

**Ministry of
Transportation**

Office of the Minister

777 Bay Street, 5th Floor
Toronto ON M7A 1Z8
416 327-9200
www.ontario.ca/transportation

**Ministère des
Transports**

Bureau de la ministre

777, rue Bay, 5^e étage
Toronto ON M7A 1Z8
416 327-9200
www.ontario.ca/transport



M2020-1356

Mr. Nando Iannicca
Regional Chair
Regional Municipality of Peel
chair@peelregion.ca

RECEIVED
April 20, 2020
REGION OF PEEL
OFFICE OF THE REGIONAL CLERK

Dear Chair Iannicca:

I am writing to inform you that the Government of Ontario is taking further steps to keep goods moving during the COVID-19 outbreak by temporarily lifting reduced load period restrictions for truck drivers in southern Ontario.

Lifting reduced load period restrictions will help the trucking industry to efficiently move the essential goods that Ontarians need, including food and agricultural products, medical supplies and fuel.

To assist in the government's actions to support Ontario's need to move essential freight and supplies during the current COVID-19 emergency, the Ministry of Transportation is including the commodities listed for exemption in the federal Hours of Service exemptions as issued by Transport Canada (*see below chart*) from Reduced Load Periods across southern Ontario:

1	Medical supplies and equipment related to the testing, diagnosis and treatment of COVID-19;
2	Supplies and equipment necessary for community safety, sanitation, and prevention of community transmission of COVID-19 such as masks, gloves, hand sanitizer, soap and disinfectants;
3	Paper products and other groceries for emergency restocking of distribution centers or stores;
4	Immediate precursor raw materials-such as paper, plastic or alcohol-that are required and to be used for the manufacture of items in categories (1), (2) or (3);
5	Fuel;
6	Equipment, supplies and persons necessary to establish and manage temporary housing, quarantine, and isolation facilities related to COVID-19;

REFERRAL TO _____
RECOMMENDED _____
DIRECTION REQUIRED _____
RECEIPT RECOMMENDED ☒ _____

To assist farmers and agribusinesses, the Ministry of Transportation also plans to temporarily exempt the following commodities:

- Food;
- Farm products; and
- Products that support the production of farm products (e.g. seed, animal feed, fertilizer)

These measures will only be applicable to the portions of southern Ontario, defined by regions south of the Ontario frost penetration depth of 1.6 m which runs along a line extending from Penetanguishene, through Lake Simcoe to Cornwall, including the following geographic areas:

1. The geographic areas of Brant, Bruce, Chatham-Kent, Dufferin, Durham, Elgin, Essex, Grey, Haldimand, Halton, Hamilton, Huron, Lambton, Middlesex, Niagara, Norfolk, Northumberland, Oxford, Peel, Perth, Peterborough, Prince Edward, Simcoe, Toronto, Waterloo, Wellington or York.
2. The part of each of the following geographic areas that is south of that part of the King's Highway known as No. 7:
 - i. Frontenac.
 - ii. Hastings.
 - iii. Kawartha Lakes.
 - iv. Lennox and Addington.
3. The part of the geographic area of Leeds and Grenville that is within the City of Brockville or that is within one of the following townships:
 - i. Athens.
 - ii. Elizabethtown-Kitley.
 - iii. Front of Yonge.
 - iv. Leeds and the Thousand Islands.

As you are aware, the Reduced Load Period allows the local road authority to implement Section 122 of the *Highway Traffic Act*, via local bylaws, to protect pavement infrastructure during the spring thaw period.

I have attached a report recently commissioned by the ministry outlining the outlook for Reduced Load Period across Ontario. The report finds that based on current subsurface temperatures and forecasted weather, the Reduced Load Period has ended in certain areas of southern Ontario and is not expected to return. Thus, the above related exemptions should have minimal impact to infrastructure because the likelihood of subsurface frost remaining in these areas is very low. However, the report notes that in the north (northern Ontario) there is a critical need to maintain Reduced Load Period, to protect investments in infrastructure from damage and to maintain safe roads for the future.

