

New Brunswick

June 2020 Review July 2020 and Summer Outlook

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Meteorological Service of Canada
Environment and Climate Change Canada
July 3, 2020



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June 2020; Climate Summary

Station Name	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		DAILY	17.1	16.0	1.1			
BAS CARAQUET	WXS	AU8	16.2	15.0	1.2	12.7	74.9	17
BAS CARAQUET		DAILY				16.0	74.9	21
BATHURST A	ZBF	NCA	16.8	15.9	0.9			
BOUCTOUCHE CDA CS	ABT	AU8	17.1	15.2	1.9	17.1	95.3	18
CHARLO AUTO	ZCR	AU8	16.4	14.6	1.8	15.6	85.1	18
MIRAMICHI RCS	ACQ	AU8	17.5	15.7	1.8			
DOAKTOWN AUTO RCS	ADN	AU8	17.1	16.0	1.0	27.7	95.4	29
EDMUNDSTON	ERM	AU8	15.5	15.2		31.0	97.4	32
FREDERICTON INTL A	YFC	NCA	17.4	16.2	1.2	25.8	82.4	31
FREDERICTON CDA CS	AFC	AU8	17.6	16.4	1.2	41.8	86.3	48
GAGETOWN AWOS A	YCX	AU5	18.2	16.4	1.8			
GRAND MANAN SAR CS	XGM	AU8	14.9					
KOUCHIBOUGUAC	AKC	AU8	17.0	15.5	1.5			
MECHANIC SETTLEMENT	AMS	AU8	15.7			28.3		
MISCOU ISLAND (AUT)	WMI	AU8	15.0					
MONCTON INTL A	YQM	NCH	16.9	15.2	1.7	34.3	94.6	36
MONCTON A	YQM	NCA	16.9	15.2	1.7			
OAK POINT		DAILY	16.2	16.4		24.6	86.1	29
POINT LEPREAU CS	WPE	AU8	13.4	12.8	0.6			
RED PINES	ARP	AU8	16.3	15.4	0.9	8.8	83.6	11
SAINT JOHN A	YSJ	NCH	15.3	14.0	1.3	82.5	101.0	82
SUSSEX FOUR CORNERS	ASF	AU8	17.2	16.0	1.2	32.4	88.4	37
WOODSTOCK NEWBRIDGE	EWD	AU8	16.7	16.3	0.4	28.6	91.0	31
Average			16.5	15.5	1.3	28.5	88.3	31
Max			18.2	16.4	1.9	82.5	101.0	82
Min			13.4	12.8	0.4	8.8	74.9	11

Highlights:

The average temperature anomaly was above normal (**+1.3C**). Positive anomalies were observed at all sites. The first half of June was below normal but was averaged out with a much above normal second half.

Total precipitation amounts were much below normal, with an average of **31%** of total precipitation. Bas Caraquet, Bouctouche, Charlo, and Sackville areas reported their driest June on record with several other sites recording their top 5 driest. All sites reported less than half of their normal precipitation with the exception of Saint John.

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June 2020; Climate Summary

Events:

June 5; Severe thunderstorms. A strong cluster of thunderstorms ravaged the Fredericton area with violent winds, excessive rain and hail. Wind gusts to 90 km/h were recorded in Fredericton along with near 29 mm of rain in 15 minutes.

June 17-20: Unprecedented heat event. Unseasonable heat smashed 27 daily maximum temperature records across the province with values into the mid 30's and humidex values into the low 40's (see next slide for details).

Days of month with lightning in New Brunswick; 3 5 6 9 11 20-28 (14 days)

Despite reporting lightning strikes for nearly half of the month, the total number of strikes was well below average with a mere 24% of average.

Day of month with temperature record broken or tied in New Brunswick; 2 9 10 14 16 17 18 19 20 23
(red=maximum, blue=minimum)



June 18-19; Record maximum temperatures

Maximum Temperature	New or tied Record (°C)	ECCC Station	Old record (°C)	Date
All-time	37.3 (June 19)	Kouchibouguac	37.3 (tie)	July 15 2013
All-time	36.0 (June 19)	Bouctouche	35.6	August 1 1995
All-time	35.8 (June 18)	Bas Caraquet	35.5	July 5 1983
All-time	32.8 (June 18)	Miscou Island	32.5	July 2 2014
Monthly	37.2 (June 19)	Miramichi	36.7	June 29 1944
Monthly	36.7 (June 18)	Charlo	35.6	June 23 1947 June 24 1947
Monthly	36.1 (June 19)	Doaktown	35.0	June 17 1994
Monthly	35.6 (June 19)	Moncton	34.4	June 29 1944

Honourable mention: Bathurst reached 37.2°C on June 18 falling just shy of their all-time record of 37.4 °C from June 27 2003



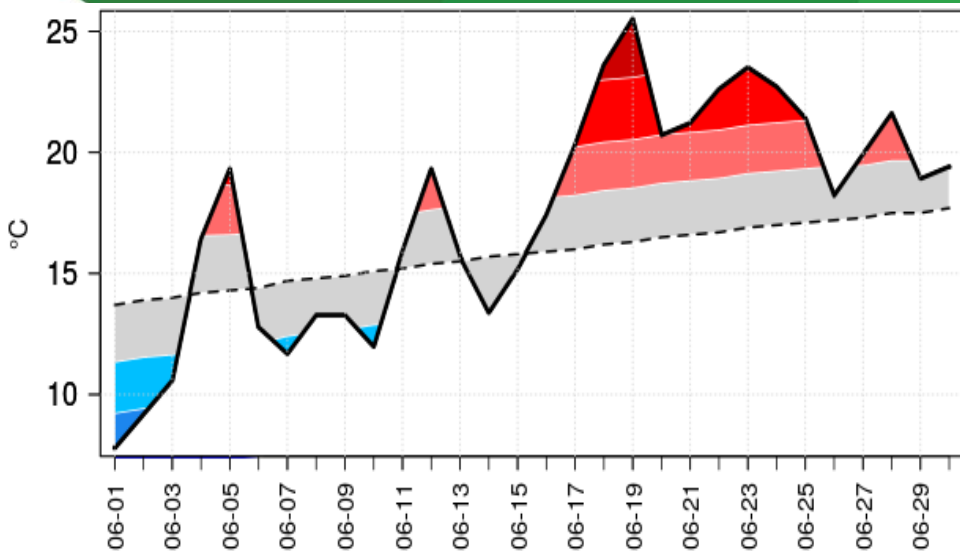
June 2020; Provincial Climate Extremes

Parameter	Value	ECCC Station	Day of month
Daily Maximum Temperature	+37.3°C	Kouchibouguac	19
Daily Minimum Temperature	-3.6°C	Edmundston	2
Maximum Daily Total Precipitation	53.4 mm	Saint John	6
Daily Maximum Wind Gust	89 km/h	Fredericton	5
Daily Maximum Humidex	42	Bathurst	18

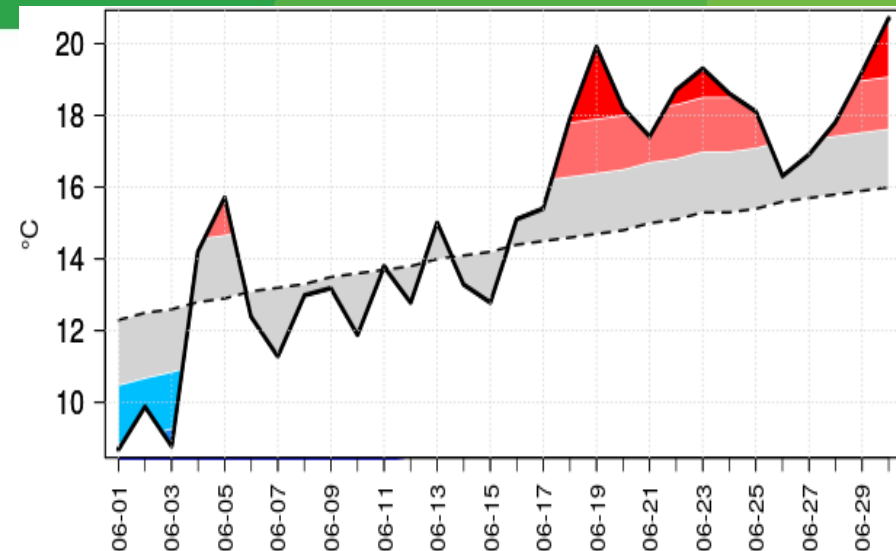


June 2020 - Temperature

Daily Mean Temperature (line), Long-Term Mean (dashed line) and Categories based on Standard Deviations (blue and red) Std. dev. thresholds $\pm 0.7, 1.3, 2.1$



