

Top Ten
Weather Stories of
2019
in the
Winnipeg Area
By Julien Corriveau

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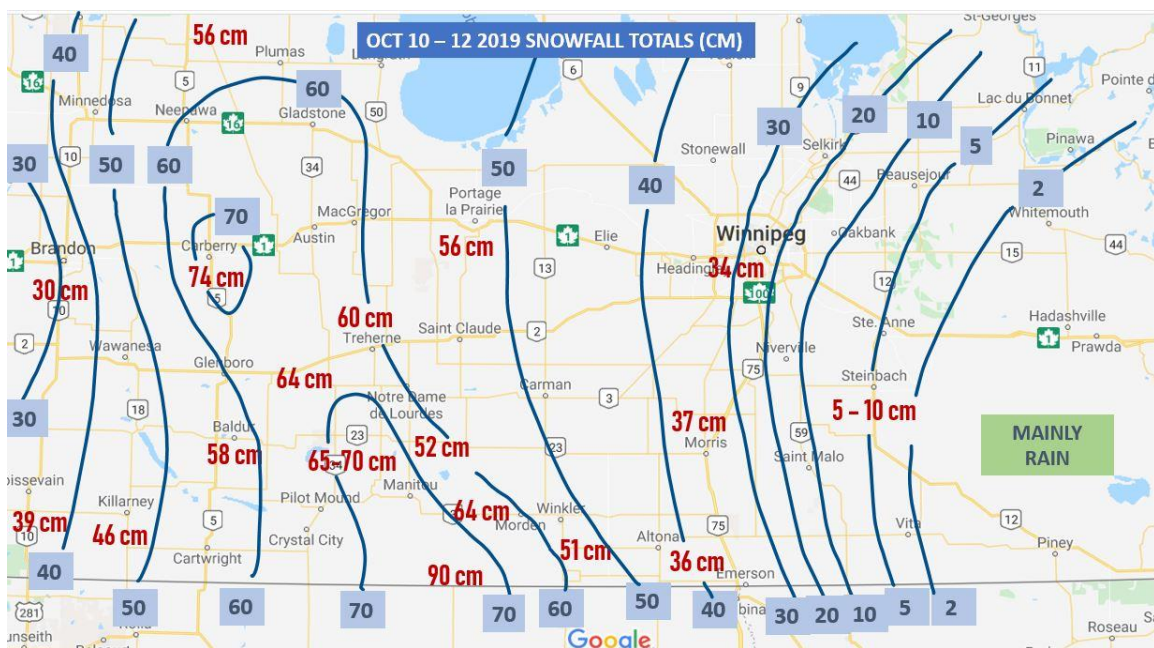


Satellite view on Oct 13 of the Colorado Low still swirling over Manitoba. By John Kassell on Twitter

1 Unprecedented October Snowstorm and Fall Flood

One of the most impactful Colorado Lows to ever hit southern Manitoba moved in just before Thanksgiving. It was the worst snowstorm to hit the province since the April 1997 blizzard.

Generally, 40 to 70 cm of snow fell between Brandon and Winnipeg, with the highest amounts along the escarpment from Neepawa southward to the US border. The area of heaviest snow also stretched as far south as Bismarck and Jamestown in North Dakota. Localized amounts as high as 90 cm were measured along the US border.



Snowfall amounts courtesy of Rob Paola

Brandon received 35.2 cm in total, 20.6 cm of which fell on October 11 alone, the 5th highest daily snowfall in October since 1885. Schanzenfeld (near Winkler) recorded 37.2 cm on October 10, smashing its previous daily October record.

In Winnipeg, 34.0 cm fell at the Charleswood site over 2 days, the largest October snowstorm on record in the city since 1872, beating 27.9 cm on Oct 30-31, 1971. It was also the earliest snowstorm of over 20 cm (previously 20.3 cm Oct 16, 1878) and the earliest of over 30 cm (previously 35.8 cm Nov 7-8, 1986). 21 cm fell on Oct 10 alone, the 2nd snowiest October day since 1872 and the earliest date to record over 20 cm. The snow depth of 30 cm on the morning of Oct 12 obliterated the previous October snow depth record in Winnipeg of 18 cm on Oct 31, 1971. The old record for Oct 12 was just 2 cm in 2006. In total, 36.6 cm of snow fell in October, 31 cm above normal and the 2nd snowiest October on record since 1872 and the snowiest in 100 years.