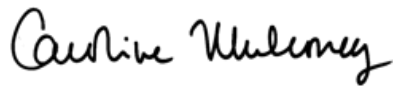
The ministry is always open and willing to consider ideas to reduce the burden for Ontario businesses while maintaining road safety. This is a temporary regulation in response to the COVID-19 outbreak, in effect until June 30, 2020.

I invite your staff to contact Jonathan Boone, Head of Maintenance Materials and Systems if you require more information on instrumentation and weather forecasting used by the ministry to determine the optimal timing for Reduced Load Periods on highways under the jurisdiction of the ministry. Jonathan can be reached at Jonathan.Boone@Ontario.ca or 416-722-8197.

Our food supply chain is one of the strongest in the world, and our government will continue to work with municipalities, the trucking industry, agricultural sector and retailers to ensure the people of Ontario have access to the supplies they need.

Thank you for your understanding and support.

Sincerely,

A handwritten signature in black ink, reading "Caroline Mulroney". The signature is written in a cursive, flowing style.

Caroline Mulroney
Minister of Transportation

Attachment: Spring Load Adjustment (SLA) Outlook for April and May 2020

Spring Load Adjustment (SLA) Outlook for April and May 2020

Ontario Ministry of Transportation

To: **Jonathan Boone**
MTO

Date: **April 2020**

From: **Dr. Diar Hassan and Ted Reeler**
Wood.

Executive Summary

Winter Weather Forecasting Services

This report is established to provide MTO with a Spring Load Adjustment (SLA) outlook. The document was constructed on SLA data from Northern Ontario and subsurface temperatures from MTO RWIS stations in Southern Ontario. The projected weather outlook for April and May 2020 is also considered in this report. It is worth noting that other factors can play a role in the SLA outlook that were not considered as they are out of the scope of this report.

A near to slightly below normal temperatures are projected through the rest of April and through to mid-May in Southern Ontario. Meanwhile, below-normal temperatures are likely to persist for northern Ontario through to late May. An oscillating temperature pattern is likely to affect the province at times due to the passage of a few weather systems. A drier precipitation pattern is likely to persist along Northern Ontario with near normal to slightly below normal precipitation likely across Southern Ontario throughout May 2020.

Generally, no SLA watch is expected for most of southern Ontario throughout May 2020. There is a chance of an SLA watch in the period between April 19 and April 25 in the Algonquin area due to a cold snap affecting that area.

SLA watch is likely to persist through NE and NW Ontario through at least mid-May with a watch likely in the period between April 15 and May 4 due to a cold snap affecting the area.

CONTENTS

Executive Summary 2

1 Introduction 4

2 April and May Weather Outlook..... 4

3 Southern Ontario SLA Outlook 4

3.1 Southwestern and south-central Ontario 4

3.2 Eastern Ontario 6

4 Northern Ontario SLA Outlook 8

4.1 Northeastern Ontario 8

4.2 Northwestern Ontario..... 8

5 Wood Commitment to Quality..... 11



1 Introduction

The Ministry of Transportation of Ontario (MTO) owns nine (9) Spring Load Adjustment (SLA) stations across Northern Ontario. The SLA stations are equipped with temperature sensors that measure the subsurface temperature at different levels. The SLA data are used to monitor the subsurface freeze-thaw cycles during fall and spring seasons and restrict loads applied to the roads by heavy vehicles to prevent any road damage.

Dr. Owusu-Ababio and Dr. Schmiti from the University of Wisconsin March 2014 report (WisDOT ID no. 0092-11-16) referenced Raad et al. (1995) study results stating that the loss of pavement strength was most impacted during thaw initiation in the base and least impacted when the thaw reached a depth of approximately 3.5 feet (~1 meter). ([Link](#)).

This report provides an SLA outlook throughout May 2020 by comparing the subsurface (45 cm and 160 cm) temperature from northeastern and northwestern Ontario for the period between March 1st and April 8th last year and this year (2019 and 2020). Due to the lack of SLA stations in southern Ontario, the Road Weather Information System (RWIS) subsurface temperatures (40 cm and 150 cm) were used to quantify the SLA condition.

It should be noted that other factors (e.g. soil composition and soil moisture) can affect the subsurface thawing cycle that are not considered as they are outside the scope of this report.

