

T-MOSAIC

Terrestrial Multidisciplinary distributed Observatories for the Study of Arctic Connections





T-MOSAIC

Terrestrial Multidisciplinary distributed Observatories for the Study of Arctic Connections





T-MOSAiC invitation to INTERACT Station Managers

Background: INTERACT is a founding partner of the IASC project Terrestrial Multidisciplinary distributed Observatories for the Study of Arctic Connections (T-MOSAiC), with the aim to promote the sharing of information, observations and samples.

We invite contributions to a T-MOSAiC/INTERACT catalogue of Automated Weather Station (AWS) air temperature data plus photographic landscape images (spring and summer) for the T-MOSAiC / MOSAiC period 1 January 2019 to 31 December 2020:

- Compilation of air temperature data from AWS stations that are currently 'invisible' in the WMO network (see next slide for potential data archiving and presentation)
- Of great interest to modelers for high latitudes, atmospheric circulation/projection models are especially constrained by air temperatures
- A photographic catalogue of landscape images across the circumpolar North at this time of rapid change. The aim is a set of photos from two 'INTERACT/T-MOSAiC periods: March-May (best = 15 April 2020) & June-August (best = 15 July 2020)

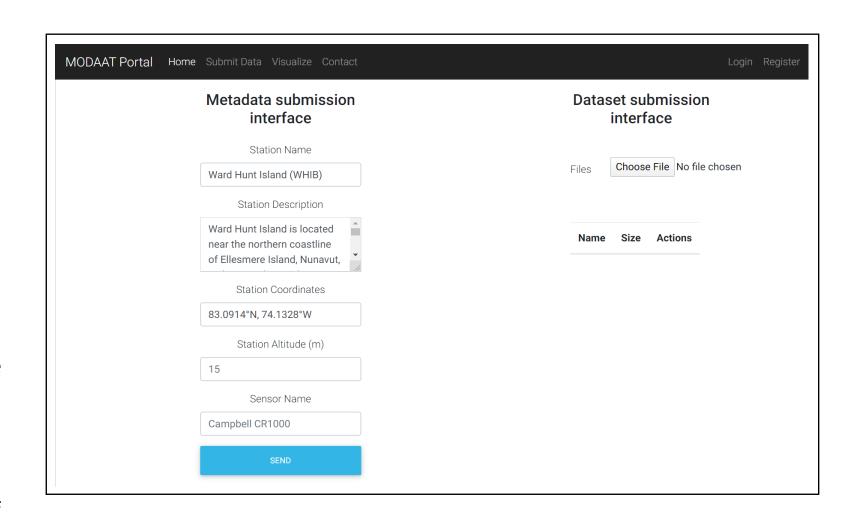
Merged Observation Data Arctic Air Temperatures 2019-2020



Available data L

List of publications

- A Web-portal is in development to streamline data transfer
- The metadata requirements have been defined according to WMO standards
- The data archives will be published as individual station records that will have DOI's assigned and will be citable publications
- The authors of each archive could be persons, a project name or station name, depending on preference
- The registered data publication will have a link to full station database (if that exists) and station contact



Merged Observation Data Arctic Air Temperatures 2019-2020



Available data

List of publications

Station name: Ward Hunt Island Observatory, Canada

Location: 83.0914°N, 74.1328°W; altitude 8m

Summary: Ward Hunt Island is located near the northern coastline of Ellesmere Island, Nunavut, in the Canadian High Arctic. The Automatic Weather Station (AWS) is 50 m from a coastal lagoon on the northern side of the island, in a polar desert landscape. This record contains air temperature data within the period 1 January 2019 to 31 December 2020, and landscape images looking outwards from the station in summer. Links to the full AWS database, station operator and contact details are given in the metadata record.







Updated air temperature plot 1/1/2019 to 31/12/2020

2019: mean, min, max 2020: mean, min, max

Metadata download

Landscape images download

Air temperature data download

Authors: CEN (Authors could be persons, projects, programs or station names)

Cite this dataset as:

Version 1.1: data 2019-2020

Nordicana D DOI Versioning: Version 1.0: data from 2019

(new version of the same DOI)

CEN (2020) Air temperature data and landscape images at Ward Hunt Island, Canada, 2019-2020, version 1.0. Nordicana DXX, https://doi.org/10.5885/XXXX This registered digital object identifier (DOI) allows the data to be discovered and cited

Merged Observation Data Arctic Air Temperatures 2019-2020



Station name: Ward Hunt Island Observatory, Canada

Location: 83.0914°N, 74.1328°W; altitude 8m

Summary: Ward Hunt Island is located near the northern coastline of

Automatic Weather Station (AWS) is 50 m from a coastal lagoon on the northern side of the island, in a polar desert landscape. This

record contains air temperature data within the period 1 January 2019 to 31 December 2020, and landscape images looking outwards

from the station in summer. Links to the full AWS database, station operator and contact details are given in the metadata record.







