

## Supplementary material

**Table S1.** Mean monthly morning, midday and evening air temperature (°C) in Nuuk in the period Aug 1807–Jul 1813

Period	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Annual mean
Morning													
1807/08	2.9	-2.9	-1.8	-4.3	-7.0	-19.3	-13.7	-10.9	-7.0	-1.5	0.6	1.1	-5.3
<b>1808/09</b>	<b>5.2</b>	<b>-1.8</b>	<b>-2.1</b>	<b>-4.8</b>	<b>-5.1</b>	<b>-3.6</b>	<b>-8.2</b>	<b>-5.0</b>	<b>-2.7</b>	<b>-2.6</b>	<b>-1.2</b>	<b>5.5</b>	<b>-2.2</b>
1809/10	3.7	0.0	-1.7	-2.6	-9.4	-8.5	-9.6	-6.0	-5.6	0.8	2.7	6.0	-2.5
<i>1810/11</i>	<i>1.8</i>	<i>-2.2</i>	<i>-2.7</i>	<i>-3.3</i>	<i>-8.4</i>	<i>-15.9</i>	<i>-19.2</i>	<i>-25.1</i>	<i>-10.0</i>	<i>-5.9</i>	<i>0.3</i>	<i>3.3</i>	<i>-7.3</i>
1811/12	3.8	-0.8	-2.7	-9.2	-10.6	-12.0	-25.1	-13.9	-5.4	-1.6	1.1	6.4	-5.8
1812/13	4.1	-1.2	-2.6	-5.1	-4.9	-16.1	-12.2	-24.1	-11.0	-5.6	5.2	7.1	-5.5
<b>1807-13</b>	<b>3.6</b>	<b>-1.5</b>	<b>-2.3</b>	<b>-4.9</b>	<b>-7.6</b>	<b>-12.6</b>	<b>-14.7</b>	<b>-14.2</b>	<b>-6.9</b>	<b>-2.7</b>	<b>1.4</b>	<b>4.9</b>	<b>-4.8</b>
Midday													
1807/08	4.1	-0.9	-1.4	-3.0	-6.2	-19.3	-12.8	-8.8	-2.8	-0.2	1.9	3.0	-3.9
1808/09	6.8	0.3	-1.2	-4.0	-4.1	-2.5	-6.5	-2.4	0.1	0.3	1.1	7.7	-0.4
<b>1809/10</b>	<b>5.5</b>	<b>3.8</b>	<b>0.6</b>	<b>-1.5</b>	<b>-8.6</b>	<b>-8.0</b>	<b>-7.6</b>	<b>-2.3</b>	<b>-0.4</b>	<b>7.6</b>	<b>7.4</b>	<b>9.9</b>	<b>0.5</b>
<i>1810/11</i>	<i>5.8</i>	<i>2.9</i>	<i>-0.3</i>	<i>-2.4</i>	<i>-7.6</i>	<i>-15.0</i>	<i>-16.9</i>	<i>-20.9</i>	<i>-5.8</i>	<i>-2.6</i>	<i>4.5</i>	<i>6.0</i>	<i>-4.3</i>
1811/12	7.5	2.6	-0.7	-8.1	-9.4	-10.6	-23.6	-10.6	-0.3	4.3	6.1	10.7	-2.7
1812/13	8.0	2.4	0.0	-2.4	-4.5	-15.1	-10.4	-18.7	-4.6	2.4	8.8	10.3	-2.0
<b>1807-13</b>	<b>6.3</b>	<b>2.0</b>	<b>-0.5</b>	<b>-3.6</b>	<b>-6.7</b>	<b>-11.7</b>	<b>-13.0</b>	<b>-10.6</b>	<b>-2.3</b>	<b>2.0</b>	<b>5.0</b>	<b>7.9</b>	<b>-2.1</b>
Evening													
1807/08	2.7	-2.1	-2.7	-4.3	-6.5	-19.4	-12.4	-11.5	-7.6	-3.5	-0.1	1.0	-5.5
<b>1808/09</b>	<b>4.6</b>	<b>-1.8</b>	<b>-2.4</b>	<b>-5.0</b>	<b>-4.6</b>	<b>-3.7</b>	<b>-7.7</b>	<b>-4.5</b>	<b>-2.6</b>	<b>-2.9</b>	<b>-1.1</b>	<b>4.4</b>	<b>-2.3</b>
1809/10	3.6	0.5	-1.9	-3.0	-9.5	-8.3	-9.8	-7.0	-5.7	-0.6	2.5	5.1	-2.8
<i>1810/11</i>	<i>1.7</i>	<i>-2.1</i>	<i>-3.2</i>	<i>-3.5</i>	<i>-8.5</i>	<i>-15.2</i>	<i>-20.3</i>	<i>-27.1</i>	<i>-12.8</i>	<i>-7.0</i>	<i>-0.8</i>	<i>2.7</i>	<i>-8.0</i>
1811/12	4.1	-1.3	-2.8	-9.4	-10.7	-12.1	-26.2	-14.8	-6.3	-3.4	2.3	6.2	-6.2
1812/13	3.2	-1.2	-2.8	-4.1	-4.8	-16.0	-12.6	-25.2	-11.4	-6.5	4.4	6.1	-5.9
<b>1807-13</b>	<b>3.3</b>	<b>-1.3</b>	<b>-2.6</b>	<b>-4.9</b>	<b>-7.5</b>	<b>-12.5</b>	<b>-14.9</b>	<b>-15.0</b>	<b>-7.7</b>	<b>-4.0</b>	<b>1.2</b>	<b>4.2</b>	<b>-5.1</b>