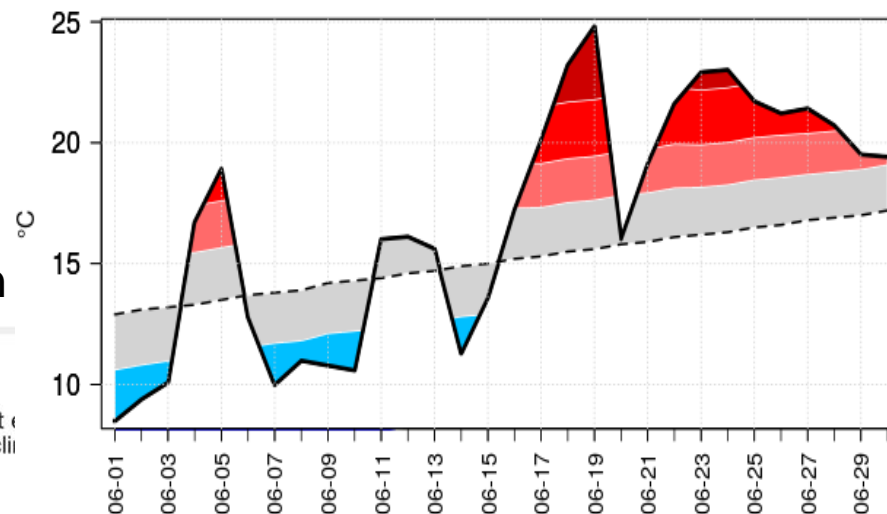
Fredericton



Saint John

All sites were
above normal

Moncton



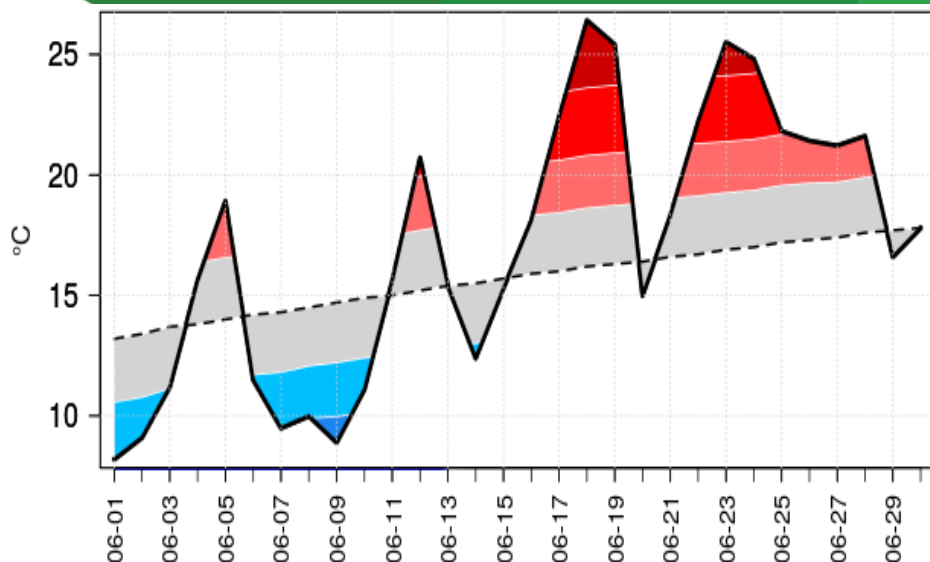
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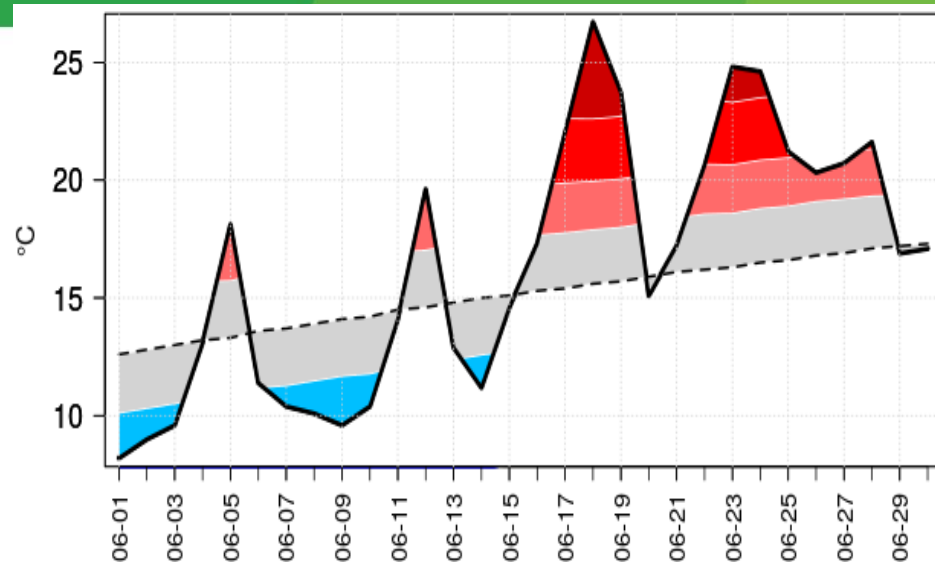
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June 2020 - Temperature

Daily Mean Temperature (line), Long-Term Mean (dashed line) and Categories based on Standard Deviations (blue and red) Std. dev. thresholds +/- 0.7, 1.3, 2.1



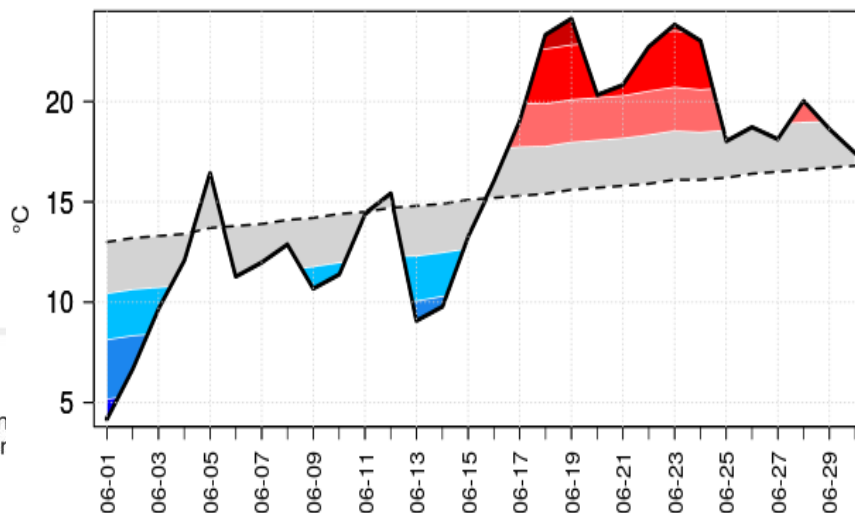
Miramichi



Bathurst

All sites were
above normal

Edmundston



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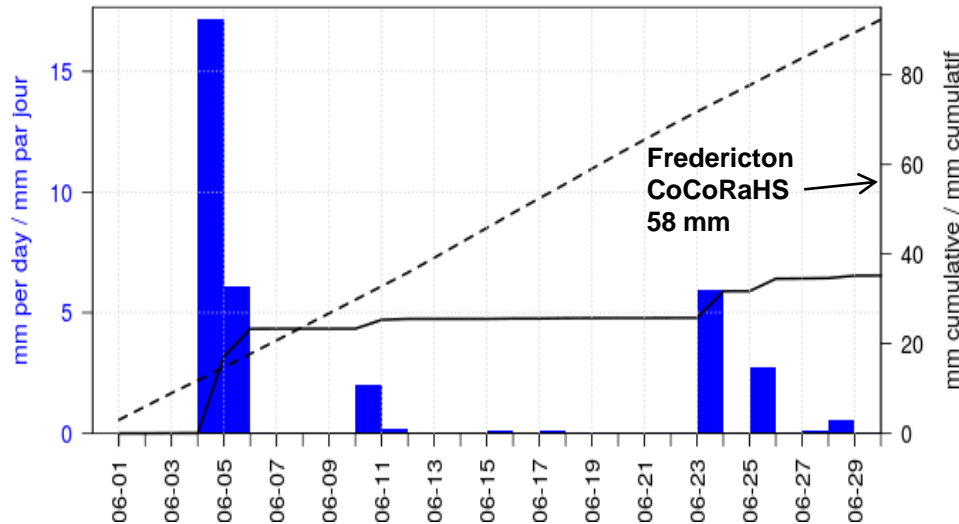
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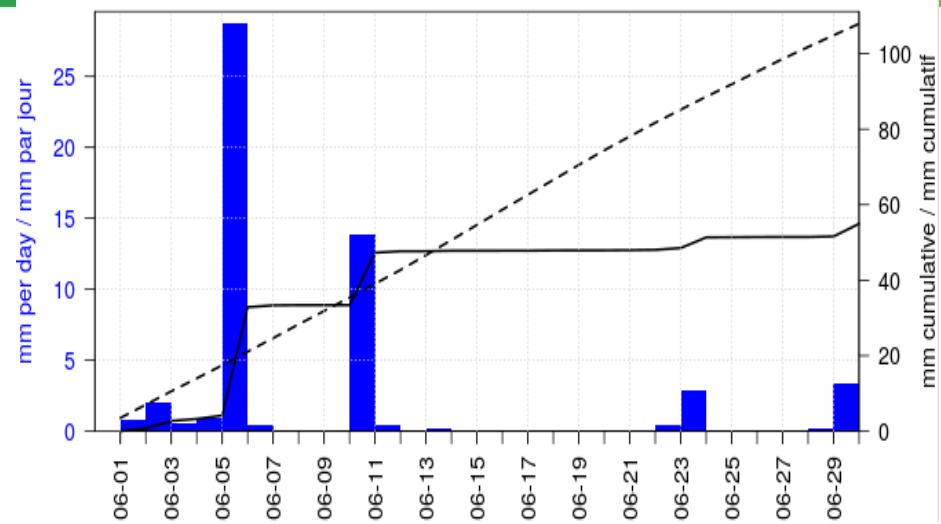
June 2020 - Precipitation

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

Climatology 2002-2019



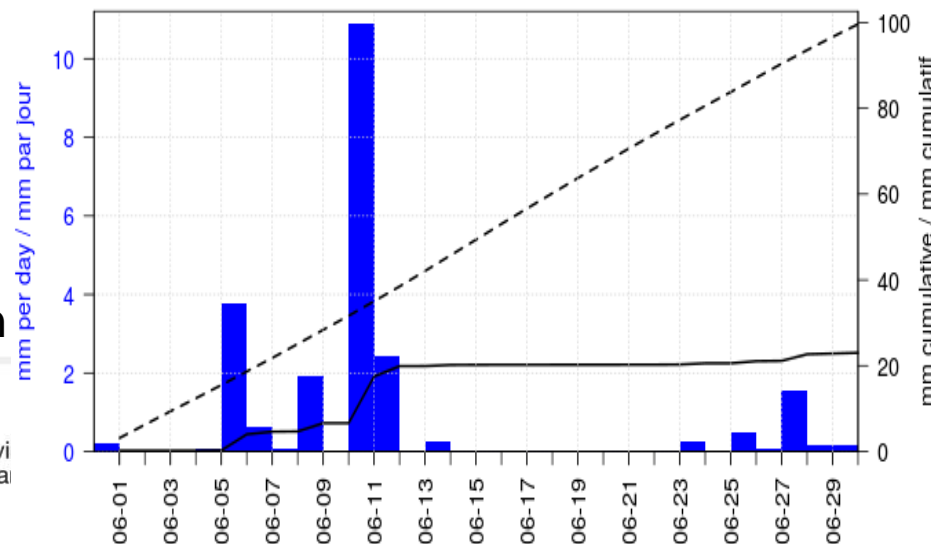
Fredericton (and area)



