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International Great Lakes Datum (IGLD) GNSS Campaign

A case study for leveraging digital tools to enhance QA/QC on large scale static GNSS observation campaign



International Great Lakes Datum (IGLD)

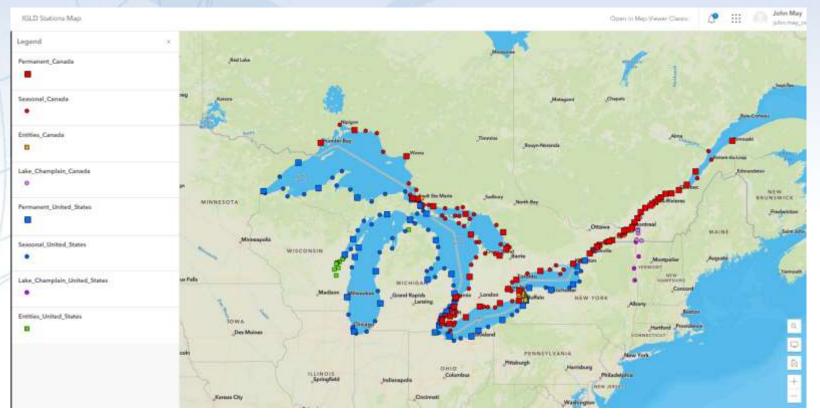
Prior Presentations at FIG Working Week 2023

Monday, 29 May 11:30–13:00 Ryan Hippenstiel, John May, Jacob Heck (USA), Michael Craymer and Rachel van Herpt (Canada): The 2022 GNSS Survey for a New International Great Lakes Datum: Overcoming Challenges with International Planning and Digital Tools (12007)

Tuesday, 30 May 11:30–13:00 Daniel Roman (USA) and John Crowley (Canada): Dynamic Heights for the International Great Lakes Datum of 2020 (11980)

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Scope of the IGLD GNSS Survey

