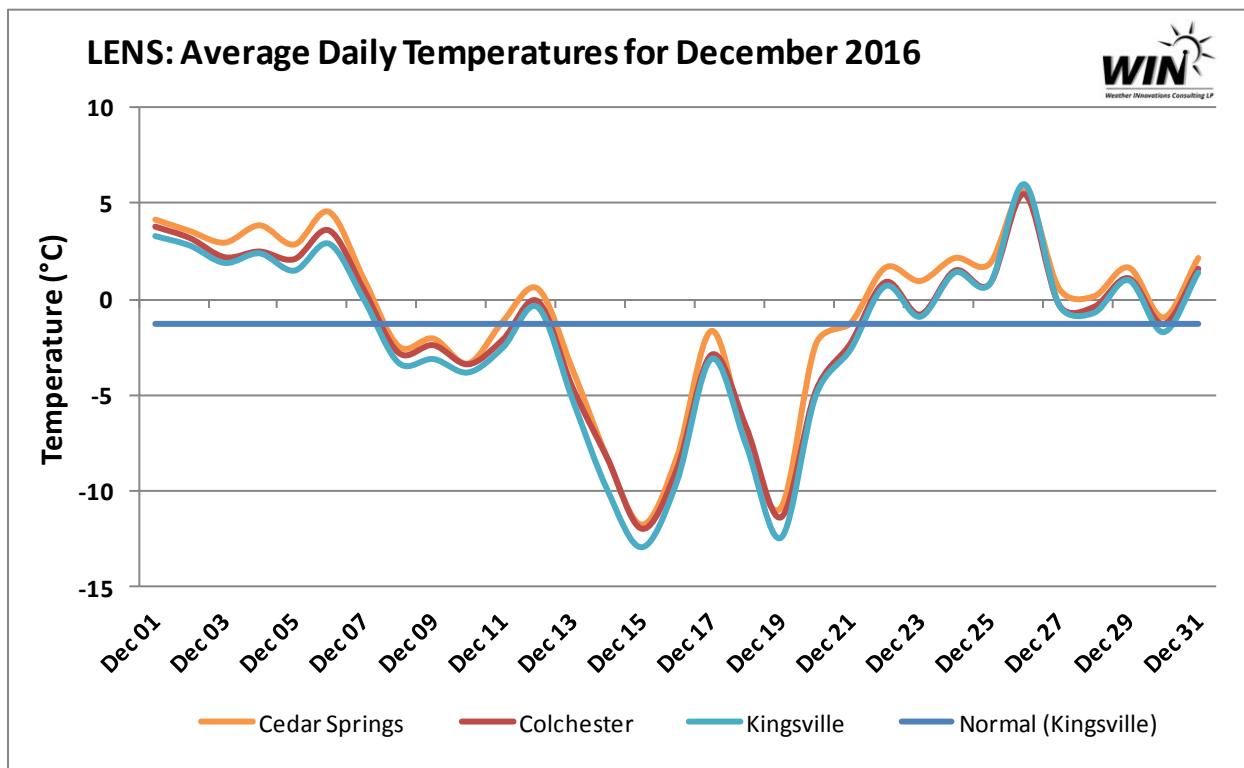




December 2016

Overview

Average December temperatures at Cedar Springs, Colchester, and Kingsville were -0.9°C , -1.5°C , and -1.9°C respectively (compared to 5.3°C , 4.5°C , and 4.3°C in 2015). The average monthly temperatures were 0.6°C below normal to 0.4°C above normal for the Lake Erie North Shore appellation (compared to 5.6°C to 6.6°C above normal in 2016). These statistics are based on Environment Canada's 30-year normals for Kingsville. This summary illustrates December 2016 minimum temperatures and icewine hours. For this report, icewine hours are defined as instances when the average hourly temperature was between -8.0°C and -12.0°C , inclusive.



Temperature Analysis

The monthly minimum temperatures for each site in December 2016 were -16.2°C (compared to -4.5°C in 2015) at the Cedar Springs station; -17.1°C (compared to -3.4°C in 2015) at the Colchester station; and -17.7°C (compared to -5.9°C in 2015) at the Kingsville station. These monthly minimum temperatures occurred on December 19. There were 7 days this month, compared to 0 days in December 2015, when temperatures, at one or more stations, dipped into icewine temperature ranges. There were also no icewine hours recorded during November for the Lake Erie North Shore appellation.



