

New Brunswick

July 2020 Review August 2020 and Summer/Fall Outlook

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Meteorological Service of Canada
Environment and Climate Change Canada
August 4, 2020



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July 2020; Climate Summary

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
AROOSTOOK	NB		DAILY	20.8	18.9	1.9	101.0	105.7	96
BAS CARAQUET	NB	WXS	AU8	18.8	18.7	0.1	57.4	80.9	71
BAS CARAQUET	NB		DAILY				69.2	80.9	86
BATHURST A	NB	ZBF	NCA	19.2	19.1	0.2	103.0	100.8	102
BOUCTOUCHE CDA CS	NB	ABT	AU8	20.2	19.2	1.0	46.5	99.1	47
CHARLO AUTO	NB	ZCR	AU8	19.2	17.9	1.3	104.8	102.1	103
MIRAMICHI RCS	NB	ACQ	AU8	20.1	19.1	0.9			
DOAKTOWN AUTO RCS	NB	ADN	AU8	19.9	19.1	0.8	118.0	105.8	112
EDMUNDSTON	NB	ERM	AU8	19.1			80.0	113.8	70
FREDERICTON INTL A	NB	YFC	NCA	20.4	19.3	1.2			
FREDERICTON CDA CS	NB	AFC	AU8	20.8	19.4	1.5	77.7	89.0	87
FUNDY PARK (ALMA) CS	NB	AFY	AU8	17.7	17.1	0.7			
GAGETOWN AWOS A	NB	YCX	AU5	20.1	19.5	0.6			
GRAND MANAN SAR CS	NB	XGM	AU8	18.1					
KOUCHIBOUGUAC	NB	AKC	AU8	19.5	19.2	0.3			
MECHANIC SETTLEMENT	NB	AMS	AU8	18.3					
MISCOU ISLAND (AUT)	NB	WMI	AU8	17.9					
MONCTON INTL A	NB	YQM	NCH	20.3	18.8	1.5	67.6	92.1	73
OAK POINT	NB		DAILY	19.3			89.1	96.9	92
POINT LEPREAU CS	NB	WPE	AU8	16.1					
RED PINES	NB	ARP	AU8	18.7	18.6	0.1			
SAINT JOHN A	NB	YSJ	NCH	18.4	17.1	1.3	89.3	88.4	101
ST. STEPHEN	NB	WSS	AU8	20.0					
SUSSEX FOUR CORNERS	NB	ASF	AU8	20.2	19.2	0.9	97.5	84.0	116
WOODSTOCK NEWBRIDGE	NB	EWD	AU8	20.3	19.0	1.3	38.6	100.2	39
Average				19.3	18.8	0.9	81.4	95.7	85
Max				20.8	19.5	1.9	118.0	113.8	116
Min				16.1	17.1	0.1	38.6	80.9	39

Highlights:

The average temperature anomaly was above normal (**+0.9C**). Positive anomalies were observed at all sites with Aroostook reporting the largest positive anomaly at +1.9C.

Total precipitation amounts were below normal, with an average of **85%** of total precipitation. Amounts were highly variable across the province (39 to 116%) due to the convective nature of the precipitation. This was the seventh consecutive month with below normal precipitation.

July 2020; Climate Summary

Events:

July 9; Severe thunderstorms. Northern areas of the province saw isolated thunderstorms that produced up to quarter-size hail and some flash flooding in the Newcastle/Miramichi area.

July 19-20: Heat event. High humidity levels combined with hot temperatures gave humidex levels in the upper 30's with St. Stephen seeing the highest value at 43.

July 25-29: Heat event. A very humid air mass brought humidex values into the high 30's and thunderstorms. On the 29th, a severe storm with toonie-sized hail was reported in the Cocagne region.

Days of month with lightning in New Brunswick; 2-6 8-10 12-13 19-20 24-31 (20 days)

The number of lightning strikes were below average at 42% of 2002-2020 normals.

Day of month with temperature record broken or tied in New Brunswick; 16 20 21 25
(red=maximum, blue=minimum)



July 2020; Provincial Climate Extremes

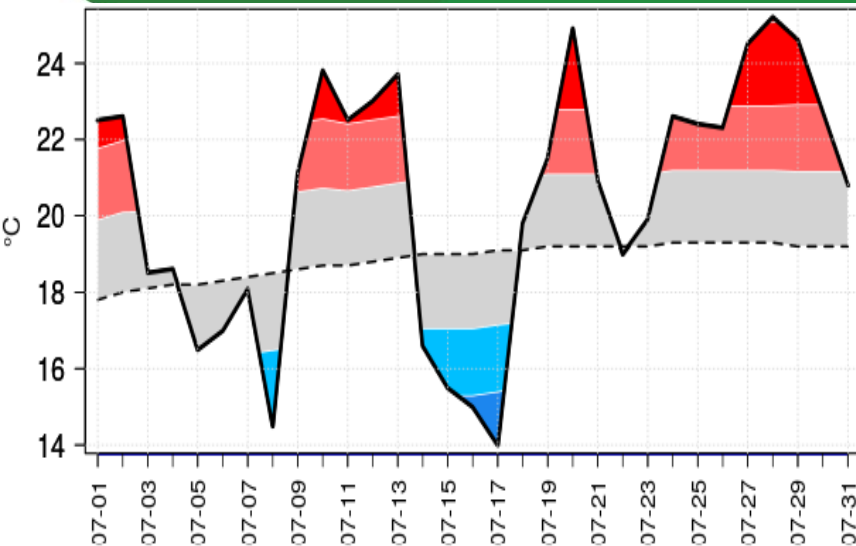
Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	+33.2°C	Edmundston	10
Daily Minimum Temperature	1.7°C	Red Pines	16
Maximum Daily Total Precipitation	34.5 mm	Doaktown	30
Daily Maximum Wind Gust	67 km/h	Moncton	12
Daily Maximum Humidex	43	St. Stephen	20



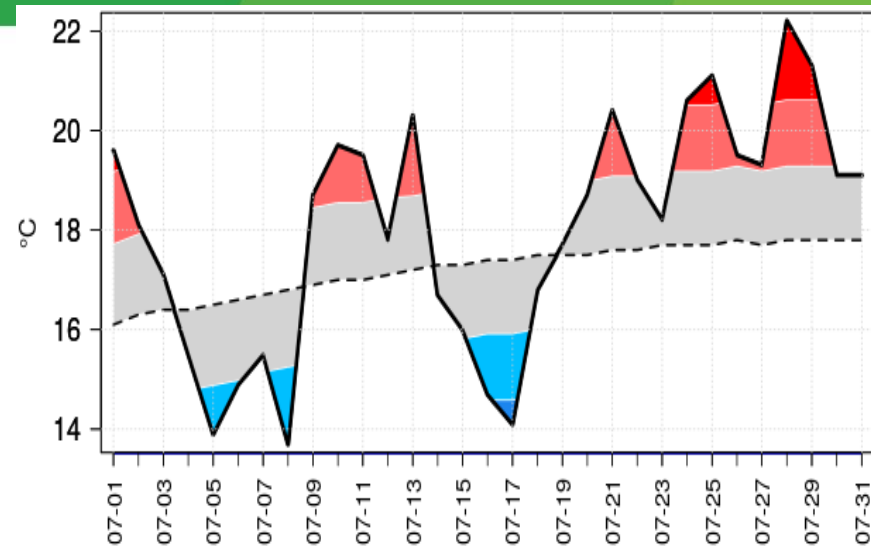
July 2020 - Temperature

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



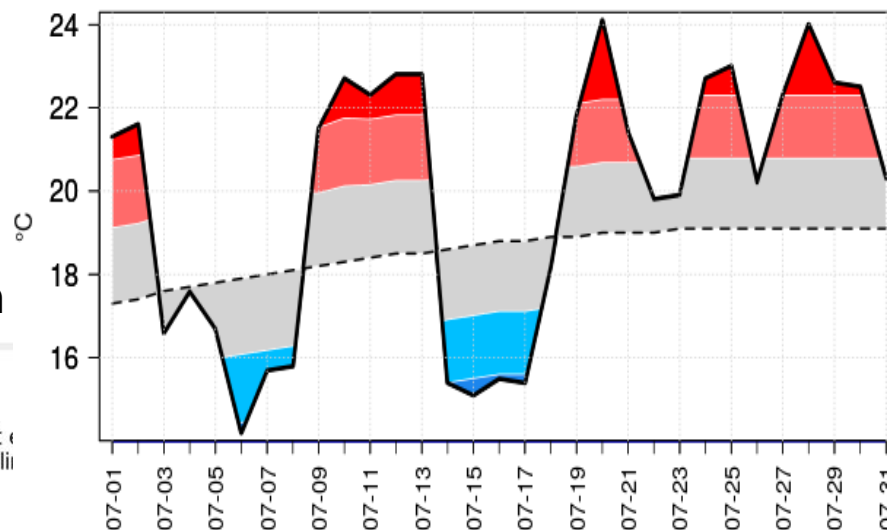
Fredericton



Saint John

All sites were
above normal

Moncton



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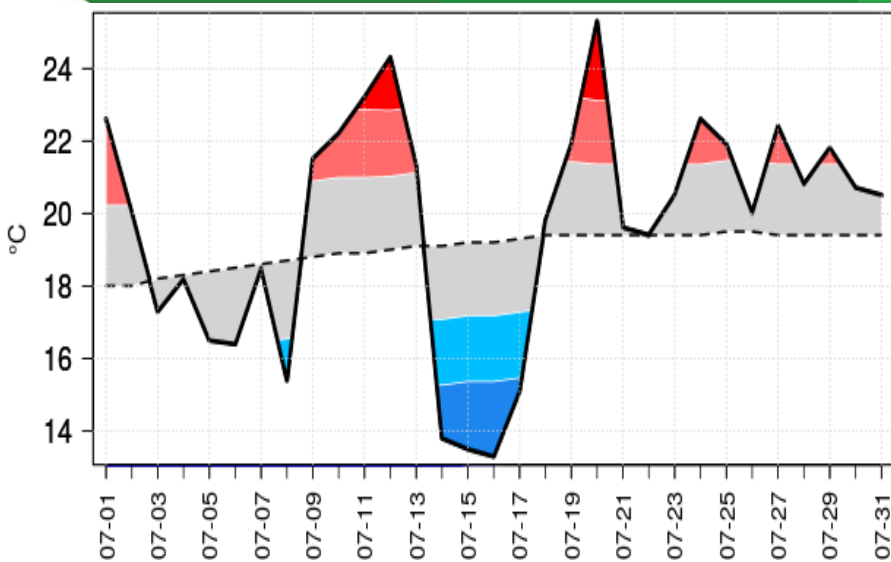
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July 2020 - Temperature