Key: bold italic font – average 6-year values, bold font – the warmest year, italic font – the coldest year

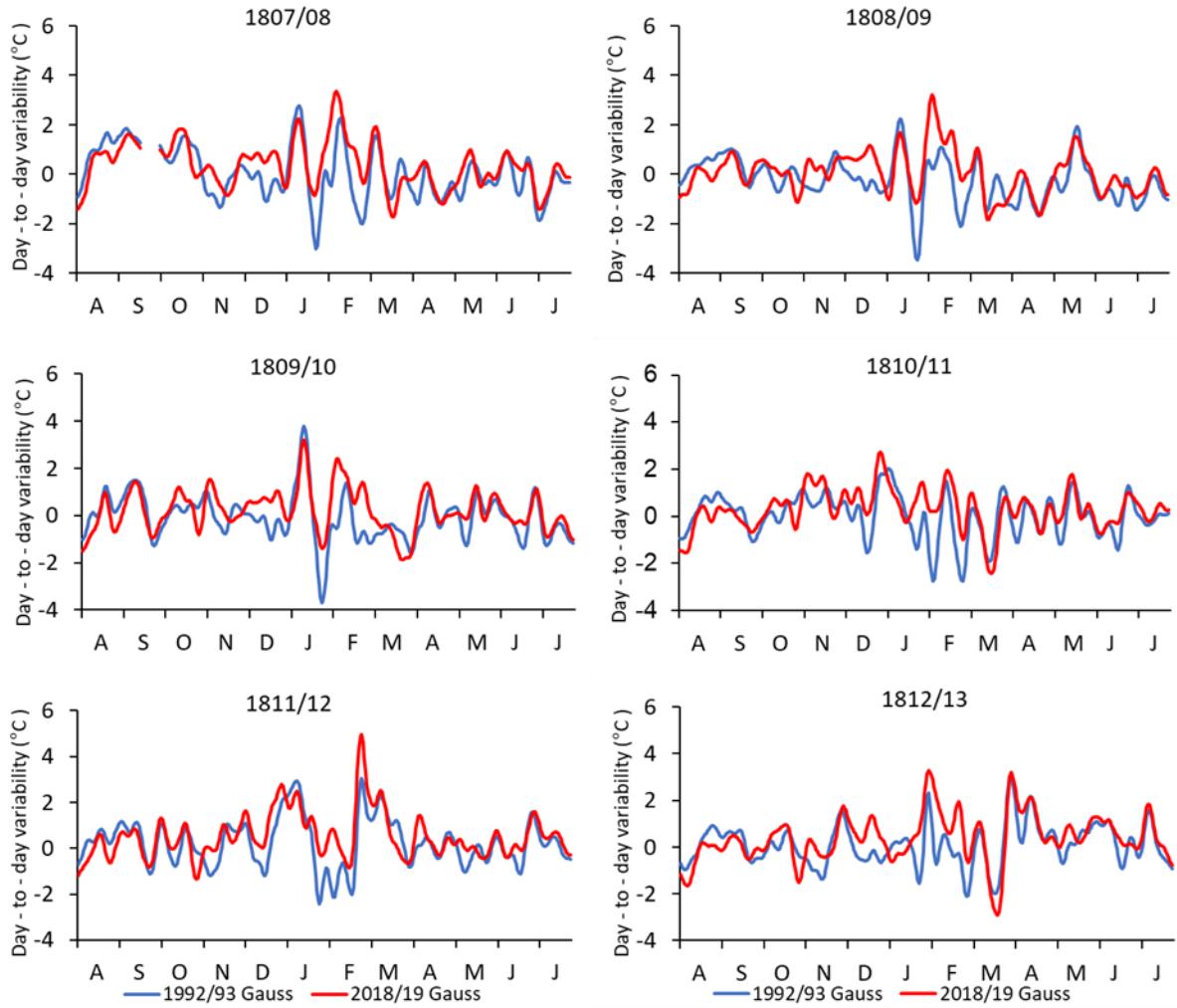
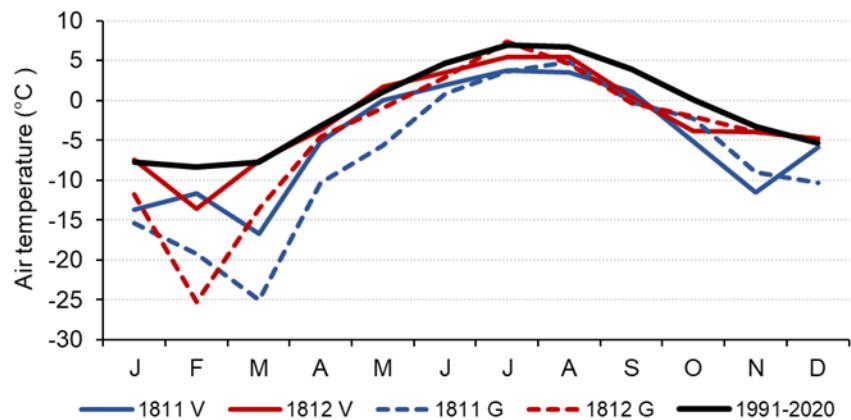


Fig. S1. Smoothed series of differences in DDTV between historical and contemporary periods for Nuuk (for the present, the two years selected were 1992/93 [cold] and 2018/19 [warm]). Individual days were filtered by a Gaussian low-pass filter with a standard deviation of three days in its distribution, corresponding to a rectangular filter of about 10 days.



**Fig. S2.** Yearly courses of air temperature in Nuuk in the years 1811 and 1812. Explanation: V – data after Vinther et al. (2006), G – data from this study; note that data come from different localities in Nuuk.