



# Update on FarSounder CSB Activities

*IHO/NOAA CSBWG8*  
October 2019

Presenter: *Heath Henley*  
Special thanks to *Austin Berard* - figures and analysis

# Quick Introduction - About FarSounder

## What do we do?

- Develop, manufacture 3D-FLS
- Supplementary processing software



## Major markets?

- Expeditionary cruise
- Private superyachts
- Government, military, research vessels

Users go to **remote areas**

Can we **save the bathymetry** data?

After **CSB-WG6** in Boulder

- Registered as Trusted Node
- Started collecting more data



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# Collecting Customer Data

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## Current Program Outline

- Send drive - record 5 TB of data
- Drive contains program to record
- They return when full
- Small # of customers

## Recording all navigation data

- NMEA streams
- 3D FLS data
- SBES's

Currently, set up to process and submit the SBES data to DCDB database.



# Program Summary - As of 10/22/19

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## **Drives returned**

- 6 customers, ~30 TB of raw sensor data

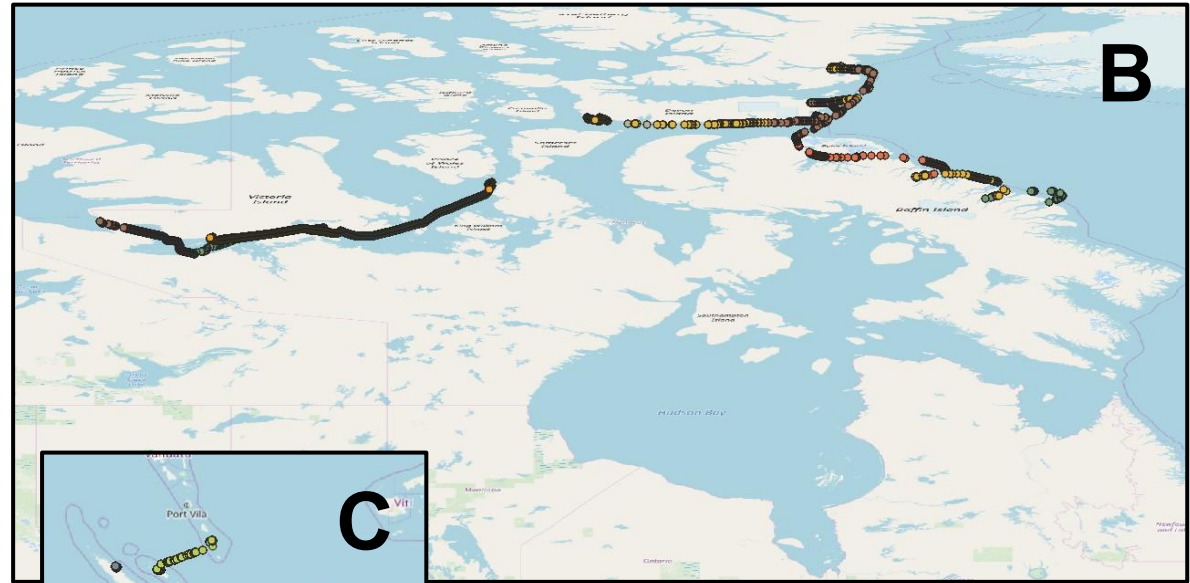
## **Drives in the wild**

- 11 drives out there collecting currently

## **Submissions to DCDB**

- 109 “datasets” ~ approximate day of cruising
- 2,848,352 SBES soundings submitted to DCDB

# Overview of Data Submitted



## Submissions to DCDB

- 109 “datasets” ~ days of cruising
- 2,848,352 SBES soundings submitted to DCDB
- 3 Distinct Vessels

# Next Steps

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**Keep** the drives coming

- Improving infrastructure - it's a lot of **data**!

**Outreach**

- Target poorly charted areas

# Next Steps

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## **Keep** the drives coming