In Carberry. By Dallas McDonald on Facebook



Near Portage la Prairie. By Walther Bernal, submitted to CBC

Snowiest Octobers Since 1872 in Winnipeg	
38.6 cm	1919
36.6 cm	2019
32.3 cm	1875
30.5 cm	1971
25.9 cm	1888



Overland flooding in Zhoda from heavy rains

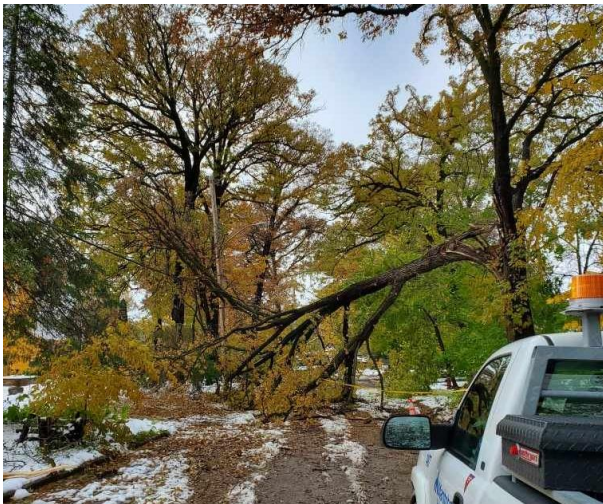
Other types of precipitation also occurred with the storm. The mixed precipitation zone hugged Winnipeg most of the event with mostly rain southeast of the city and snow to the west. 30-50 mm of rain fell in southeastern Manitoba, causing overland flooding. In Winnipeg, the snow mixed with ice pellets for several hours in the morning of October 11. This mixing zone resulted in lower amounts in eastern parts of the city compared to western parts. Thundersnow and thunder-ice pellets also occurred southeast and southwest of Winnipeg, including in Steinbach.

Virtually all main highways were closed during the storm, including highways 1, 2, 3, 10 and 14 (among others). I-29 and I-94 were closed in North Dakota. Highways in Manitoba did not reopen until late in the day on October 12 or early in the morning on October 13, depending on when they could be plowed.

The storm caused a major electricity disaster with a record number of power outages across southern Manitoba. In total, around 150,000 homes and businesses lost power. The storm was estimated to cost Manitoba Hydro more than 110 million dollars. Thousands of hydro poles, and at least a hundred hydro towers, knocked over or snapped. The hydro damages were mostly due to a combination of three factors: (1) the extreme wetness/heaviness of the snow, which stuck to everything; (2) the strong wind gusts between 80 and 100 km/h; (3) the foliage still being present on the trees. At one point, the entire city of Portage la Prairie was without power, and residents were asked to not flush their toilets since lift stations were down. Near Morden, one woman was taken to hospital due to carbon monoxide poisoning from a propane heater. Power

outages continued in the following weeks after the storm due to the number of poles needing to be replaced and due to weakened poles causing new outages. Some 5,000 residents, mostly from First Nations, were evacuated until power could be restored.

The storm caused an unprecedented disaster for trees in Winnipeg (dubbed "tree apocalypse"). Trees were knocked over, crushed, or shredded by the heavy wet snowfall and strong winds. It is difficult to overstate the scale of the devastation. 30,000 city-owned trees were damaged or downed with tens of thousands more on private property. Fallen trees blocked roadways and sidewalks, making travel difficult. One person was injured by a falling tree. The danger of falling trees prompted the city to close city parks until the clean up could be completed. City parks did not fully reopen until November 19. The full clean-up continued in 2020, costing the city about 10 million dollars and forcing it to draw from its rainy-day fund. The city's tree canopy may take a decade to recover.



(Left) Kingston Row in Winnipeg Oct 13. By Manitoba Hydro/Twitter. (Right) Winnipeg, by Andrew Rampton/Twitter



(Left) Kingston Crescent in Winnipeg. By Lane Gibson/CBC. (Right) Winnipeg Wildwood. By Jeff Stapleton/CBC

States of Emergency were issued by the City of Winnipeg and the Province of Manitoba to facilitate clean up efforts. Crews from Toronto, Saskatoon, Regina, and Calgary helped

clean up trees. Crews from Minnesota, Ontario and Saskatchewan helped replace broken power poles and towers.

The Winnipeg Floodway was opened on October 9, the first time in the fall on record since 1968. This was a consequence of both the storm (with snow melting in only a week) and the rainiest September on record. Soils were already saturated and water levels high prior to the storm. Afterwards, the Red River crest on October 24 in Winnipeg was the highest ever recorded in the fall and reached within half a foot of the crest during the 2019 spring flood. Previously, the latest date the floodway was open was on August 4, 2002. High water advisories were also issued for many rivers, including the Red, the Assiniboine and the Souris. The incredibly wet fall put a damper on harvesting and the potato harvest suffered for the second year in a row.



*(Left) The Floodway in operation Oct 12. By Marc Tellier on Twitter.
(Right) Collapsed ice on the Assiniboine in Winnipeg in December after waters receded.*

Exceptionally high river levels continued in November, as high water continued to move in from North Dakota. Such high water this late in the fall was possibly unprecedented. As floodwaters receded later in November and December, the ice that had built up on the rivers due to a cold November subsided, causing unusual cracks along the shores. The Floodway did not close until November 8.

As a result of the storm, a long-standing Christmas tradition was cancelled. Instead of using a donated tree from a resident, Winnipeg used an artificial Christmas Tree for City Hall. The tree will be used for a few years. Crews were too busy cleaning up to cut down a tree for City Hall.