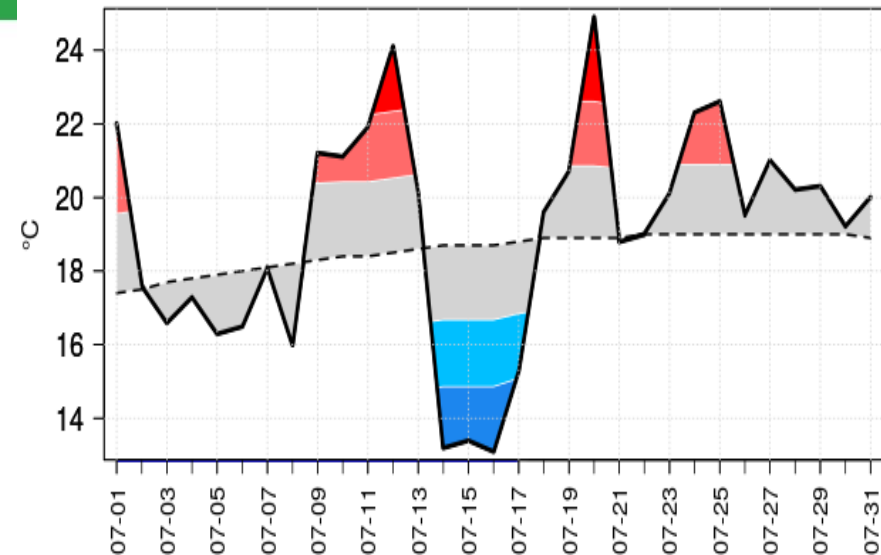
Daily Mean Temperature (line), Long-Term Mean (dashed line) and Categories based on Standard Deviations (blue and red)

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



Miramichi

■ <<< normal
 ■ << normal
 ■ < normal
 ■ normal

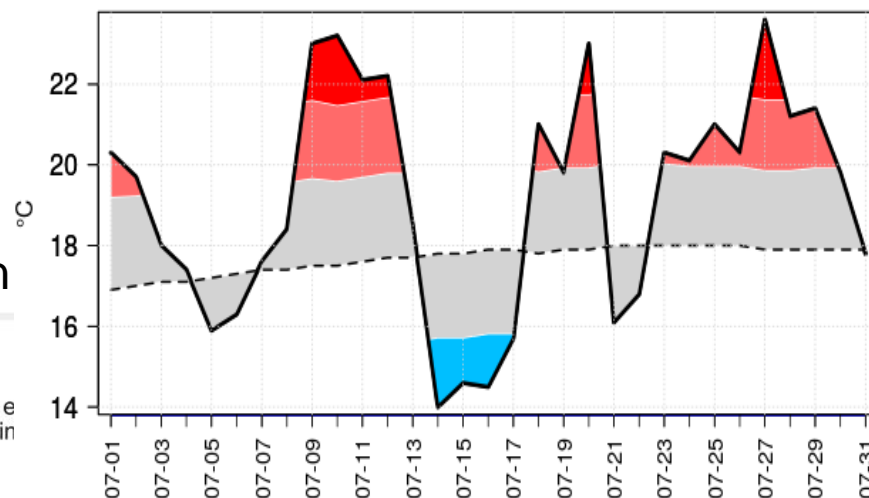


Bathurst

■ > normal
 ■ >> normal
 ■ >>> normal

All sites were
above normal

Edmundston



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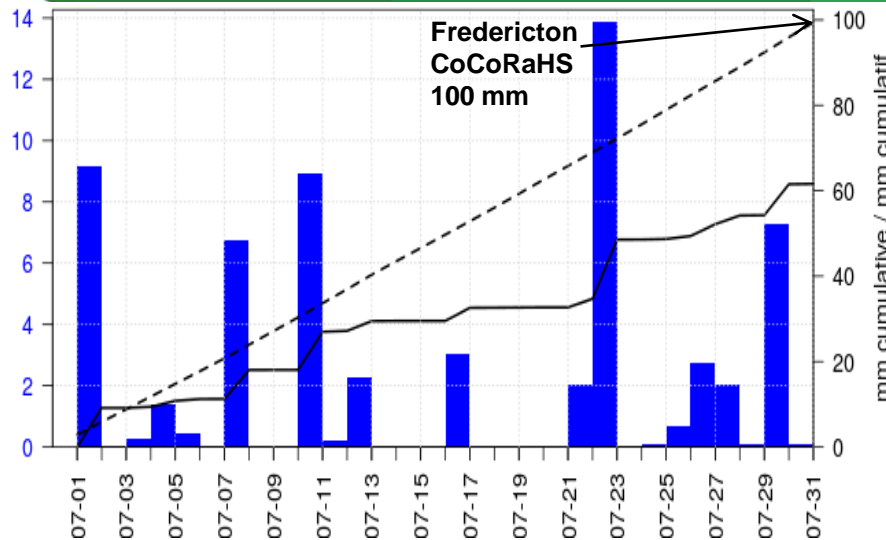
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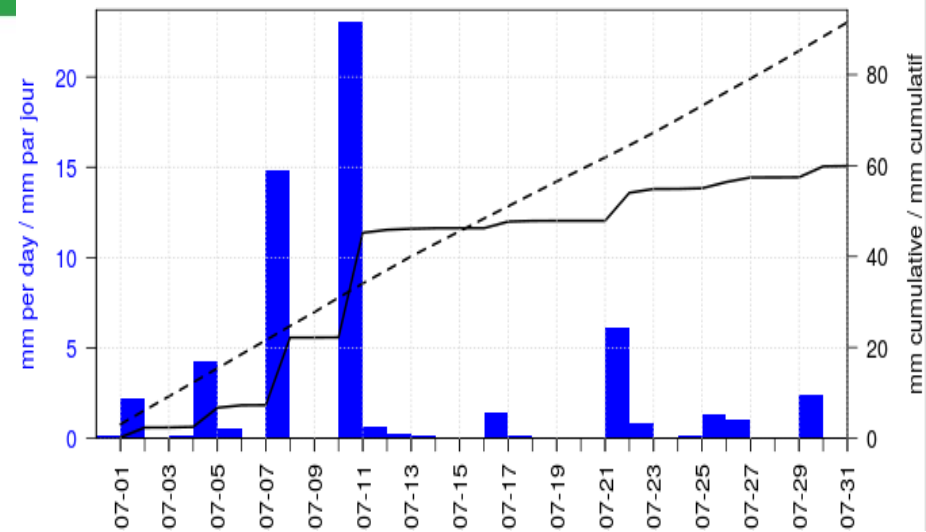
July 2020 - Precipitation

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

Based on ECCC gridded precipitation analysis
Climatology 2002-2019



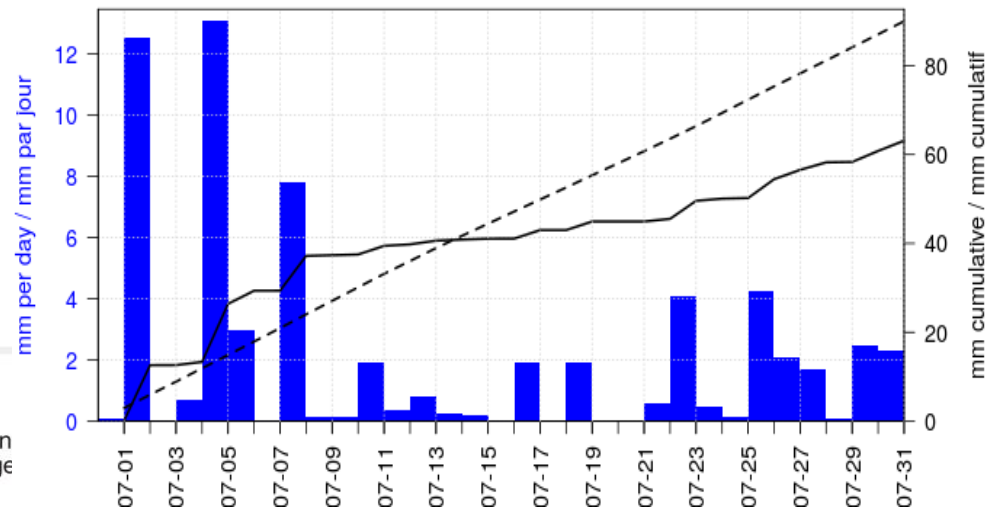
Fredericton (and area)



