

wiseman_metadata_bathymetry

Project Name	Start Date	End Date	Lat range	Lon range
WISE-Man	2019-08-12	2019-08-25	48.94568 49.25000	-68.61499 -68.01103

Role	Name	Affiliation	Email/Contact
PI	Simon Bélanger	UQAR	Simon_Belanger@uqar.ca
Database contact	Véronique Thériault	UQAR	Veronique_Therault2@uqar.ca
Survey contact	Julien Desrochers	CIDCO	418-725-1732

Citation:

Université du Québec à Rimouski. Aquatel Laboratory. (2019). WISE-Man Project (WaterSat Imaging Spectrometer Experiment), characterization of shallow inland and coastal waters. [Version 1.0] Data published on St. Lawrence Global Observatory-SLGO. [<https://slgo.ca>]. Access date: [YYYY-MM-DD].

Project Description:

The WaterSat Imaging Spectrometer Experiment (WISE) for optically shallow inland and coastal waters assessment (the WISE-Man project)'s objective was to demonstrate the potential of hyperspectral imagery for mapping bathymetry, water column quality (or inherent optical properties) and retrieve bottom properties in order to respond to the pressing needs of science (e.g. ecology, geomorphology, coastal risk), resource management and defense operation. Within this framework, an intensive fieldwork campaign was conducted in the Manicouagan / Baie-Comeau region (Québec, Canada) in July-August 2019. The database includes several datasets (csv files) of bathymetric data, samples with a multibeam (MBES) and a monobeam (Hydroball).

Funders:

Canadian Space Agency (FAST program 2017), Department of Fisheries and Oceans (DFO) (Ocean protection plan), Réseau Québec Maritime (RQM), Québec-Océan network, UQAR, NSERC discovery grant to Simon Bélanger.

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data_dictionary_bathymetry_wiseman.csv

Description:

The “data_dictionary_bathymetry_wiseman.csv” file contains the description and units of all parameters included in each dataset (each csv file).

Dataset Contact:

Name	Affiliation	Email
Veronique Theriault	UQAR	veronique_theriault2@uqar.ca

Instruments:

NA

Sampling and Analysis:

NA

References:

NA

bathymetry_yyyymmdd_MBES_wiseman.csv

Description:

These datasets contain the depth sampled with the multibeam - 1 file per day of sampling. Those data are not to be used for navigation purposes.

Dataset Contact:

Name	Affiliation	Email/Contact
Veronique Theriault	UQAR	veronique_theriault2@uqar.ca
Julien Desrochers	CIDCO	418-725-1732

Instruments, Samping and Analysis:

Depth was measured in situ from a boat with a multibeam echosounder.

Data sampling	
Boat	F.J. Saucier
Echosounder model	<i>Reson Seabat 7125-SV2</i>
Vertical data collection method	<i>Multibeam</i>
Resolution	<i>1m</i>
Data acquisition software	<i>PDS</i>
Data management software	<i>Caris HIPS 11.3</i>

Horizontal Reference	
Horizontal Coordinate system	<i>Northing, Easting</i>
Horizontal Datum	<i>NAD83 (SCRS) époque 1997 – Converted to WGS84 ESPG :4326 in these csv files</i>
Projection	<i>UTM 19N (original) - Converted to WGS84 ESPG :4326 in these csv files</i>
Positioning method	<i>RTK</i>
Positioning system	<i>Septentrio AsteRx-U</i>
Point of origin reference number	<i>BAIE(NRCan)</i>
Point of origin coordinates	<i>N49° 11' 12.537769", W68° 15' 47.973417"</i>

Vertical Reference	
Vertical reference system	<i>ZC</i>
Elevation of point of origin	<i>28.457 m</i>
Water reduction method	<i>Table de séparation Estuaire2012</i>
Tide gauge referenced station	<i>NA</i>

References:

NA

bathymetry_hydroball_wiseman.csv

Description:

This dataset contains the depth sampled with the hydroball - 1 file including multiple days of sampling. Those data are not to be used for navigation purposes.

Dataset Contact:

Name	Affiliation	Email/Contact
Veronique Theriault	UQAR	veronique_theriault2@uqar.ca
Julien Desrochers	CIDCO	418-725-1732

Instruments, Samping and Analysis:

Depth was measured in situ from a boat with a monobeam echosounder.

Data sampling	
Boat	Zodiac
Echosounder model	<i>Hydroball M2Ocean</i>
Vertical data collection method	<i>MonoBeam</i>
Resolution	<i>1m</i>
Data acquisition software	<i>Hydromagic</i>
Data management software	<i>DepthStar</i>

Horizontal Reference	
Horizontal Coordinate system	<i>Northing, Easting</i>
Horizontal Datum	<i>NAD83 (SCRS) époque 1997 – Converted to WGS84 ESPG :4326 in these csv files</i>
Projection	<i>UTM 19N (original) - Converted to WGS84 ESPG :4326 in these csv files</i>
Positioning method	<i>PPK</i>
Positioning system	<i>Hemisphere</i>
Point of origin reference number	<i>BAIE(NRCan)</i>
Point of origin coordinates	<i>N49° 11' 12.537769", W68° 15' 47.973417"</i>

Vertical Reference	
Vertical reference system	<i>ZC</i>
Elevation of point of origin	<i>28.457 m</i>
Water reduction method	<i>Table de séparation Estuaire2012</i>
Tide gauge referenced station	<i>NA</i>

References:

NA