

# Mapping New Zealand's Seafloor

5th South and West Pacific Regional Mapping Community Meeting

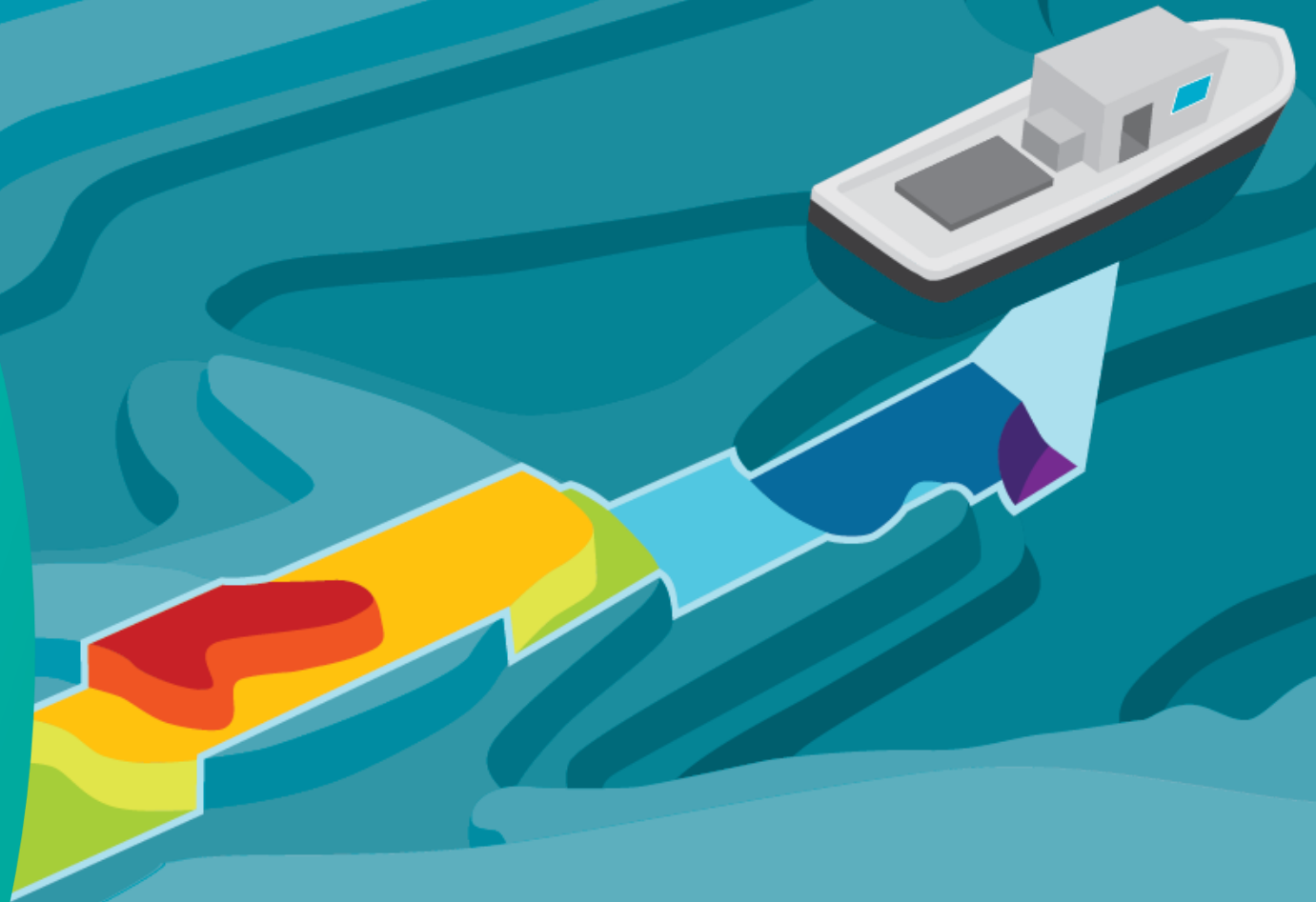
**New Zealand Hydrographic Authority**

Stuart Caie, Manager Hydrographic Survey

12-14 July 2023



# New Zealand Hydrographic Authority



# Area of charting responsibility

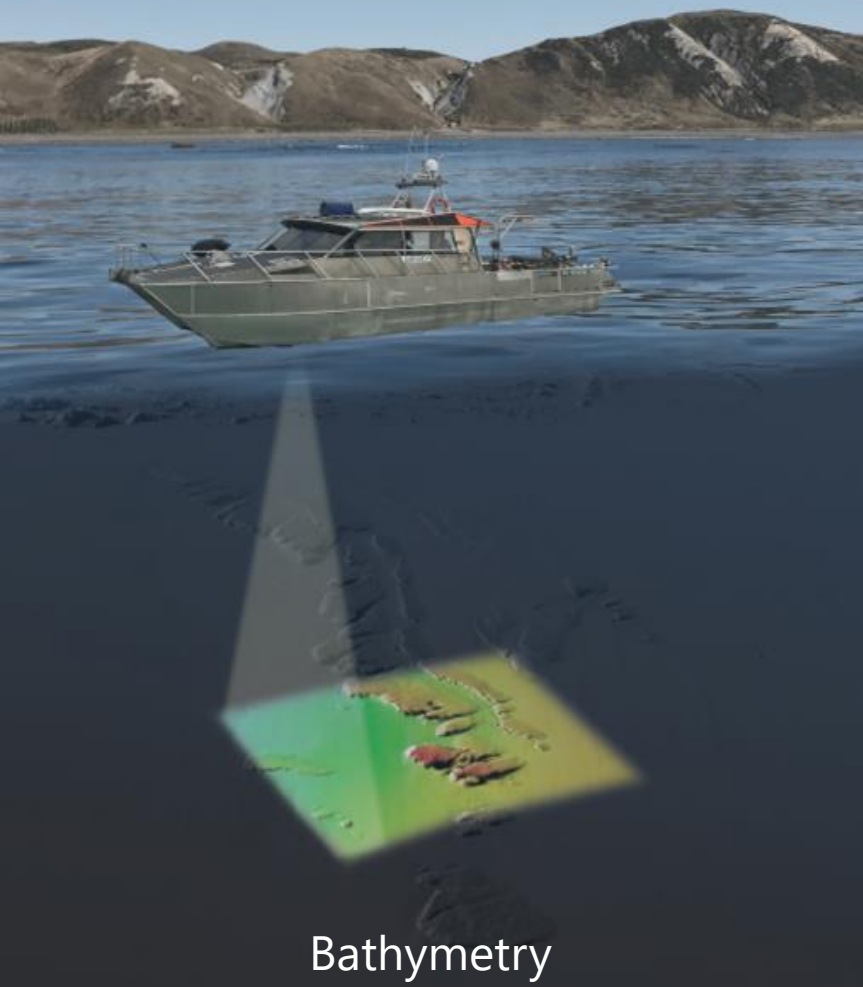


# Survey coverage





# More than bathymetry










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🔍 surface index

Showing 1–20 of 782



**NZ Bathymetric Surface Model Index** ☆

Land Information New Zealand

CC-BY

🕒 3 Aug 2022

👁 26.8K ↓ 247

Map ×



**Antarctic Bathymetric Surface Model Index** ☆


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🕒 29 Jun 2022

👁 20.3K ↓ 19

Map +



**NZ Bathymetric Surface Model Index – Third Party** ☆

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Map ×

2 layers  
New Zealand

File View Tools History

2 layers, New Zealand

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Export






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 **NZ Bathymetric Surface Model Index** ☆  
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🕒 3 Aug 2022  
👁 26.8K ↓ 247 **Map** ×

Polygon Layer  
616 Polygons

 **Antarctic Bathymetric Surface Model Index** ☆  
Land Information New Zealand  
CC-BY  
🕒 29 Jun 2022  
👁 20.3K ↓ 19 **Map** +

