

Dataset Description

Station Information							
ID*	Type*	Location	Latitude*	Longitude*	Coordinate System Units	Coordinate Reference System	Coordinate Collection Method
Central Hudson Bay – transect start	Ocean	Hudson Bay	57.4	-91.9	decimal degrees	Unknown	GPS - Unspecified
Central Hudson Bay transect end	Ocean	Hudson Bay	58.9329	-86.032	decimal degrees	Unknown	GPS - Unspecified

Station Information							
ID*	Type*	Location	Latitude*	Longitude*	Coordinate System Units	Coordinate Reference System	Coordinate Collection Method
Narrows transect start	Ocean	Hudson Bay	62.7	-91.6	decimal degrees	Unknown	GPS - Unspecified
Narrows – transect end	Ocean	Hudson Bay	61.61166	-83.9557	decimal degrees	Unknown	GPS - Unspecified

Station Information							
ID*	Type*	Location	Latitude*	Longitude*	Coordinate System Units	Coordinate Reference System	Coordinate Collection Method
Western Hudson Bay transect start	Ocean	Hudson Bay	64.4	-78	decimal degrees	Unknown	GPS - Unspecified
Western Hudson Bay – transect end	Ocean	Hudson Bay	62.96258	-81.8738	decimal degrees	Unknown	GPS - Unspecified

Dataset Description

SAMPLE VARIABLE DETAILS

Variable Name*	Variable Description	Variable Speciation	Variable Sample Fraction*	Variable Media Type	Activity Collection Type	Result Value Type
Lat	Latitude in Decimal Degrees	None	None	Other	Satellite	Actual
Long	Longitude in Decimal Degrees	None	None	Other	Satellite	Actual
Distance_m	Distance along the transect	None	None	Other	Field Observation	Calculated
total_ice_concentration	Total sea ice concentration	None	None	Ice Floe	Field Observation	Calculated
old_ice	Old sea ice - Survived at least one season's melt (>2 m)	None	None	Ice Floe	Field Observation	Calculated
fyi	First Year Sea Ice (30 - 200 cm)	None	None	Ice Floe	Field Observation	Calculated
fyi_thick	Thick First Year Sea Ice (>120 cm)	None	None	Ice Floe	Field Observation	Calculated
fyi_medium	Medium First Year Sea Ice (70 - 120 cm)	None	None	Ice Floe	Field Observation	Calculated
fyi_thin	First Year Thin Sea Ice (30 - 70 cm)	None	None	Ice Floe	Field Observation	Calculated
young_ice	Young Sea Ice (10 - 30 cm)	None	None	Ice Floe	Field Observation	Calculated
new_ice	New Ice-Frazil, Grease, Slush, Shuga (0-10 cm)	None	None	Ice Floe	Field Observation	Calculated
QF	Data qualifier	Followed labels in table 2 of this document	None			

Dataset Description

DATA FILE DETAILS

Column Name*	Unit	Description	Statistic Applied
Distance_m	m	Distance along the transect	
total_ice_concentration	concentrations in tenths	Total sea ice concentration	
old_ice	concentrations in tenths	Old sea ice - Survived at least one season's melt (>2 m)	
fyi	concentrations in tenths	First Year Sea Ice (30 - 200 cm)	
fyi_thick	concentrations in tenths	Thick First Year Sea Ice (>120 cm)	
fyi_medium	concentrations in tenths	Medium First Year Sea Ice (70 - 120 cm)	
fyi_thin	concentrations in tenths	First Year Thin Sea Ice (30 - 70 cm)	
young_ice	concentrations in tenths	Young Sea Ice (10 - 30 cm)	
new_ice	concentrations in tenths	New Ice-Frazil, Grease, Slush, Shuga (0-10 cm)	

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	
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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 .