2 April and May Weather Outlook

A developing weather pattern over the eastern Pacific is likely to bring below seasonal temperature to the province, especially northwestern and northeastern Ontario, throughout mid-May. The temperature is likely to moderate at times due to the passage of a few weather systems. Temperatures are likely to moderate to near normal across southern Ontario by early May before affecting the rest of the province. The coldest part of the highway within the province is likely to be along Hwy 11 from Ramore and through Rock Point throughout mid-May.

Although the passing weather systems are likely to increase the soil moisture, the systems are likely to be limited to southern Ontario and occasionally affecting the Upper Great Lakes. Northern Ontario is likely to have a precipitation deficit through May.

3 Southern Ontario SLA Outlook

Temperature and moisture variability is expected to persist through May. The area is likely to average near to a slightly below seasonal temperatures with the coldest spot likely to be in the Algonquin area in eastern Ontario.

3.1 Southwestern and south-central Ontario

The subsurface temperature from the WR-10 Tower Line near Wood stock and CR-05 Thornton near Barrie was obtained for the period between March 1st and April 8th, 2020. Figures 1 and 2 show that the subsurface temperatures at both depths are well above the freezing point.

Although near normal to slightly below normal temperatures are likely to persist through mid-May, the current subsurface temperature and the increasing sensible heat received from the sun is likely to prevent

this area from returning to a Spring Load Adjustment (SLA) scenario through the rest of this spring season.

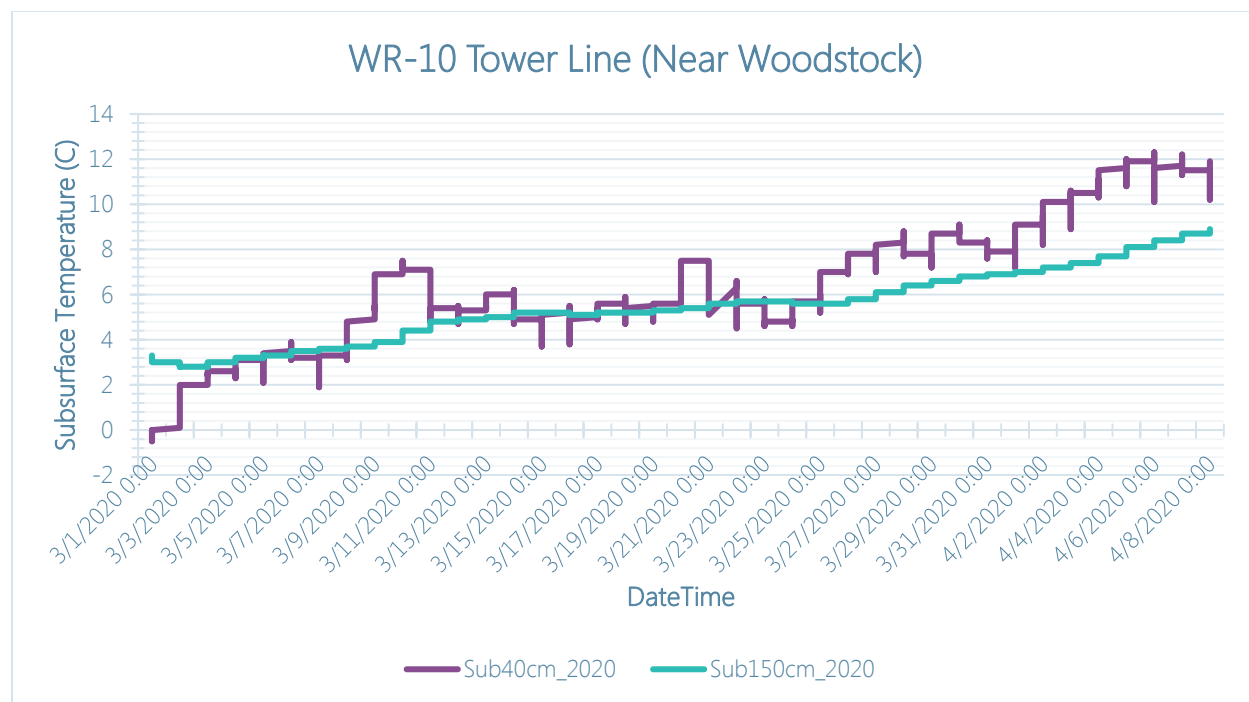


Figure 1. Subsurface temperatures from WR-10 Tower Line near Woodstock, SW Ontario for the period between March 1 to April 8, 2020.