Polygon Layer  
228 Polygons

 **NZ Bathymetric Surface Model Index – Third Party** ☆  
Land Information New Zealand  
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🕒 3 Nov 2022  
👁 21.5K ↓ 78 **Map** ×

Polygon Layer  
127 Polygons

File View Tools History

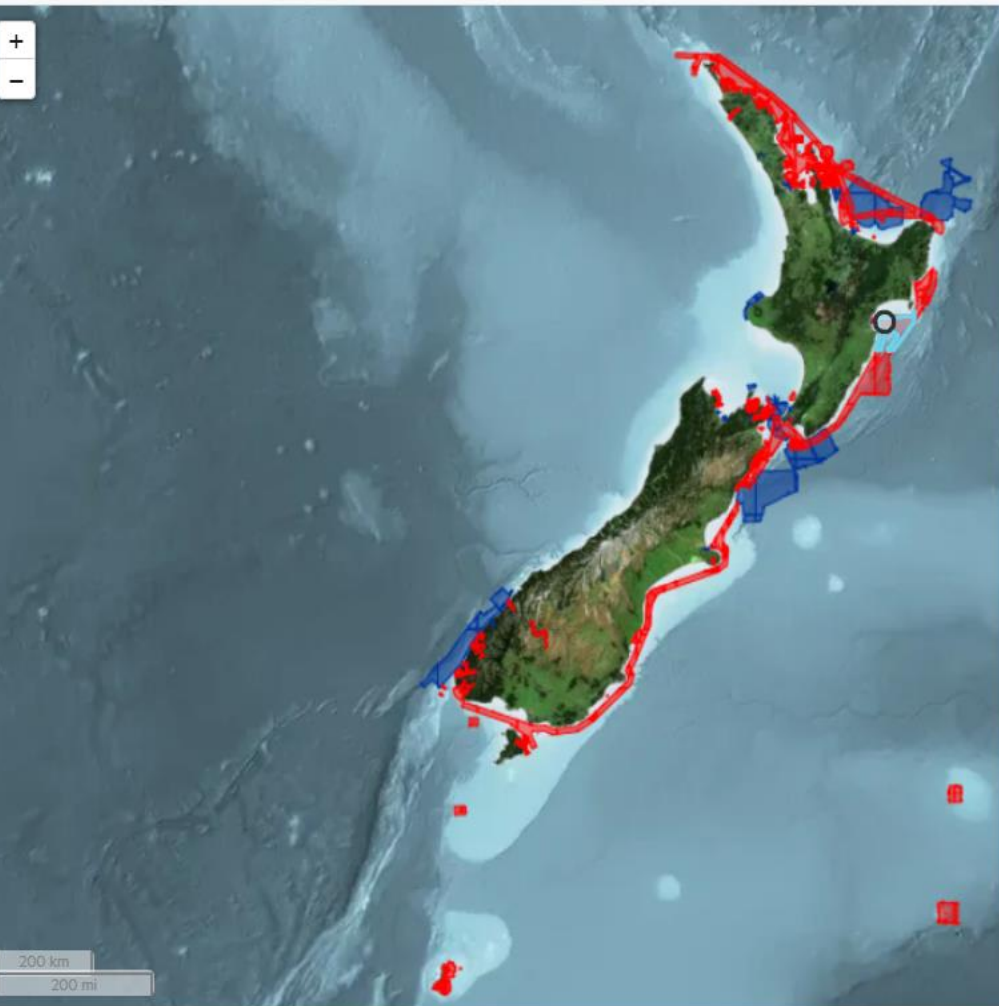
2 layers, New Zealand 🔗

Find address or place

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**Export**



▾  NZ Bathymetric Surface Model Index

id	chart_no	
2000170	23	71
2000209	23	71

id	2000170
chart_no	23
serial_no	715-749,784-808,914-933,952-976,977-1004,1013-1037
surv_org	LINZ
category	Public
surv_title	P1011, Shipping Lane 4 Hydrographic Survey (HYD0512-HS17)
surv_start	2005-09-18
surv_end	2010-10-29
quality	Zone of confidence A1
scale	50000
surf_res	10
sound_acc	0.7
line_space	
vert_datum	Lowest astronomical tide
sound_tech	found by multi-beam
sss_tech	

