPE	AU8	15.6	12.4	3.2	110.8	120.9	92
RED PINES	NB	ARP	AU8	13.6	13.1	0.5	202.3	76.5	265
SAINT JOHN A	NB	YSJ	NCH	15.0	13.0	2.0	138.9	105.6	132
ST. STEPHEN	NB	WSS	AU8	15.5			118.0		
SUSSEX FOUR CORNERS	NB	ASF	AU8	15.7	14.3	1.4	142.8	99.9	143
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	14.4	13.2	1.2	220.5	95.7	*record* 230
Average				15.0	13.6	1.5	171.1	92.1	196
Max				15.8	14.7	3.2	244.6	122.7	331
Min				13.0	12.1	0.5	110.8	73.8	92

Highlights:

The average temperature anomaly was above normal (+1.5°C). All sites reported positive anomalies with Point Lepreau reporting the largest anomaly at 3.2°C. Mild minimum temperatures contributed greatly to the above normal conditions.

Total precipitation amounts were much above normal, with an average of 196% of total precipitation. Three sites saw their wettest months on record and only Point Lepreau saw an anomaly below normal. Most of the precipitation came from slow-moving systems or partial remnants of tropical systems.

September 2021; Climate Summary

Events:

September 2-3: “Rain and Wind Event”. An intense low pressure system brought significant rain and strong winds to eastern and southern areas of the province. Generally, 50-90 mm fell but locally up to 134 mm was reported in the Hopewell Cape area while Miscou Island recorded a wind gust to 89 km/h.

September 9-10: “Rain Event I”. A stalled frontal system brought heavy rain to areas in the southwest extending to the north along the front. Rainfall amounts varied from 40-70 mm along the front with a report of as high as 88 mm east of Woodstock.

September 25-27: “Rain Event II”. A slow-moving, elongated trough brought heavy rain to areas in the west and also in the east. Rainfall amounts of 50-70 mm were reported along the trough with as much as 85 mm at Kouchibouguac Park.

Days of month with lightning in New Brunswick; 2 6 7 9 12 15 18 25 26 (9 days)

**Day of month with temperature record broken or tied in New Brunswick; 18 23 24
(red=maximum, blue=minimum)**



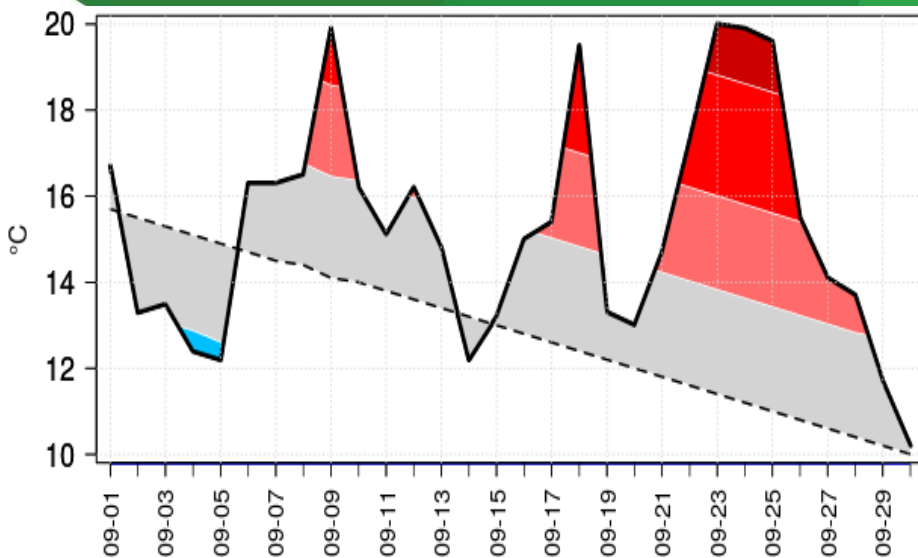
September 2021; Provincial Climate Extremes

Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	+27.2°C	Kouchibouguac	9
Daily Minimum Temperature	-1.2°C	Edmundston	29
Maximum Daily Total Precipitation	102.3 mm	Grand Manan	2
Daily Maximum Wind Gust	89 km/h	Miscou Island	3
Daily Maximum Humidex	32	Sussex Moncton	9



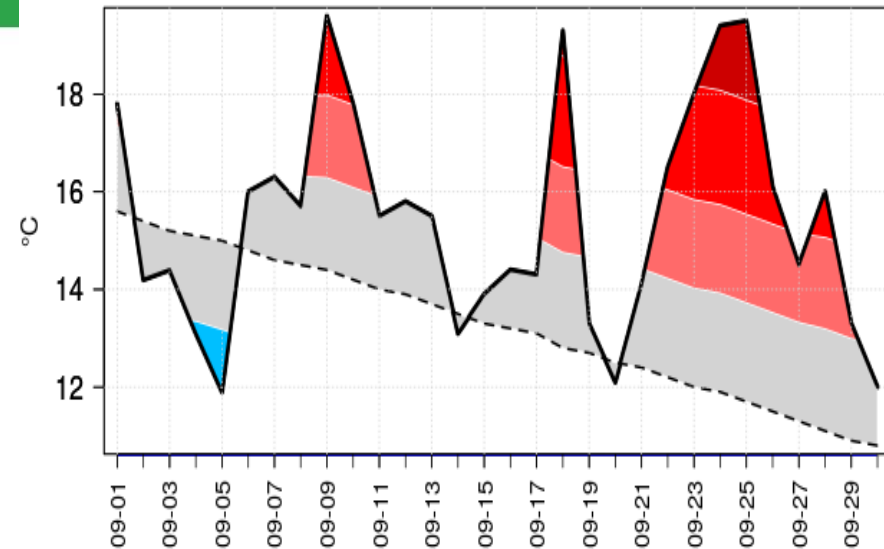
September 2021 - Temperature

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 $\pm 0.7, 1.3, 2.1$



Fredericton

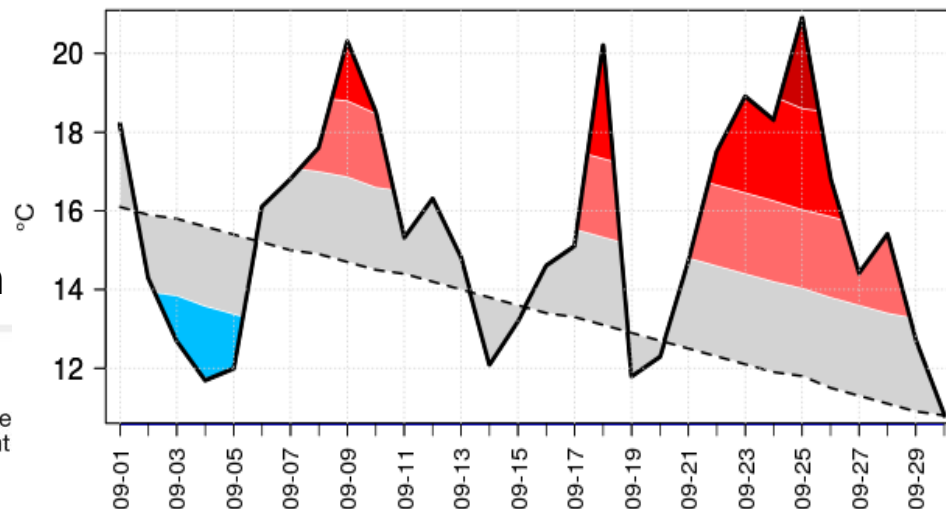
■ <<< normal
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Saint John