In Morden on Oct 12. By Shelly & Dan Heinrichs/Twitter



In Winnipeg. By Missing Gurl on Twitter



Snapped power poles near Portage la Prairie. By Kyle Brittain for The Weather Network



My bushes were completely flattened by the snow.

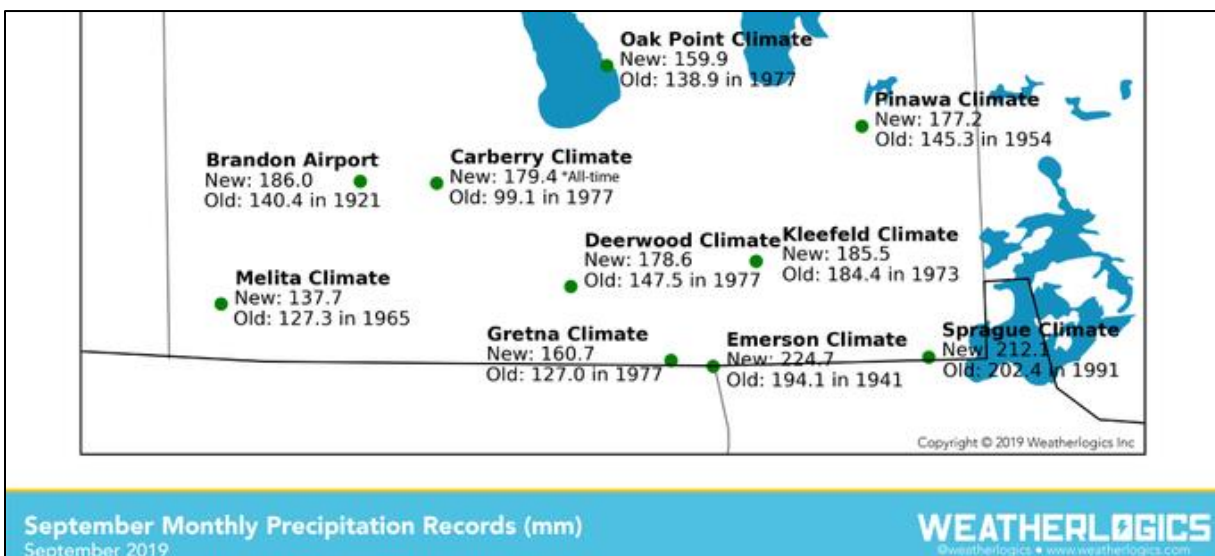
2 Rainiest September on Record

After exceptional dryness most of the year, Mother Nature turned on the taps in September, producing one of the greatest deluges Manitobans have seen in the fall. Most of the rain fell in the second half of the month, particularly in the last ten days.

At Winnipeg Airport, 153.1 mm of rain fell in September, the rainiest on record and second wettest since 1872 (wettest was 1872 with 156.2 mm of rain and snow). This was 3.2 times the normal.

Rainiest Septembers Since 1872 in Winnipeg	
153.1 mm	2019
149.6 mm	1941
148.2 mm	1977
139.4 mm	1912
137.9 mm	1872

Much of southern Manitoba had a wettest September on record, including Brandon which beat its old record of 140.4 mm in 1921 with a whopping 186.0 mm (normal is 44 mm). Several locations in southern Manitoba recorded over 200 mm, particularly in the southern Red River Valley and southeastern Manitoba. These amounts were nearly unprecedented in September and rare for any month of the year, especially since most of the rain fell in only two weeks. September is, on average, only the 5th wettest month of the year with around or under 50 mm. This meant 2019's amounts were three to five times the normal. The highest amount came from a Cocorahs site in Zhoda with close to 260 mm of precipitation in September. South of the border, Grand Forks (230 mm), Minot (199 mm), and Williston (205 mm) also recorded their wettest Septembers on record. Overall, it was the wettest September on record for the state of North Dakota.



ECCC stations that had a wettest September on record, according to Weatherlogics. (Excluding Winnipeg)