© Land Information New Zealand

🏠 ★ Browse

🔍 bathy index

x 🗲 1

File View Tools History

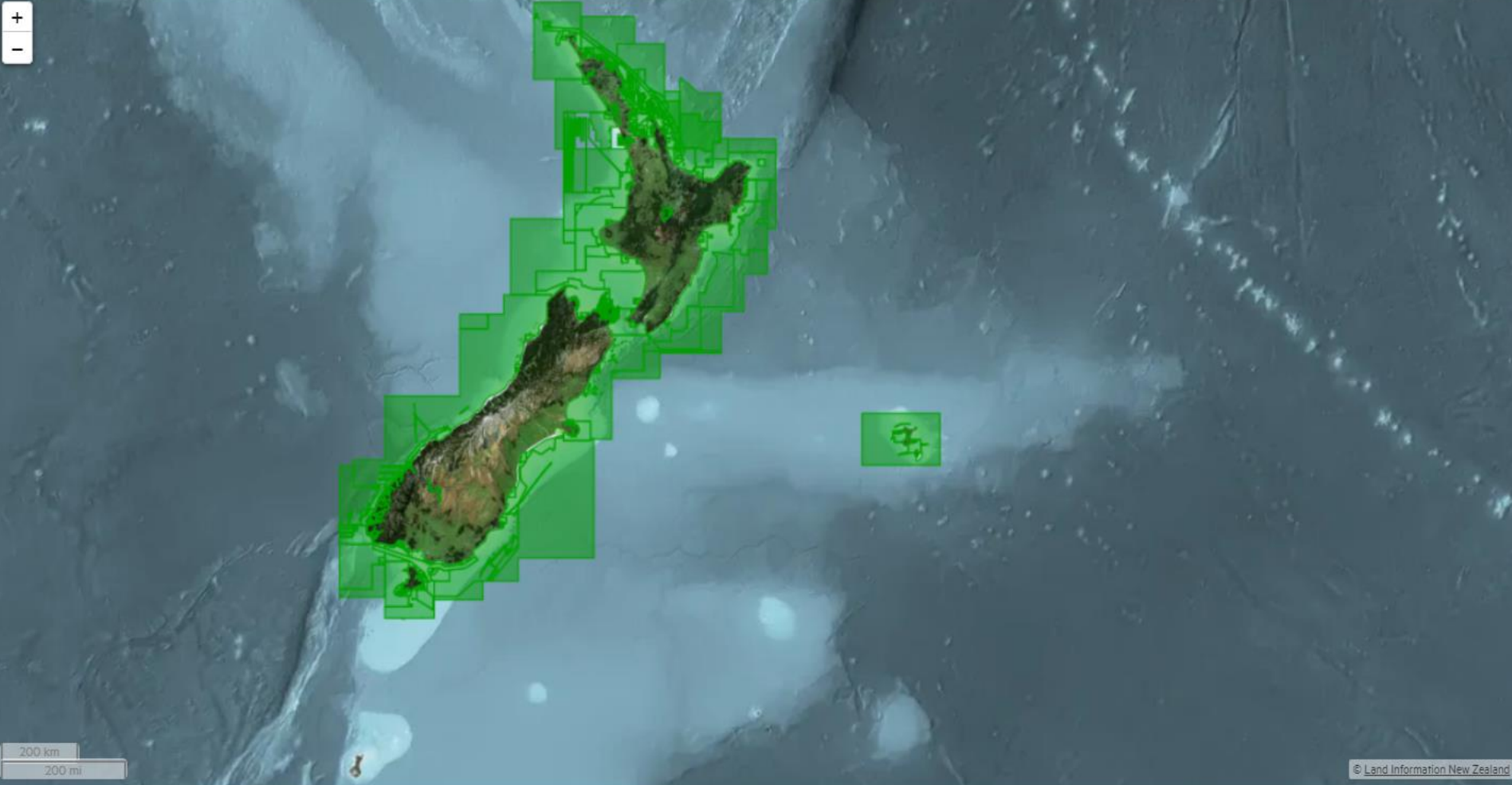
NZ Bathymetric Data Index, New Zealand 🔗