LENS: Daily Minimums

November 2016

Date	Cedar Springs	Colchester	Kingsville
1-Nov	11.1	10.7	10.3
2-Nov	14.6	13.6	14.1
3-Nov	9.2	9.2	7.9
4-Nov	6.1	4.3	4.5
5-Nov	6.7	5.6	4
6-Nov	4.9	4.2	3.4
7-Nov	9.8	3.9	3.9
8-Nov	9.2	8.9	7.8
9-Nov	2.2	0.7	0.4
10-Nov	3.7	4.3	1.5
11-Nov	2.1	-2.6	-2.1
12-Nov	-1.2	-2.2	-4
13-Nov	3	4.1	2.9
14-Nov	5.8	4.7	4.3
15-Nov	7.2	5.6	5.8
16-Nov	5.5	4.8	5.6
17-Nov	5	5.6	5.7
18-Nov	11.7	10.5	11.1
19-Nov	0.8	0.2	-0.8
20-Nov	-3	-2.9	-3.3
21-Nov	-3.5	-3.8	-4.7
22-Nov	-4.7	-7.1	-7.8
23-Nov	-2.8	-4.4	-4.8
24-Nov	5.3	4.5	4.2
25-Nov	3.4	3.5	3
26-Nov	3.3	3	2.3
27-Nov	3.4	1.4	1.2
28-Nov	7	5.2	4.8
29-Nov	8.3	8.1	7.5
30-Nov	5.7	3.9	3.9

December 2016

Date	Cedar Springs	Colchester	Kingsville
1-Dec	2.1	2.3	1.7
2-Dec	2.6	1.8	1.1
3-Dec	2.1	1.5	1.1
4-Dec	1.9	1.4	1.1
5-Dec	0.5	-3.1	-2.5
6-Dec	0.5	-3.2	-1.4
7-Dec	-0.8	-1.2	-1.5
8-Dec	-4.2	-4.2	-4.9
9-Dec	-4.2	-4	-5
10-Dec	-4.6	-4.8	-5.5
11-Dec	-4.7	-3.9	-4.8
12-Dec	-2	-4.1	-3.5
13-Dec	-8.4	-10.2	-10.6
14-Dec	-11.1	-10.2	-14.8
15-Dec	-14.2	-14.3	-15.6
16-Dec	-14.8	-13.2	-15.5
17-Dec	-4.3	-5.8	-6.3
18-Dec	-12.9	-12	-12.4
19-Dec	-16.2	-17.1	-17.7
20-Dec	-6.1	-9	-9
21-Dec	-4.9	-4.6	-5.3
22-Dec	-0.1	-1.7	-2
23-Dec	-1	-3.2	-3.3
24-Dec	1.3	0.7	0.5
25-Dec	1	0.3	0.3
26-Dec	2.1	0.9	1.2
27-Dec	-1.5	-1.6	-1.9
28-Dec	-1.8	-1.7	-2
29-Dec	0.2	-0.8	-1
30-Dec	-1.8	-2.5	-2.9
31-Dec	-0.6	-1.5	-1.9