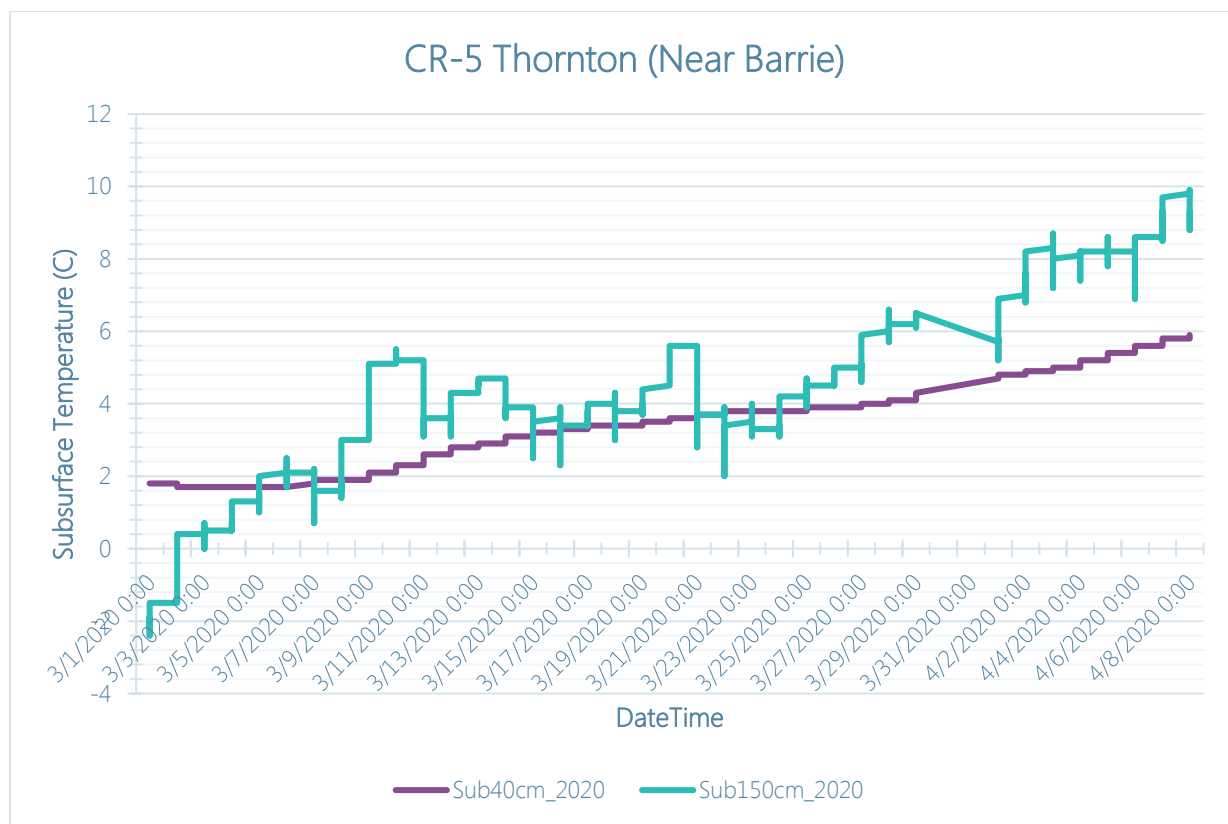


Figure 2. Subsurface temperatures from CR-5 Thornton near Barrie, South-Central Ontario for the period between March 1 to April 8, 2020.

3.2 Eastern Ontario

The subsurface temperature from the ER-19 Bancroft was obtained for the period between March 1st and April 8th, 2020. Figure 3 shows that the subsurface temperatures at both depths are well above the freezing point.