Find address or place

▸ Contents

📄

Export



Showing 1-20 of 643

 **Polygon Layer**  
199 Polygons  
CC-BY  
🕒 16 Jun 2023  
👁 39.9K ↓ 1K [Map +](#)

 **NZ Bathymetric Data Index** ☆  
Land Information New Zealand  
CC-BY  
🕒 3 Nov 2022  
👁 40.7K ↓ 683 [Map x](#)

 **Waikato LiDAR Index Tiles (2021)** ☆  
Land Information New Zealand  
CC-BY  
🕒 28 Jun 2023  
👁 912 ↓ 19 [Map +](#)

 **Taranaki LiDAR Index Tiles (2021)** ☆  
Land Information New Zealand  
CC-BY  
🕒 28 Jun 2023  
👁 912 ↓ 19 [Map +](#)

 **NZ Bathymetric Data In...** x  
New Zealand



KARAKA BAY

Uawa River

Tolaga Wharf (derelict)

Cook's Cove (Tidal Station)

Poutere Island

Mt Titirangi

Titirangi Offset

Scale 0 to 1000 meters

Large green arrow pointing to a location in the bay.

Grid of red numbers (depth/survey data) overlaid on the map.



## Layers

► IHO DCDB/NOAA NCEI ?

► EMODnet

► Australia

► Canada

► France

► Germany

► Japan

► Netherlands

▼ New Zealand

☒ LINZ Bathymetric Data Index ?

☒ LINZ Bathymetric Surface Model Index ?

► Norway

► Portugal

► United Kingdom

► Other Data Sources

► Known Non-Public Data ?

► Bathymetric Coverage Maps

Grid Extract

More Information

Help

This index enables you to identify freely available digital bathymetric surface models owned by [Land Information New Zealand \(LINZ\)](#), as well as models that contain third-party data. This data provides a 3-dimensional model of the surface of the seafloor. These surface models have been created by LINZ from publically funded single- or multi-beam data collected in the New Zealand coastal area since early 1998. The polygons in the index show the extent of these gridded data models, and include descriptive information, such as the age and quality of the data.

The gridded surface models are not downloadable from the LINZ Data Service, but can be provided to you on request.

Please refer to the [LINZ Bathymetric Index Data Dictionary](#) for further information about the attributes of this dataset, and formats in which the data is available.

For more information about the data layers displayed, please visit:

- [NZ Bathymetric Surface Model Index](#)
- [SW Pacific Bathymetric Surface Model Index](#)
- [Antarctic Bathymetric Surface Model Index](#)
- [NZ Bathymetric Surface Model Index \(Third-Party\)](#)

ERN OCEAN  
Position: 102.656°, -34.935°  
Elevation: -6360 meters



< Marine geospatial  
information

Finding and accessing MGI

Managing and reusing MGI

Marine scientific research

## Marine scientific research

Each year New Zealand receives applications from people from other countries seeking to undertake marine scientific research (MSR) in the New Zealand Territorial Sea, Exclusive Economic Zone (EEZ) and Continental Shelf.

The New Zealand Ministry of Foreign Affairs and Trade on behalf of the New Zealand Government receives and manages MSR applications from New Zealanders seeking to undertake MSR in waters under the national jurisdiction of other States, and people from other countries seeking to undertake MSR in New Zealand's Territorial Sea, EEZ and Continental Shelf.

Information about applying for consent to carry out MSR in New Zealand's waters can be found on the Ministry for Foreign Affairs and Trade website(link is external).