All sites were
above normal

Moncton



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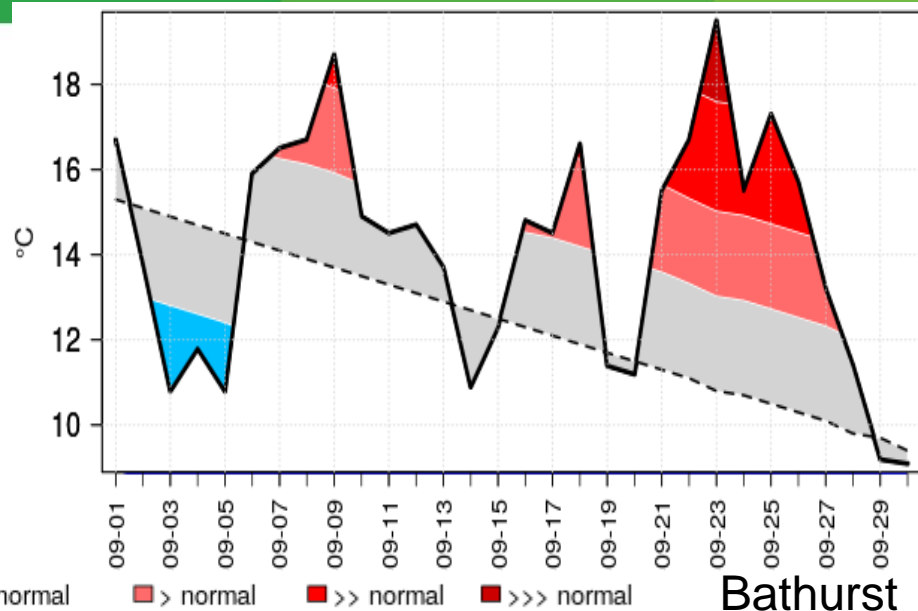
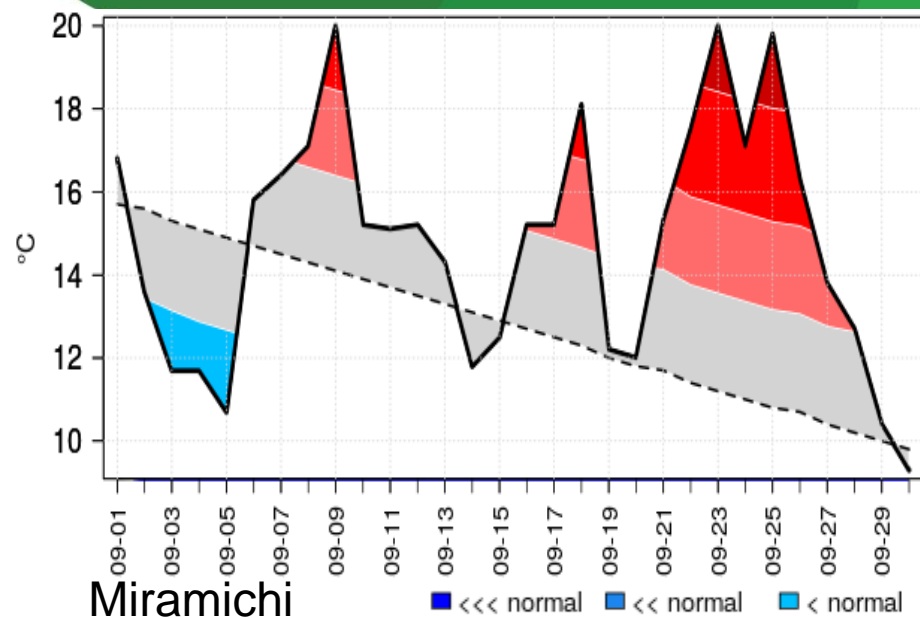
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September 2021 - Temperature

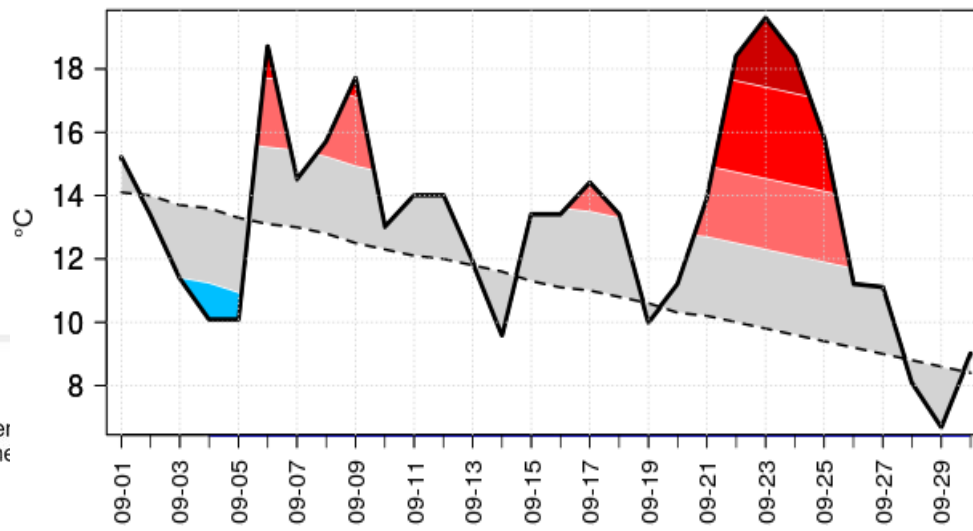
Daily Mean Temperature (line), Long-Term Mean (dashed line)
and Categories based on Standard Deviations (blue and red)

Based on gridded observations / Climatology 1981-2010
Std. dev. thresholds +/- 0.7, 1.3, 2.1



All sites were
above normal

Edmundston



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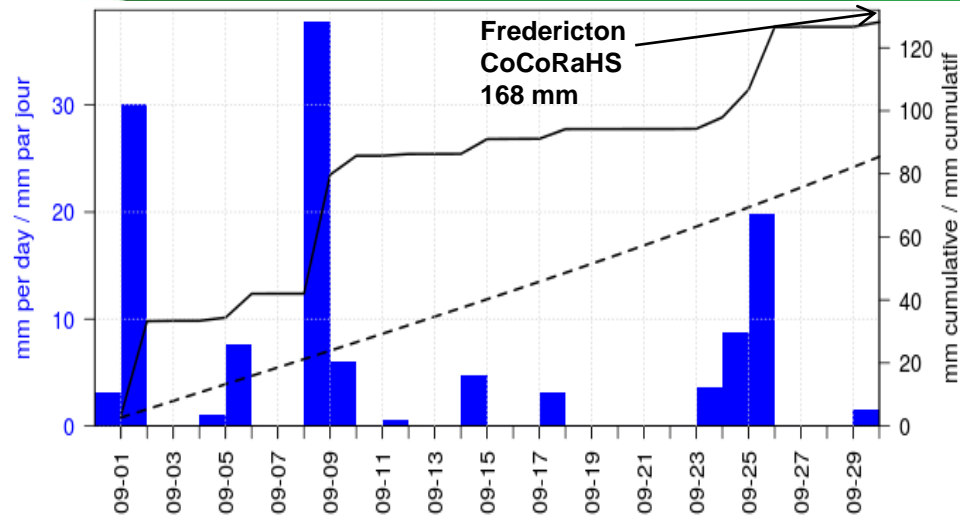
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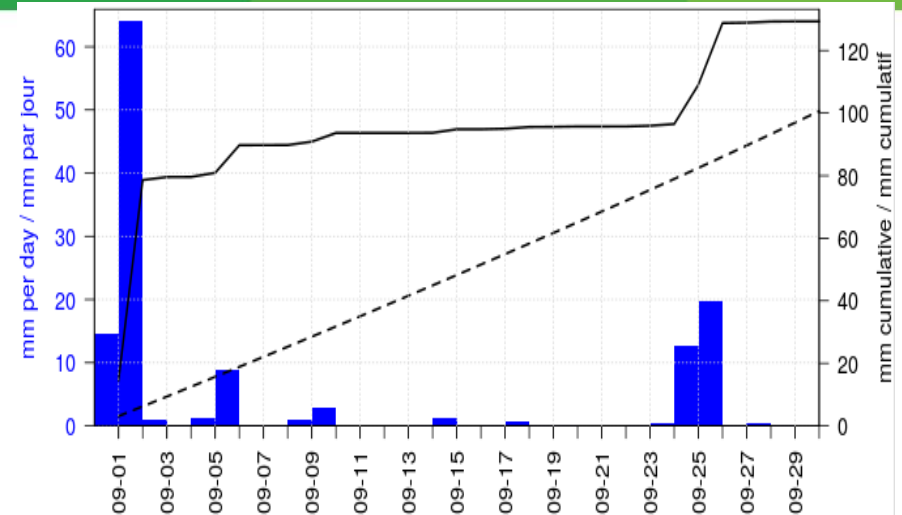
September 2021 - Precipitation

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

Based on ECCC gridded precipitation analysis
Climatology 2002-2020



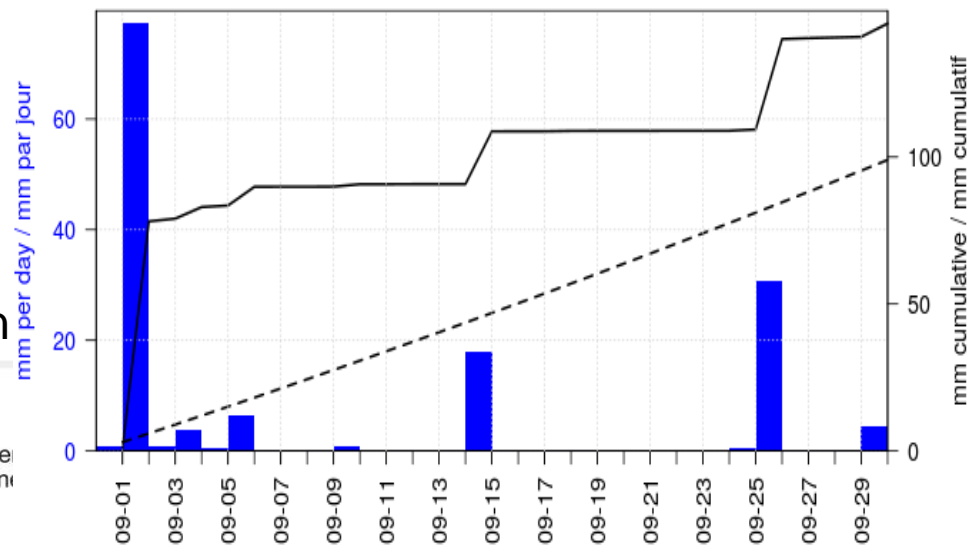
Fredericton (and area)