Although a slightly below normal temperatures are likely to persist through mid-May, the current subsurface temperature and the increasing sensible heat received from the sun is likely to prevent most of this area from returning to a Spring Load Adjustment (SLA) scenario through the rest of this spring season.

A cold snap is likely to bring the risk of a temporary freeze to the subsurface temperature in the Algonquin Area, mainly along Eganville-Huntsville-Trout Creek (Hwys 11 and 60) in the period between April 19 and through 25. This could provoke an SLA watch for the Algonquin area during that period.

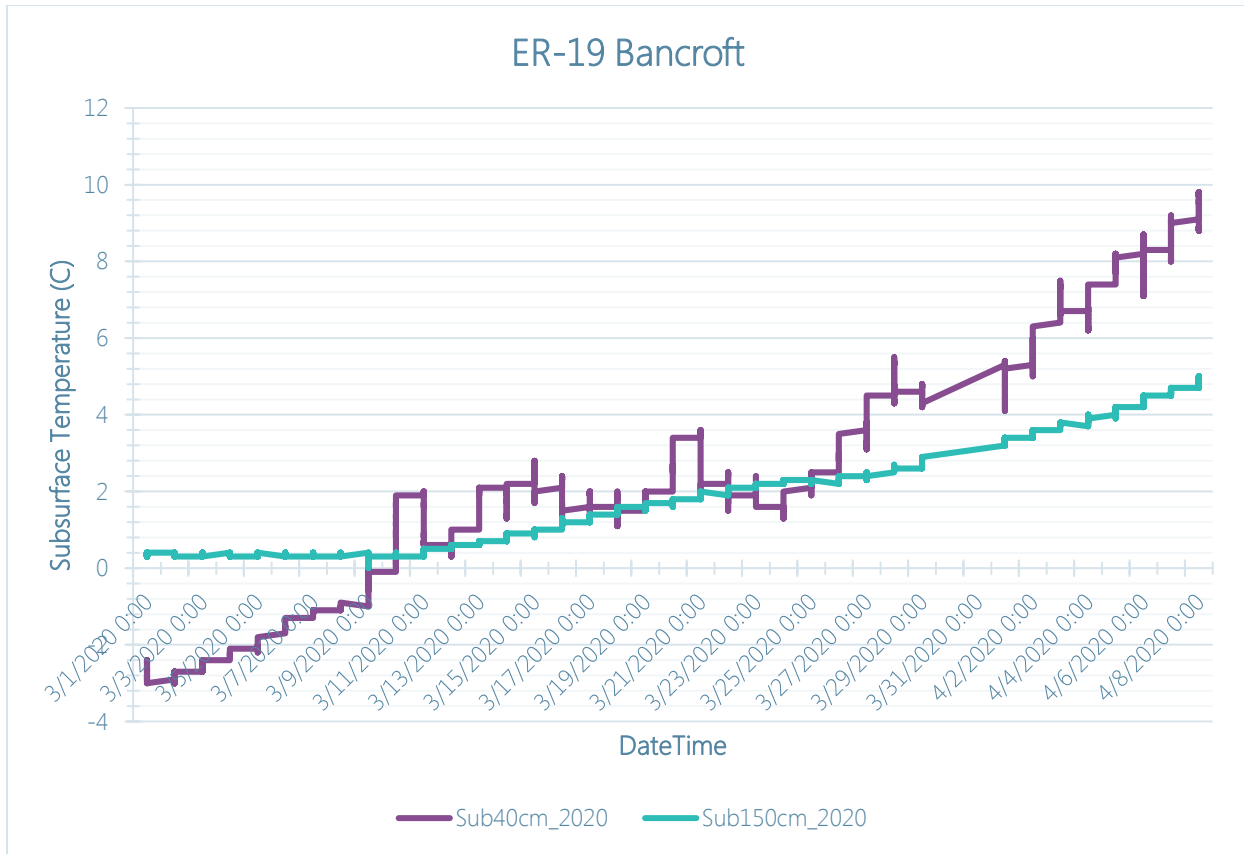


Figure 3. Subsurface temperatures from ER-19 Bancroft, NE Ontario for the period between March 1 to April 8, 2020.

