

# Metadata

Field	Value
<b>Dataset Name</b>	Churchill Beluga Boat Drone Imagery
<b>Dataset General Type</b>	imagery
<b>Dataset Type</b>	Dataset
<b>Dataset Level</b>	1.1
<b>Program Website</b>	
<b>Keyword Vocabulary</b>	Polar Data Catalogue,Global Change Master Directory
<b>Keyword Vocabulary URL</b>	<a href="https://www.polardata.ca/pdcinput/public/keywordlibrary">https://www.polardata.ca/pdcinput/public/keywordlibrary</a> ; <a href="https://gcmd.earthdata.nasa.gov/KeywordViewer/scheme/all?gtm_scheme=all">https://gcmd.earthdata.nasa.gov/KeywordViewer/scheme/all?gtm_scheme=all</a>
<b>Theme</b>	
<b>Title</b>	Freshwater
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/group/freshwater">https://canwin-datahub.ad.umanitoba.ca/data/group/freshwater</a>
<b>Title</b>	Remote Sensing
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/group/remote-sensing">https://canwin-datahub.ad.umanitoba.ca/data/group/remote-sensing</a>
<b>Dataset Status</b>	Complete
<b>Maintenance and Update Frequency</b>	Not planned

Field	Value
<b>Dataset Last Revision Date</b>	2019-08-09
<b>Dataset DOI</b>	10.34992/sgs5-yw58
<b>Metadata Creation Date</b>	2026
<b>Publisher</b>	CanWIN
<b>Dataset Authors</b>	
<b>Dataset Authors 1</b>	
<b>Name</b>	Harasyn, Madison
<b>Type of Name</b>	Personal
<b>Email</b>	<a href="mailto:Madison.harasyn@umanitoba.ca">Madison.harasyn@umanitoba.ca</a>
<b>Affiliation</b>	Centre for Earth Observation Science - University of Manitoba
<b>ORCID ID</b>	<a href="https://orcid.org/0000-0002-5741-6766">https://orcid.org/0000-0002-5741-6766</a>
	ORCID
	<a href="http://orcid.org/">http://orcid.org/</a>
<b>Dataset Authors 2</b>	
<b>Name</b>	Barber, David

Field	Value
<b>Type of Name</b>	Personal
<b>Email</b>	<a href="mailto:david.barber@umanitoba.ca">david.barber@umanitoba.ca</a>
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<b>Contributors</b>	
<b>Project Data Curator</b>	Chan, Wayne
<b>Project Data Curator email</b>	<a href="mailto:wayne.chan@umanitoba.ca">wayne.chan@umanitoba.ca</a>
<b>Project Data Curator Affiliation</b>	Centre for Earth Observation Science - University of Manitoba
<b>Dataset Collection Start Date</b>	2019-07-28
<b>Dataset Collection End Date</b>	2019-08-09
<b>Sample Collection</b>	
<b>Activity Collection Type</b>	Field Measurement

Field	Value
<b>Preferred citation</b>	
<b>Analytical Instrument</b>	
<b>Analytical Method</b>	
<b>Licence Name or Copyright Statement</b>	Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International
<b>Copyright Statement</b>	
<b>Licence Type</b>	Open
<b>Embargo Date</b>	
<b>Licence URL</b>	<a href="https://spdx.org/licenses">https://spdx.org/licenses</a>
<b>Terms of Access</b>	<p>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.</p>
<b>Terms of Use</b>	<p>By accessing this data you agree to [CanWIN's Terms of Use](/data/publication/canwin-data-statement/resource/5b942a87-ef4e-466e-8319-f588844e89c0).</p>
<b>Awards</b>	
<b>Related Resources</b>	
<b>Publications</b>	

Field	Value
<b>Publications 1</b>	
<b>Publication Name</b>	Detection and tracking of belugas, kayaks and motorized boats in drone video using deep learning
<b>Identifier Code</b>	10.1139/juvs-2021-0024
<b>Identifier Type</b>	DOI
<b>Relationship to this dataset</b>	Describes
<b>Resource Type</b>	Online Resource
<b>Publication Type</b>	JournalArticle
<b>Spatial regions</b>	churchill
<b>Spatial extent West Bound Longitude</b>	-94.3257662171
<b>Spatial extent East Bound Longitude</b>	-94.0706395086
<b>Spatial extent South Bound Latitude</b>	58.6686784698
<b>Spatial extent North Bound Latitude</b>	58.8195795207

# Data and Resources

Field	Value
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/e028a59d-284b-4502-acad-4aaf0e1776e1/download/davidbarber_img_6403.jpg">https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/e028a59d-284b-4502-acad-4aaf0e1776e1/download/davidbarber_img_6403.jpg</a>
<b>Name</b>	Churchill Estuary - Madison Harasyn, David Barber
<b>Description</b>	Taken on June 13, 2018 in the Churchill Estuary as part of the Beluga Boat Study.
<b>Format</b>	JPEG
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/ad573eed-c8eb-434e-a012-09bf5ba2c43c/download/dji_0094.jpg">https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/ad573eed-c8eb-434e-a012-09bf5ba2c43c/download/dji_0094.jpg</a>
<b>Name</b>	Churchill Estuary
<b>Description</b>	Taken on April 24, 2019 in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	JPEG
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/7f84dcd1-13f0-4b3b-889b-6ace985ac927/download/dji_0106.jpg">https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/7f84dcd1-13f0-4b3b-889b-6ace985ac927/download/dji_0106.jpg</a>