Saint John

All sites were
below normal

Moncton



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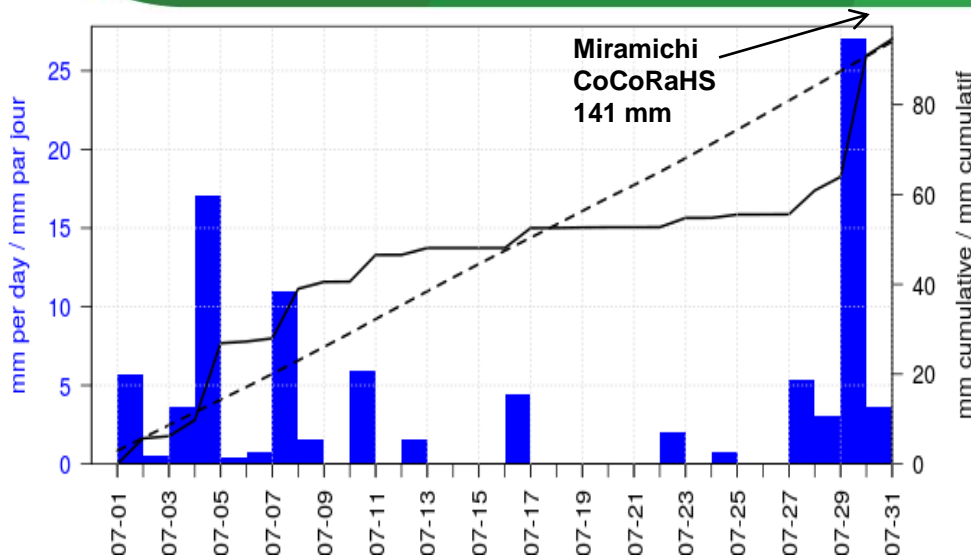
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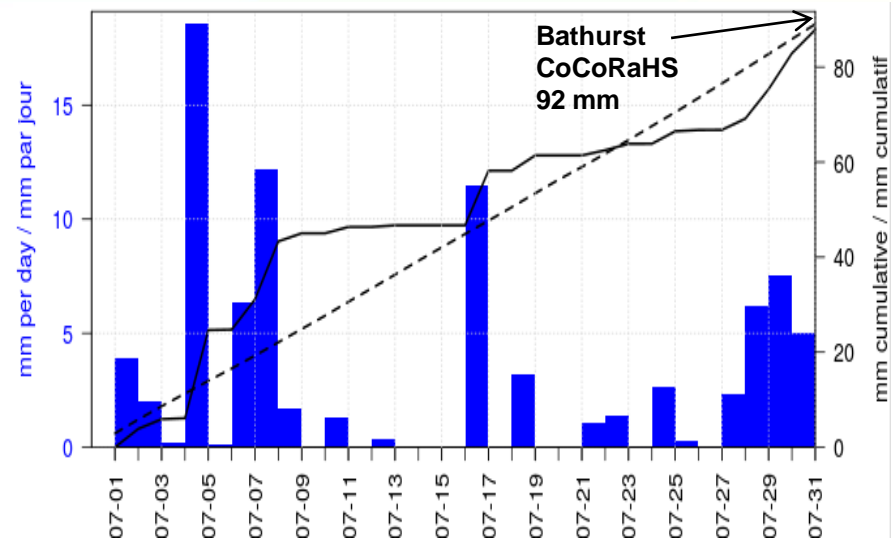
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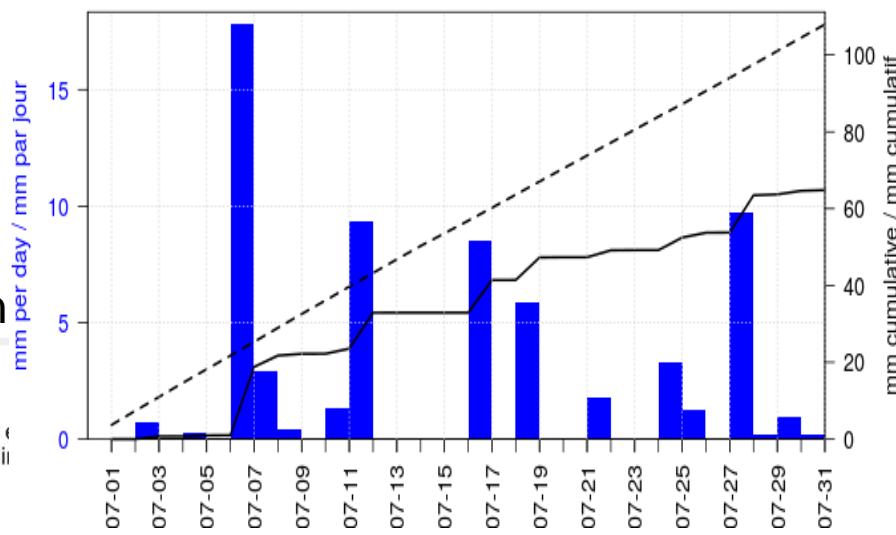
Miramichi



Bathurst

Bathurst and
Miramichi were
near normal

Edmundston



Edmundston
was below
normal

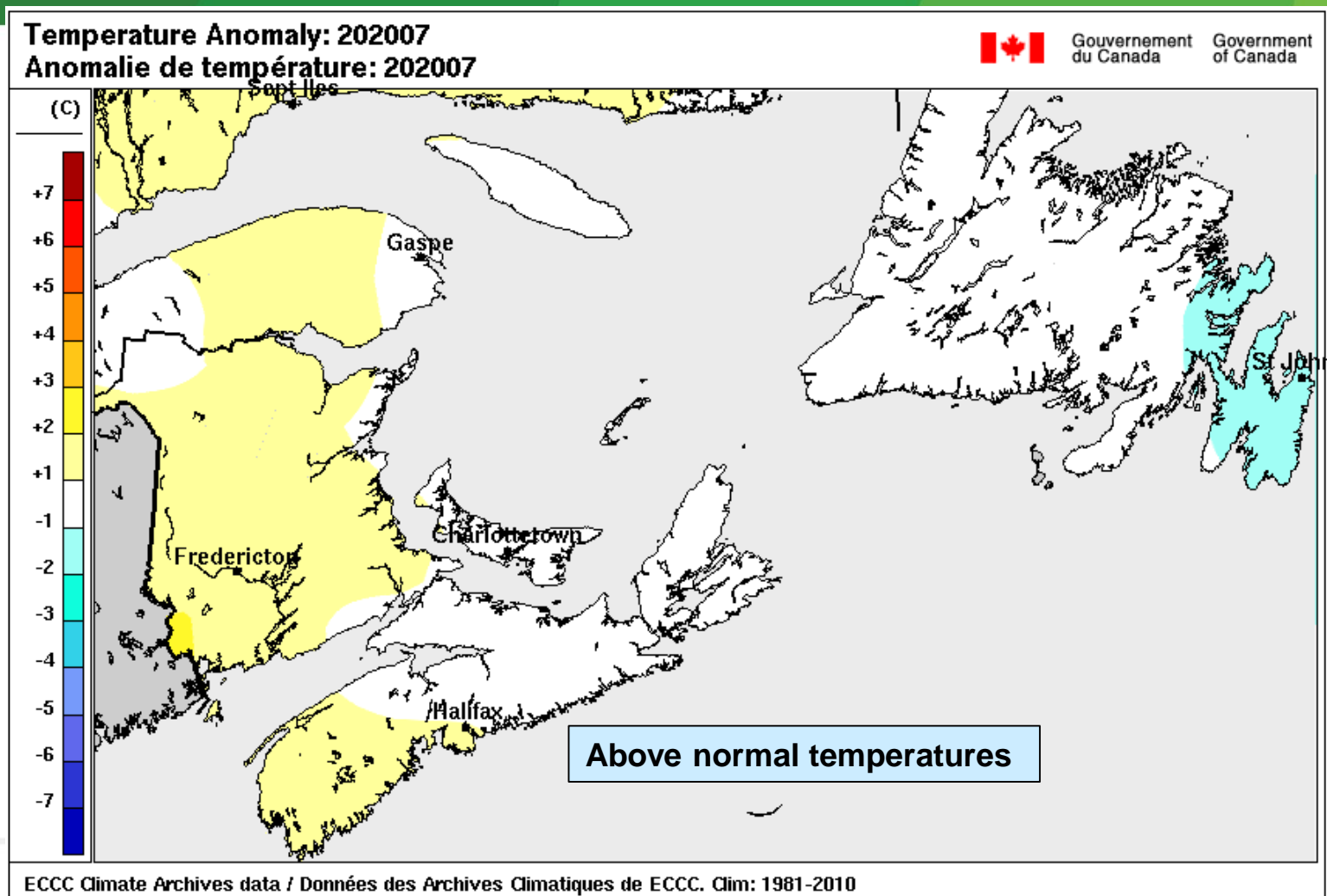


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July 2020 – Temperature departure from 1981-2010 mean