4 Northern Ontario SLA Outlook

Despite the projected lack of precipitation in northern Ontario the projected below seasonal temperature and the existing soil moisture is likely to keep this area in SLA watch through at least the first week of May.

4.1 Northeastern Ontario

The subsurface temperature from the SLA 560 near Earlton was obtained for the period between March 1st and April 8th, 2019 and 2020, respectively. Figure 4 shows that the subsurface temperatures (45 cm and 160 cm) are warmer this year when compared to the same period last year (2019). This is an indication to the slightly warmer than normal temperatures the area has experienced this winter, especially during March 2020. Both subsurface temperatures are just above freezing as of April 8th, 2020.

The projected oscillating air temperature is likely to keep this area in SLA watch through at least the first week of May. An SLA warning could be issued in the period between April 17 and May 4.

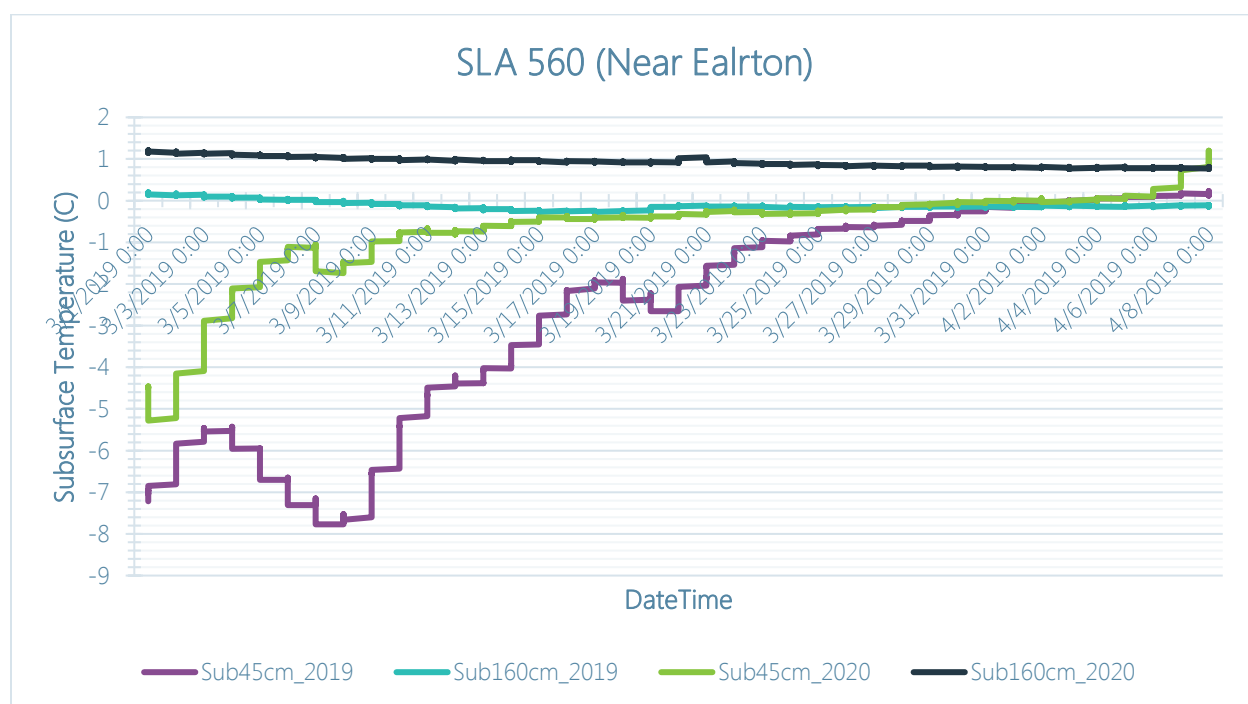


Figure 4. Subsurface temperatures comparison from SLA 560 near Earlton, NE Ontario for the period between March 1 to April 8, 2019, and March 1 to April 8, 2020.