Consents granted to applicants to undertake MSR usually contain

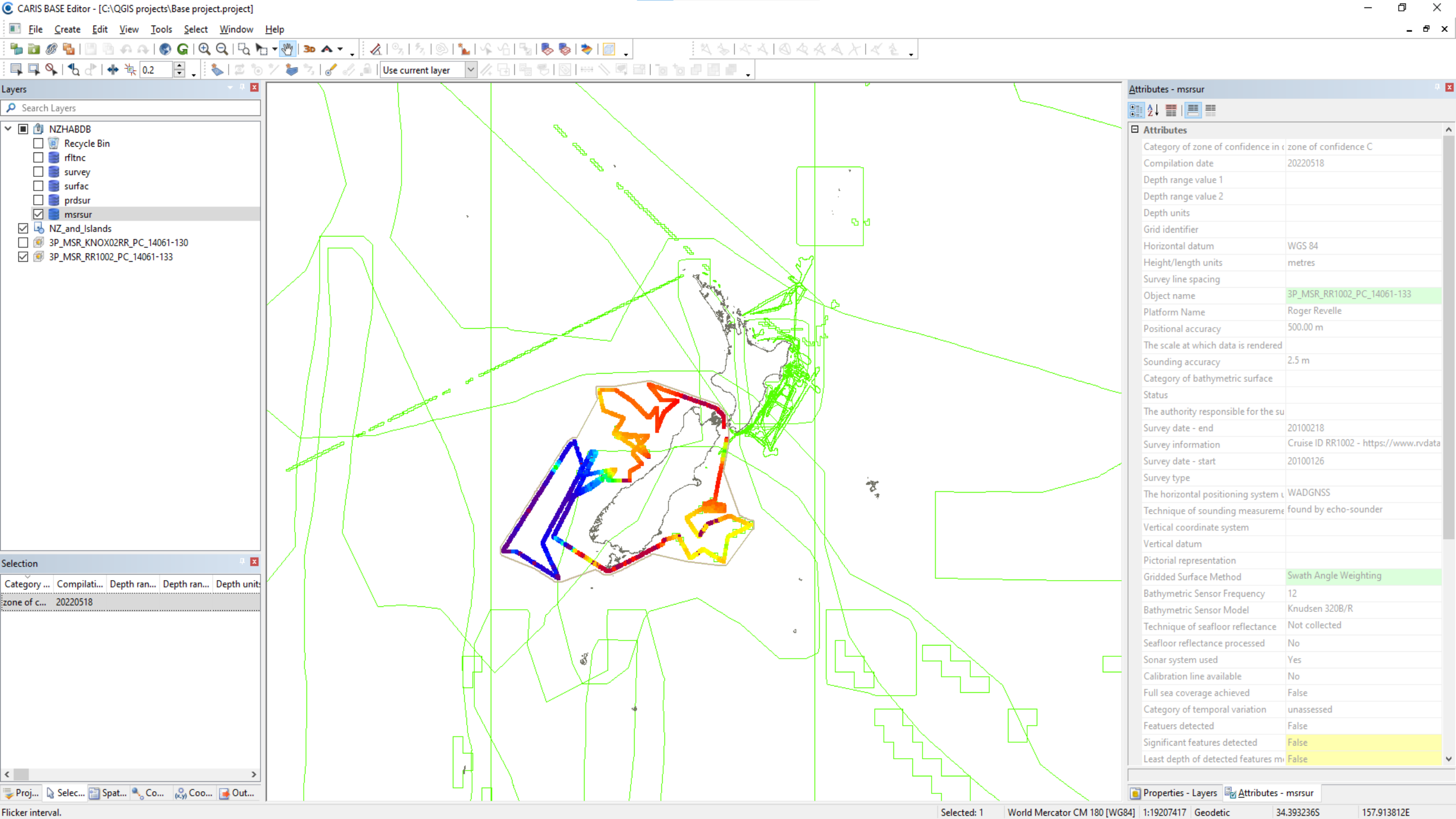


# Transiting vessels – New Zealand's EEZ

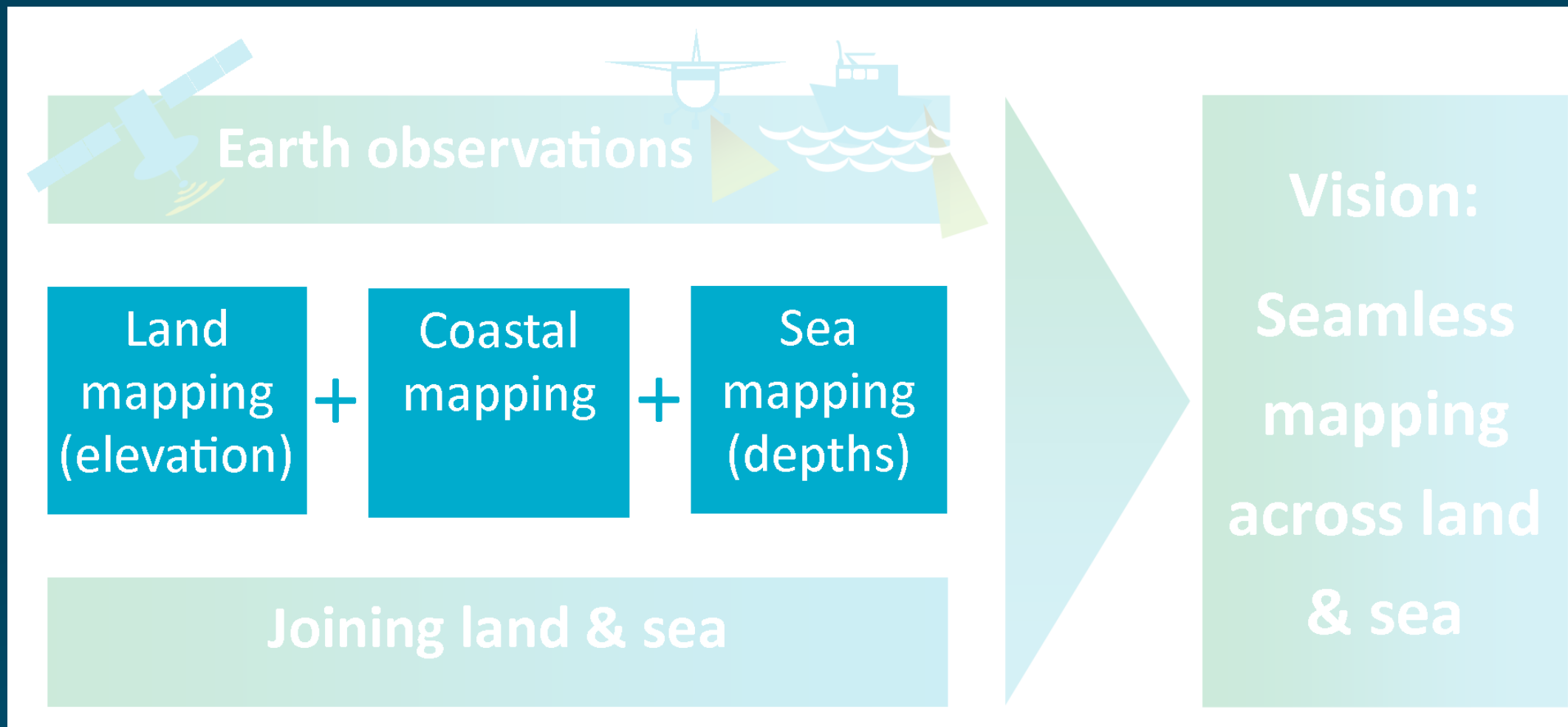
- Now easier to collect **bathymetric data** during **transit** in **NZ's EEZ**
- Marine science research application **not required**
- Toitū Te Whenua Land Information New Zealand authorised to request vessels to activate their seafloor mapping systems during transit
- Submit data to NZ for inclusion in **GEBCO grid**
- If your vessel undertakes transits of NZ's EEZ please contact [MSR-NZ@linz.govt.nz](mailto:MSR-NZ@linz.govt.nz) for further information and a request to collect bathy data

Bluff Harbour, Southland Region.

