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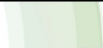
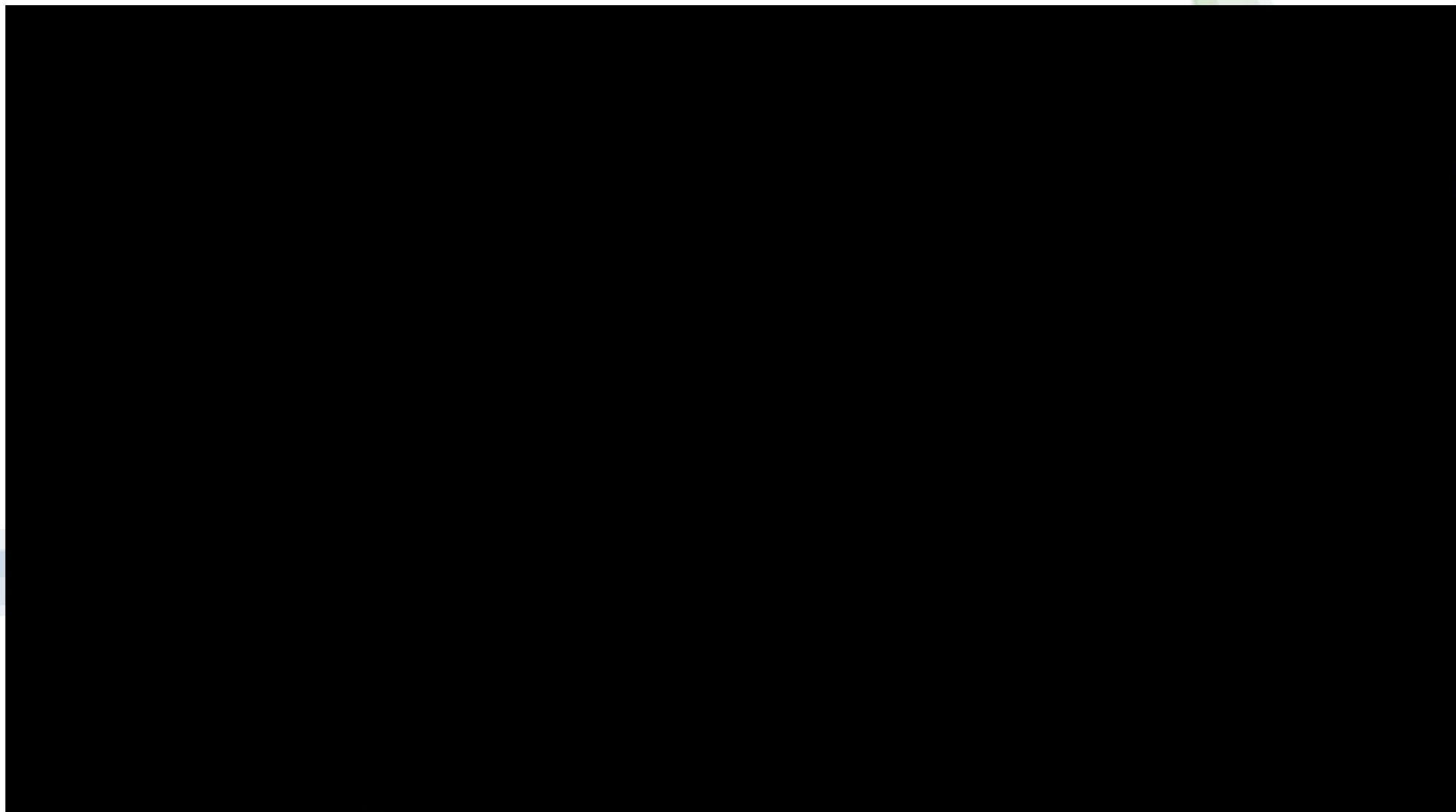
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## CASE STUDY – MV ENCHANTER



**Kevin Banaghan**  
**Principal Advisor Training RCCNZ**



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## CASE STUDY – MV ENCHANTER



