Dataset Description

Station Information							
ID*	Type*	Location	Latitude*	Longitude*	Coordinate System Units	Coordinate Reference System	Coordinate Collection Method
IF1	Ocean	Hudson Strait	64.28601	-78.2189	decimal degrees	Unknown	GPS - Unspecified
IF3	Ocean	Hudson Strait	62.87295	-78.8548	decimal degrees	Unknown	GPS - Unspecified
16	Ocean	Hudson Bay	62.2796	-85.906	decimal degrees	Unknown	GPS - Unspecified
18	Ocean	Hudson Bay	63.7138	-88.417	decimal degrees	Unknown	GPS - Unspecified
21	Ocean	Hudson Bay	60.9113	-89.3586	decimal degrees	Unknown	GPS - Unspecified
24	Ocean	Hudson Bay	61.6966	-87.7641	decimal degrees	Unknown	GPS - Unspecified
25	Ocean	Hudson Bay	62.0219	-87.0088	decimal degrees	Unknown	GPS - Unspecified
33	Ocean	Hudson Bay	56.60088	-87.0658	decimal degrees	Unknown	GPS - Unspecified
34	Ocean	Hudson Bay	56.5062	-86.8942	decimal degrees	Unknown	GPS - Unspecified
36	Ocean	Hudson Bay	57.774	-86.0311	decimal degrees	Unknown	GPS - Unspecified
38	Ocean	Hudson Bay	58.7224	-86.3045	decimal degrees	Unknown	GPS - Unspecified
40	Ocean	Hudson Bay	58.23267	-88.56332	decimal degrees	Unknown	GPS - Unspecified

Dataset Description

SAMPLE VARIABLE DETAILS

Variable Name*	CanWIN Standardized Name[1]	Variable Description	Variable Speciation	Variable Sample Fraction*	Variable Media Type	Activity Collection Type	Result Value Type
Year			None	None	Other	n/a	Actual
Month			None	None	Other	n/a	Actual
Day			None	None	Other	n/a	Actual
Julian_Day		Day of the year	None	None	Other	n/a	Actual
Station		ID	None	None	Other	n/a	Actual
Lat		Latitude in Decimal Degrees	None	None	Other	Satellite	Actual
Long		Longitude in Decimal Degrees	None	None	Other	Satellite	Actual
Sample_Type		Bottom ice, Melosira arctica	None	None	Other	Field Observation	Actual
Analyzed_by		Lab location: University of British Columbia (UBC)	None	None	Other	Lab Measurement	Actual
Numbers_of_cores		Number of bottom core sections that were pooled in this sample	None	None	Ice Core	Lab Measurement	Actual

Dataset Description

Bottom_Core_height_cm		Height of the collected ice core bottom section	None	None	Ice Core	Field Observation	Actual
Filtered_Volume_mL		Filtered Volume	None	Filtrate	Ice Core	Lab Measurement	Calculated
PON_mg_m-2		Particulate organic nitrogen	None	Filtrate	Biological	Lab Measurement	Blank Corrected
POC_mg_m-2		Particulate organic carbon	None	Filtrate	Biological	Lab Measurement	Blank Corrected
QF	LAF	Data qualifier: The nitrogen values were very high. Consultation with the lab at UBC could not rule out that the mass spectrometer, used to analyze the samples, was not sealed properly during the analysis and could have been contaminated by nitrogen contained in the air.	None	None	Other	n/a	Actual

Dataset Description

DATA FILE DETAILS

Column Name*	Unit	Description	Statistic Applied
Sample_Type	none	Bottom ice, Melosira arctica	
Analyzed_by	none	Lab location: University of British Columbia (UBC)	
Numbers_of_cores	none	Number of bottom core sections that were pooled in this sample	
Bottom_Core_height_cm	cm	Height of the collected ice core bottom section	
Filtered_Volume_mL	mL	Filtered Volume	
PON_mg_m-2	mg m-2	Particulate organic nitrogen	
POC_mg_m-2	mg m-2	Particulate organic carbon	

Dataset Description

Table 1. Code list

CanWIN Short Code	Definition	User Code
ADL	Above Detection Limit	
BDL	Below Detection Limit	
$	Incorrect sample container	
EFAI	Equipment failure, sample lost	
FEF	Field equipment failed	
FEQ	Field Equipment Questionable	
FFB	Failed. Field blank not acceptable.	
FFD	Failed. Field Duplicate.	
FFS	Failed. Field spike not acceptable.	
H	Holding time exceeded	
ISP	Improper sample preservation	
ITNA	Incubation time not attained	
ITNM	Incubation temperature not maintained	
JCW	Sample container damaged, sample lost	
NaN	Value is missing and reason is not known	
NC	Not collected	
ND	Not detected	
NR	Sample taken/measured on site but information in this field not recorded	
NS	Sample collected but not submitted	
OC	Master Coordinate List Used	
P	Analysis requested and result pending	
prob_good	probably good value. Data value that is probably consistent with real phenomena but this is unconfirmed or data value forming part of a malfunction that is considered too small to affect the overall quality of the data object of which it is a part.	
prob_bad	probably bad value. Data value recognised as unusual during quality control that forms part of a feature that is probably inconsistent with real phenomena.	
Interpolated	This value has been derived by interpolation from other values in the data object.	
Q	Below limit of quantification (LOQ). The value was below the LOQ of the analytical method. The value in the result field is the limit of quantification (limit of detection) for the method.	
LAF	Lab Analysis Failure (value cannot be trusted due to detected lab instrument	New code added by LCM

Dataset Description

	failure (e.g. contamination) during sample processing	

Table 2. Options for Statistics Applied

Statistics Applied	Description
30DADMean	Thirty-day average daily mean
7DADM	Seven-day average daily maximum
7DADMean	Seven-day average daily mean
7DADMin	Seven-day average daily minimum
Coefficient of variation	The ratio of the standard deviation σ to the mean, μ.
Daily Geometric Mean	Provides a number that is more representative of the median and helps reduce the effect of a few extreme values.
Daily Maximum	The largest value of a set, each period of a day cycle
Daily Minimum	The smallest value of a set, each period of a day cycle
Hourly Maximum	The largest value of a set, each period of an hour cycle
Hourly Minimum	The smallest value of a set, each period of an hour cycle
MatLab script	Provide the MatLab script or the link to it
Mean	The sum of all the numbers in the set divided by the amount of numbers in the set
Median	The middle point of a number set, in which half the numbers are above the median and half are below.
None	None
R script	Provide the R script or the link to it
Standard Deviation	This describes the spread of values in the sample
Standard Error	The standard deviation of the sample mean, $\bar{x}$, which describes its accuracy as an estimate of the population mean, μ.