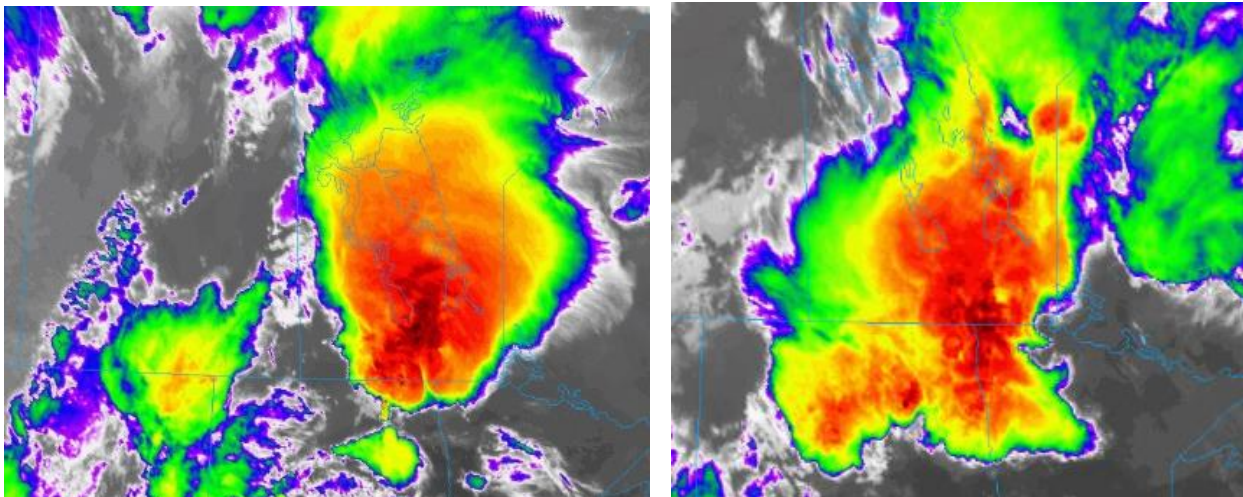
SITE	RAINFALL PAST 30 DAYS	
	(mm)	(in)
Zhoda 2.9 SE - SRRCD	259.3	10.21
Morris 14.2 ESE	252.7	9.95
Morris 8.2 ENE	241.6	9.51
Emerson 5.5 W	235.0	9.25
Steinbach 0.8 SSE	227.6	8.96
Rosa 3.5 SE - SRRCD	226.8	8.93
St Pierre Jolys 2.5 NW	225.8	8.89
Pinawa 1.0 SW	225.3	8.87
Piney 16.1 SE MAFRD	223.0	8.78
Sprague 1.6 ESE	221.0	8.70
Green Ridge 2.2 NW	216.4	8.52
St Francois Xavier 2.2 NW - 4	216.4	8.52
Woodlands 1.5 SE	212.3	8.36
Morris 6.3 NE	211.8	8.34
Thornhill 1.9 WNW	211.6	8.33
Brandon 3.1 NNE	211.6	8.33
Sundown 3.4 W - SRRCD	210.8	8.30
Roseau River 6.2 WNW	207.0	8.15
St Francois Xavier 8.7 NW	204.0	8.03
Winnipeg 7.6 ENE	203.7	8.02
Argyle 8.5 N	202.4	7.97
Boissevain 7.5 WSW	200.0	7.87

Cocorahs volunteer stations September precipitation amounts. Table by Rob Paola

48 hr rainfall Sep 20-21 2019		
SITE	(mm)	(in)
Zhoda	145	5.69
Emerson (ECCC)	133	5.22
Rosa	130	5.10
Gardenton	127	5.00
Brandon (ECCC)	122	4.81
Marchand	115	4.52
Dominion City	110	4.32
Mountainside	109	4.28
Woodlands	106	4.16
Sprague (ECCC)	104	4.09
Altona	100	3.95
Argue	100	3.92
Boissevain	98	3.87
Morris	97	3.81
Elie	94	3.69
Dand	92	3.61
St. Pierre	89	3.52
Menisino	89	3.48
Lakeland	87	3.42
Forrest	85	3.35
Neepawa	85	3.33
Ninette	85	3.33
Shilo	84	3.30
Rivers	80	3.17

Sep 20-21 rainfall amounts, table by Rob Paola

The heaviest deluge occurred on September 20 and 21, when several rounds of heavy rain and severe thunderstorms pummelled southern Manitoba. The weather pattern was unusual for that time of year, with a surge of warm and very humid air from the south that lasted about a week. In the two-day period, Winnipeg received around 50 mm of rain, a month's worth by September standards. However, this was not even close to being the highest amount. Brandon recorded 122.2 mm, the greatest two-day precipitation since 1890 (the 48.3 mm on Sep 20 and the 73.9 mm on Sep 21 were both all-time daily



Infrared satellite images of (Left) the morning and (Right) evening, storm complexes on September 20.

records for September – the old record being 32.5 in 1970). This beat 100.3 mm from August 10 to 11, 1907. Even that did not match parts of the southern Red River Valley and southeastern Manitoba where locally 130 to 160 mm of rain fell during the two-day period, double to triple the monthly normal.

Some might have said the thunderstorm event in the morning of September 20 was the most significant of the year in Winnipeg. A strong mesoscale convective system moved through the Red River Valley around the morning rush hour, dumping significant amounts of rain, and producing strong winds and frequent lightning. The storms also produced a magnificent shelf cloud. The intensity and scale of the system was unusual for so late in the season (stretching from Berens River to the US border). It blanketed the city in darkness during mid morning.

Wind gusts with the morning storms were generally between 80 and 90 km/h, with a gust of 81 km/h at Winnipeg Airport. The strongest gust was 97 km/h at the Reef Lake MB Fire station near Berens River. Locally 50 to 60 mm of rain fell within an hour in southwestern parts of Winnipeg. Weather Underground stations in La Salle and Montcalm also recorded amounts of 50 mm and 61 mm within an hour. The deluge flooded streets, and water poured from the ceiling at the Fairmont Hotel. Nickel to toonie sized hail also fell south of Winnipeg, such as in Winkler, Île des Chênes, Morris, Vita, and Lorette. In Brandon's south end, nickel to hen egg sized hail was reported overnight along with strobe-light lightning. Lightning also set off a house fire in Bridgwater.