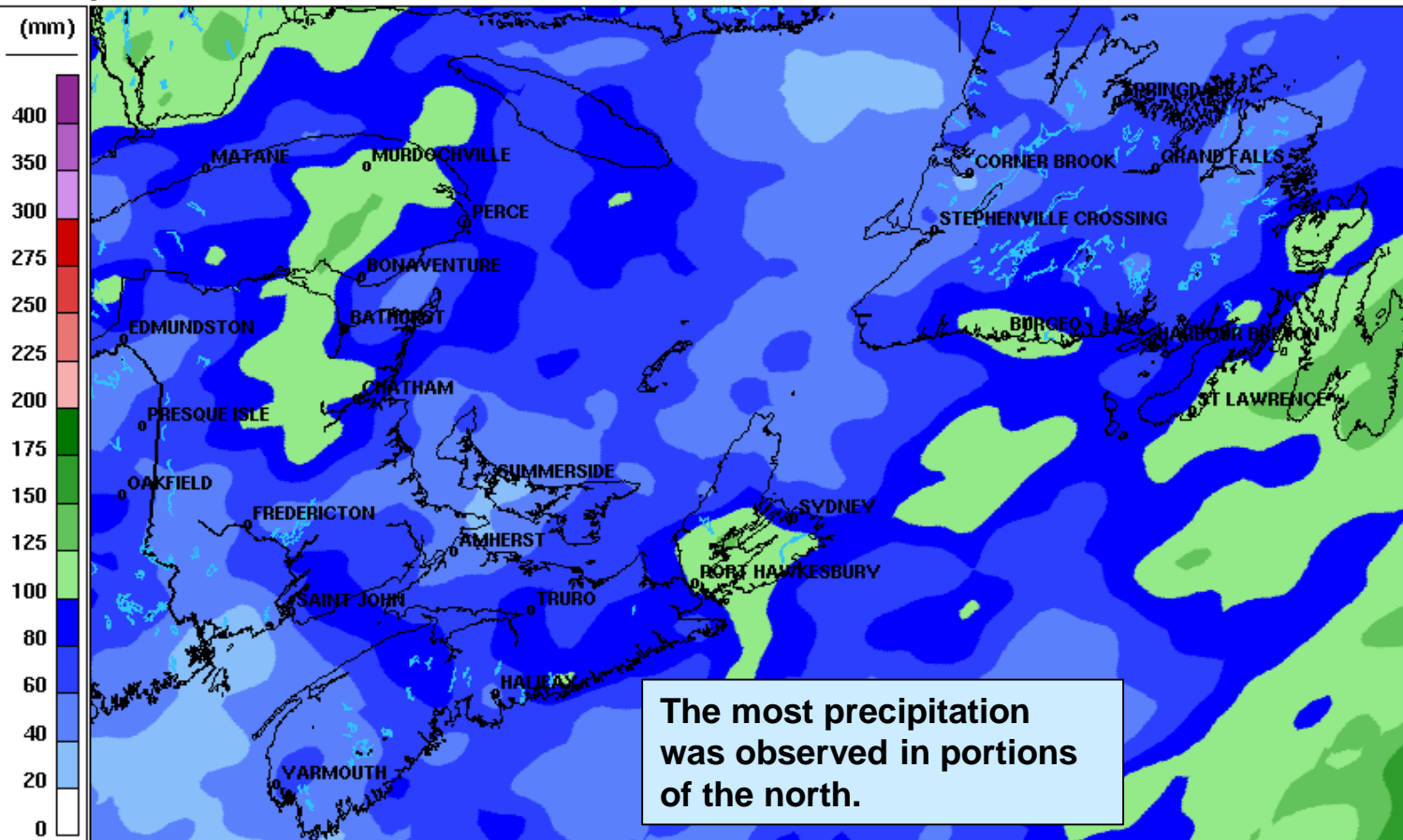


July 2020 – Total precipitation

Total precipitation: 202007
Précipitation totale: 202007



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ECCC NWP model gridded data / Données sur grille de modèle de PNT de ECCC



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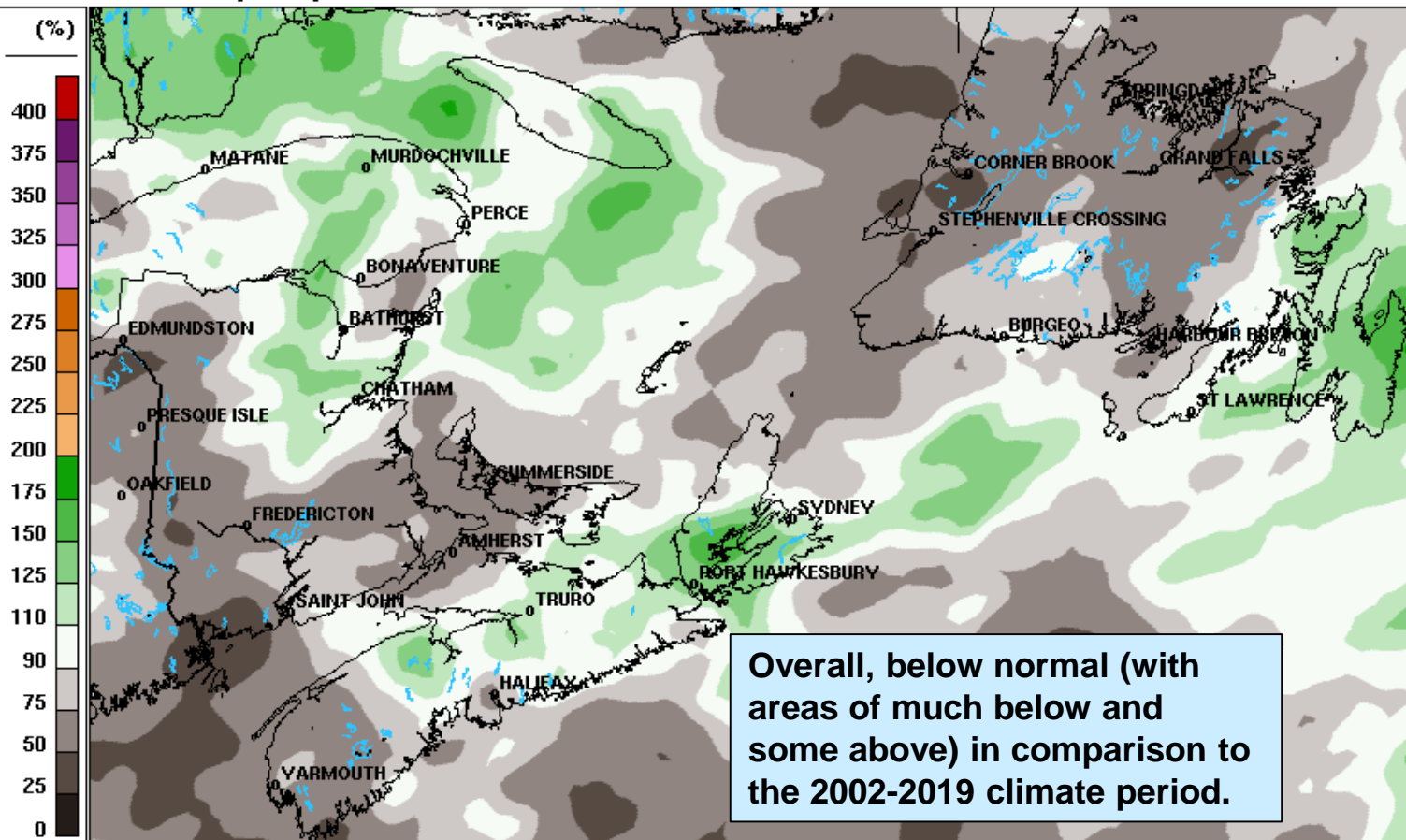
July 2020 – Precipitation departure from 2002-2019 mean

Precipitation Relative Total: 202007
Total relatif de précipitation: 202007



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ECNC NWP model gridded data / Données sur grille de modèle de PNT de ECNC. Clim: 2002-2019