Saint John

All sites were
above normal

Moncton



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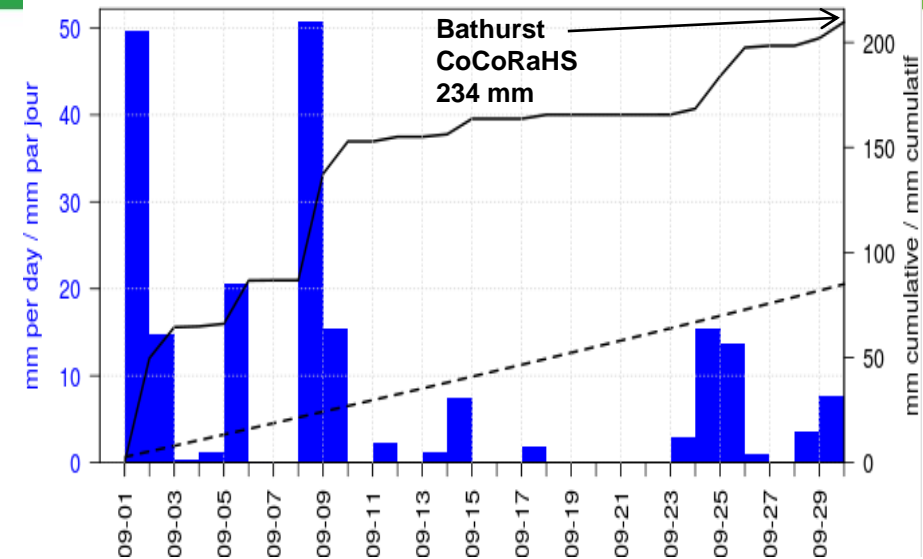
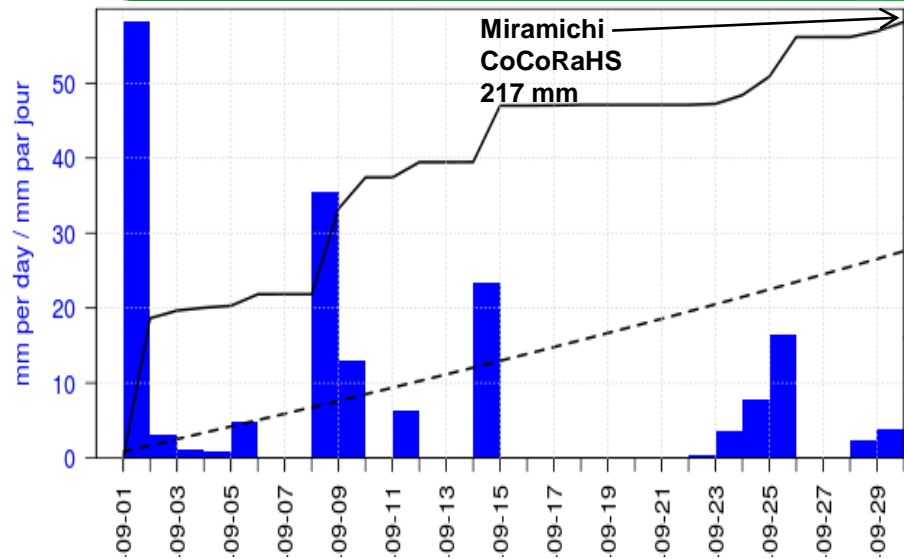
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September 2021 - Precipitation

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

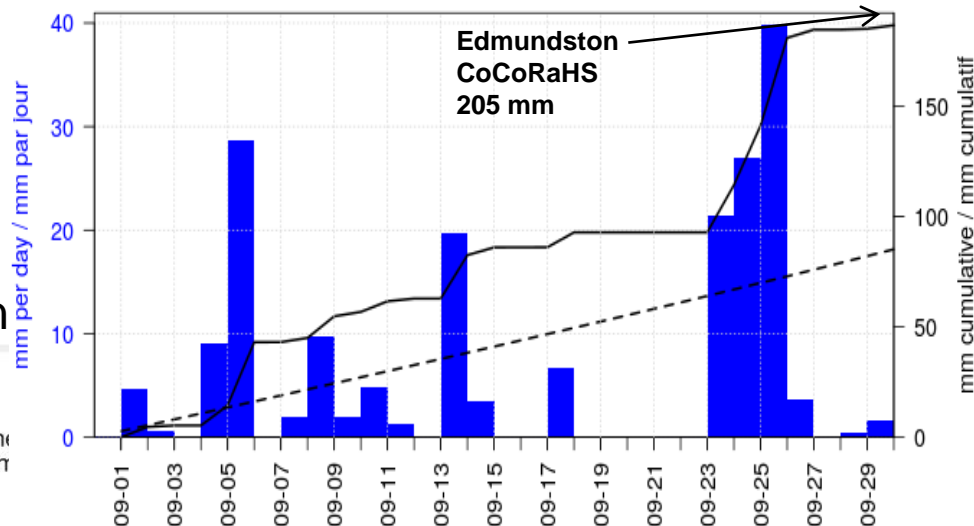
Based on ECCC gridded precipitation analysis
Climatology 2002-2020



Miramichi

All sites were
above normal

Edmundston



Bathurst

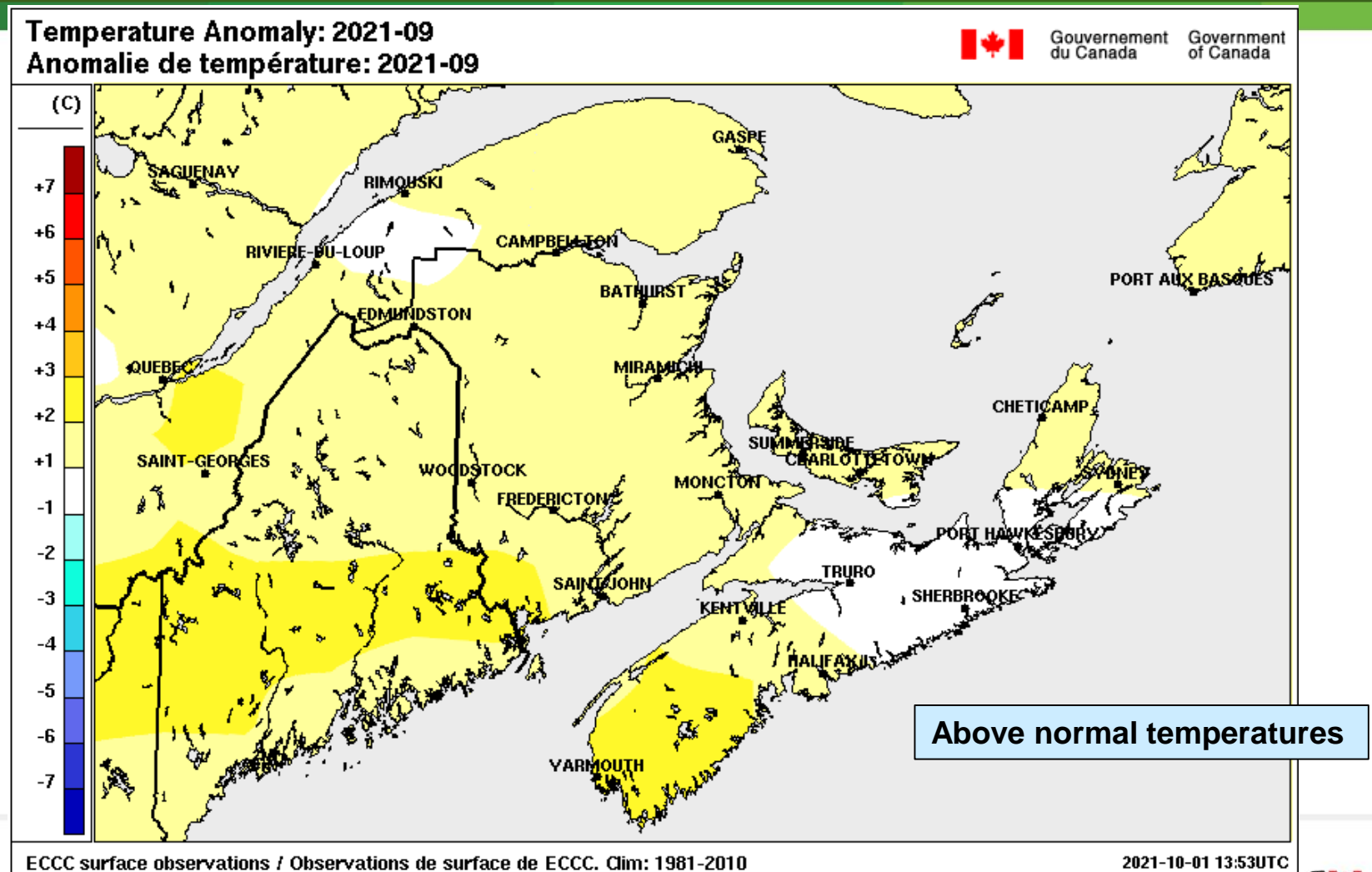


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September 2021 – Temperature departure from 1981-2010 mean