Photo from southeast of Winnipeg early morning on September 20, courtesy of Steinbach Online

Storms began to develop again in the afternoon on September 20. In extreme southwestern Manitoba, toonie sized hail fell around 2-3 pm. Another complex of thunderstorms eventually developed in south-central and southeastern Manitoba later in the afternoon and evening. Flash flooding was the main issue with these.

Emerson recorded 103.5 mm of rain for the date (September 20), an all-time daily rainfall record for September, breaking the old record of 81.3 mm in 1955. 64 mm fell in just an hour. Widespread amounts between 70 and 120 mm occurred, including south of the

border. Grand Forks, ND recorded over 100 mm within just a few hours, causing severe overland flooding that flooded farm fields and caused the closure of a portion of I-29.



Flooding on Chevrier Boulevard in Winnipeg the morning of September 20. Courtesy of a CBC viewer

Farmers suffered the brunt of the rain's impacts in September. Rain was needed all year, but then came too late in the season and too heavily. The rain put a damper on harvest operations, with many crops being unharvested or harvested significantly later than normal. The heavy rains also caused rivers to swell at a time when they would normally be falling. Flood warnings were issued south of the border for the Red River. In addition, many MPI claims were submitted for hail and water damage to vehicles, particularly from Winnipeg and Brandon.

3 Driest First Half of the Year on Record

After exceptional dryness in 2017 and 2018, one of the last things Manitobans wanted to see was a repeat in 2019. Although excessive rains and flooding occurred in September, the first half of the year was a different story with record dry conditions. In Winnipeg, it was the driest first half (January to June) of the year on record since 1872 with a measly 105 mm of precipitation (the Airport recorded a raw amount of 91.0 mm. Accounting for under catch in the winter by using The Forks results in 105 mm of precipitation - still the driest first half of the year). This continued a significant deficit that started in 2017 which was the 3rd driest year on record since 1873 and followed by 2018 which was the 16th driest year. In addition, not a single day received 10 or more mm of precipitation from January to June, the first time this has happened since 1872. The maximum daily precipitation was only 8.5 mm on May 3, lower than the maximum of 12.0 mm in 2006.

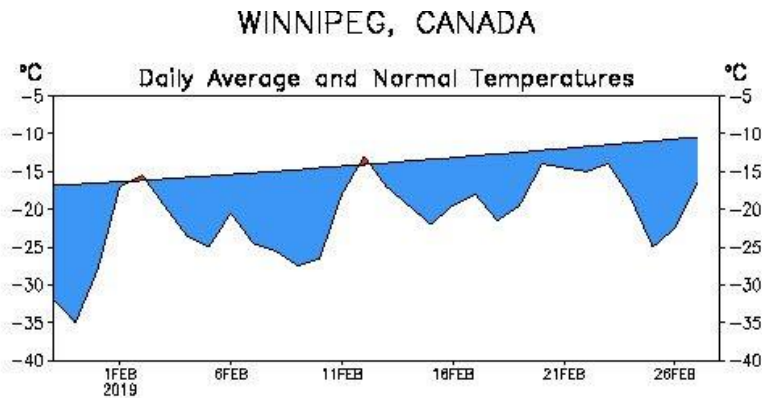
All months from January to June, except February, were drier than normal in Winnipeg. March was most notable with a measly 0.6 mm of precipitation at Winnipeg Airport, the driest March on record since 1872. Only 1.6 cm of snow fell, tied 5th lowest snowfall in March. March was dry throughout the Prairies with Regina also recording its driest March on record.

Driest Marches in Winnipeg Since 1872	
0.6 mm	2019
1.5 mm	1939
2.3 mm	1924
2.8 mm	1915

Overall, it was the 8th driest spring on record in Winnipeg and the driest since 1987. Extreme dryness continued into June, a month that is on average the wettest of the year. Only 26.3 mm fell, the 7th driest June since 1873 and the driest since 1974.

The Red River Valley saw rainfall in July and August that was closer to normal, helping to lessen the impacts of the drought. However, parts of the Interlake and Parklands remained dry, causing the worst impacts to be felt in these regions. Hay and cattle feed faced a major shortage, causing more than ten municipalities to declare states of disaster to initiate aid from higher governments. The provincial government allowed livestock producers to cut hay and let their animals graze on Crown land to help lessen the impacts. Some producers hauled in water and feed which was expensive. In September, both the provincial and federal governments outlined measures to provide financial assistance to affected producers. The series of three dry years also resulted in an increased prevalence of grasshoppers, particularly in and around the Red River Valley. In Winnipeg, it was a repeat of 2018's shifting soils, causing cracks in foundations and ground subsidence.