Saint John

All sites were below normal

Moncton



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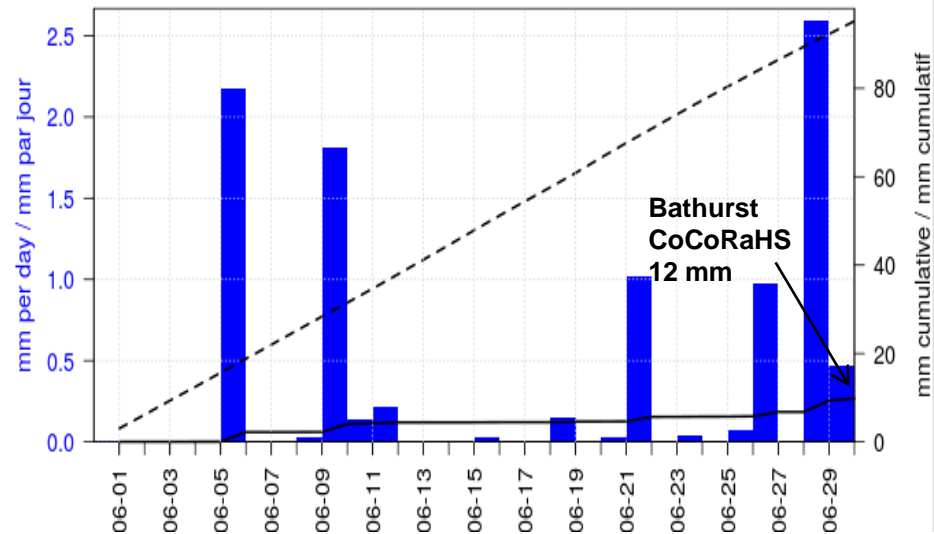
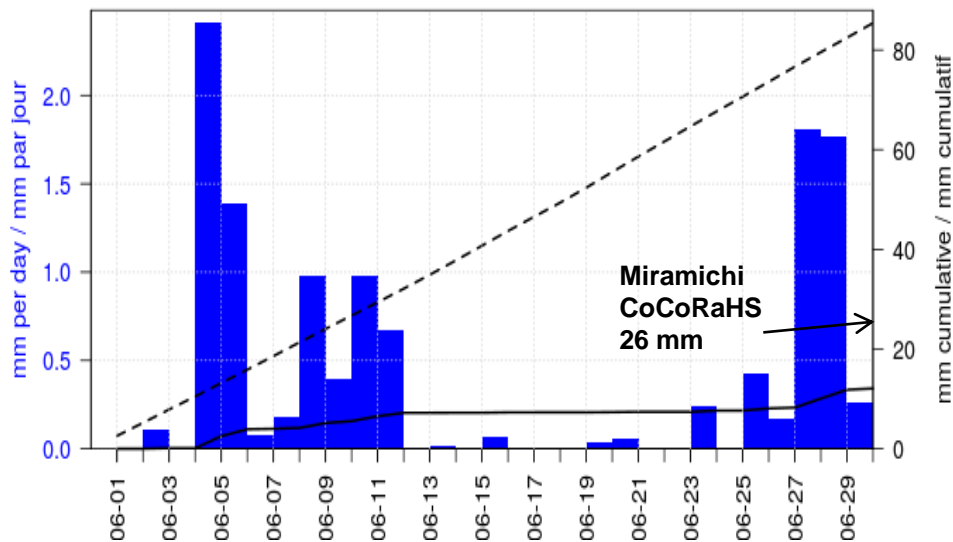
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Climatology 2002-2019

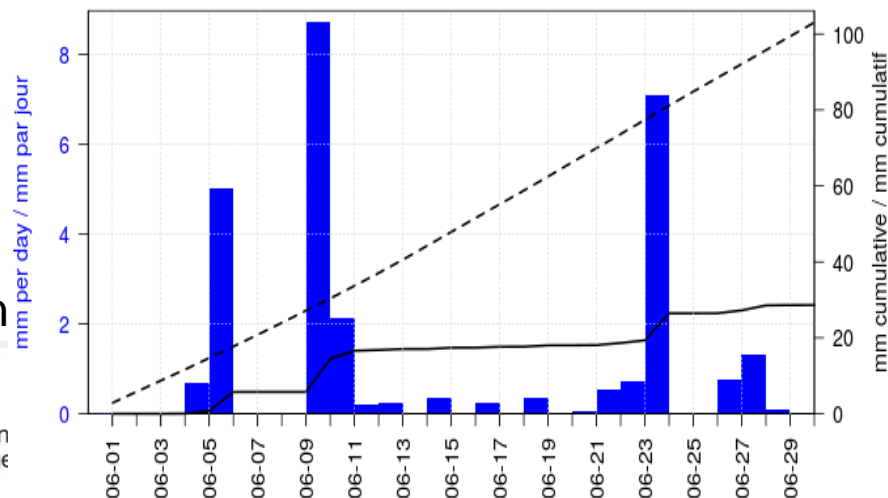


Miramichi

Bathurst

All sites were below normal

Edmundston

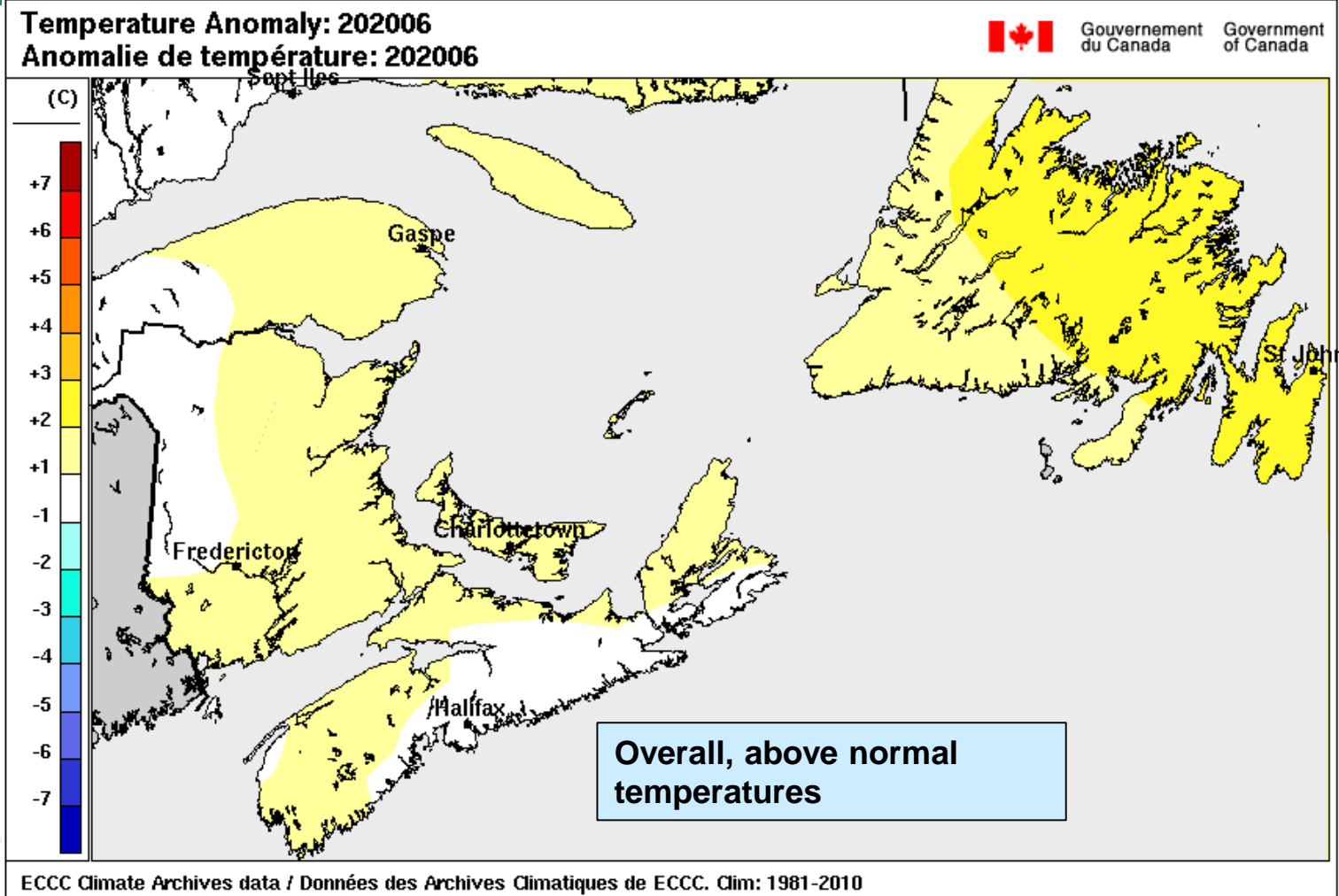


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June 2020 – Temperature departure from 1981-2010 mean