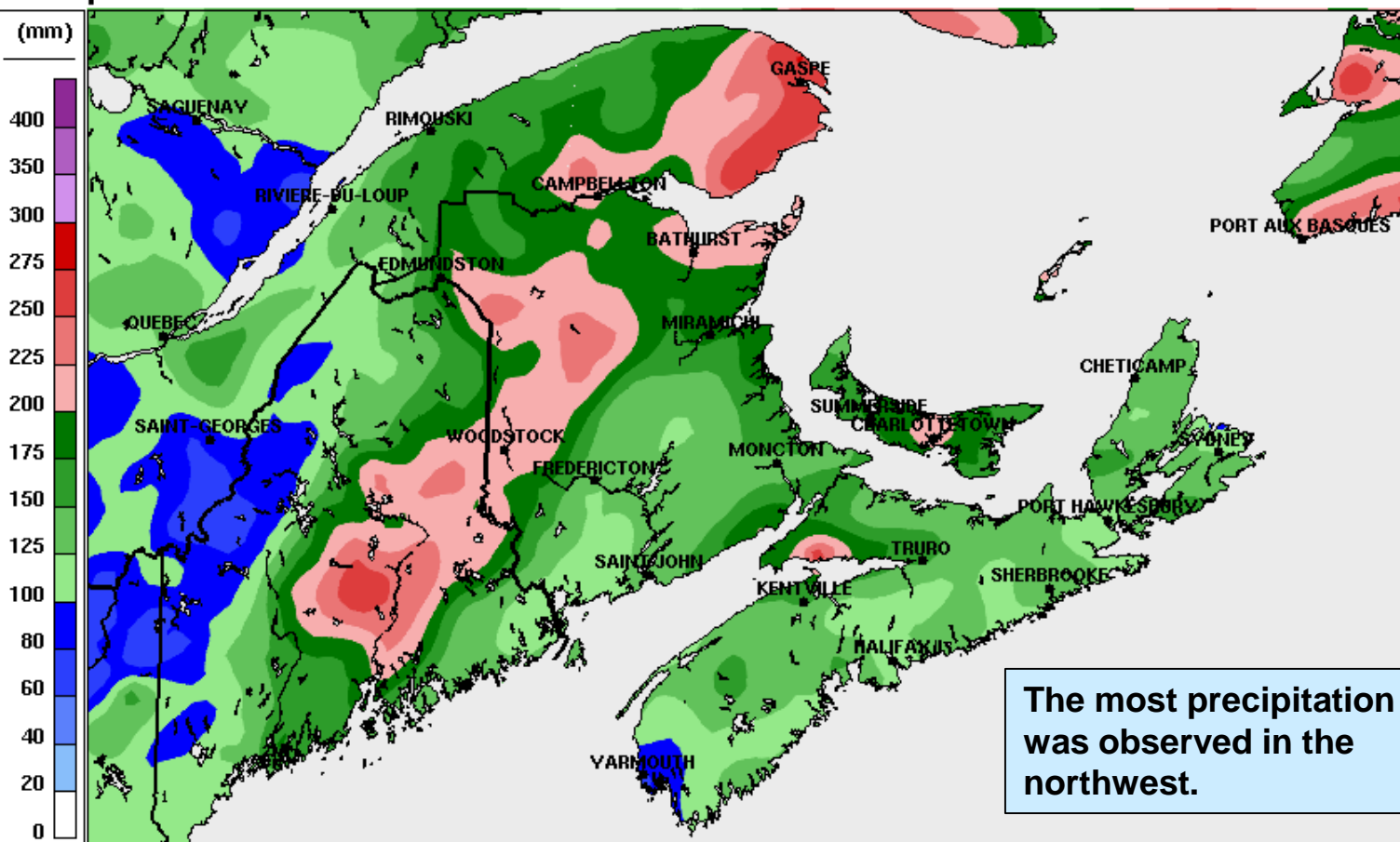
September 2021 – Total precipitation

Total precipitation: 2021-09
Précipitation totale: 2021-09



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The most precipitation
was observed in the
northwest.

ECCC 10-km CaPA / ACaP 10-km d'ECCC

2021-10-01 13:26UTC



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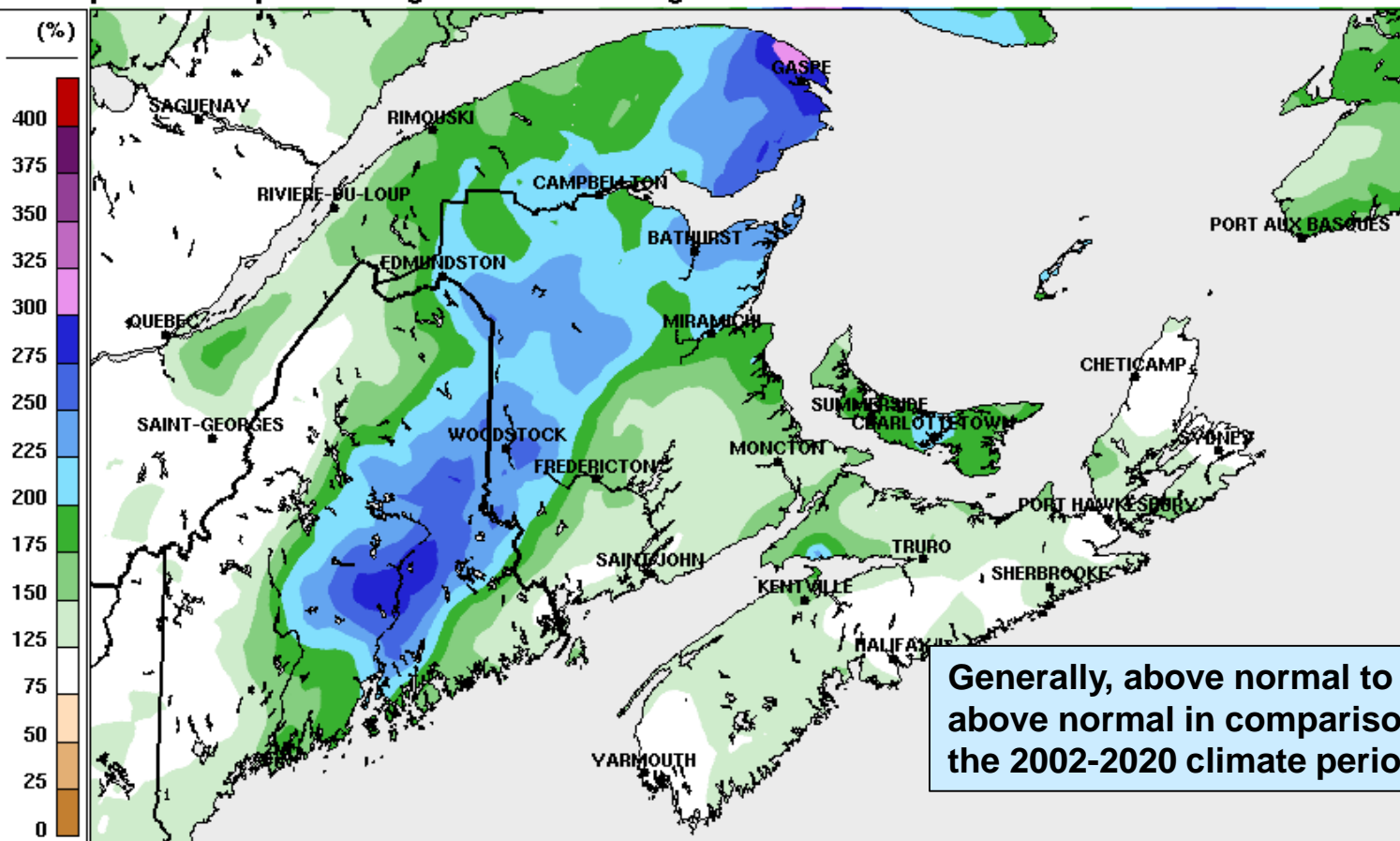
September 2021 – Precipitation departure from 2002-2020 mean

Precipitation as a Percentage of Climatology: 2021-09
Précipitation en pourcentage de la climatologie: 2021-09



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Generally, above normal to much above normal in comparison to the 2002-2020 climate period.