4 Extreme Cold and Snow in Late January and February



A prolonged cold snap gripped southern Manitoba and much of the central and western continent in the second half of January and much of February. At Winnipeg Airport, the maximum temperature between January 16 and March 7 (a 51-day stretch) was -6.9°C on February 20. In fact, this -6.9°C high for February was the 4th coldest on record since 1873. The normal February maximum temperature is 3.1°C . In addition, 23 days dipped below -20°C in February, tied 17th most since 1873. Overall, February averaged -19.9°C , a whopping 6.4 degrees below normal and tied 22nd coldest since 1873. It was also the second coldest February since 1979.

In Brandon, February averaged -22.6°C , the 6th coldest February on record since 1890 and the coldest since 1979. Related to the cold, Winnipeg Airport did not reach a dewpoint of -10.0°C or higher in February, only the third month since 1953 to fail to do so and the first February to fail to do so.

The cold in Manitoba was at its worst during a brutal cold snap January 29 and 30 which saw temperature records broken in much of the US Midwest and Northern Plains. At Winnipeg Airport (XWG), the low of -39.9°C on January 30 was the coldest since February 2007 (-41.7°C). Although the official station XWG just missed a true -40°C , the Nav Canada YWG site did reach -40.0°C . Wind chill also dipped to -52.4 , the first wind chill below -50 since 2014 and the lowest wind chill since 2004.



February 24 blizzard south of Winnipeg along Highway 75 near Morris and Letellier

The cold in February was also accompanied by an unusual amount of snow for that time of year. February is normally a month with very little snowfall and that held true through the 21st century so far. However, 38.4 cm of snow fell in February 2019 in Winnipeg, 2.7 times the normal of 14.0 cm. It was the snowiest February since 1987 and the wettest since 2009 (February 2009 had a lot of rain).

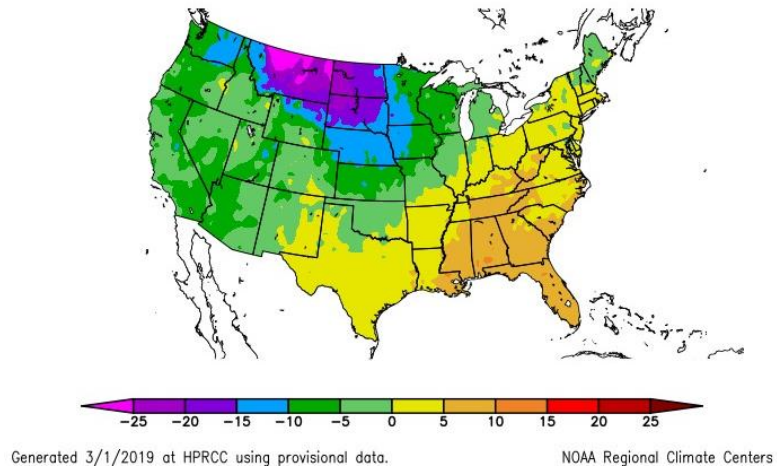
Manitoba had missed the worst of the snow and cold anomalies in February, with areas south of the border and in far western Canada recording one of the snowiest and coldest Februaries ever. In North Dakota, Minot had its second coldest February, Bismarck its fifth coldest and Fargo its 11th coldest. In Minneapolis, it was a top 10 snowiest month of all time. Even further west, Seattle, Washington had its snowiest and 3rd coldest February. In Alberta and Saskatchewan, cold anomalies greater than 10 degrees occurred, including in Calgary and Saskatoon where February was 12.8 degrees and 11.4 degrees colder than normal respectively. For both cities, it was the 4th coldest February. Edmonton International Airport dipped to -41.2°C on February 5, while Saskatoon and Regina dipped to -42.5°C and -42.0°C respectively during the February cold snap.

Thanks in part to the prolonged cold spell, the river trail in Winnipeg set a record for its longest season, being open for more than 70 days.

WEATHERLOGICS February 2019 Stats by City					
City	Mean temperature	Difference from normal (rank)	Precipitation	Difference from normal (% of normal) (rank)	Records since
Winnipeg	-19.9 °C	-6.4 °C (22 nd coldest tied)	20.5 mm*	+6.4 mm (48 th wettest)	1872
Brandon	-22.6 °C	-9.0 °C (6 th coldest)	24.4 mm	+10.9 mm (23 rd wettest)	1890
Regina	-23.5 °C	-11.4 °C (5 th coldest)	12.3 mm	+2.7 mm (56 th wettest)	1884
Saskatoon	-24.2 °C	-11.4 °C (4 th coldest)	11.1 mm	+2.6 mm (59 th wettest tied)	1892
Calgary	-18.2 °C	-12.8 °C (4 th coldest)	28.7 mm	+19.3 mm (16 th wettest)	1884
Edmonton City Centre	-19.4 °C	-11.8 °C (5 th coldest)	14.3 mm	+2.8 mm (64 th wettest)	1880

Data sources: ECCC. A merged dataset is used for each location in order to cover the entire period of available records. Data from each location is also quality checked using procedures developed by Weatherlogics. If you would like more information, please DM or email us.
*The Winnipeg precipitation gauge suffered from precipitation undercatch in February. Due to this issue, the Weatherlogics precipitation measurement for Winnipeg was used as a replacement.