This T-MOSAiC activity is being led by **CEN**

(ULaval) through INTERACT and we will

follow up shortly with more information

and responses to your questions

Updated air temperature plot 1/1/2019 to 31/12/2020

2019: mean, min, max 2020: mean, min, max

Metadata download

Landscape images download

Air temperature data download

Authors: CEN (Authors could be persons, projects, programs or station names)

Cite this dataset as:

CEN (2020) Air temperature data and landscape images at Ward Hunt Island, Canada, 2019-2020, version 1.0. Nordicana DXX, https://doi.org/10.5885/XXXX This registered digital object identifier (DOI) allows the data to be discovered and cited

Nordicana D DOI Versioning:

- Version 1.0: data from 2019
- Version 1.1: data 2019-2020

(new version of the same DOI)



T-MOSAiC invitation to INTERACT Station Managers

Background: INTERACT is a founding partner of the IASC project Terrestrial Multidisciplinary distributed Observatories for the Study of Arctic Connections (T-MOSAiC), with the aim to promote the sharing of information, observations and samples.

Request to INTERACT Station Managers for other data, observations or samples

Key principles:

- Station Managers are very busy and have limited time for such requests
- Protocols must be clear and easy to follow
- Any specialized equipment should be provided
- All requests will be centralized via INTERACT/T-MOSAiC Offices
- Station Managers / Stations should be appropriately credited
- Station Managers have the final say on acceptance or not



INTERACT is a founding partner of the IASC project T-MOSAiC, with the aim to promote the sharing of information, observations and samples from areas close to INTERACT Stations.

This has resulted in the present call to allow T-MOSAiC researchers to access to data from Arctic field stations during 2020, by way of collaboration with the INTERACT station managers

This is the draft text from the call to be launched in late February, for feedback and revision by INTERACT Station Managers at the present meeting



Applications are to be submitted by the online form given **here**, and are subject to the following conditions:

1. This call is open only to T-MOSAiC Action Group members or to researchers involved in T-MOSAiC endorsed projects (applications for endorsement of projects is possible, by applying as described here:

https://www.t-mosaic.com/t-mosaic-endorsement.html



- 2. Applicants may request access to station data, sample collection or field measurements.
 - 1. The request for station data (e.g. meteorological, snow depth, etc.) should clearly describe in the application form the required parameter and the period of data collection, data format, etc.
 - 2. For any request of sample collections or field measurements, the applicants must provide to station managers all the necessary equipment, including sampling equipment and storage containers, as well as clearly described protocols for the work.
 - 3. For sample transport, the applicants will be required to make the necessary arrangements in consultation with each station manager.
 - 4. The applicants are required to explicitly state how the station/station managers/station personnel will get credit for this collaboration.



- 3. Before choosing the stations where the work is requested, the proponents should visit INTERACT website (https://eu-interact.org/accessing-the-arctic/infrastructures/) to obtain information about the location, infrastructure and data which is already available.
- 4. Until the application has been accepted, the applicants should not contact the station managers directly. All applications should be submitted to the T-MOSAiC Secretariat, which is working in close consultation with the INTERACT Secretariat and Station Managers. After acceptance, INTERACT or T-MOSAiC will inform the applicant about how to proceed with the project.
- 5. INTERACT and INTERACT Station Managers reserve the right to reject any application they deem unsuitable for this collaboration. The submission of an application does not guarantee the acceptance of the request.

Draft request form for Application to T-MOSAiC – INTERACT Call for Remote Access







Applicant Information

- 1. Project title and acronym:
- 2. Lead Institution
- 3. Principal Investigator:
 - Family Name, First name
 - - Address
 - - Email:
 - - Telephone:



Endorsement by T-MOSAiC

[] Other;

Application to T-MOSAiC – INTERACT Call for Remote Access

Endorsement & Type

	[] Requested – send this completed form to diogo.folhas@tecnico.ulisboa.p
5.	[] Granted (date: DD/MM/YYYY) Type of support requested from the station manager (cross one or more)
	[] Data Access ; e.g., air temperature, air pressure.
	[] Data Collection; e.g., snow depth, active layer depth, Soil temperature.

[] Sample Collection; e.g., plant, insect, snow samples.



6. Data access request details:

- i) Requested variables:
- ii) Period:
- iii) Target INTERACT Station(s):

7. Data collection details:

- i) Requested field parameters
- ii) Data collection specifications (measurement specifics)
- iii) Period:
- iv) Target INTERACT Station(s):
- v) Upload Protocol (simplified but specific):

Detailed Information



Sampling and Credit

8. Sample collection details

- i) Type of sample(s):
- ii) Sample collection specifications:
- iii) Period:
- iv) Target INTERACT Station(s):
- v) Sample handling and transport details
- vi) Upload Protocol (Simple but specific):

9. Describe briefly how you plan to credit the Stations and their personnel for this support.



T-MOSAiC Secretariat will <u>receive</u>, <u>organize</u>, and <u>manage</u> the applications, and act as a bridge between the Applicants and INTERACT.

The success of this is dependant on a good organization of the application process/distribution and good communication.



T-MOSAIC

Terrestrial Multidisciplinary distributed Observatories for the Study of Arctic Connections