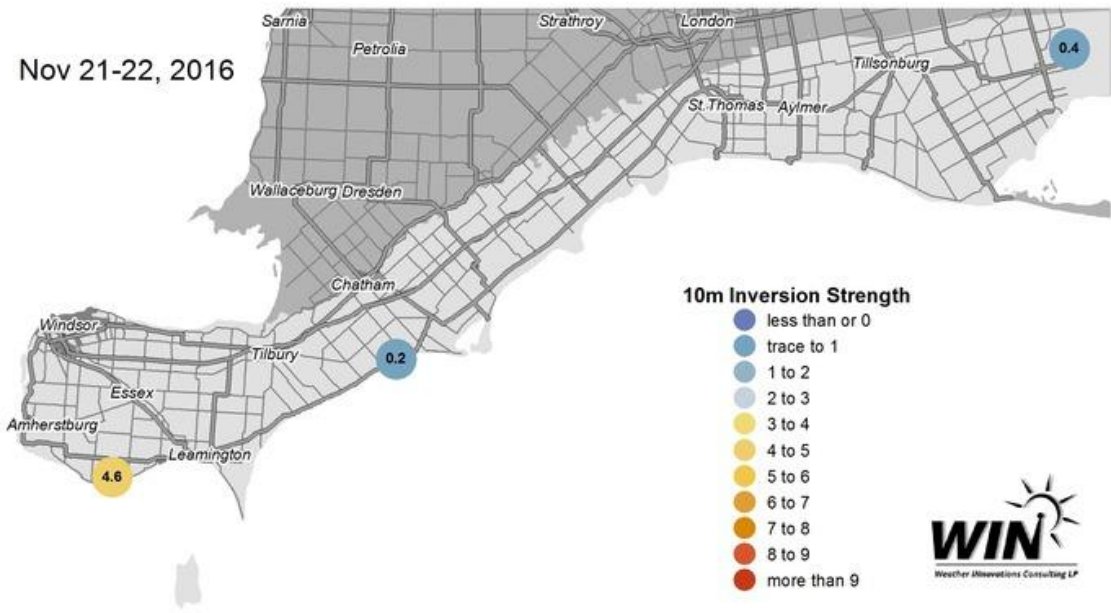
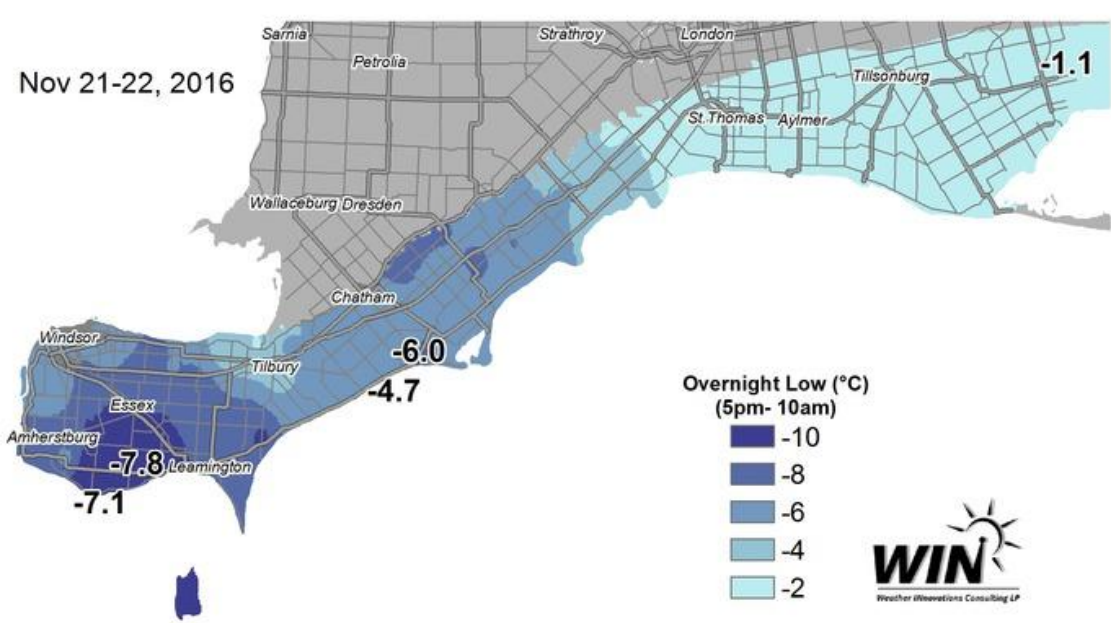