4.2 Northwestern Ontario

The subsurface temperature from the SLA 671 near Kenora and SLA 527 near Lake Nipigon was obtained for the period between March 1st and April 8th, 2019 and 2020, respectively. Figures 5 and 6 show that the subsurface temperatures (45 cm and 160 cm) are warmer this year when compared to the same period last year (2019). This is an indication to the slightly warmer than normal temperatures experienced this year,

especially during early March 2020. The temperature at 45 cm depth is gradually warming and is currently a few degrees above freezing at both stations. The deeper layer (160 cm) is near or just below freezing.

The projected oscillating air temperature is likely to keep this area in SLA watch through at least the first week of May. An SLA warning could be issued in the period between April 15 and May 3.

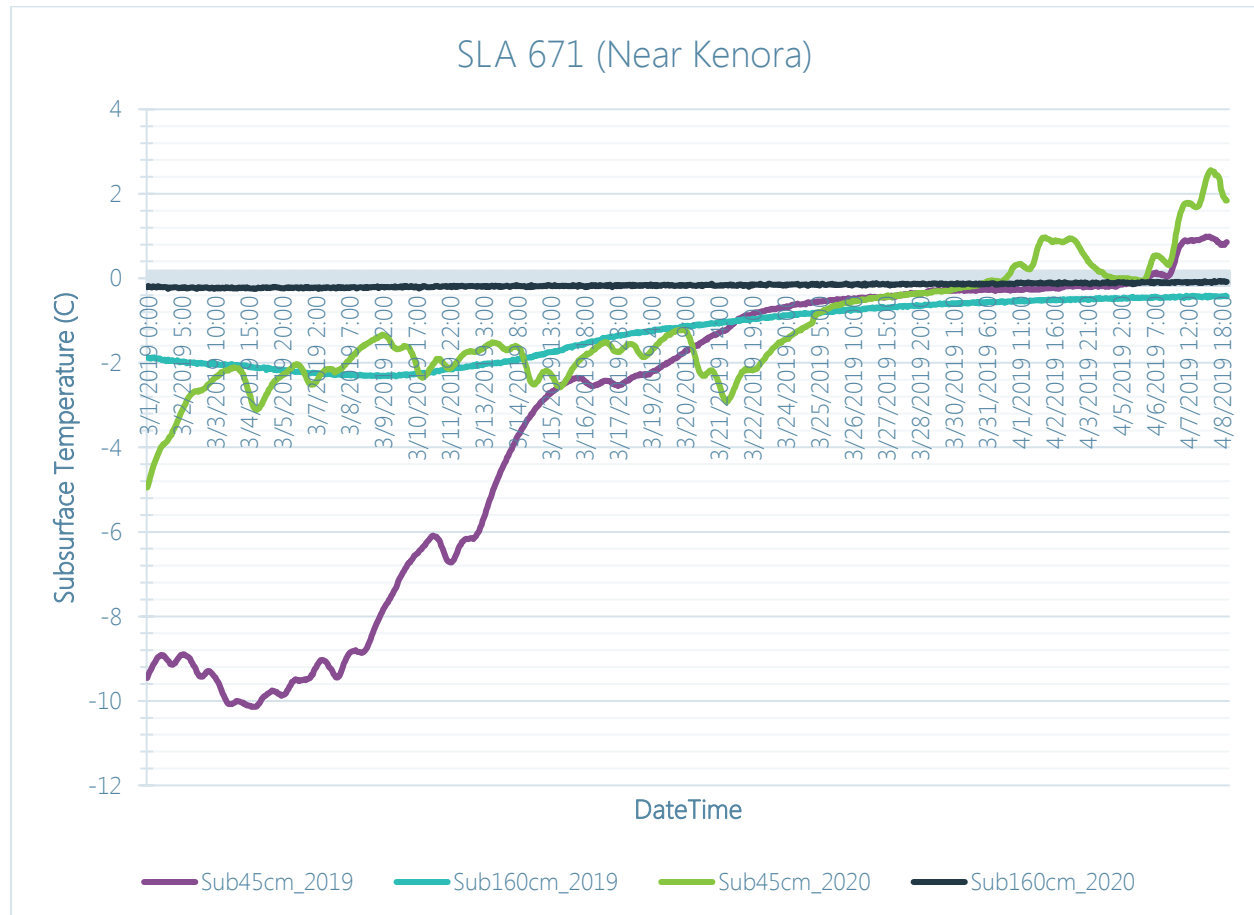


Figure 5. Subsurface temperatures comparison from SLA 671 near Kenora, NW Ontario for the period between March 1 to April 8, 2019, and March 1 to April 8, 2020.