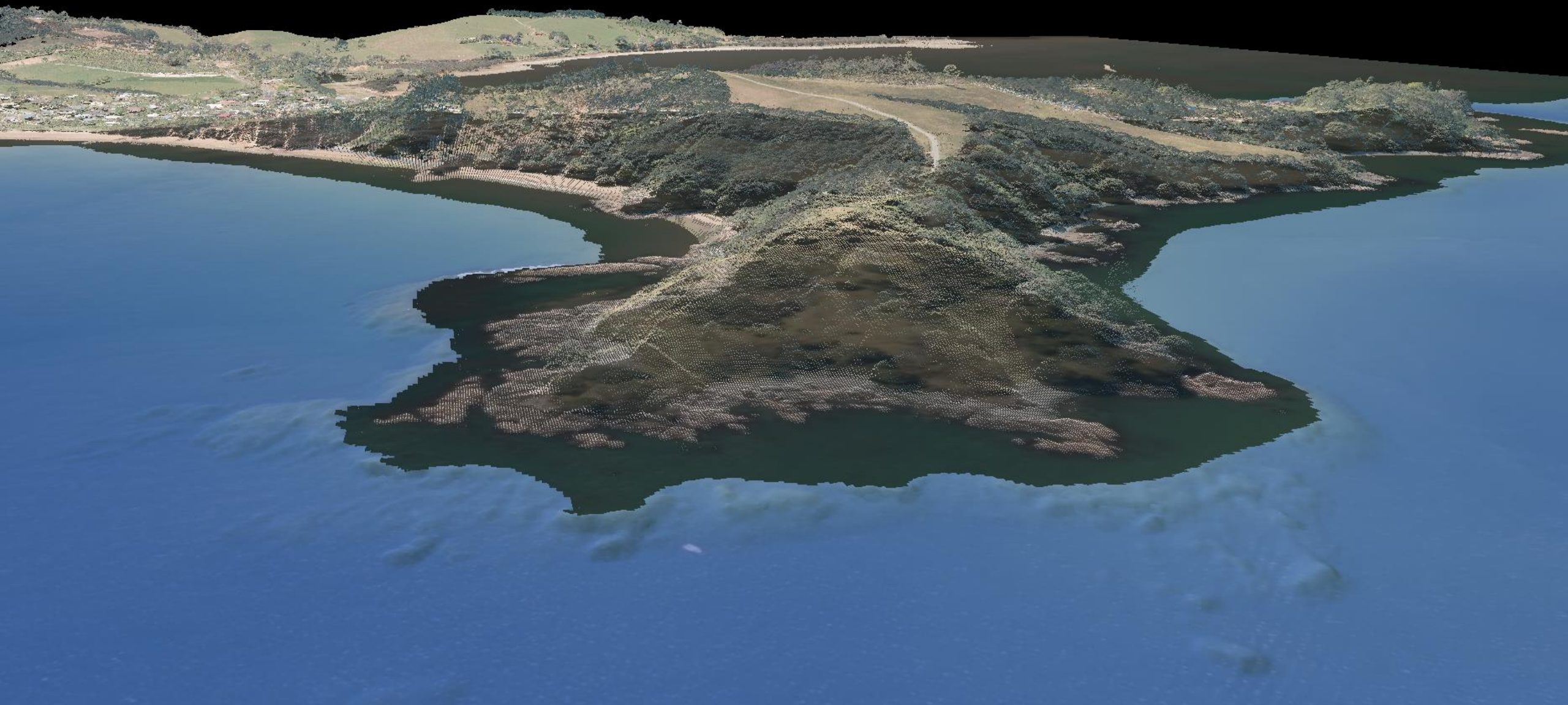




# Mapping NZ 2025



# Coastal Mapping



Hihi, Northland – topographic LiDAR and MBES bathymetry



A bathymetric map of Cook Strait, New Zealand, showing the seafloor topography. The map uses a color scale where blue represents deep water and green/yellow represents shallower areas. The strait is a narrow passage between two landmasses, with a prominent ridge running through its center. The text "Thank you!" is centered over the map.

**Thank you!**