Metadata

Field	Value
Dataset Name	KuKa Rothera 2023 Processed Waveforms
Dataset General Type	KuKa Data
Dataset Type	Collection
Dataset Level	0
Program Website	https://defiant.ac.uk/
Keyword Vocabulary	Polar Data Catalogue
Keyword Vocabulary URL	https://www.polardata.ca/pdcinput/public/keywordlibrary
Theme	
Title	Cryosphere
URL	https://canwin-datahub.ad.umanitoba.ca/data/group/cryosphere
Title	Glaciers
URL	https://canwin-datahub.ad.umanitoba.ca/data/group/glaciers
Title	Ice Sheets and Ice Shelves
URL	https://canwin-datahub.ad.umanitoba.ca/data/group/ice-sheets-and-ice-shelves
Title	Sea Ice

Field	Value
URL	https://canwin-datahub.ad.umanitoba.ca/data/group/sea-ice
Title	Snow
URL	https://canwin-datahub.ad.umanitoba.ca/data/group/snow
Dataset Status	In Progress
Maintenance and Update Frequency	Not planned
Dataset Last Revision Date	2024-11-28
Dataset DOI	10.34992/pqvf-q516
Metadata Creation Date	2026
Publisher	CanWIN
Dataset Authors	
Dataset Authors 1	
Name	Mallett, Robbie
Type of Name	Personal
Email	robbie.d.mallett@uit.no
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Field	Value
ORCID ID	0000-0002-1069-6529
	ORCID
	http://orcid.org/

Dataset Authors 2

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Contributors

Contributors 1

Name	
Role	
Email	

Field	Value
Affiliation **ORCID ID**	
Project Data Curator	Stroeve, Julienne
Project Data Curator email	julienne.stroeve@umanitoba.ca
Project Data Curator Affiliation	Centre for Earth Observation Science - University of Manitoba
Dataset Collection Start Date	2023-03-17
Dataset Collection End Date	2023-10-09
Sample Collection **Sample Collection 1** **Sampling Instrument Name**	Prosensing KuKa
Standardized Sampling Instrument Name	
Sample Collection Method Name	Polarimetric Radar Scanning
Comment **Method Link**	

Field	Value
Method Summary	This directory contains processed waveform data from the KuKa radar instrument from its deployment at Rothera Research Station during 2023. Data were collected over sea ice, open water, glacial ice and terrestrial snow. In addition, calibration experiments were performed on a metal sheet and over concrete inside the aircraft hanger. The data are therefore extremely diverse and contact should be made with the Rothera DEFIANT project team prior to any scientific analysis. Any such analysis will require auxiliary data concerning the nature of the target in the footprint (sea ice, land-ice, snow etc). Data are processed at full bandwidth (see Willatt et al., 2023 GRL for details on this) using the KuKaPy Python package (https://doi.org/10.5281/zenodo.7967057).
Method Description Type	Methods
Activity Collection Type	Field Measurement
Preferred citation	
Analytical Instrument	
Analytical Instrument 1	
Analytical Instrument Name	
Standardized Analytical Instrument Name	
Analytical Instrument Identifier Id	
Analytical Instrument Title Type	Alternative Title
Analytical Instrument Identifier Type	
Analytical Method	
Analytical Method 1	
Analytical Method Name	

Field	Value
Method Link	
Method Summary	
Laboratory	
Comments	All data are geolocated with the exception of calibration measurements that occurred in the aircraft hangar where no GPS fix was available. Due to a persistent issue with the instrument clocks, the accuracy of timestamps are not always guaranteed.
Variables Measured	
Licence Name or Copyright Statement	Creative Commons Attribution 4.0 International
Copyright Statement	
Licence Type	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.

Field	Value
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	Canada C150 Research Chairs
Website	
Funder Name	NSERC
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	

Field	Value
Publications	
Publications 1	
Publication Name	
Identifier Code	
Identifier Type	
Relationship to this dataset	
Resource Type	Online Resource
Publication Type	
Spatial regions	antarctica
Spatial extent West Bound Longitude	
Spatial extent East Bound Longitude	
Spatial extent South Bound Latitude	
Spatial extent North Bound Latitude	

Data and Resources

Field	Value
URL	https://canwinerddap.ad.umanitoba.ca/erddap/files/Defiant_Rothera_Campaign_0bb4_eeb0_9c06/KuKa_Data/
Name	KuKa data

Field	Value
Description	This dataset contains processed waveform data from the KuKa radar instrument from its deployment at Rothera Research Station during 2023.
Format	.nc
Resource Category	data