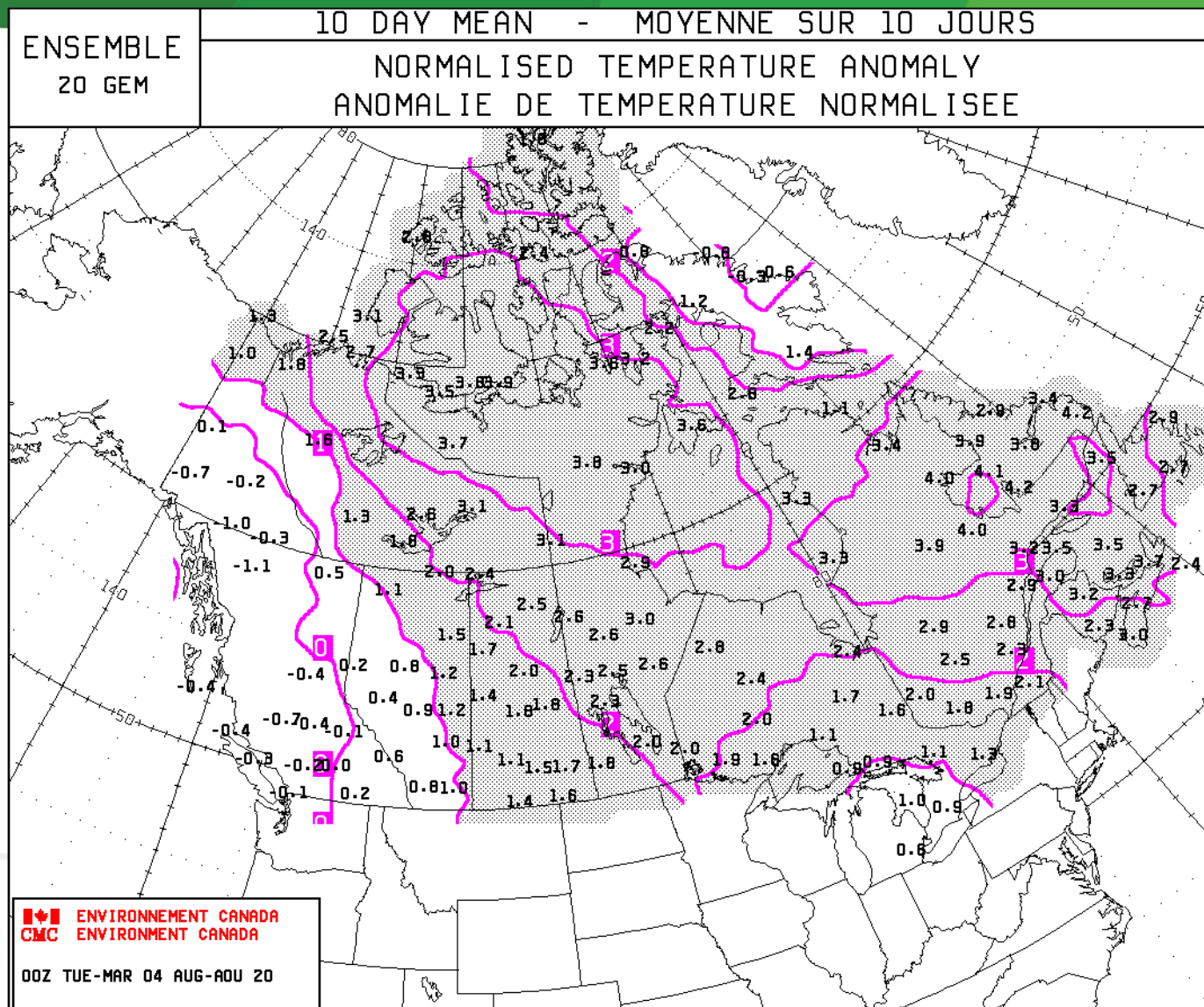
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Outlook – 10 day mean temperature

(Suggesting above normal conditions (+2.3 to +3.3°C))



10 day
forecast
ending
August 14,
2020

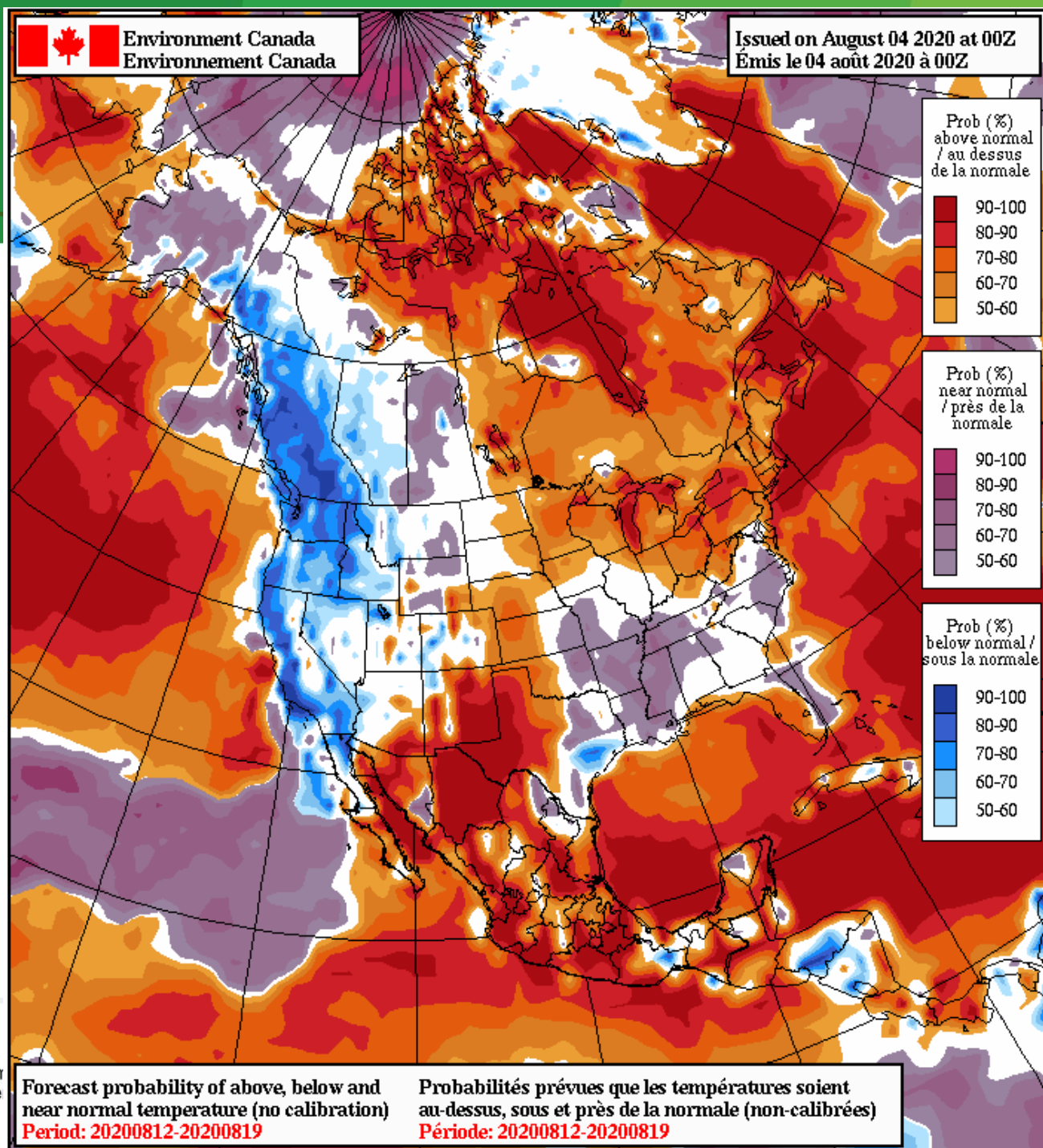


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Day 8 to 14 Forecast

Period ending
August 19, 2020

Suggesting a moderate
to strong signal for above
normal across the
province.



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Fredericton

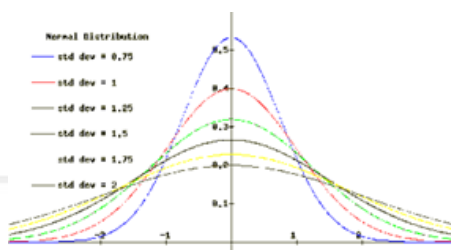
August

Normal high: +24.8C

Normal low: 12.1C

**Next 15 days; ending
August 19, 2020**

Generally suggesting above normal until near August 13th before transitioning to more near normal for the remainder of the period.



Ensemble and Deterministic Forecasts issued 4 August 2020 00 UTC

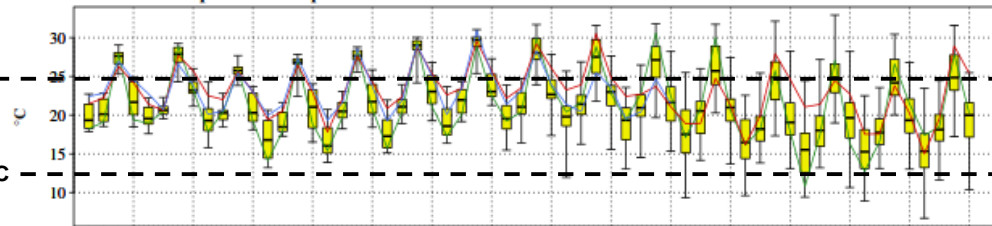
Prévision d'ensemble et déterministe émises le 4 Août 2020 00 UTC

for/pour

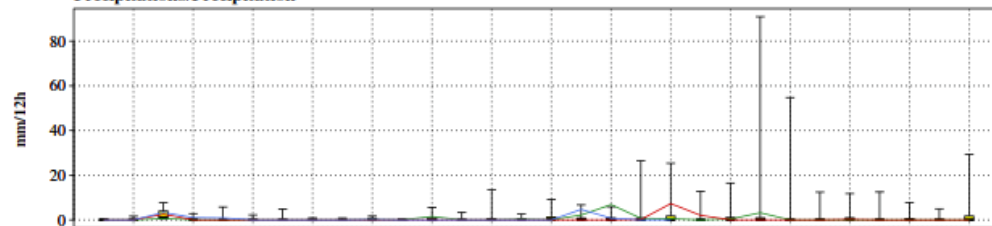
NAEFS / SPENA

FREDERICTON (YFC) 45.87 N 66.53 W/O

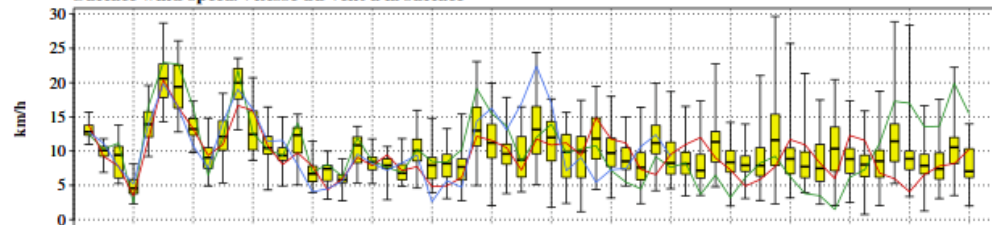
Surface air temperature/Température de l'air à la surface