	Days with Icewine Temperatures
	Monthly Minimum



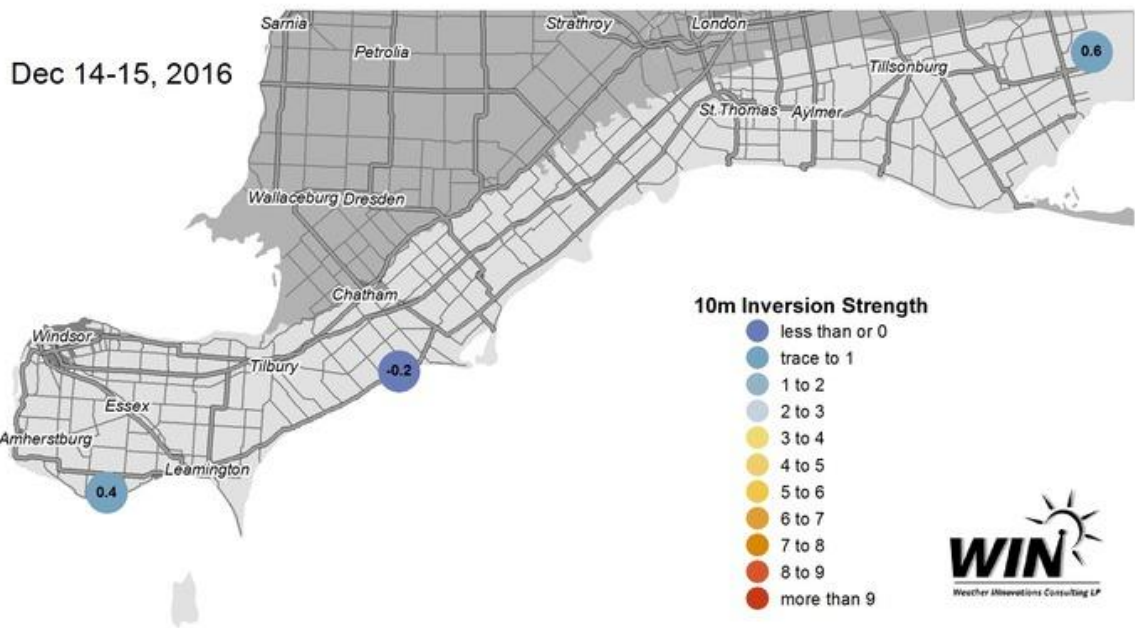
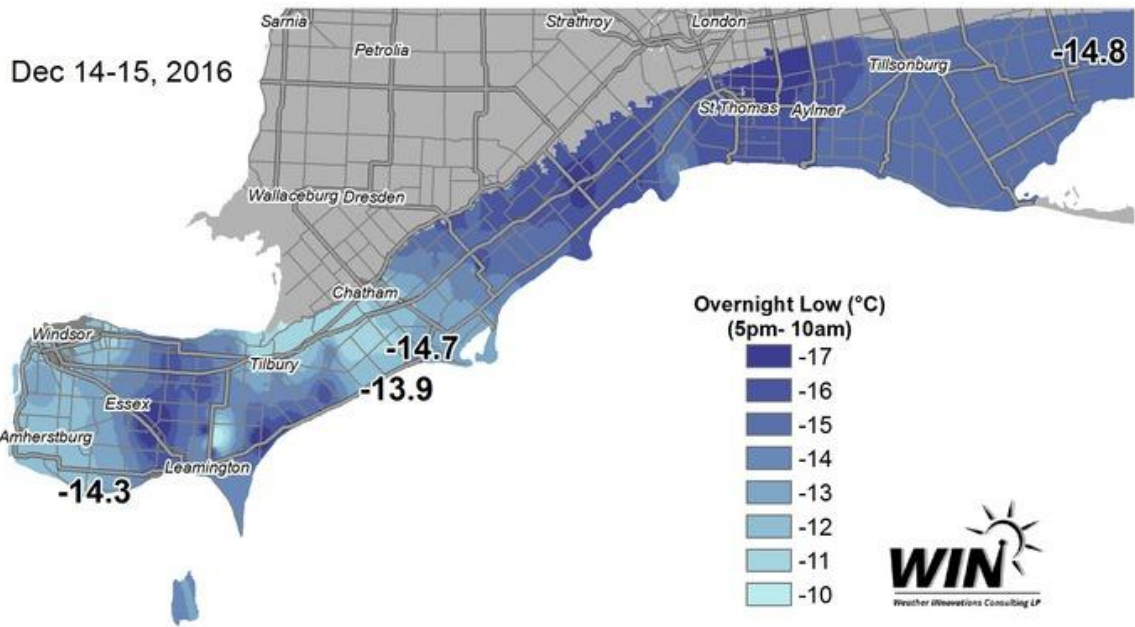
Inversion Strength

The following six figures show the temperature and 10 m inversion strengths for the coldest November and December nights: November 21-22, December 14-15, and December 18-19. Inversion temperatures were suitable for running wind machines during the night of December 18-19, potentially mitigating the cold surface temperatures.