Departure from Normal Temperature (F)
2/1/2019 – 2/28/2019



5 Record Heat and Humidity in Mid September

Once again, record heat and humidity occurred in September. An unseasonable push of hot and humid air from the south sent temperatures and humidity soaring across southern Manitoba between September 15 and 21. Temperatures reached close to or exceeded 30°C for three consecutive days from September 15 to 17. These temperatures were at least 10 degrees warmer than normal. At Winnipeg Airport, the maximum temperature was 30.6°C on September 17. The main story was the humidity as dewpoints rose to 20°C for three consecutive days from September 16 to 18, smashing records. Dewpoint reached 21.2°C on September 16 and 17 at Winnipeg Airport, breaking the old records of 19.6°C in 2018 and 17.8°C in 1955 respectively. They were also the latest dates to reach such dewpoint values since 1953 (previously September 5, 1960). Humidex values reached the mid to high thirties, also records. At Winnipeg Airport, humidex reached 37.6 and 36.8, breaking the old records of 33.9 in 2018 and 34.5 in 1976. The only other time humidex values reached as high this late in the season was on September 19, 2004 (38.1).

Thanks to high humidity, overnight lows were remarkably warm. On September 17, Winnipeg Airport had a minimum temperature of only 21.3°C, breaking the record of 17.8°C in 1961. It was also the third highest in September since 1872.

In total, 11 daily records were broken at Winnipeg Airport during the event from September 15 to 21, including:

- 7 high maximum and high minimum dewpoint records
- 2 high humidex records
- 2 high minimum temperature records

The hotspot in the province during the event was Dauphin with a high of 33.7°C and a humidex of 39 on September 17. Emerson recorded a daily minimum temperature of 21.6°C on the same date.

6 July 8-10 Deluge Soaked up like a Sponge

After exceptionally dry conditions so far in the year, much welcomed rains and thunderstorms finally arrived on July 8, 9 and 10 in significant quantities. Widespread amounts of 50 or more mms fell in southern Manitoba with local amounts over 100 mm. A rainfall event such as this would typically cause at least some overland flooding, but instead, the exceptionally dry soils soaked up the rain like a sponge, with very little standing water after the event. The event did raise river levels, however.

The Highest Rainfall Amounts July 8 to 10	
140 mm	Winnipeg Island Lakes
137 mm	Brunkild
136 mm	Winnipeg southwestern Southdale
135 mm	Zhoda
134 mm	Mountainside
125 mm	St François Xavier
103-120 mm	Steinbach
112 mm	Winnipeg Fort Rouge
95 mm	Winnipeg Windsor Park

The highest rainfall amount recorded was about 140 mm in Winnipeg's Island Lakes neighbourhood, most of which fell within a 24-hour period. The rain came down in torrents for several hours on July 9 with 120 mm of rain recorded on the date, almost double what would normally be received in the entire month of July. For any location to receive over 100 mm in a single day within Winnipeg is rare. Even more rare is for this kind of rain to not cause any flooding issues other than some flooded streets, thanks to the dry soils. Generally, widespread amounts of 80 to 140 mm of rain fell in central and southern parts of the city. In addition, a swath of 100 + mm of rain fell south of the city

from around Brunkild through to Sprague, while 100 + mm amounts were more localized in nature in southwestern Manitoba. Mountainside recorded 126.8 mm of rain on the 9th. In Winnipeg, one of the greatest impacts of the rain was its effects on traffic lights. Outages at some intersections caused traffic delays.

7 Cold October and Early November

Unseasonably cold and cloudy conditions occurred in October for the second year in a row. Daily highs averaged 6.8°C, 3.8 degrees below normal and tied 8th coldest on record since 1872 (2nd coldest since 1970). The mean temperature of 3.4°C tied for 28th coldest since 1872. This was the second consecutive October among the top 30 coldest, a streak that has not occurred since the 1930s. The cold days were mostly the result of excessive cloudiness. Cloudy skies resulted in little diurnal temperature variation (milder at night but colder during the day). The average high was only 6.7 degrees warmer than the average low for the month, the second smallest spread in October since 1872. As a result, only 10 days dipped below freezing during the month, significantly less than the normal of 17 days. The maximum temperature in October was only 19.1°C, the 24th lowest since 1872 and the lowest since 2009 (16.6°C).

The unseasonably cold conditions continued into part of November. The first half of November was the 7th coldest on record since 1872 and the coldest since 1995, with a mean temperature of -8.3°C. No daily cold records were broken, showing that the cold temperatures were more persistent than they were extreme.

