

# Metadata

<b>Dataset Name</b>	Zn, Pb and Cd-NPs in snow samples from Winnipeg and Muller Ice Cap 2022-2023
<b>Dataset General Type</b>	metallic nanoparticles data
<b>Dataset Type</b>	Dataset
<b>Dataset Level</b>	
<b>Program Website</b>	
<b>Keyword Vocabulary</b>	Polar Data Catalogue
<b>Keyword Vocabulary URL</b>	<a href="https://www.polardata.ca/pdcinput/public/keywordlibrary">https://www.polardata.ca/pdcinput/public/keywordlibrary</a>
<b>Theme</b>	
<b>Title</b>	Atmosphere
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/en/group/modelling">https://canwin-datahub.ad.umanitoba.ca/data/en/group/modelling</a>
<b>Dataset Status</b>	Complete
<b>Maintenance and Update Frequency</b>	Not planned
<b>Dataset Last Revision Date</b>	2024-12-18
<b>Dataset DOI</b>	10.34992/emwm-4426
<b>Metadata Creation Date</b>	2025
<b>Publisher</b>	CanWIN

## Dataset Authors

### Dataset Authors 1

**Name** Oliveira, Richard

**Type of Name** Personal

**Email** [richard.oliveira@umanitoba.ca](mailto:richard.oliveira@umanitoba.ca)

**Affiliation** Agriculture and Agri Food Canada

**ORCID ID** 0000-0001-7906-5664

ORCID  
<http://orcid.org/>

### Dataset Authors 2

**Name** Wang, Feiyue

**Type of Name** Personal

**Email** [Feiyue.Wang@umanitoba.ca](mailto:Feiyue.Wang@umanitoba.ca)

**Affiliation** Centre for Earth Observation Science - University of Manitoba

**ORCID ID** 0000-0001-5297-0859

ORCID  
<http://orcid.org/>

### Dataset Authors 3

**Name** Dahl-Jensen, Dorthe

**Type of Name** Personal

**Email** [dorthe.dahl-jensen@umanitoba.ca](mailto:dorthe.dahl-jensen@umanitoba.ca)

**Affiliation** Centre for Earth Observation Science - University of Manitoba

**ORCID ID** 0000-0002-1474-1948

ORCID  
<http://orcid.org/>

## Contributors

### Contributors 1

**Name**

**Role**

Email

Affiliation

ORCID ID

**Project Data  
Curator**

Oliveira, Richard

**Project Data  
Curator  
email**

[Richard.Oliveira@umanitoba.ca](mailto:Richard.Oliveira@umanitoba.ca)

**Project Data  
Curator  
Affiliation**

Centre for Earth Observation Science - University of Manitoba

**Dataset  
Collection  
Start Date**

2022-11-04

**Dataset  
Collection  
End Date**

2023-04-20

**Sample  
Collection**

**Sample  
Collection 1**

**Sampling  
Instrument  
Name**

Inductively Coupled Plasma Mass Spectrometry (Agilent 8900)

**Standardized  
Sampling  
Instrument  
Name**

**Sample  
Collection  
Method Name**

Single particle analysis

**Comment**

**Method Link**

**Method  
Summary**

**Method  
Description  
Type**

Methods

<b>Activity Collection Type</b>	
<b>Preferred citation</b>	
<b>Analytical Instrument</b>	
<b>Analytical Instrument 1</b>	
<b>Analytical Instrument Name</b>	Inductively Coupled Plasma Mass Spectrometry (Agilent 8900)
<b>Standardized Analytical Instrument Name</b>	
<b>Analytical Instrument Identifier Id</b>	
<b>Analytical Instrument Title Type</b>	Alternative Title
<b>Analytical Instrument Identifier Type</b>	
<b>Analytical Method</b>	
<b>Analytical Method 1</b>	
<b>Analytical Method Name</b>	Single particle inductively coupled plasma mass spectrometry (spICP-MS)
<b>Method Link</b>	
<b>Method Summary</b>	
<b>Laboratory</b>	Ultra-Clean Trace Elements Laboratory (UCTEL)
<b>Comments</b>	
<b>Variables Measured</b>	
<b>License Name</b>	Creative Commons Attribution 4.0 International
<b>Licence Type</b>	Open