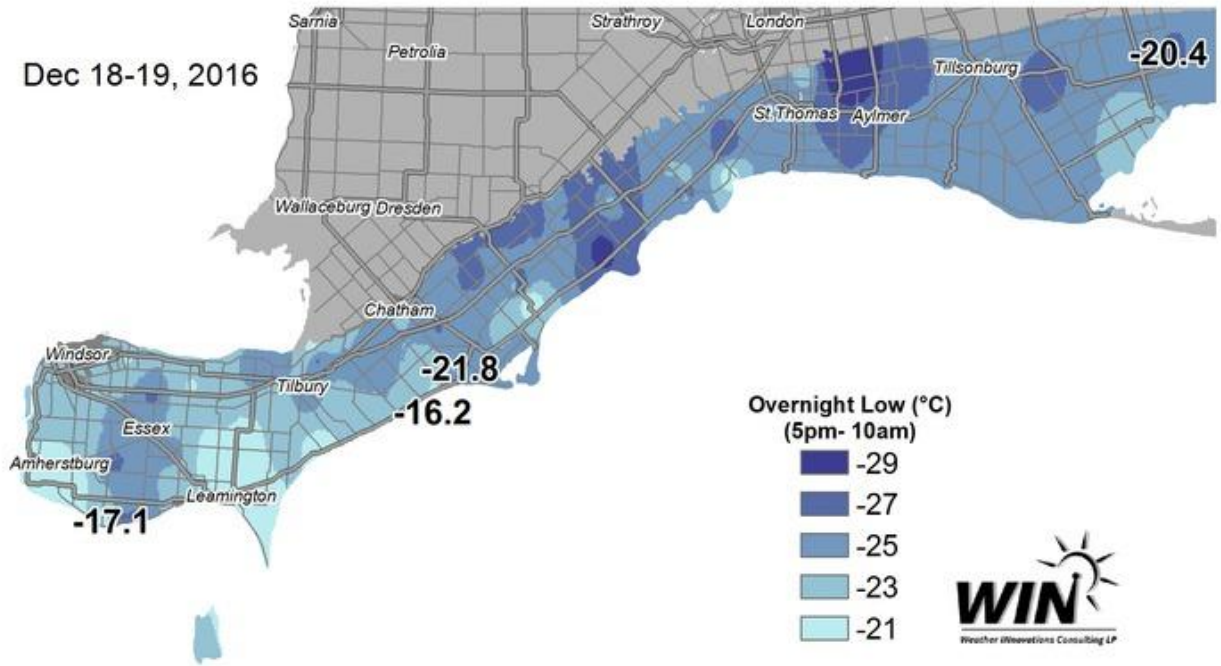
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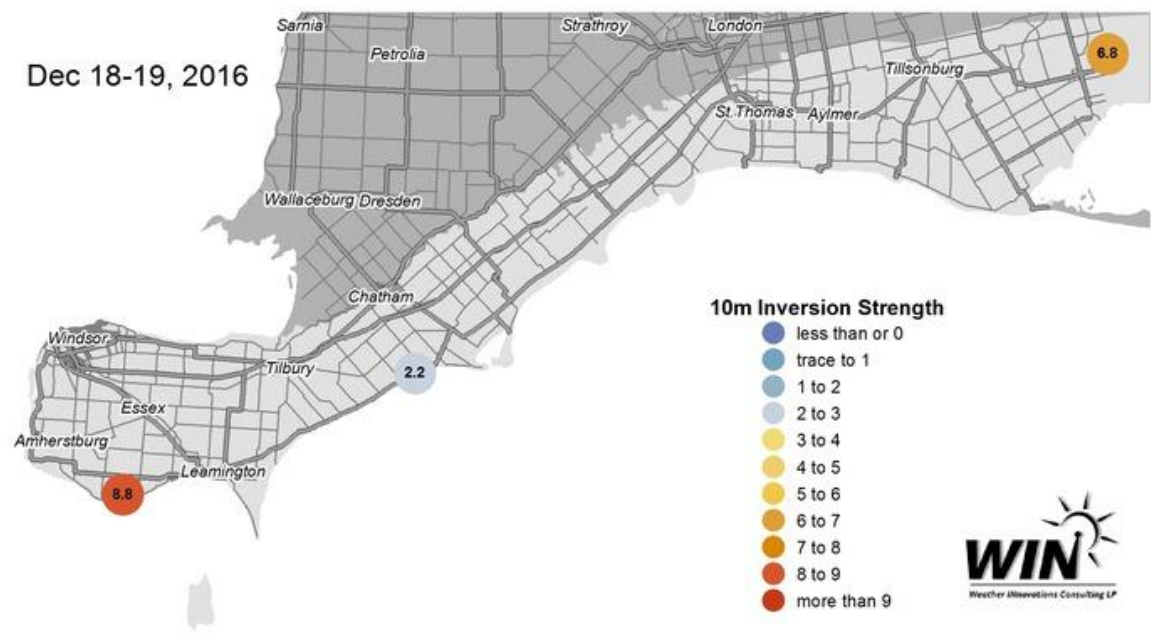