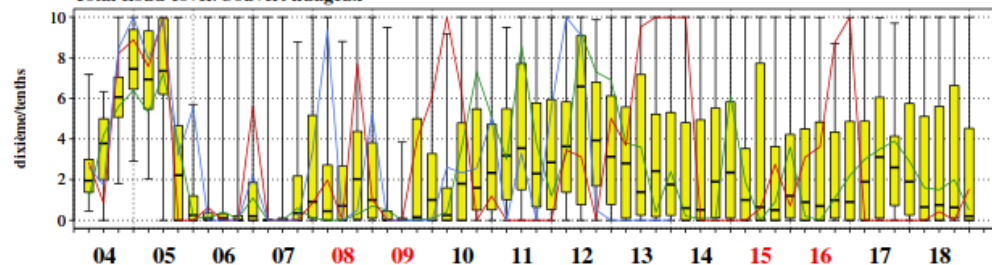
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



Total cloud cover/Couvert nuageux



August/Août 2020

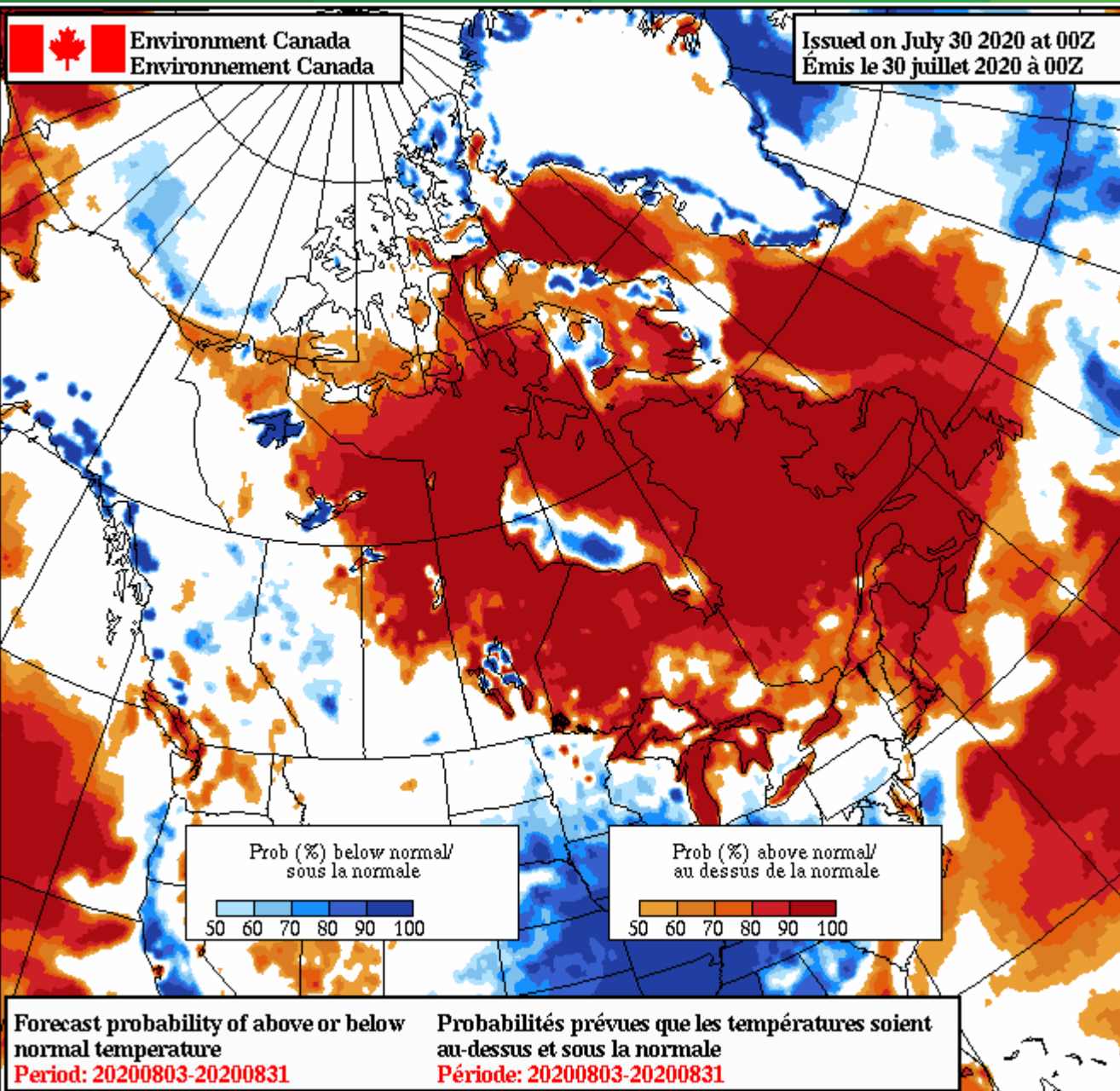
Global Model / Modèle global

Control Member / Membre contrôle CMC

Control Member / Membre contrôle NCEP

max
75%
median/médiane
25%
min





Temperature
August 3
to
August 31

CMC
Monthly
Forecast
Product
using GEPS
50km res.