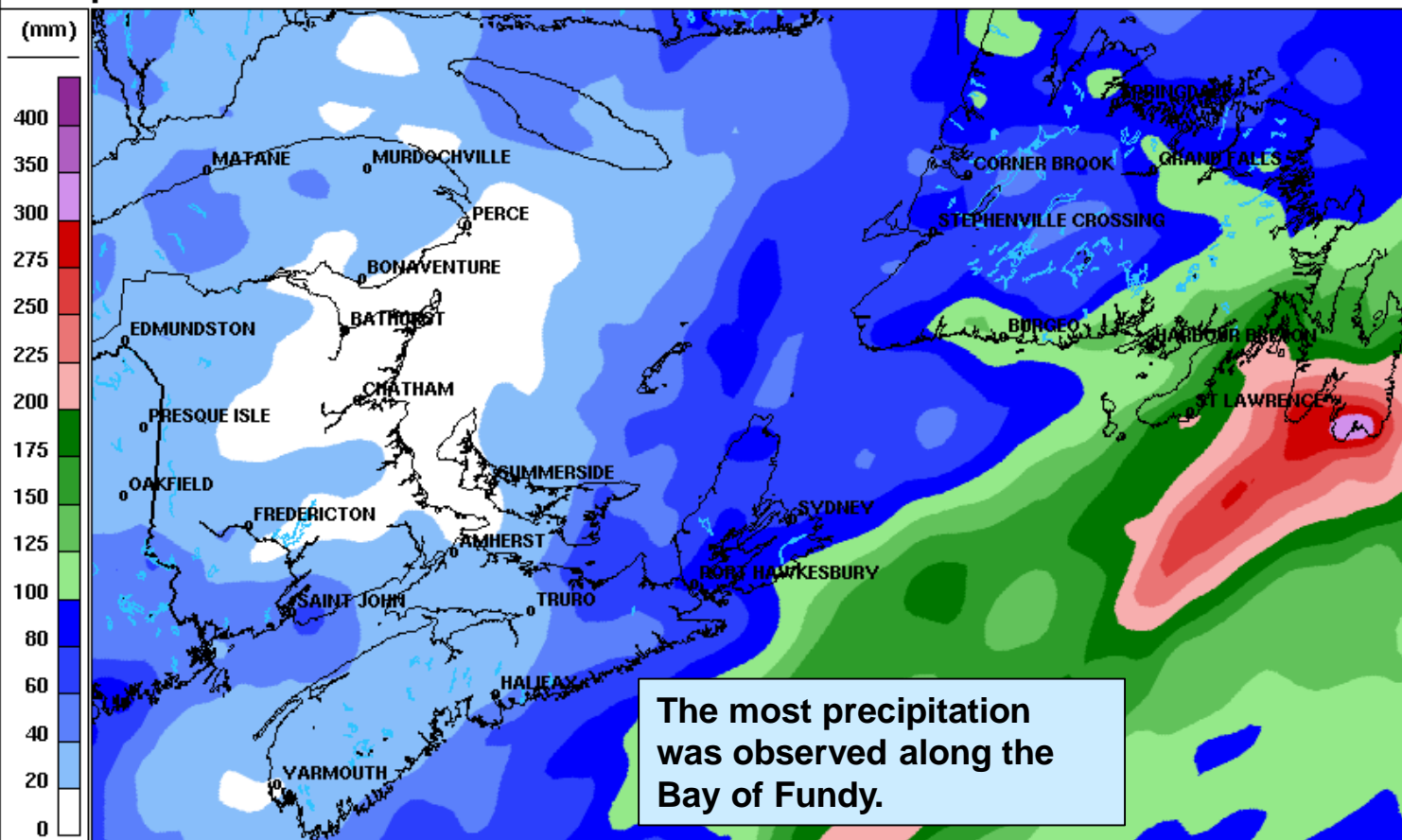


June 2020 – Total precipitation

Total precipitation: 202006
Précipitation totale: 202006



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Government of Canada



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

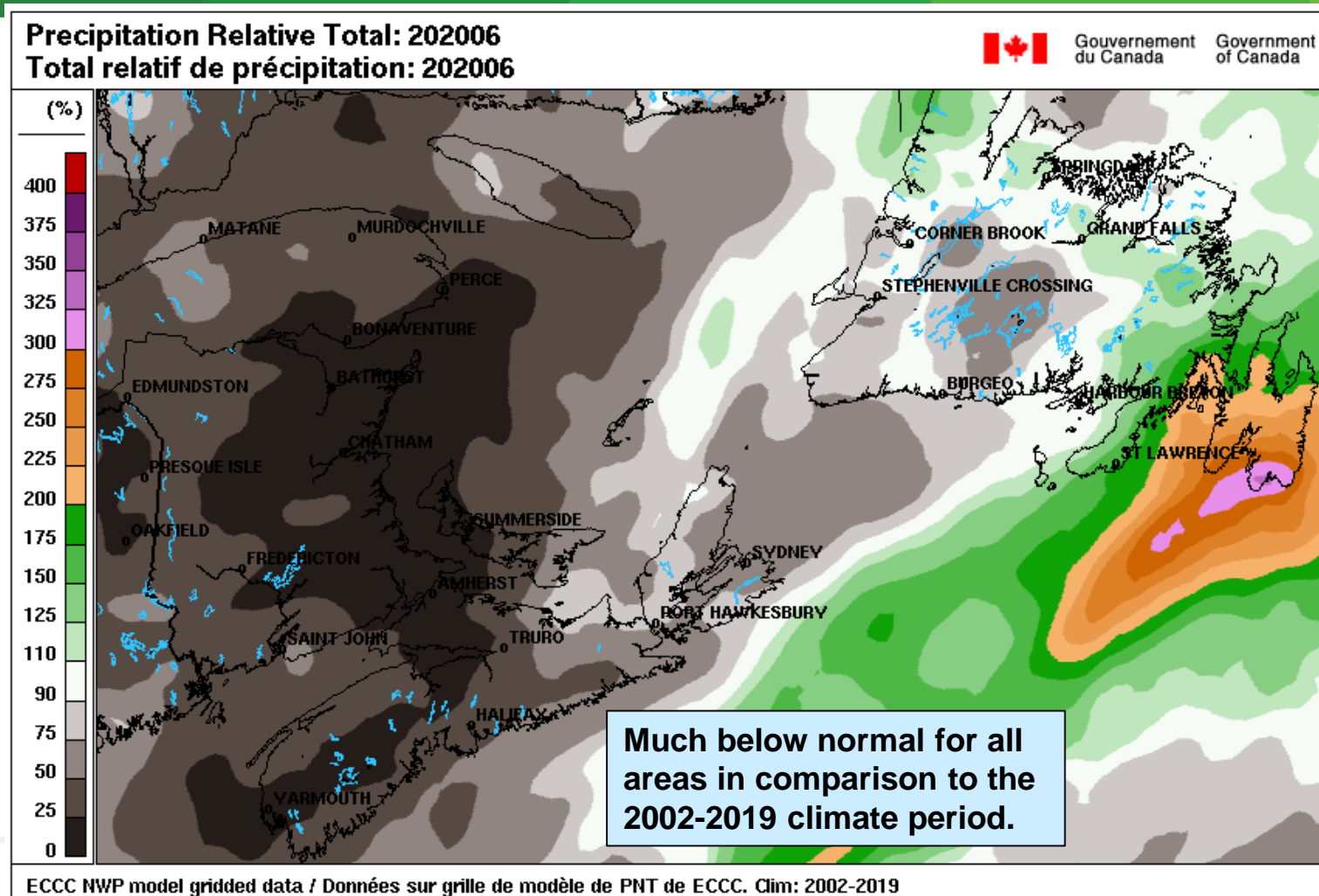


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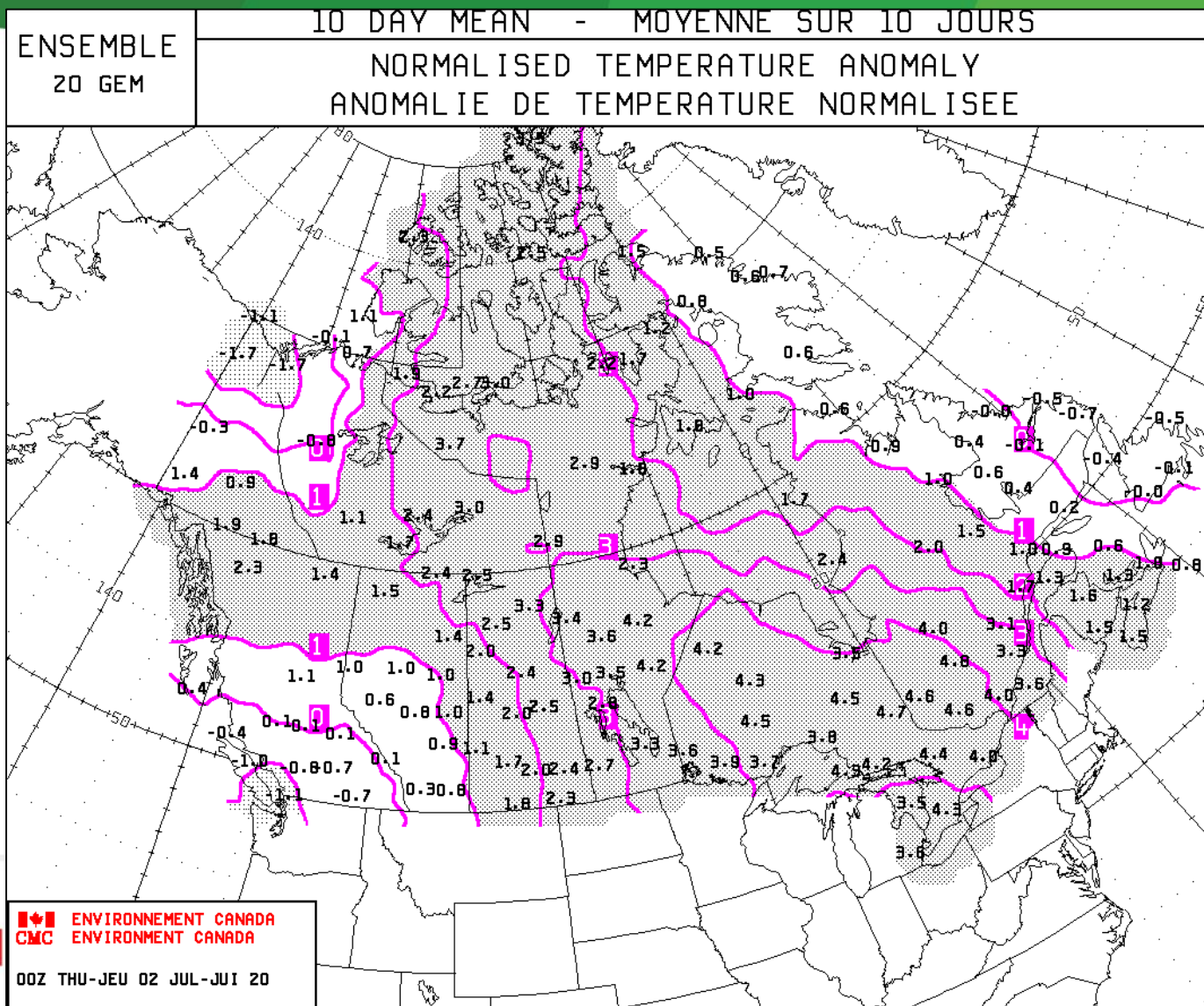
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June 2020 – Precipitation departure from 2002-2019 mean