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Dec 18-19, 2016



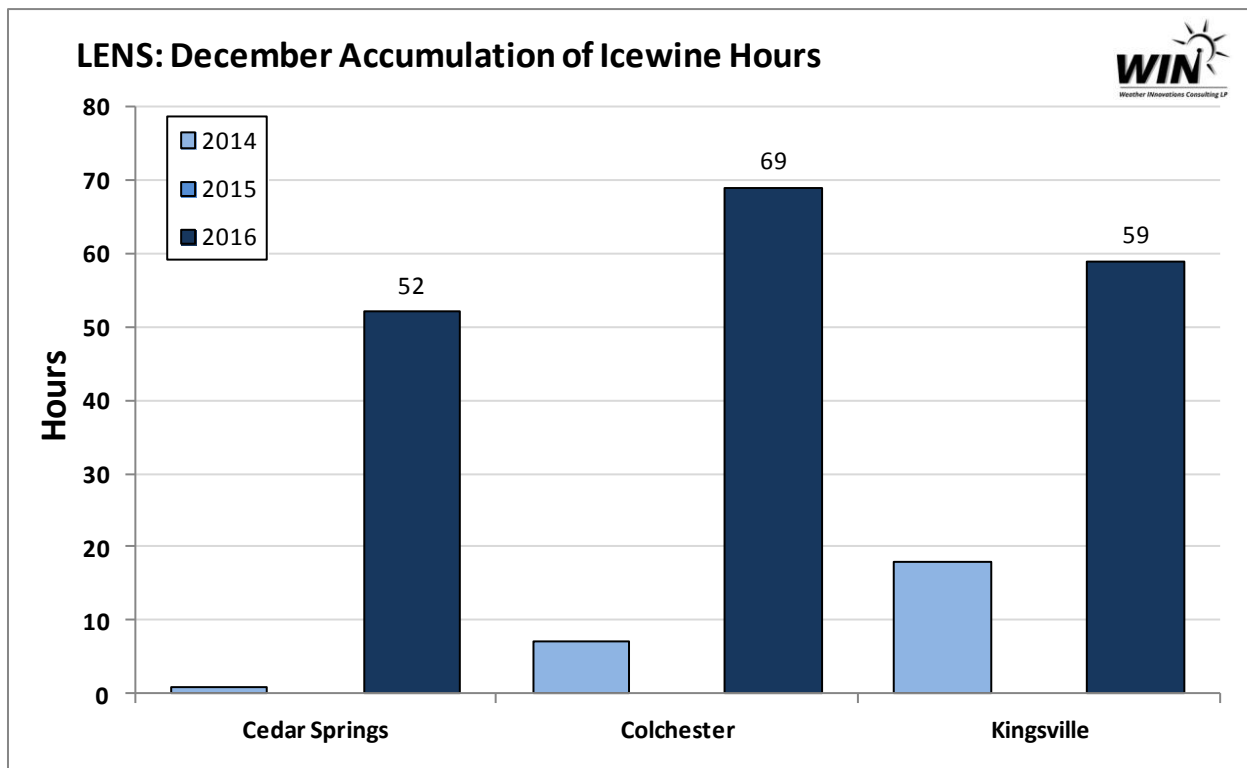
Dec 18-19, 2016





Icewine Hours Analysis

The cold mid-December temperatures resulted in 52 to 69 icewine hours across the appellation. December 2016 icewine hours exceeded both 2014 and 2015 values, as seen in the following figure. The Lake Erie North Shore stations recorded no icewine hours in December 2015 and between 1 and 18 icewine hours in December 2014. No icewine hours were recorded in November 2016. Due to the cold mid-December temperatures, many icewine harvests could be completed before the new year.



Summary

December 2016 temperatures were near-normal in the Lake Erie North Shore appellation; average temperatures for the month were 0.6°C below to 0.4°C above the 30-year normals. The coldest temperature reached was -17.7°C on December 19 at the Kingsville station. December provided some opportunities for harvesting icewine grapes at all locations, unlike 2015 when no opportunities arose.