**Embargo  
Date****Licence URL** <https://spdx.org/licenses>**Terms of  
Access**

CanWIN datasets are licensed individually, however most are licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0) Public License. Details for the licence applied can be found using the Licence URL link provided with each dataset. By using data and information provided on this site you accept the terms and conditions of the License. Unless otherwise specified, the license grants the rights to the public to use and share the data and results derived therefrom as long as the proper acknowledgment is given to the data licensor (citation), that any alteration to the data is clearly indicated, and that a link to the original data and the license is made available.

**Terms of  
Use**

By accessing this data you agree to [CanWIN's Terms of Use](/data/publication/canwin-data-statement/resource/5b942a87-ef4e-466e-8319-f588844e89c0).

**Awards****Awards 1****Award Title****Website****Funder Name****Funder  
Identifier Code****Funder  
Identifier Type****Funder  
Identifier  
Scheme****Grant Number****Related  
Resources****Related  
Resources 1****Related  
Resource  
Name****Resource  
Code****Identifier Type****Relationship  
To This  
Dataset****Resource Type** Online Resource**Type**

Series Name

## Publications

### Publications 1

Publication  
Name

Identifier Code

Identifier Type

Relationship to  
this dataset

Resource Type    Online Resource

Publication  
Type

**Spatial  
regions**

arctic-basin

**Spatial  
extent West  
Bound  
Longitude**

**Spatial  
extent East  
Bound  
Longitude**

**Spatial  
extent South  
Bound  
Latitude**

**Spatial  
extent North  
Bound  
Latitude**

# Data and Resources

<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/96d2e0f1-7eda-4d8f-bf50-34d9fb3f5049/resource/18deb060-f9fb-4447-bd47-3a0fdf4bfbbe/download/cd-nps-winnipeg-snow.xlsx">https://canwin-datahub.ad.umanitoba.ca/data/dataset/96d2e0f1-7eda-4d8f-bf50-34d9fb3f5049/resource/18deb060-f9fb-4447-bd47-3a0fdf4bfbbe/download/cd-nps-winnipeg-snow.xlsx</a>
<b>Name</b>	Cd NPs in Winnipeg snow
<b>Description</b>	Cd NPs in snow, Winnipeg
<b>Format</b>	XLSX
<b>Resource Category</b>	data
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/96d2e0f1-7eda-4d8f-bf50-34d9fb3f5049/resource/a98126f5-efd8-4e91-94ae-1558ded440c0/download/pb-nps-in-winnipeg-muller-snow.xlsx">https://canwin-datahub.ad.umanitoba.ca/data/dataset/96d2e0f1-7eda-4d8f-bf50-34d9fb3f5049/resource/a98126f5-efd8-4e91-94ae-1558ded440c0/download/pb-nps-in-winnipeg-muller-snow.xlsx</a>
<b>Name</b>	Pb NPs in Winnipeg-Muller snow
<b>Description</b>	Pb NPs in snow, Winnipeg-Muller
<b>Format</b>	XLSX
<b>Resource Category</b>	data
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/96d2e0f1-7eda-4d8f-bf50-34d9fb3f5049/resource/9a692f15-eb91-426f-89d9-6c4c1571fce1/download/zn-nps-winnipeg-muller-snow.xlsx">https://canwin-datahub.ad.umanitoba.ca/data/dataset/96d2e0f1-7eda-4d8f-bf50-34d9fb3f5049/resource/9a692f15-eb91-426f-89d9-6c4c1571fce1/download/zn-nps-winnipeg-muller-snow.xlsx</a>
<b>Name</b>	Zn NPs in Winnipeg-Muller snow
<b>Description</b>	Zn NPs in snow, Winnipeg-Muller
<b>Format</b>	XLSX
<b>Resource Category</b>	data