Field	Value
<b>Name</b>	Churchill Estuary - Ice Floes 1
<b>Description</b>	Taken on June 20, 2018 in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	JPEG
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/3d05131d-1c8c-4cab-be9e-2e12a9807d9e/download/dji_0202.jpg">https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/3d05131d-1c8c-4cab-be9e-2e12a9807d9e/download/dji_0202.jpg</a>
<b>Name</b>	Churchill Estuary - Ice Floes 2
<b>Description</b>	Taken on June 22, 2018 in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	JPEG
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/075cc222-d7e8-404e-af41-eb986ec8aab3/download/dji_0340.jpg">https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/075cc222-d7e8-404e-af41-eb986ec8aab3/download/dji_0340.jpg</a>
<b>Name</b>	Churchill Estuary - Ice Floes 3
<b>Description</b>	Taken on June 8, 2018 in the Churchill Estuary as part of the Churchill Beluga Boat Study.

Field	Value
<b>Format</b>	JPEG
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/26a48e38-9ec9-49a6-95ba-60474e1487dd/download/maddie_drone.jpg">https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/26a48e38-9ec9-49a6-95ba-60474e1487dd/download/maddie_drone.jpg</a>
<b>Name</b>	Churchill Estuary - Madison Harasyn and Drone
<b>Description</b>	Taken on June 4, 2018 in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	JPEG
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/d34138b9-6b4b-439d-b95a-712e84709620/download/dji_0136.jpg">https://canwin-datahub.ad.umanitoba.ca/data/dataset/b5f259b4-3ace-4750-bfb0-47c4e794082f/resource/d34138b9-6b4b-439d-b95a-712e84709620/download/dji_0136.jpg</a>
<b>Name</b>	Churchill Estuary - Boat
<b>Description</b>	Taken on June 20, 2018 in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	JPEG
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga3.mp4">https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga3.mp4</a>

Field	Value
<b>Name</b>	Churchill Beluga Boat Study drone video 2019 - 1
<b>Description</b>	Drone footage of beluga whales and boats in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	MP4
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga5.mp4">https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga5.mp4</a>
<b>Name</b>	Churchill Beluga Boat Study drone video 2019 - 2
<b>Description</b>	Drone footage of beluga whales and boats in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	MP4
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga6.mp4">https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga6.mp4</a>
<b>Name</b>	Churchill Beluga Boat Study drone video 2019 - 3
<b>Description</b>	Drone footage of beluga whales and boats in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	MP4

Field	Value
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga7.mp4">https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga7.mp4</a>
<b>Name</b>	Churchill Beluga Boat Study drone video 2019 - 4
<b>Description</b>	Drone footage of beluga whales and boats in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	MP4
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga8.mp4">https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga8.mp4</a>
<b>Name</b>	Churchill Beluga Boat Study drone video 2019 - 5
<b>Description</b>	Drone footage of beluga whales and boats in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	MP4
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga9.mp4">https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga9.mp4</a>
<b>Name</b>	Churchill Beluga Boat Study drone video 2019 - 6

Field	Value
<b>Description</b>	Drone footage of beluga whales and boats in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	MP4
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga10.mp4">https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga10.mp4</a>
<b>Name</b>	Churchill Beluga Boat Study drone video 2019 - 7
<b>Description</b>	Drone footage of beluga whales and boats in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	MP4
<b>Resource Category</b>	raw_data
<b>URL</b>	<a href="https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga11.mp4">https://canwinerddap.ad.umanitoba.ca/erddap/files/Drone_Data_588f_21fe_8ff6/beluga11.mp4</a>
<b>Name</b>	Churchill Beluga Boat Study drone video 2019 - 8
<b>Description</b>	Drone footage of beluga whales and boats in the Churchill Estuary as part of the Churchill Beluga Boat Study.
<b>Format</b>	MP4
<b>Resource Category</b>	raw_data

## Related Publications

Field	Value
<b>Title</b>	One Beluga, Two Beluga, Three Beluga, Four: How to Count Belugas When You Run Out of Fingers and Toes
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/publication/beluga-graphic-novel">https://canwin-datahub.ad.umanitoba.ca/data/publication/beluga-graphic-novel</a>

## Deployment details

Field	Value
<b>Title</b>	Churchill Drone Deployment
<b>URL</b>	<a href="https://canwin-datahub.ad.umanitoba.ca/data/deployment_details/churchill-drone-deploy">https://canwin-datahub.ad.umanitoba.ca/data/deployment_details/churchill-drone-deploy</a>