Outlook – 10 day mean temperature

(Suggesting above normal conditions (+1.2 to +2.0°C))

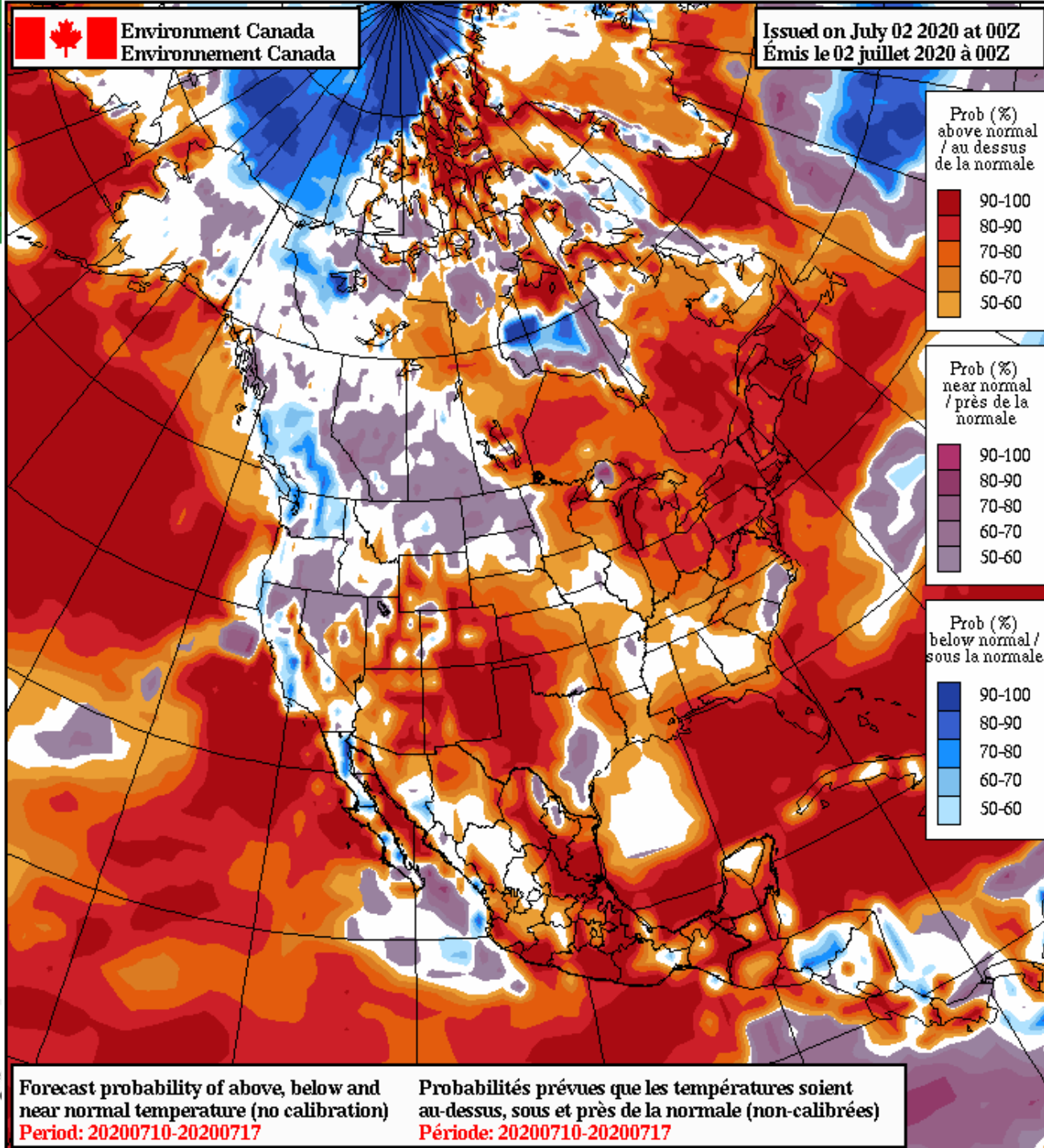


10 day
forecast
ending
July 12,
2020

Day 8 to 14 Forecast

Period ending
July 17, 2020

Strong signal for above
normal across the
province.



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Fredericton

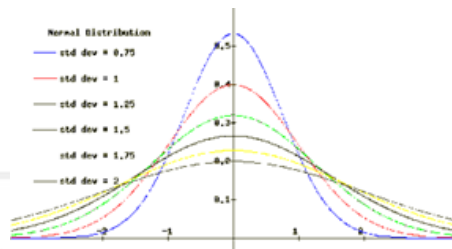
July

Normal high: +25.5C

Normal low: 13.0C

Next 15 days; ending
July 17, 2020

Generally suggesting near or
above normal throughout the
period.

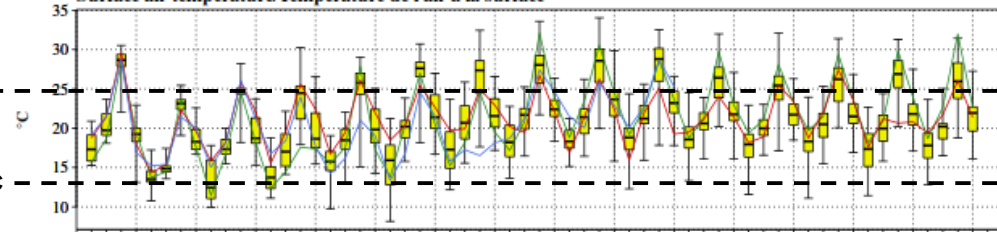


Ensemble and Deterministic Forecasts issued 2 July 2020 00 UTC
Prévision d'ensemble et déterministe émises le 2 Juillet 2020 00 UTC
for/pour

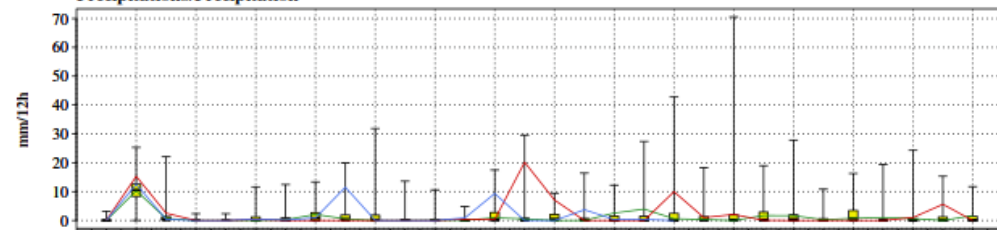
NAEFS / SPENA

FREDERICTON (YFC) 45.87 N 66.53 W/O

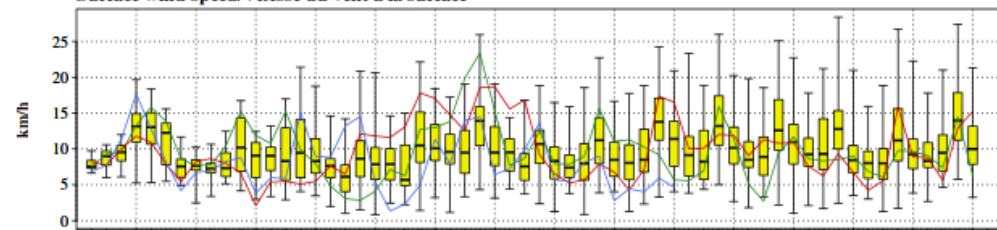
Surface air temperature/Température de l'air à la surface