- Improving infrastructure - it's a lot of **data!**

## **Outreach**

- Target poorly charted areas

## **Upload** 3D-FLS data!

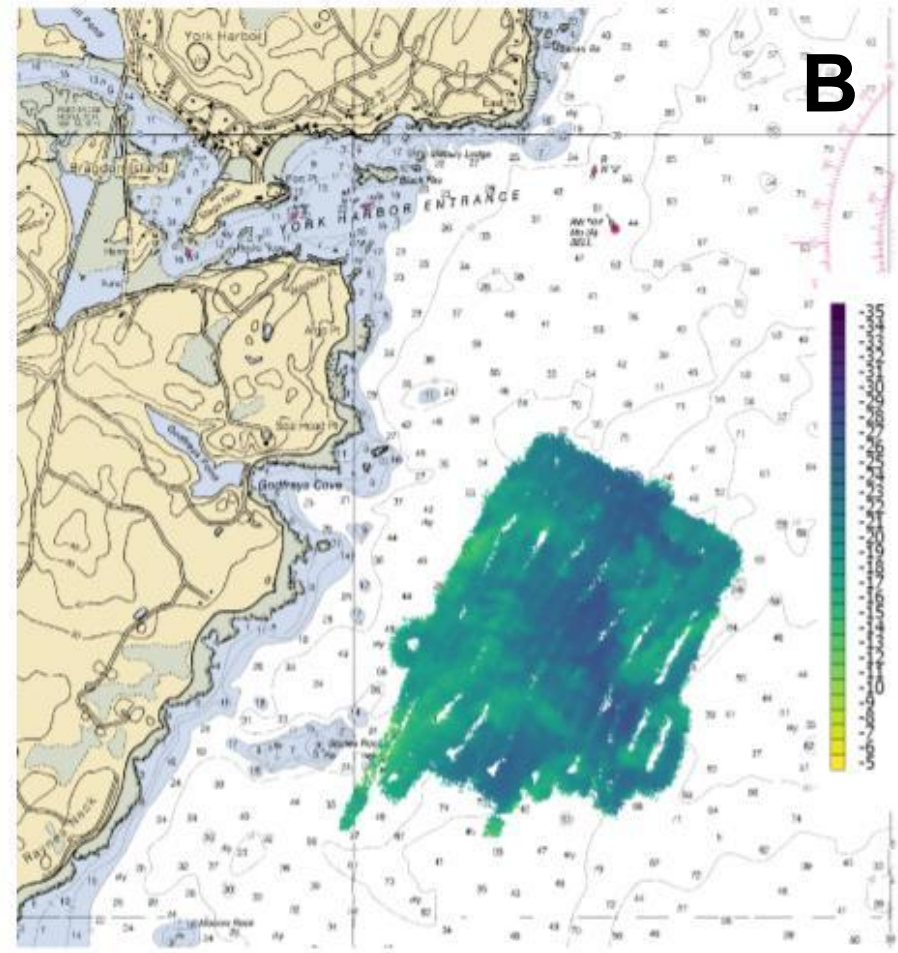
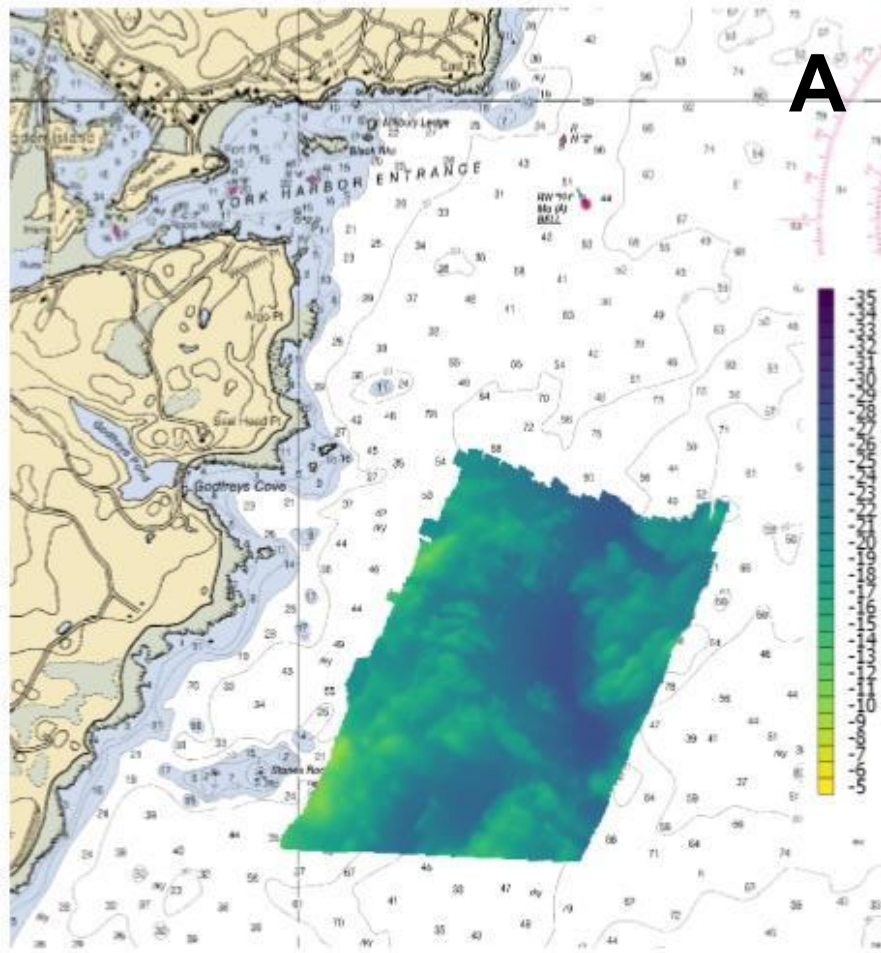
- Always been a goal - technical challenges
- Coverage, resolution - much better, more information
- Only finds bottoms in shallows (<50m)
  - Most relevant for navigation

## **Accuracy** of 3D-FLS bathy data?

- Will **not** beat MBES as a survey tool
- What if **only 3D-FLS** data is available?



# Next Steps



A - UNH Gridded MBES data

B - FarSounder-1000 Gridded 3DFLS data





# Questions?