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	
Location		Hudson Bay	None	None	Other	n/a	
Day_SAT_above_Zero		Day of year at which surface air temperatures went >0□C for more than 12 hours	None	None	Other	Satellite	Calculated
Breakup_day		Day of year at which ice concentration <15 %	None	None	Other	Satellite	Actual
Freezeup_day		Day of year at which ice concentration >15 %	None	None	Other	Satellite	Actual
Number_of_days_ Open_water_seas on		Number of days between ice concentration falling <15%	None	None	Other	Satellite	Calculated
Number_melt_days		time period of surface air temperatures (SAT) above 0□C and ice concentrations above 15%	None	None	Other	Satellite	Calculated
QF		Data qualifier	Followed labels in table 2 of this document				

Dataset Description

DATA FILE DETAILS

Column Name*	Unit	CanWIN Standardized Name	Description	Statistic Applied
Year				
Location			Hudson Bay	
Day_SAT_above_Zero	Day of the year		Day of year at which surface air temperatures went >0□C for more than 12 hours	
Breakup_day	Day of the year		First day of the year at which ice concentration <15 %	
Freezeup_day	Day of the year		First day of the year at which ice concentration >15 %	
Number_of_days_Open_water_season	Number of days		Period of time with ice concentration <15%	
Number_melt_days	Number of days		time period of surface air temperatures (SAT) above 0□C and ice concentrations above 15%	

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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

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	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.