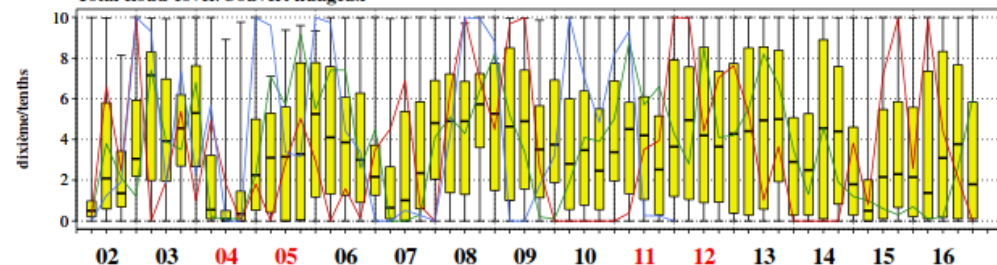
Précipitations/Precipitation



Surface wind speed/Vitesse du vent à la surface



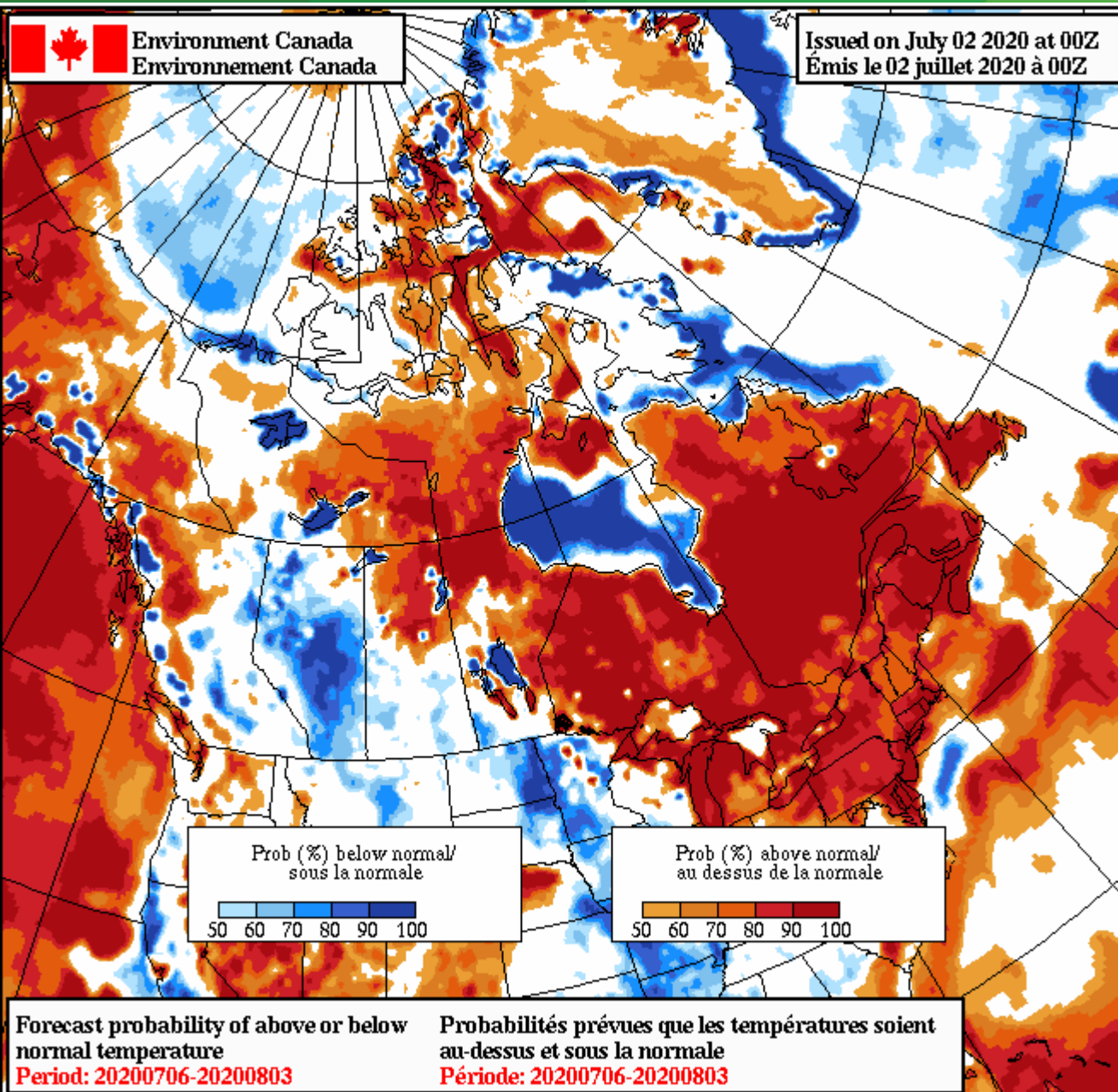
Total cloud cover/Couvert nuageux



July/Juillet 2020

max
75%
median/médiane
25%
min

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



Temperature
July 6
to
August 3

CMC
Monthly
Forecast
Product
using GEPS
50km res.

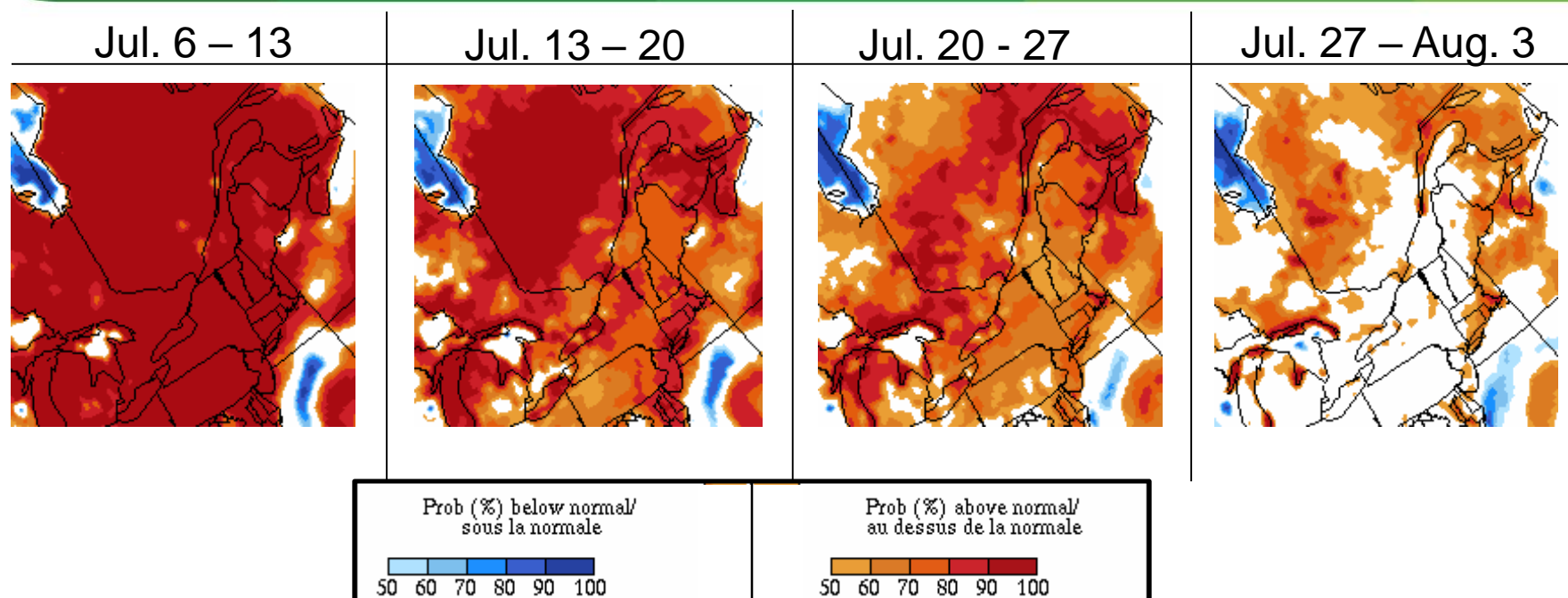


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Weekly signature from GEPS 50km resolution



Strong signal of above normal gradually transitioning to a weak signal to no conclusive signal by the end of the period.



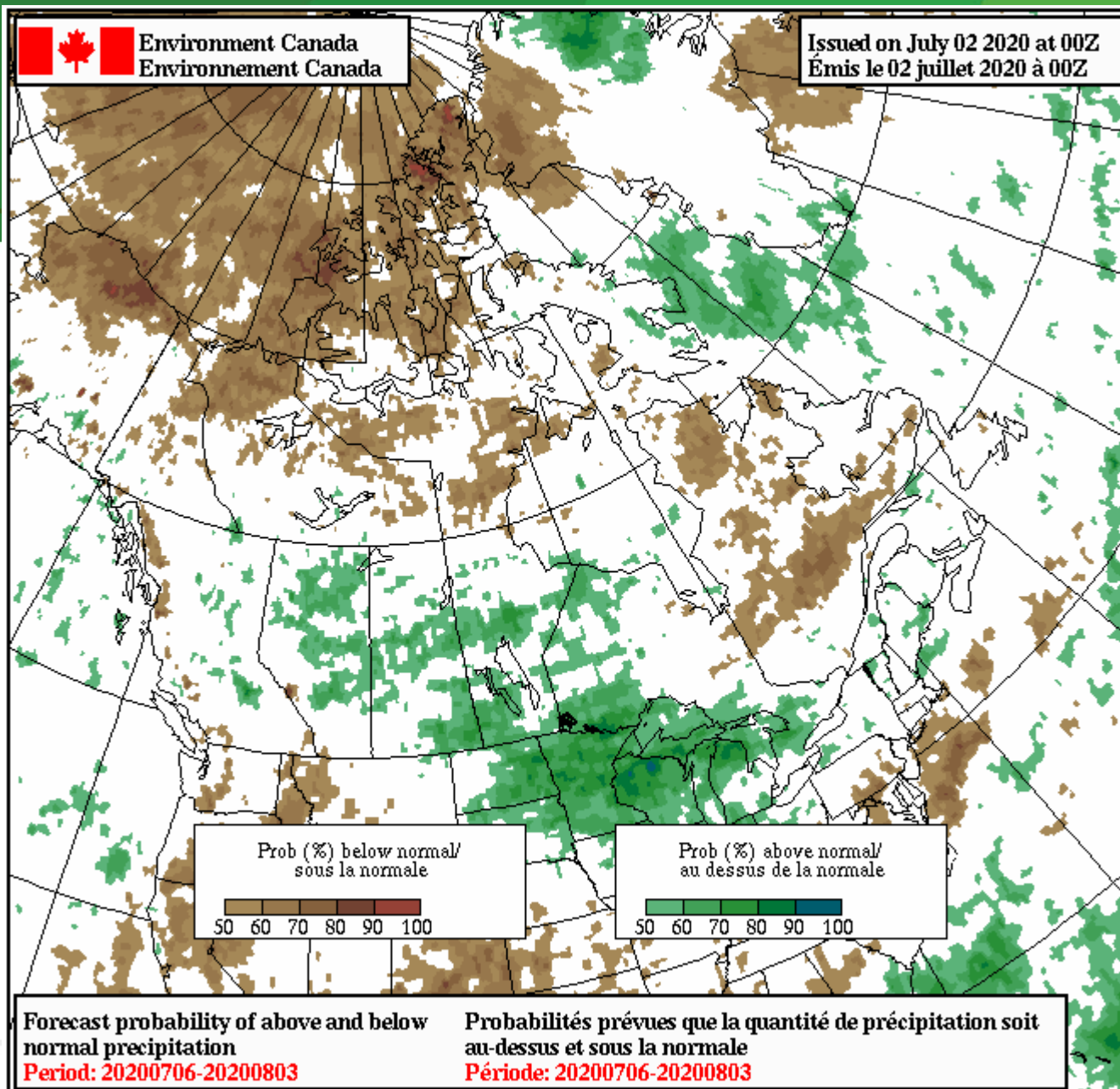


Environment Canada
Environnement Canada

Issued on July 02 2020 at 00Z
Émis le 02 juillet 2020 à 00Z

Precipitation July 6 to August 3

CMC
Monthly
Forecast
Product
using GEPS
50km res.