EECC 10-km CaPA / ACaP 10-km d'EECC. Clim: 2002-2020

2021-10-01 13:28UTC



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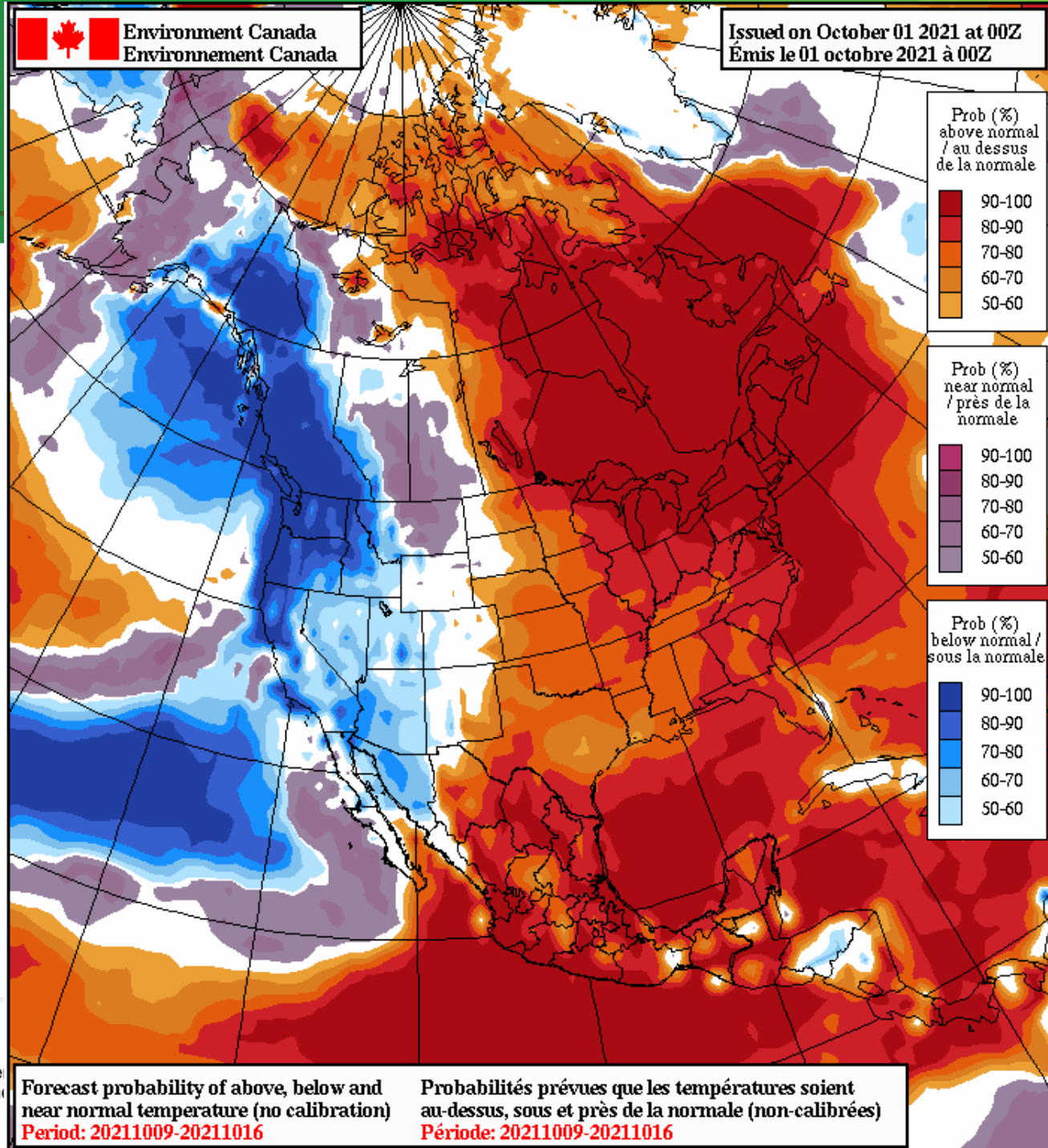
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Outlook Day 8 to 14 Forecast

Period ending
October 16, 2021

Suggesting a
strong signal of
above normal
conditions.



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Fredericton

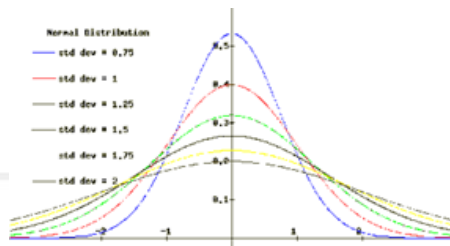
October

Normal high: 13.2C

Normal low: 1.6C

**Next 15 days; ending
October 15, 2021**

Generally suggesting near normal maximum temperatures with above normal minimums until near the 5th then much above normal for the remainder of the period.



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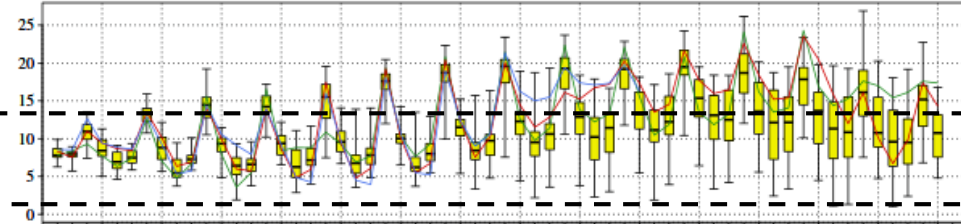
Ensemble and Deterministic Forecasts issued 1 October 2021 00 UTC
Prévision d'ensemble et déterministe émises le 1 Octobre 2021 00 UTC

for/pour

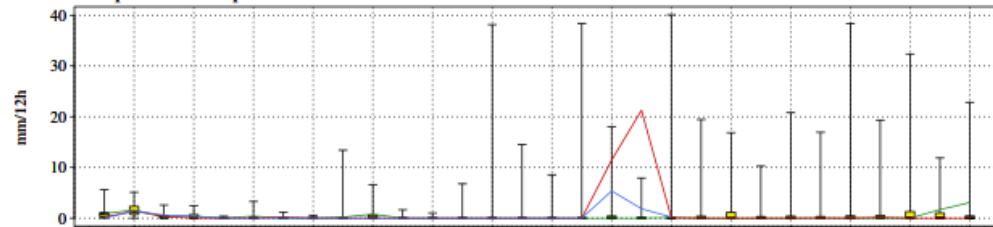
NAEFS / SPENA

FREDERICTON (YFC) 45.87 N 66.53 W/O

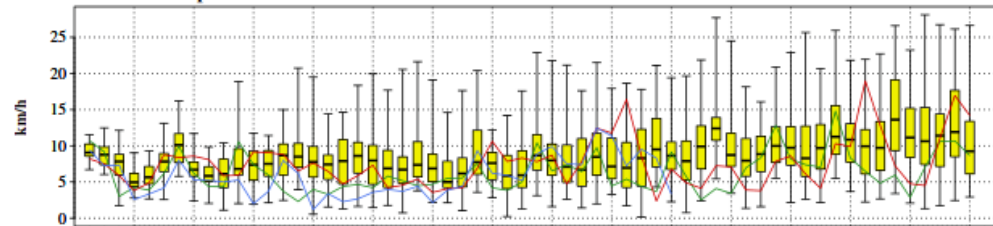
Surface air temperature/Température de l'air à la surface



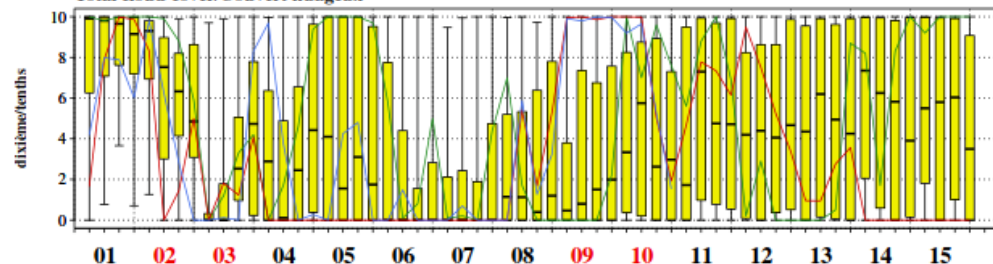
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux

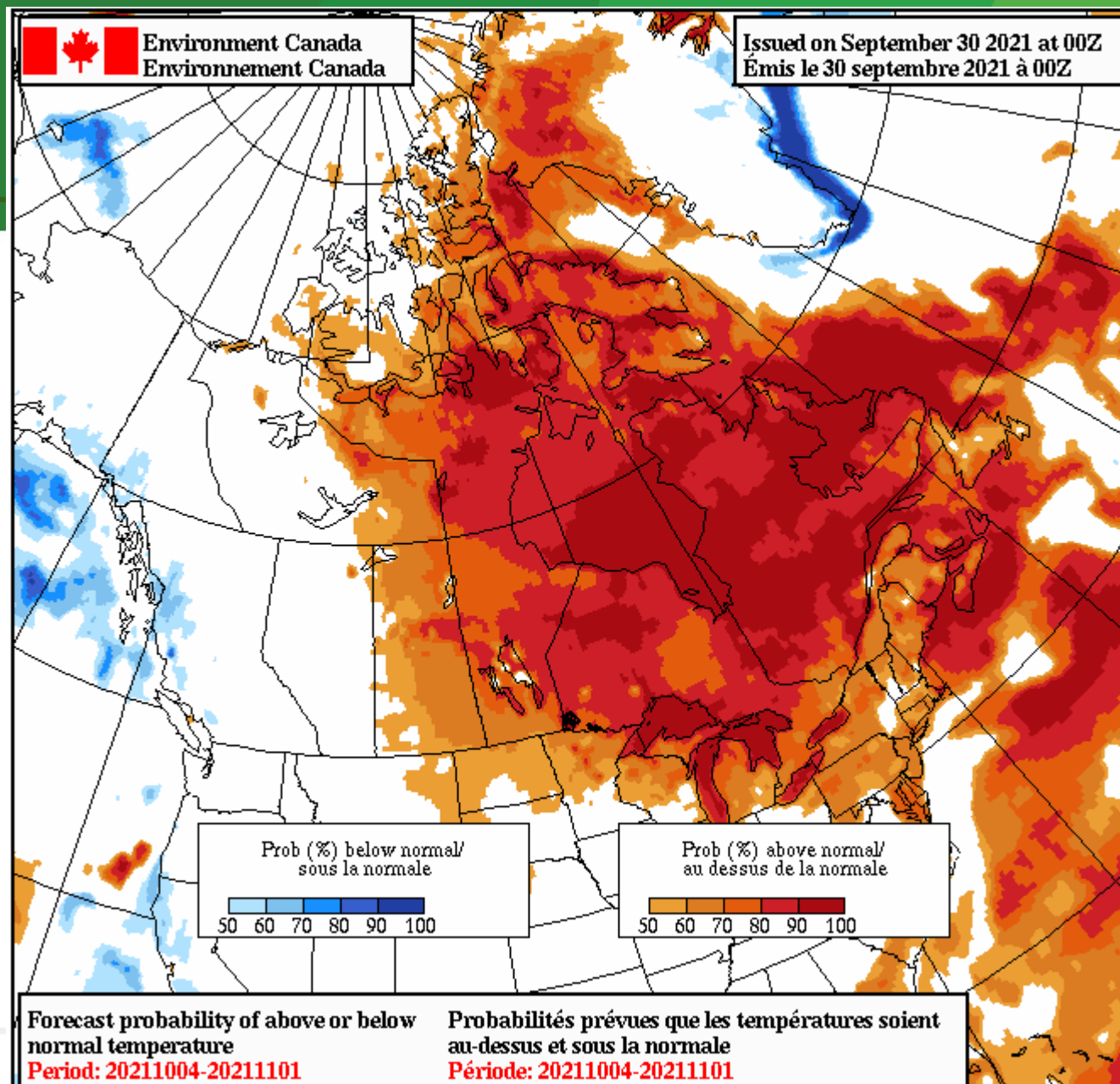


October/Octobre 2021

max
75%
median/médiane
25%
min

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

Temperature
October 4
to
November 1



CMC
Monthly
Forecast
Product
using GEPS
50km res.

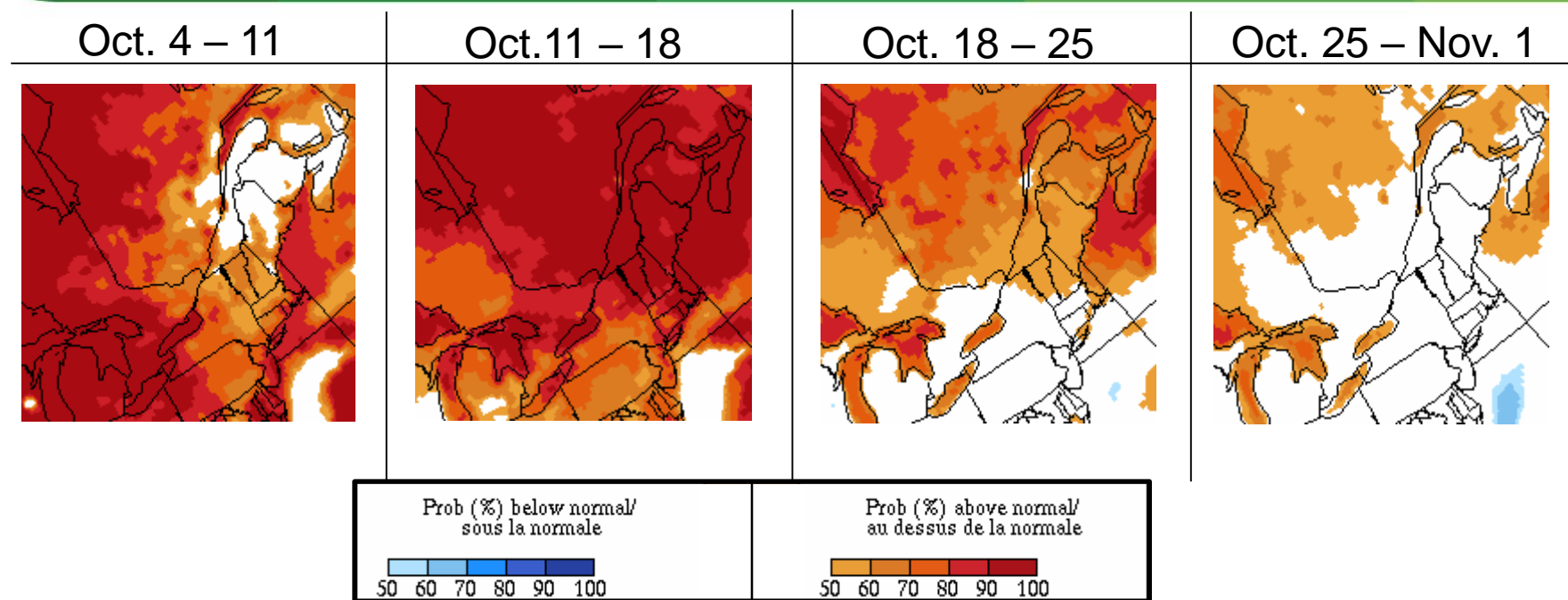


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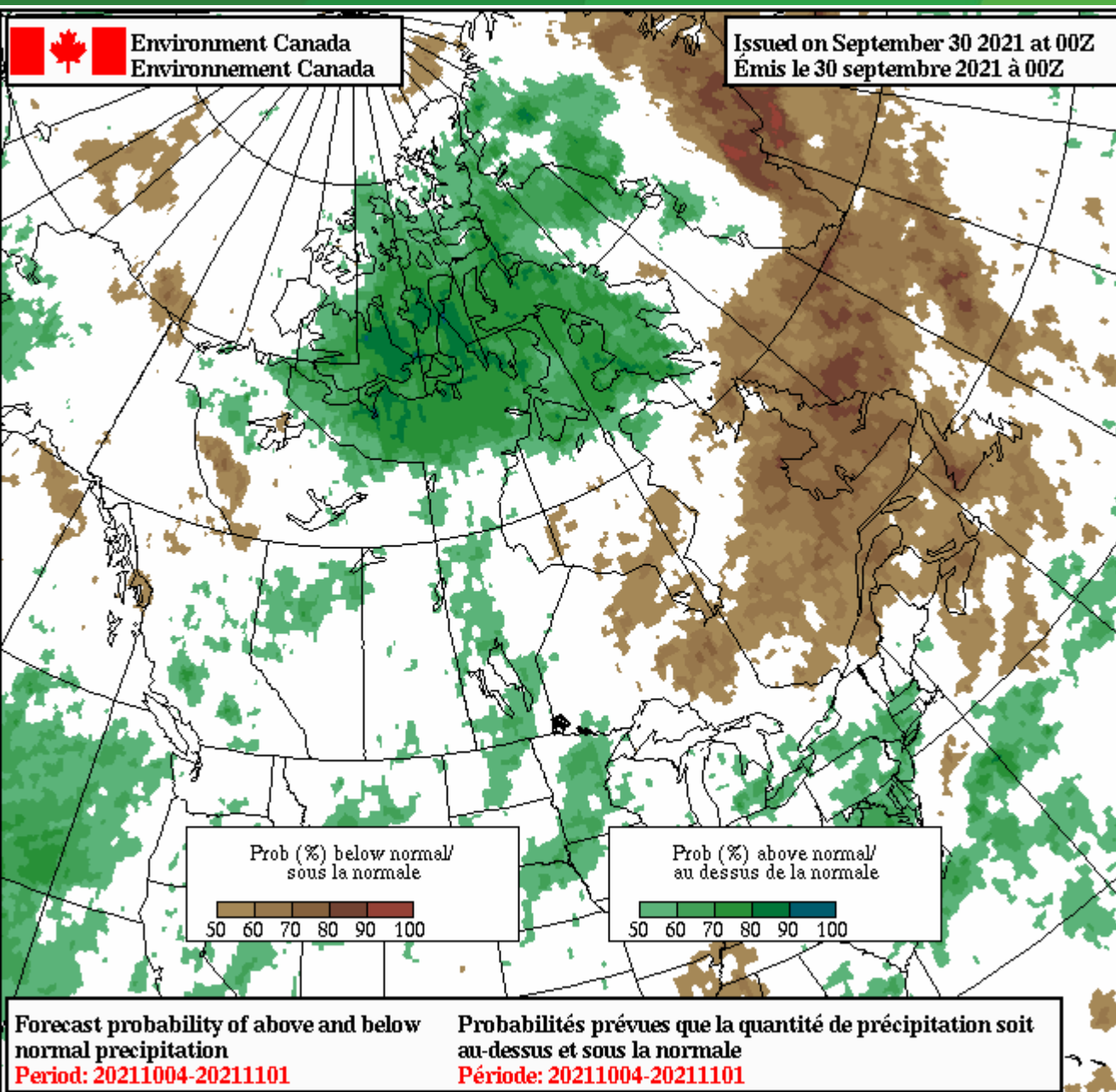
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Weekly signature from GEPS 50km resolution



Initially, no signal (near normal) then transitioning through to much above normal for the second week and then gradually returning to near normal for the last week of the period.