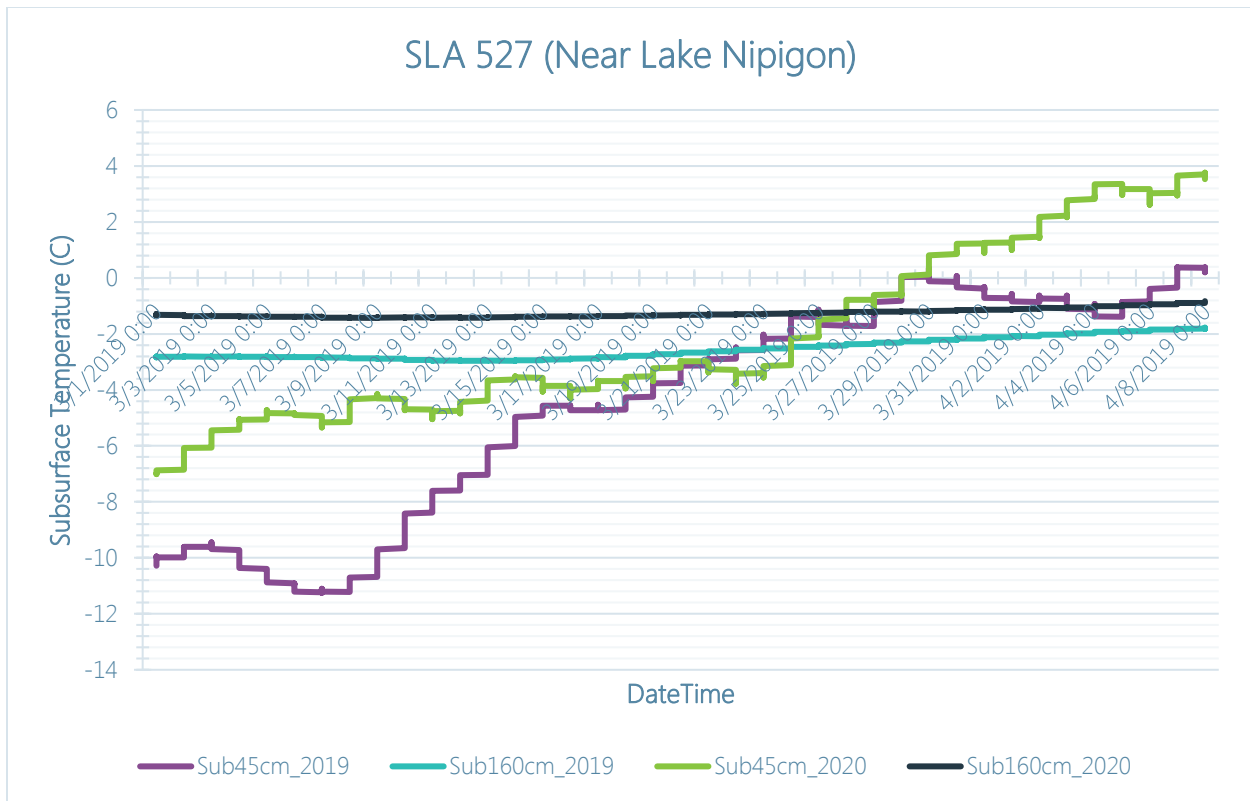


Figure 6. Subsurface temperatures comparison from SLA 527 near Lake Nipigon, NW Ontario for the period between March 1 to April 8, 2019, and March 1 to April 8, 2020.

5 Wood Commitment to Quality

Wood is committed to quality in all of its weather forecasting products.

We would be pleased to discuss or clarify any aspect of this proposal.

Wood Environment & Infrastructure Solutions, a Division of Wood Canada Limited

Prepared by:

Dr. Diar Hassan

9th April 2020

Reviewed by:

Ted Reeler

9th April 2020