Forecast probability of above and below
normal precipitation

Period: 20200706-20200803

Probabilités prévues que la quantité de précipitation soit
au-dessus et sous la normale

Période: 20200706-20200803

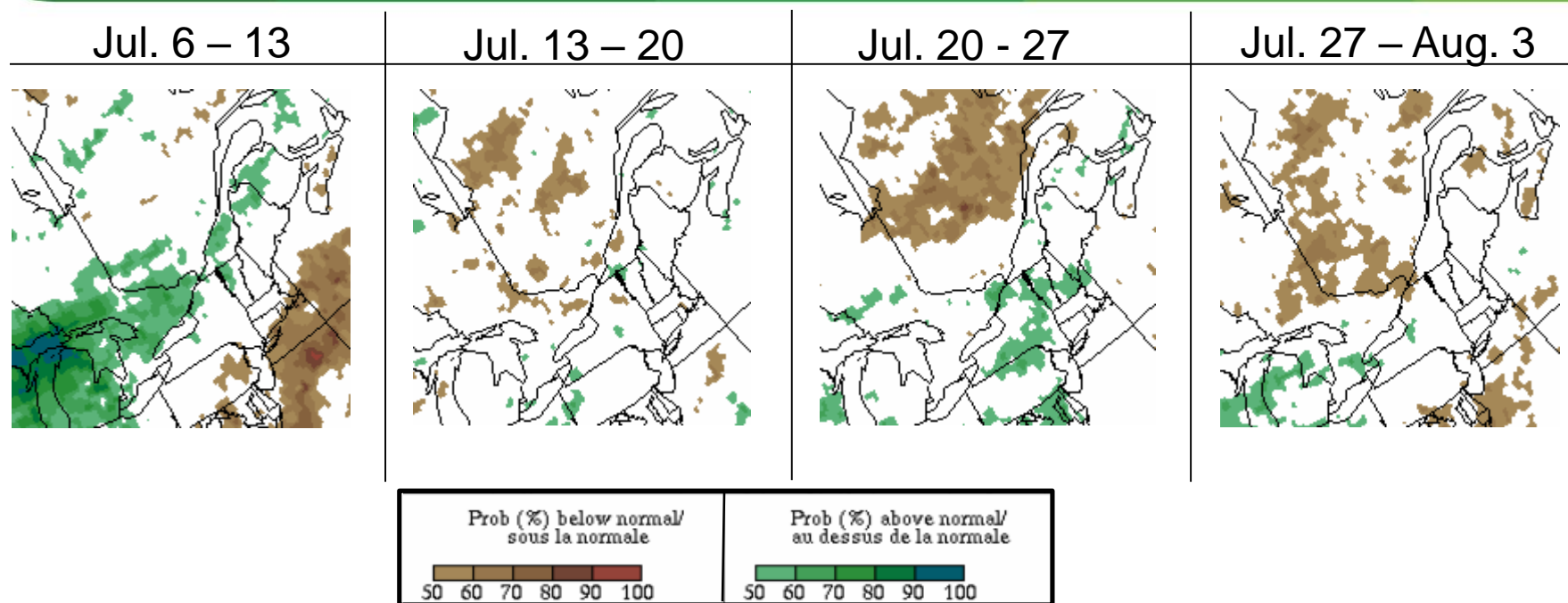


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Weekly signature from GEPS 50km resolution



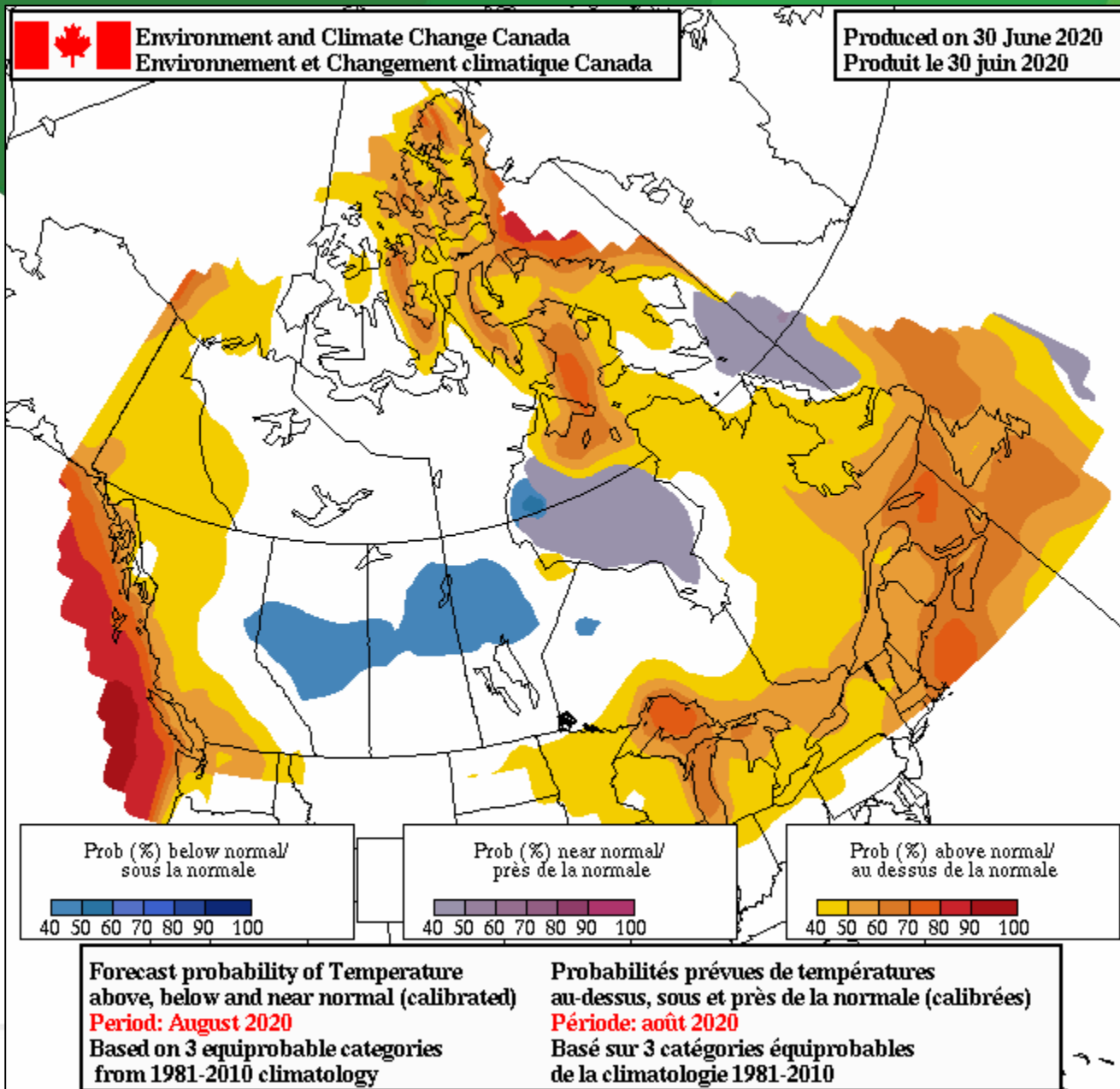
Generally, no conclusive signal (near normal) as each week alternates between subtle signals of possibly below or above normal.





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Produced on 30 June 2020
Produit le 30 juin 2020