Precipitation
October 4
to
November 1

CMC
Monthly
Forecast
Product
using GEPS
50km res.

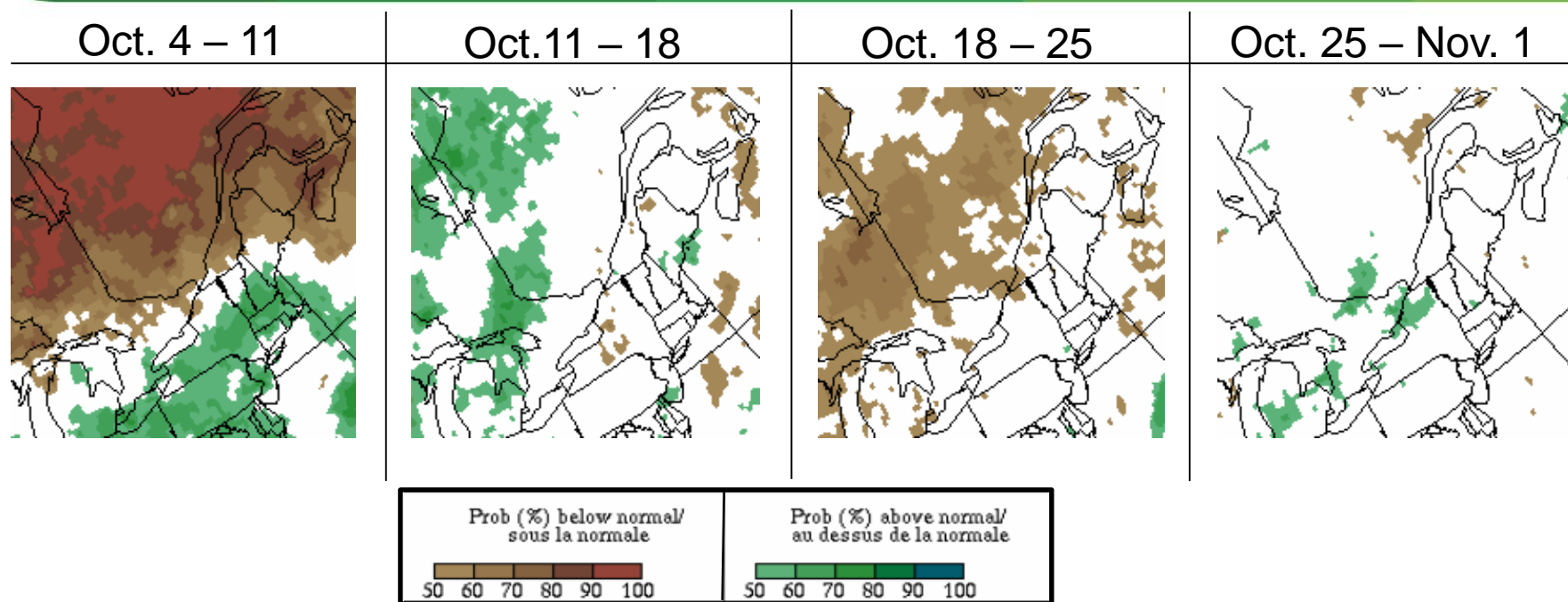


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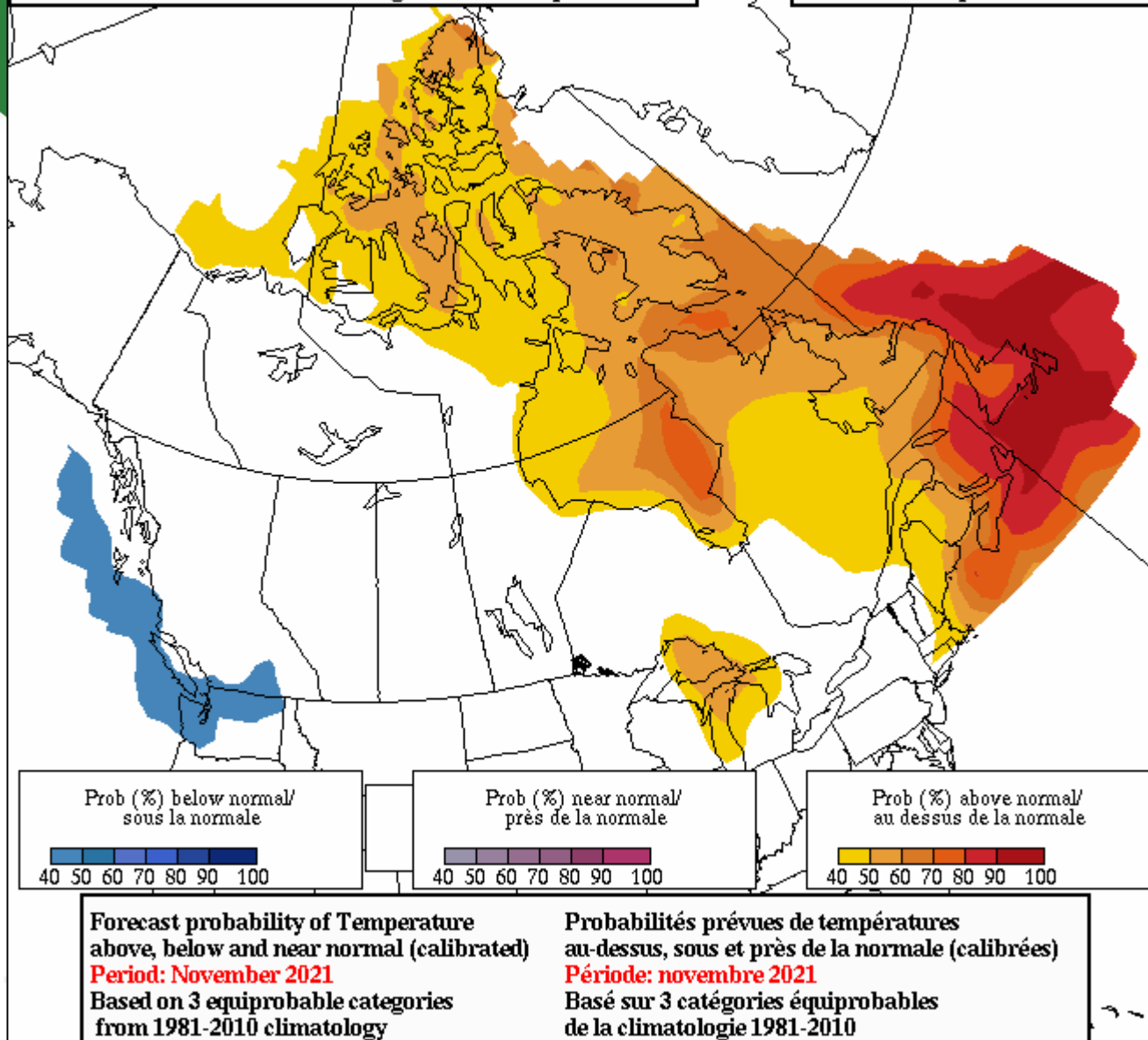
Canada

Weekly signature from GEPS 50km resolution



Beginning below normal and transitioning to near normal (no signal) by the second week and for the remainder of the period.



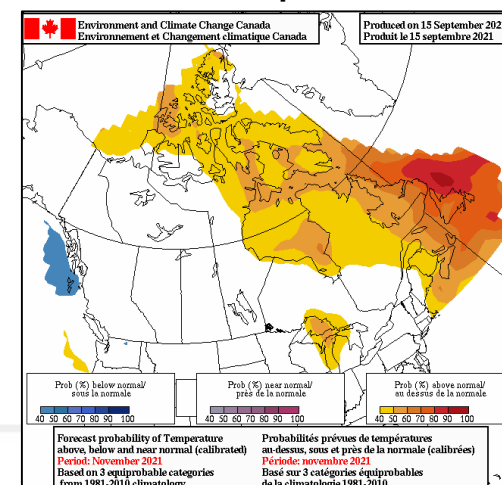


Temperature November 2021

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

CanAM3
CanAM4
+
CanOM4

Produced September 15





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Produced on 30 September 2021
Produit le 30 septembre 2021