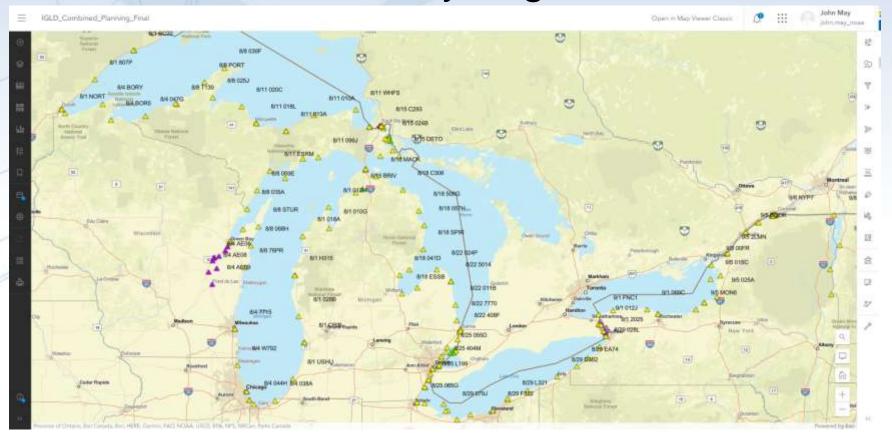


Survey parameters were established by Binational Planning Group

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Pre-Survey Logistics

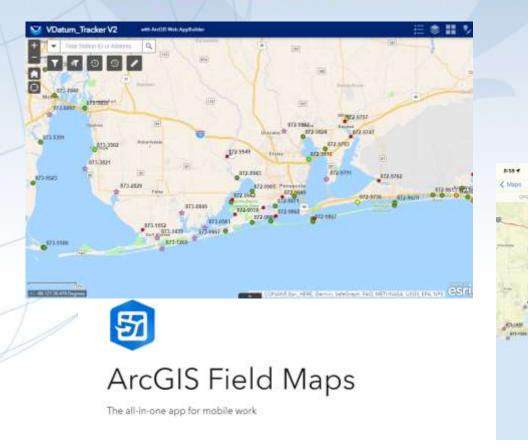


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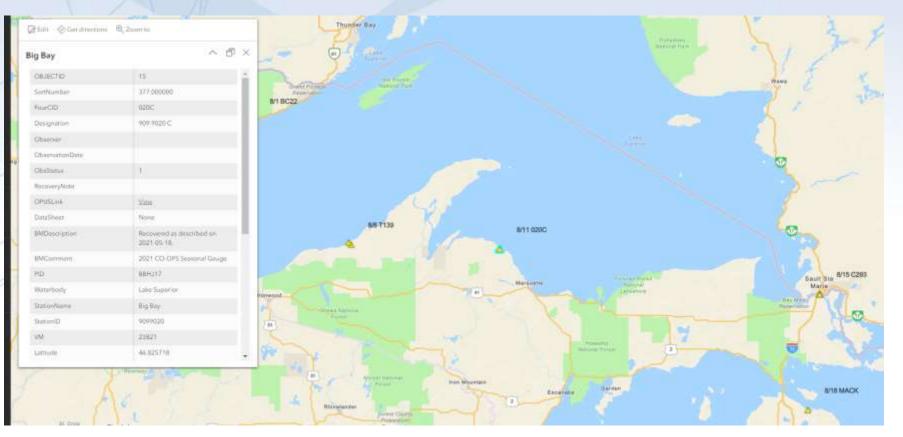
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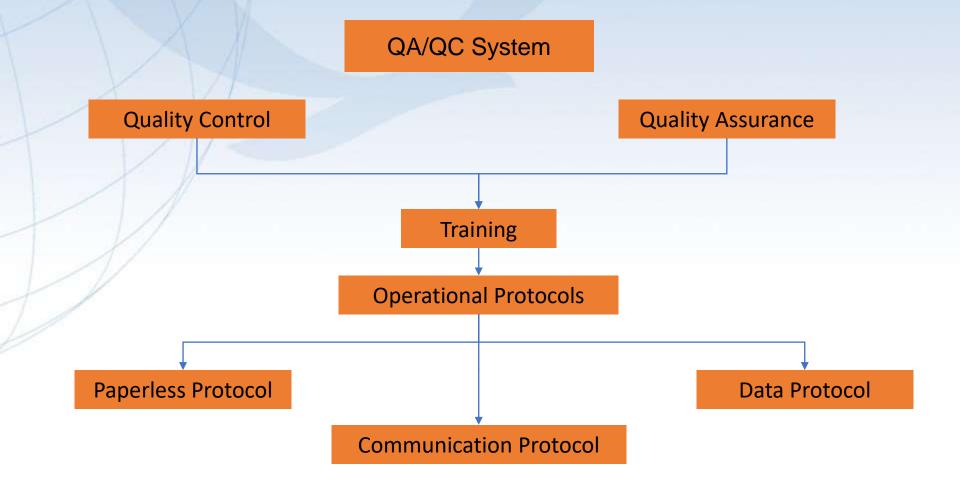


https://www.esri.com/en-us/arcgis/products/arcgis-field-maps/overview

IGLD Survey Web Map







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GNSS Log App Im GNSS Static Observation Log

John May

• Utilizes a Library of reusable Equipment

- Observation Logs can be exported to PDF and shared via email, text, airdrop, etc.
- Leverages the Device GPS, Camera and Motion sensors
- Eliminates common transcription errors
- Free on the App Store for iPhone and iPad

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Equipment Preparation





Training



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- Use of Field Maps
- Use of GNSS Log App
- Communication
 protocols
- Security protocols
- Daily observer routine

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Conducting the Survey





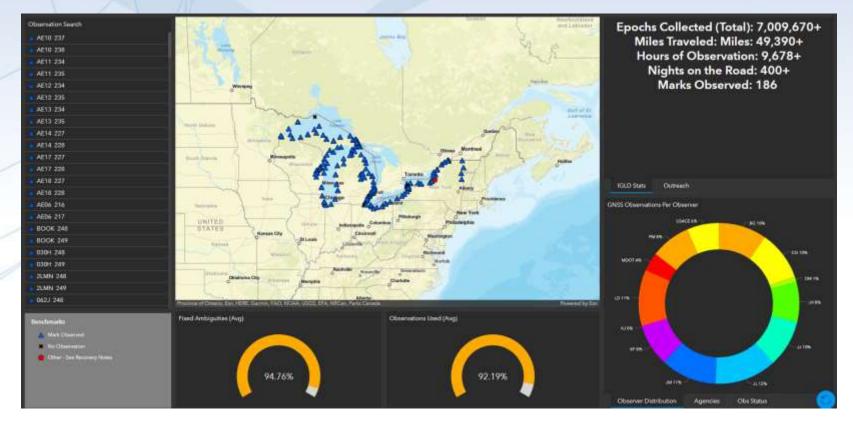
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Issues Encountered



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Results



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Summary and Questions