Coldest First Halves of November Since 1872	
-11.0°C	1935
-10.7°C	1919
-9.8°C	1986
-9.7°C	1966
-9.5°C	1995
-8.9°C	1933
-8.3°C	2019
-8.2°C	1873



Record high river levels combined with cold temperatures produced rare ice jams in November. By Pat Kaniuga/CBC

8 June 7 Thunderstorms Break Heat but Cause Damage

A brief influx of heat brought southern Manitoba its hottest temperatures of the year on June 7. Temperatures soared to the mid to high thirties, aided by low humidity. Winnipeg Airport reached 36.6°C, the hottest temperature in June since 1995. It also just missed the record high for the date of 36.8°C in 1988. Only six other Junes since 1872 managed to get as hot. Carman and Emerson reached the highest temperatures during the event with highs of 37.3°C and 37.0°C respectively.

An advancing cold front sparked off severe thunderstorms in the Red River Valley and Interlake late afternoon and evening. Damaging winds and large hail were the main stories. Gusts over 90 km/h occurred along a line from Windygates to Gimli. Winnipeg Airport (YWG) recorded a gust of 91 km/h, marking the first severe thunderstorm event at the Airport since June 2, 2017. Impressive gusts of 133 km/h were recorded in Gimli and 113 km/h at Windygates.

Maximum Wind Gusts on June 7	
133 km/h	Gimli
113 km/h	Windygates
104 km/h	Woodlands
102 km/h	Starbuck
96 km/h	Stonewall
91 km/h	Winnipeg Airport
89 km/h	Teulon



St Andrews. By Joseph Koensgen

Lightning sparked a grass fire in the Tuxedo area of Winnipeg, causing disruptions to rail service and damage to hydro poles. The strong winds caused the most damage, particularly north and west of Winnipeg where hydro poles, trees and small buildings were completely knocked over. The worst hit areas were in the RM of St Andrews and in Gimli where 24 hydro poles needed to be replaced. Close to 11,000 Manitobans lost power at the peak of the event, falling to 3,400 the next morning and to 1,900 the next afternoon. Full restoration of power took about 2 days. Hail up to around 3 cm in diameter also fell from Manitou to Portage to Stonewall and northeast of Beausejour.



Poles knocked down along Highway 8. By Manitoba Hydro on Twitter

9 Dry December

Most weather systems largely dodged the Winnipeg area and much of the Canadian side of the Red River Valley in December. However, south of the border it was a different story with storm after storm hitting the area. On December 29 alone, an intense Colorado Low brought a blizzard and over 30 cm of snow to Grand Forks and Fargo. The system had just clipped southeastern Manitoba with 5 to 10 cm, the largest snowfall of the month. Close to 60 cm of snow fell in Grand Forks in December, in sharp contrast to only about 20 cm in Winnipeg. In Winnipeg, the 20 cm of snow that fell was very fluffy, resulting in little water equivalent. The snowfall (and some freezing rain) only amounted to about 5.7 mm of precipitation, tying for 8th driest December on record since 1872.

Snow on the ground was quite meager throughout the month with grass blades still poking through the snow around Christmas. With about 7 cm of snow on the ground on Christmas morning, it was the lowest snowpack for the date since 2014. The month had started with only about 2 cm of snow on the ground. What little snow did fall also melted somewhat during a warm spell before Christmas. On December 22, temperatures reached 3.8°C at Winnipeg Airport and 7.9°C in Morden.



Dec 26 not much snow on the fields west of Winnipeg

10 Cold Late Spring with Early June Frost

After a very warm May in 2018, Mother Nature turned the tables in 2019 with the coldest May since 2009 in Winnipeg. It was especially the nights that were chilly with daily lows averaging 1.9°C, 2.4 degrees below normal and tied 17th coldest since 1872. Partly related to the cold, no thunderstorms were recorded in May. Normally, 3 days would see a thunderstorm.

The chilly nights continued into the first couple days of June with Winnipeg Airport recording a low of -0.6°C on June 2, the first freeze in June since 2009. Once again, the station reached close to freezing on June 12 with a low of 1.0°C. Normally, the Airport

sees its last freeze on May 24. June freezes have been uncommon since the 1970s with 2019 only being the 7th year with a June freeze since 1975.

Low temperatures on June 2	
-5.4°C	Narcisse
-3.9°C	Fisherton
-3.3°C	Marchand
-3.1°C	Alonsa
-2.3°C	Beausejour
-2.1°C	Gladstone
-1.6°C	Brunkild
-1.2°C	Dauphin
-0.6°C	Winnipeg Airport

Honourable Mentions

- 7th warmest first half of January.
- Heavy rain and thunderstorms in the last week of August.
- Freezing rain December 7 closes the TCH west of Winnipeg.
- Coldest year since 2014.



Freezing rain on December 7. By Rob Paola

Acknowledgement of Sources

This summary document contains information from a variety of sources, including CBC, the government of Manitoba, College of Dupage, ECCC, Twitter, the City of Winnipeg, Pembina Valley Online, Facebook, Steinbach Online, Weatherlogics, Cocorahs, Valley News Live, Global News, the National Weather Service (US), the Climate Prediction Centre (US), the Winnipeg Free Press, Manitoba Hydro.