Temperature December 2021

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

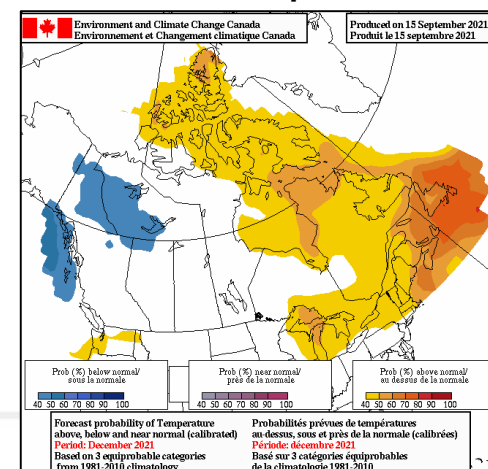
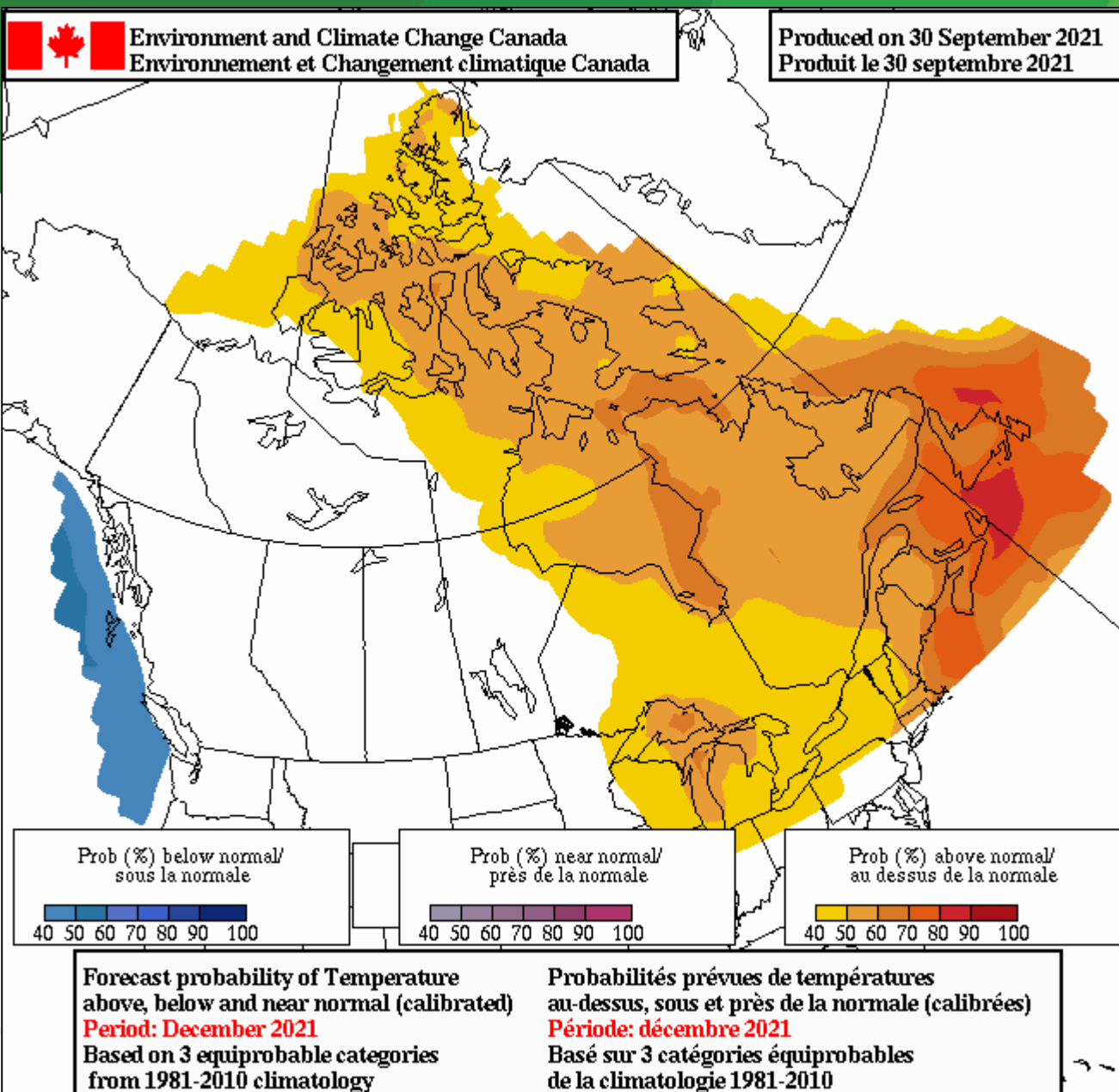
CanAM3

CanAM4

+

CanOM4

Produced September 15



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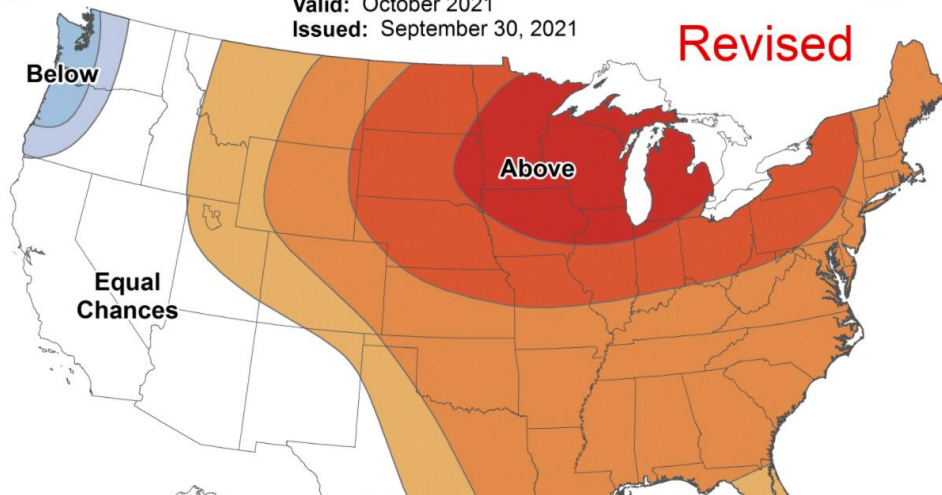


October 2021

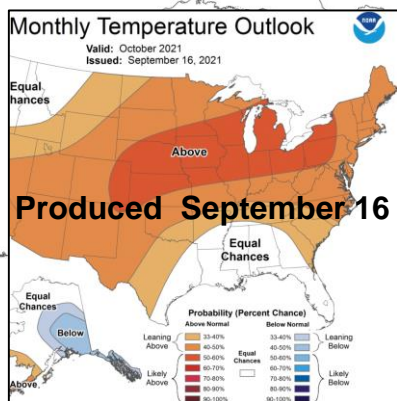


Monthly Temperature Outlook

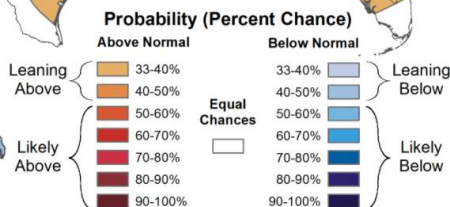
Valid: October 2021
Issued: September 30, 2021



Revised

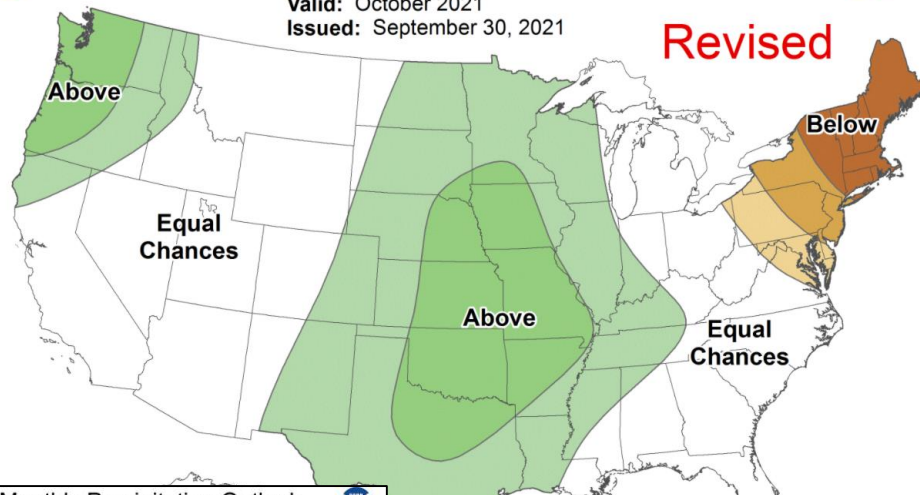


Produced September 16

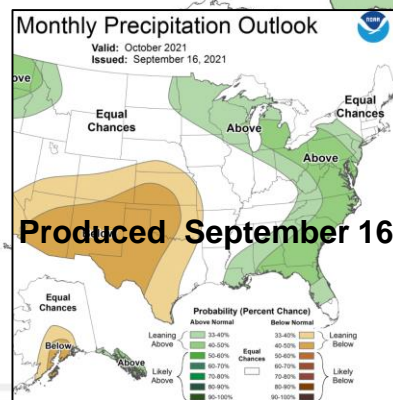


Monthly Precipitation Outlook

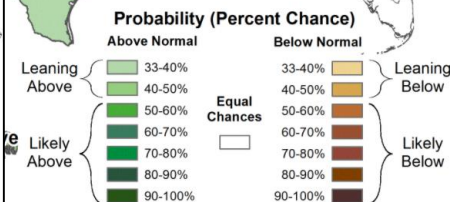
Valid: October 2021
Issued: September 30, 2021



Revised



Produced September 16



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Canada Weather Pages

www.weather.gc.ca