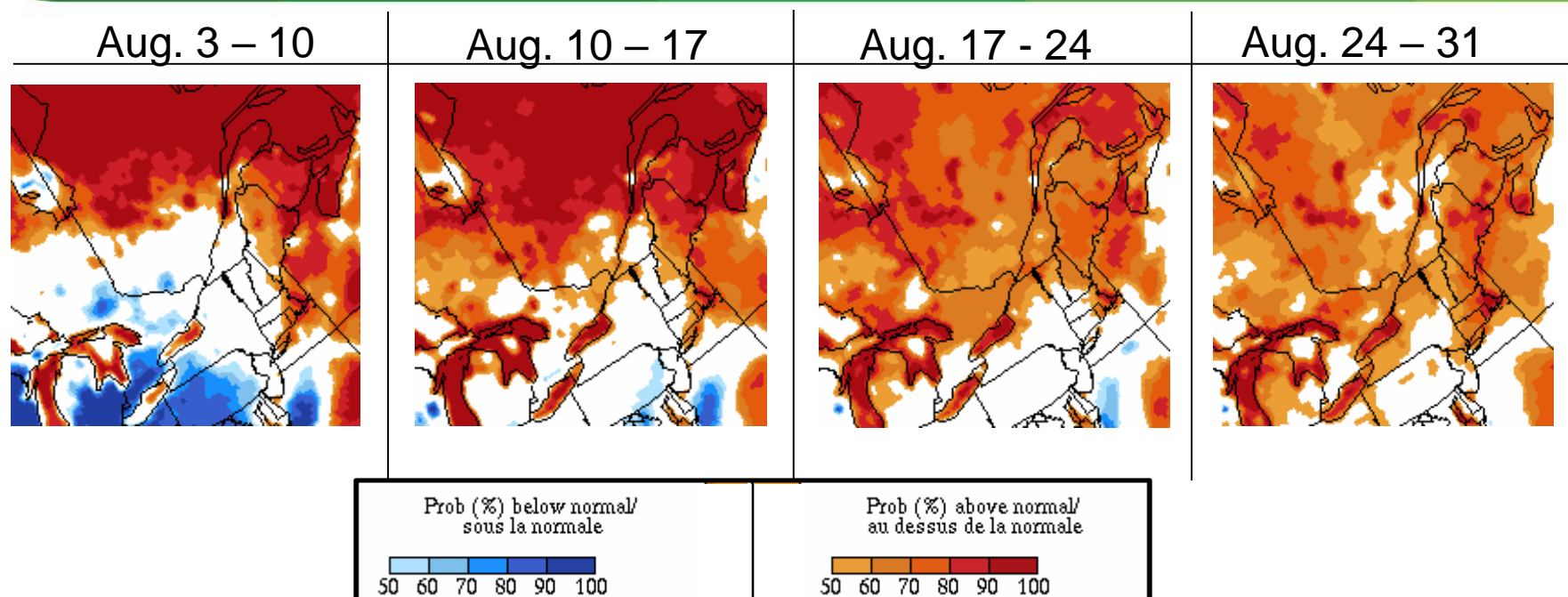


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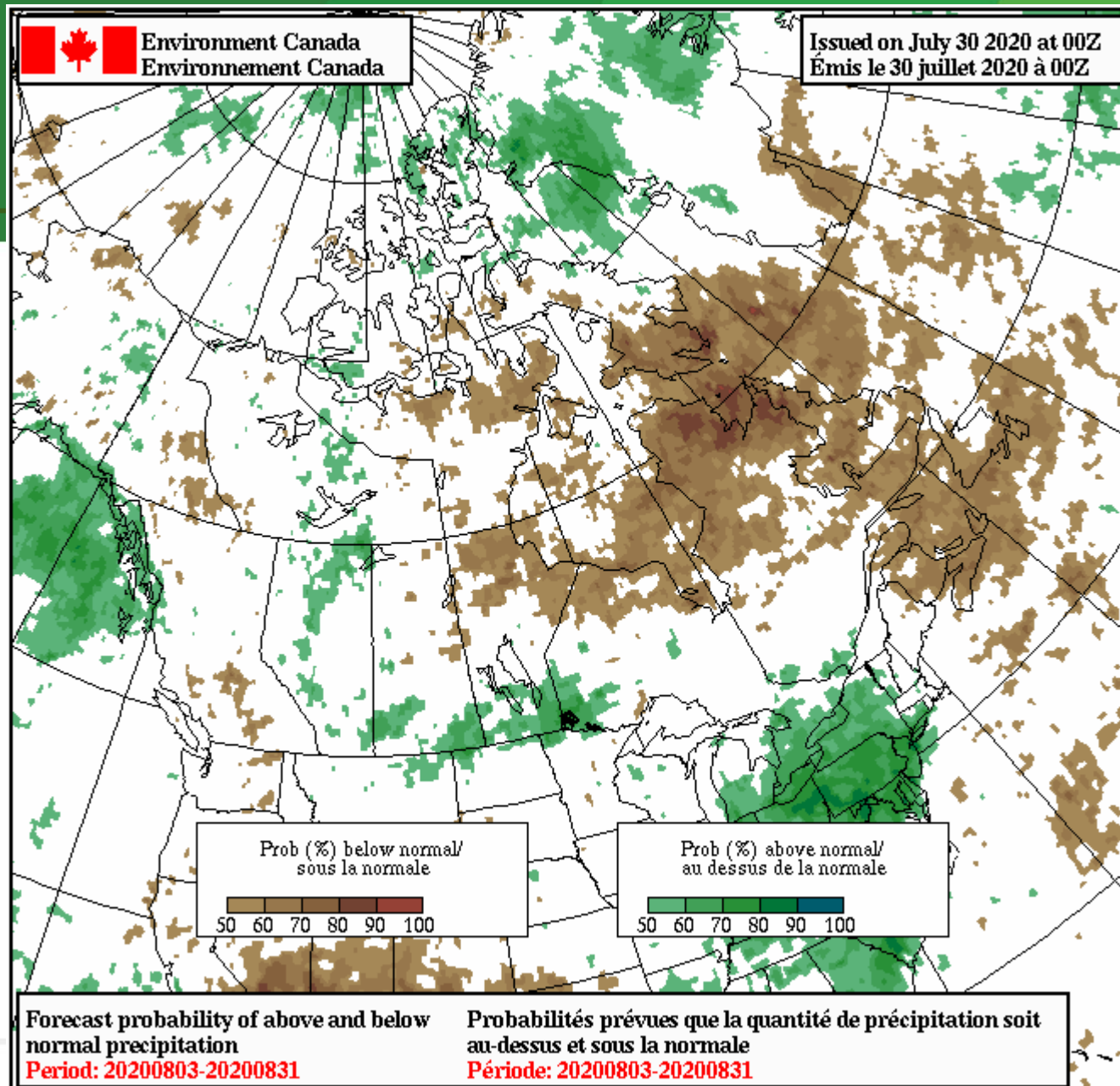
Weekly signature from GEPS 50km resolution



Moderate to strong signal of above normal gradually transitioning to a weak signal by the end of the period.

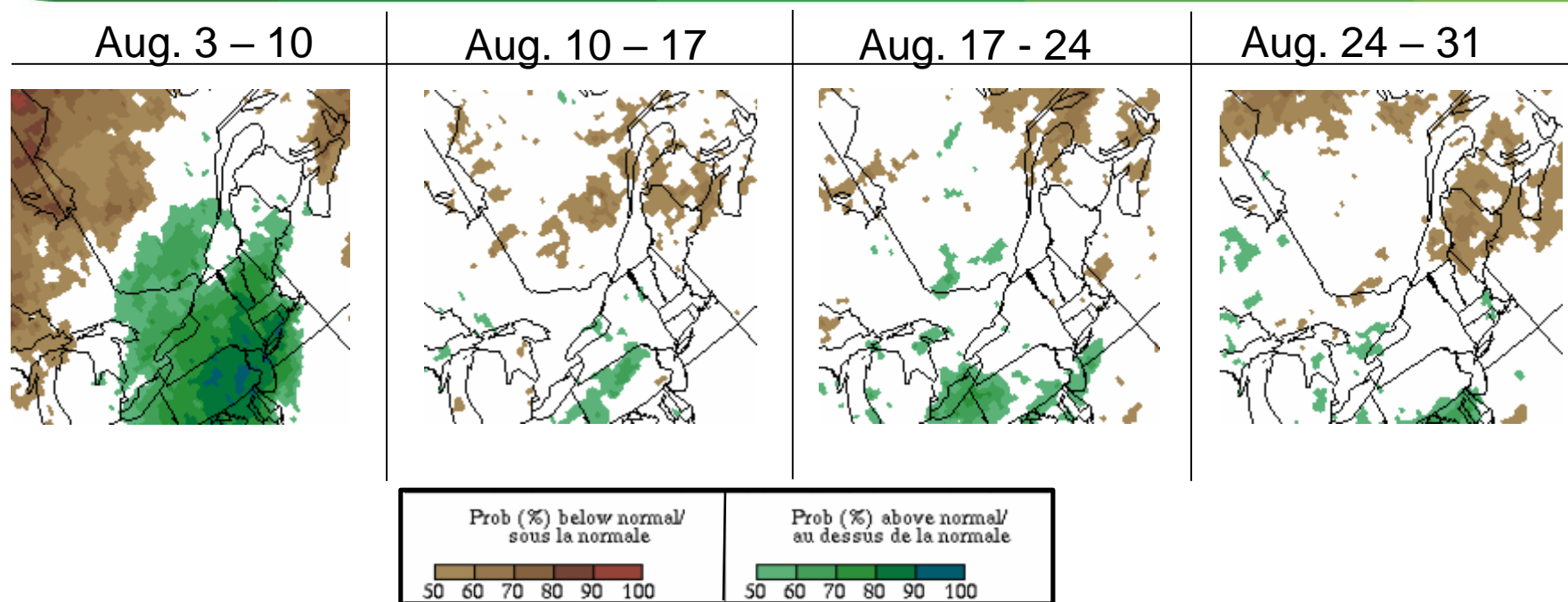


Precipitation August 3 to August 31



CMC
Monthly
Forecast
Product
using GEPS
50km res.

Weekly signature from GEPS 50km resolution



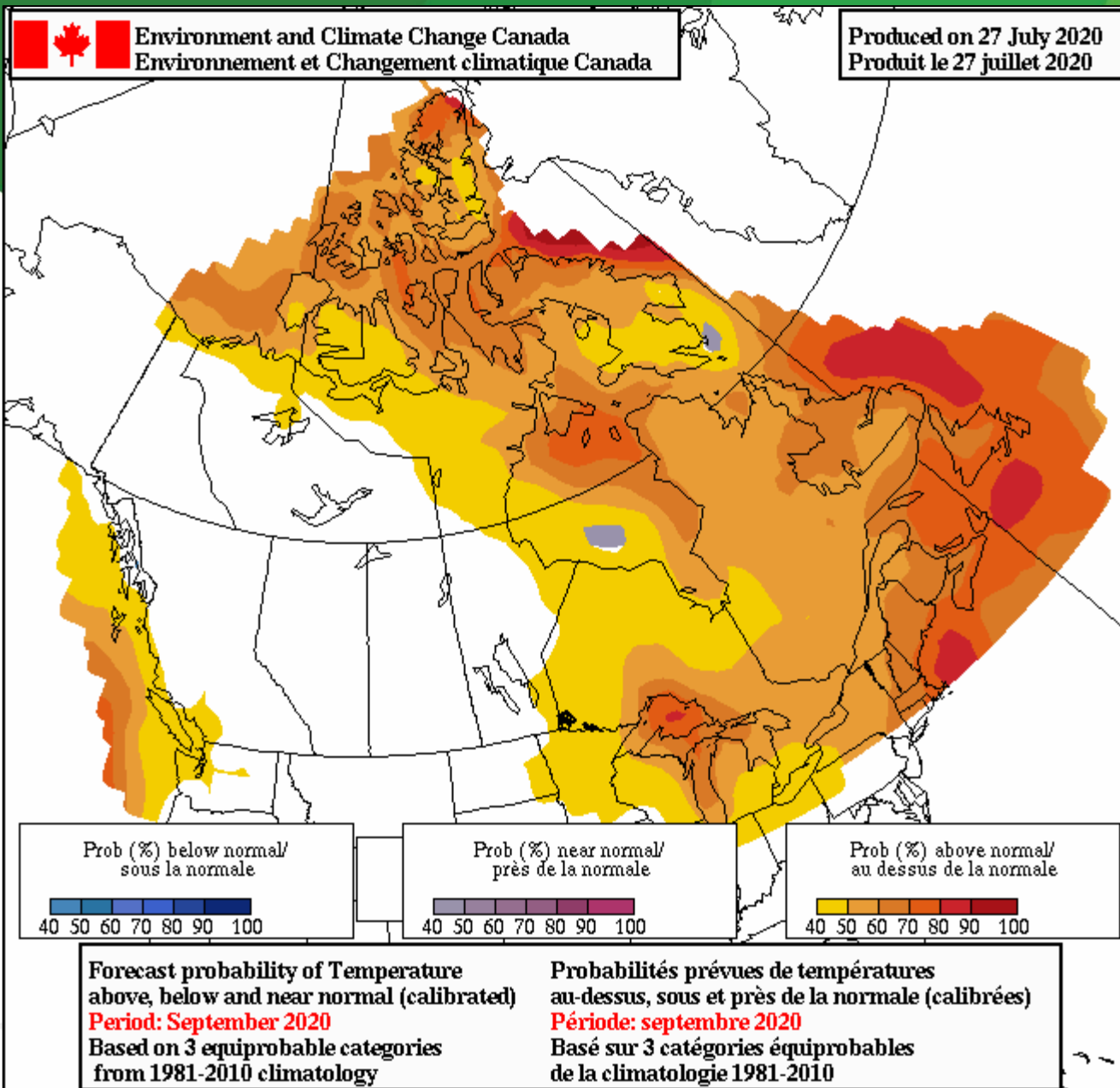
Generally, no conclusive signal (near normal) the first week then subtle signals of possibly below normal for the remainder of the period.