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Temperature August 2020

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

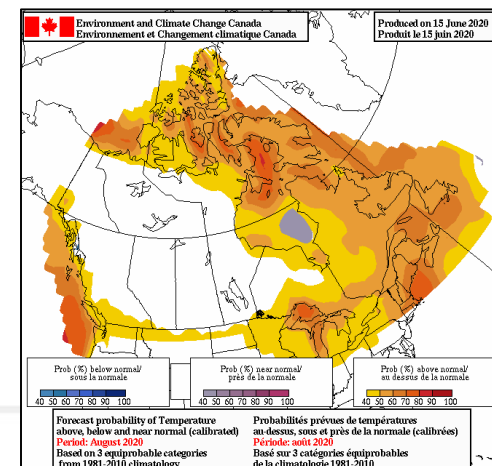
CanAM3

CanAM4

+

CanOM4

Produced June 15

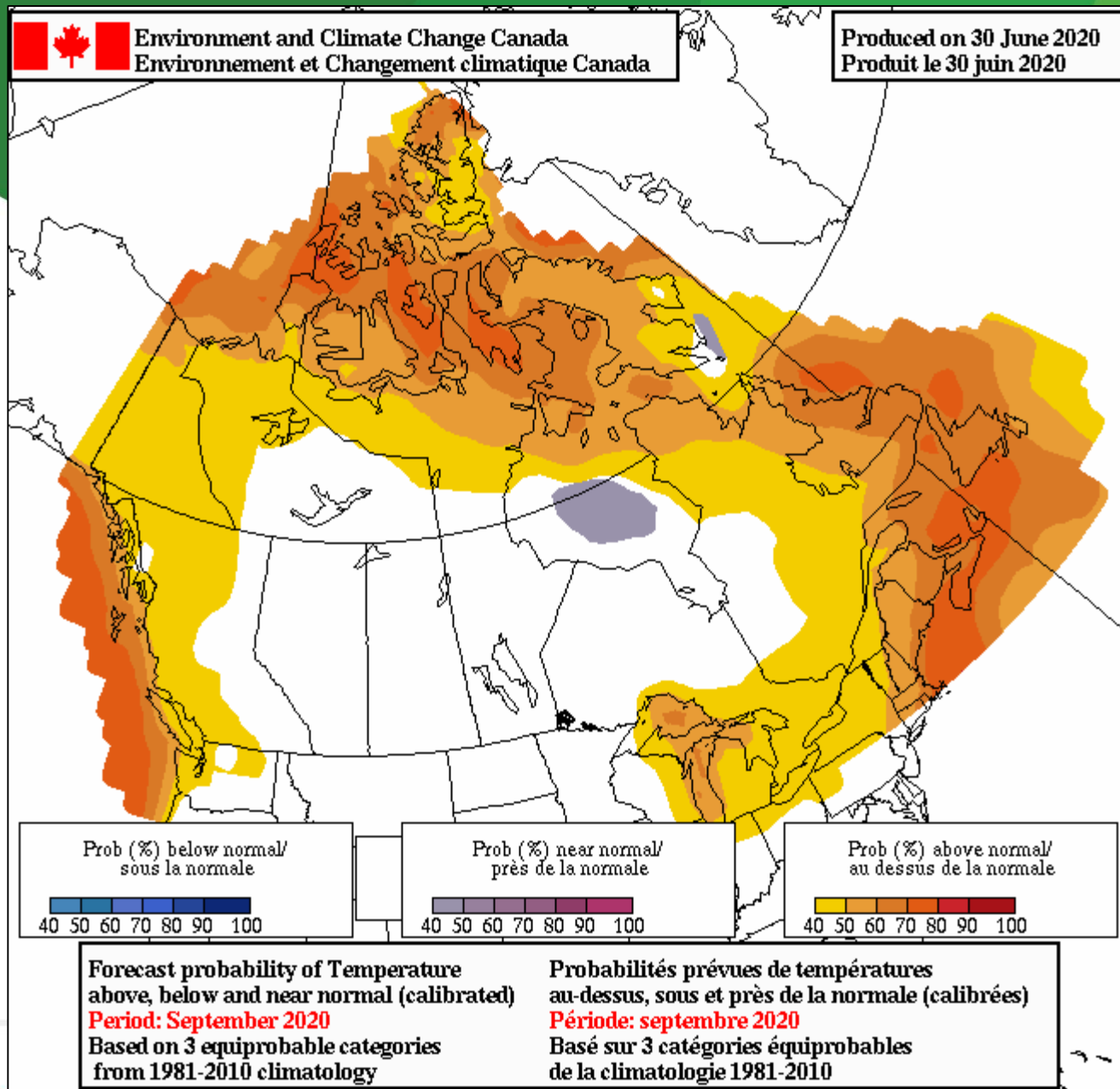


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Produit le 30 juin 2020



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Temperature September 2020

CanSIPS
(Canadian Seasonal and
Interannual Prediction
System)

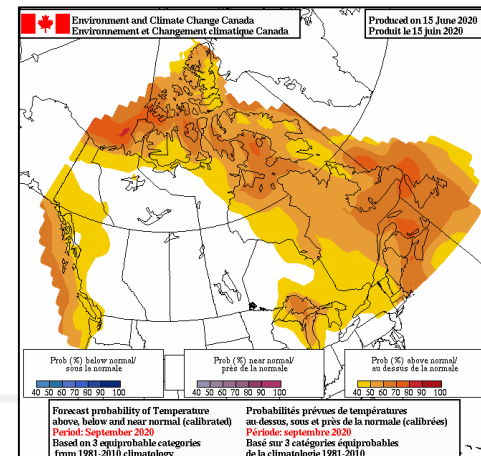
CanAM3

CanAM4

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CanOM4

Produced June 15

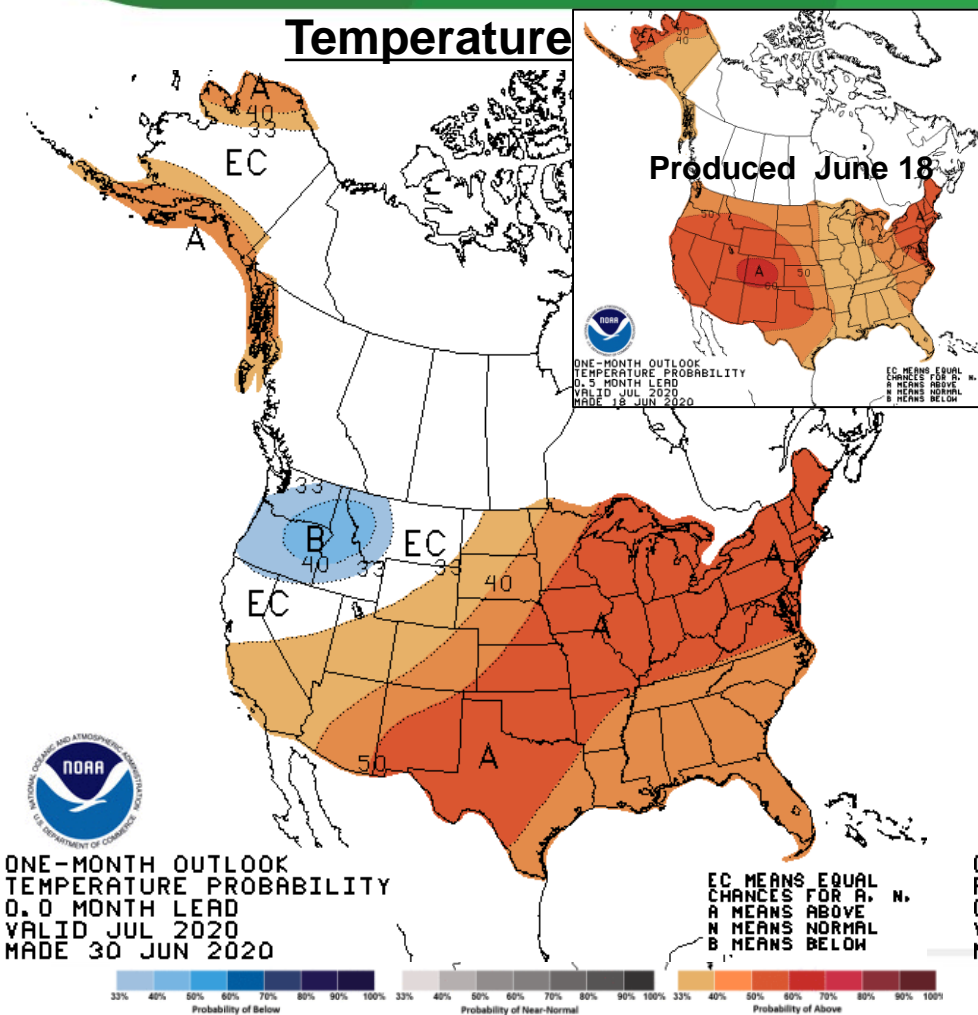


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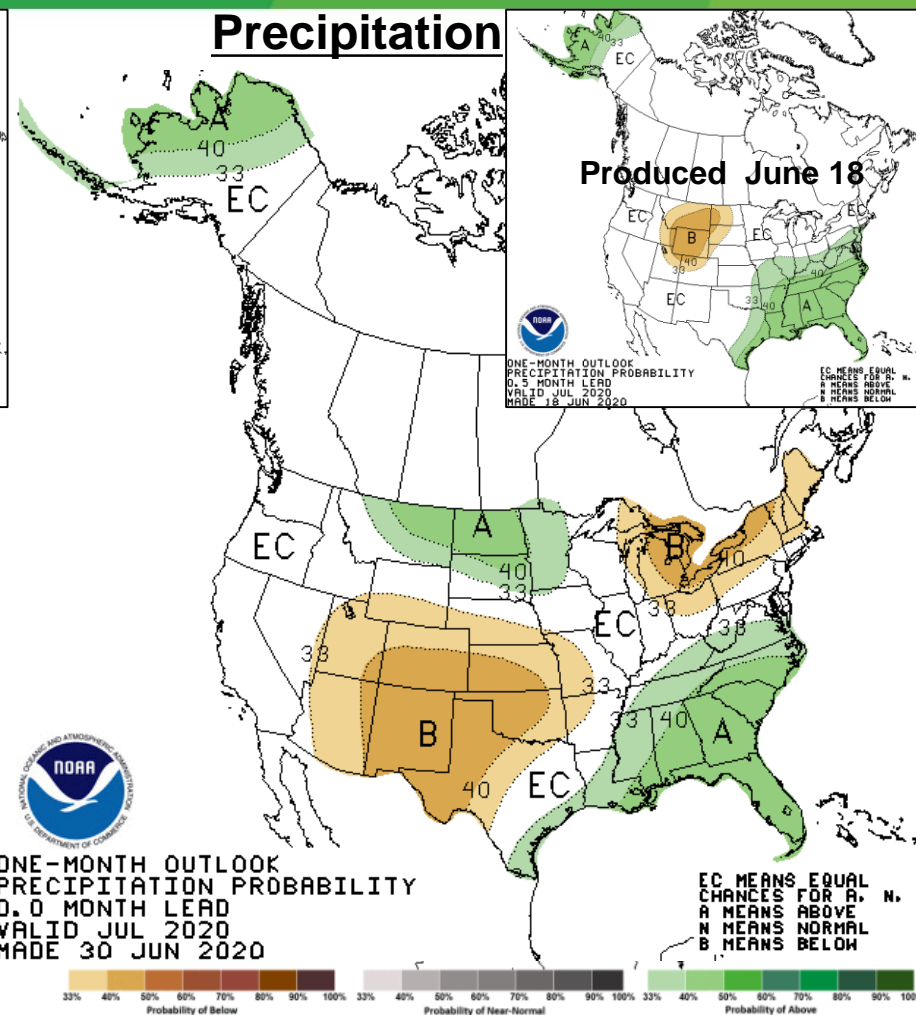


July 2020

Temperature



Precipitation



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Canada Weather Pages

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