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Produced on 27 July 2020
Produit le 27 juillet 2020



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Temperature September 2020

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

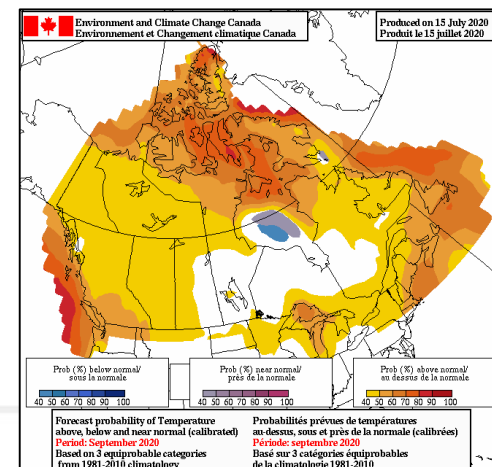
CanAM3

CanAM4

+

CanOM4

Produced July 15



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Produced on 27 July 2020
Produit le 27 juillet 2020

Temperature October 2020

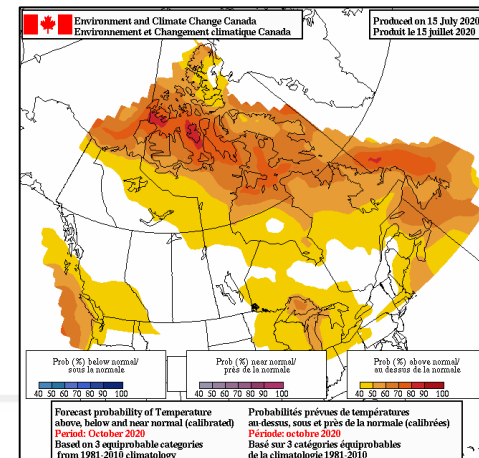
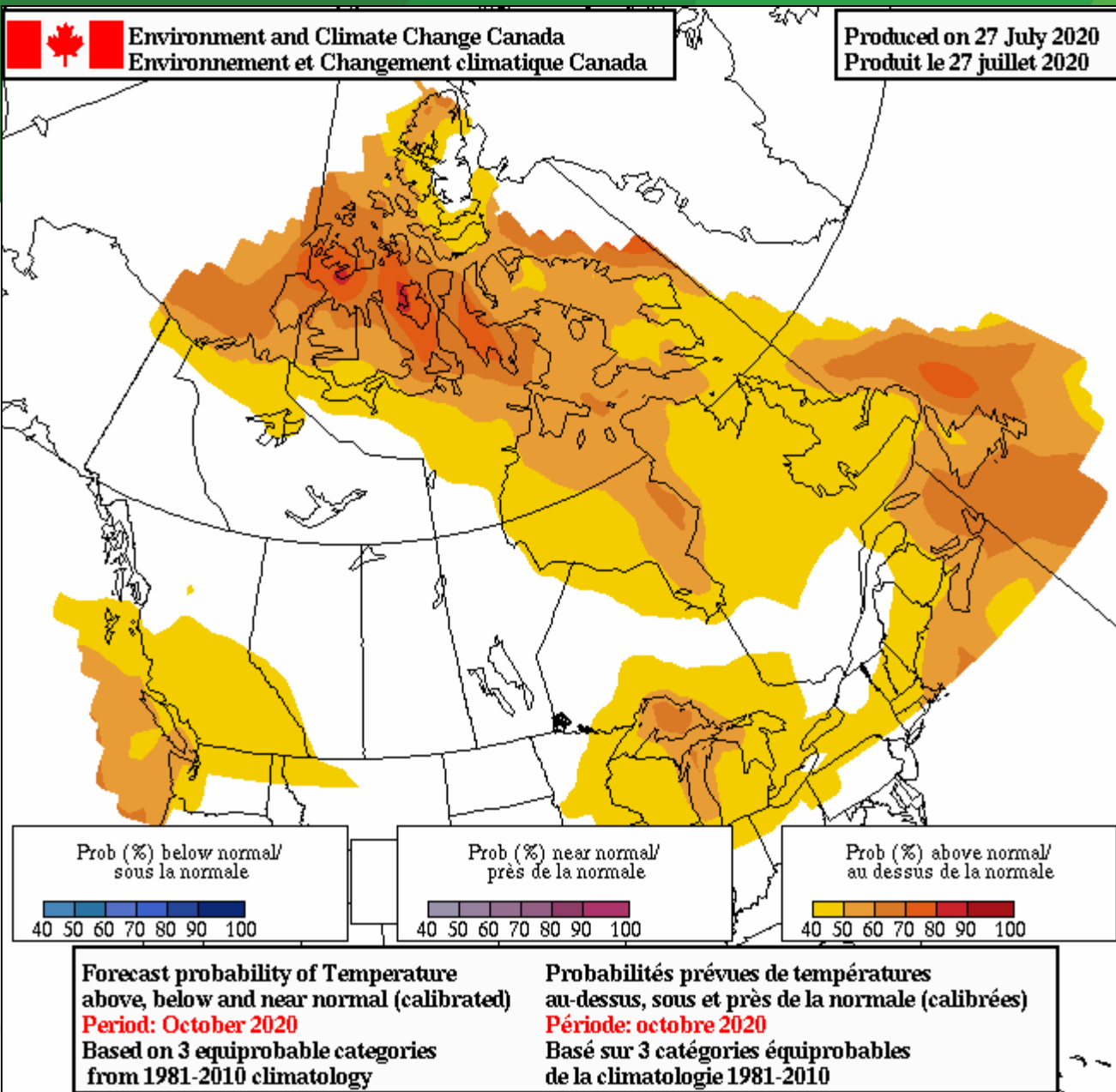
CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)
CanAM3
CanAM4
+
CanOM4

Produced July 15



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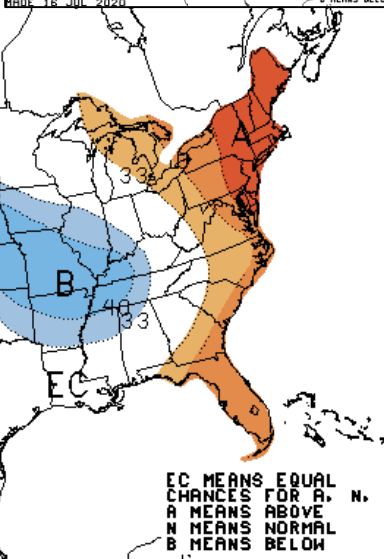
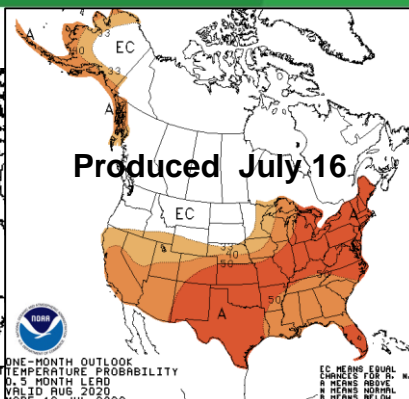


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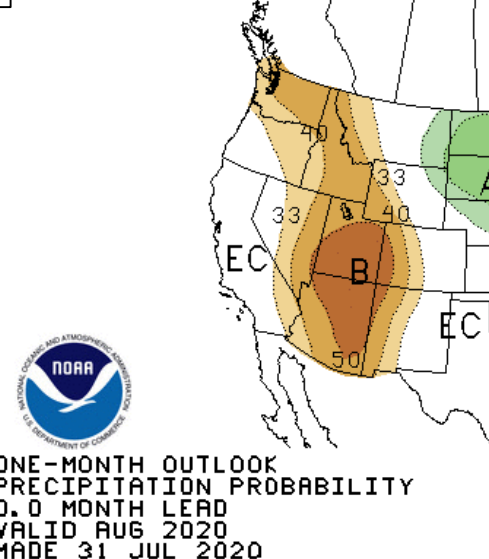
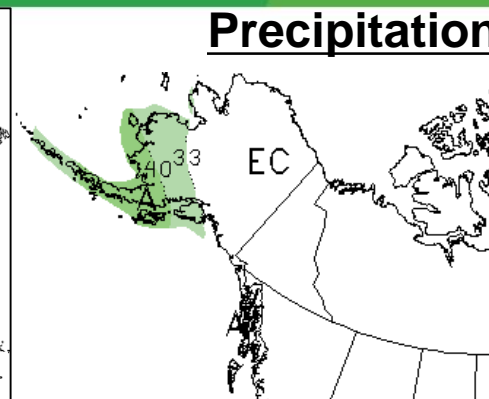


August 2020

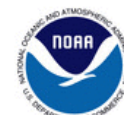
Temperature



Precipitation



ONE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.0 MONTH LEAD
VALID AUG 2020
MADE 31 JUL 2020



ONE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.0 MONTH LEAD
VALID AUG 2020
MADE 31 JUL 2020



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Contact

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Canada Weather Pages

www.weather.gc.ca



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