**20 March 2022**

**Kevin Banaghan - Principal Advisor Training  
Rescue Coordination Centre New Zealand (RCCNZ)**

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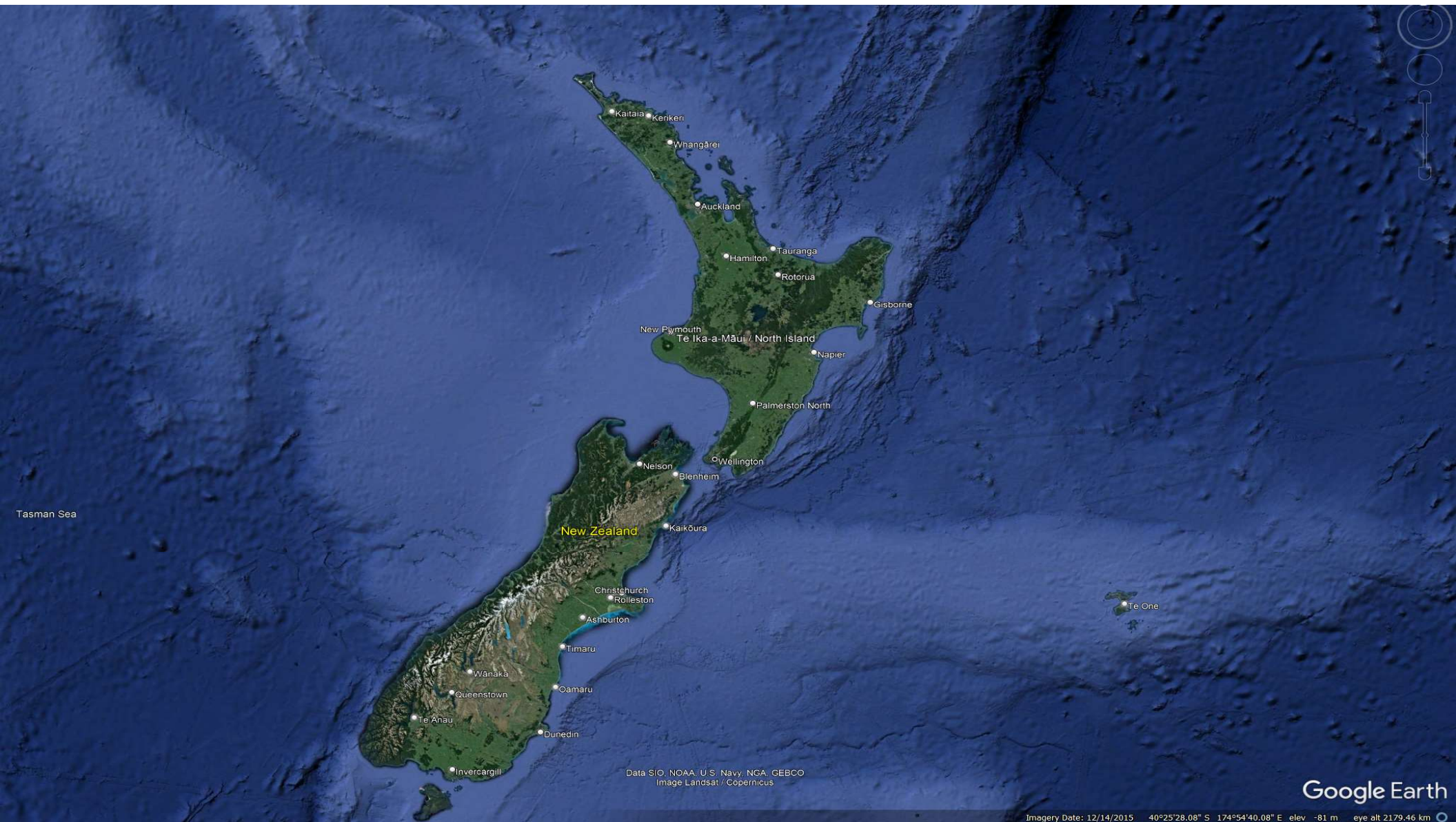


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- Incident background / (what happened).
- RCCNZ's response
- **Group discussion**
  - Things that could have been done better;
  - Things that went well; and
  - Lessons learned & recommendations.



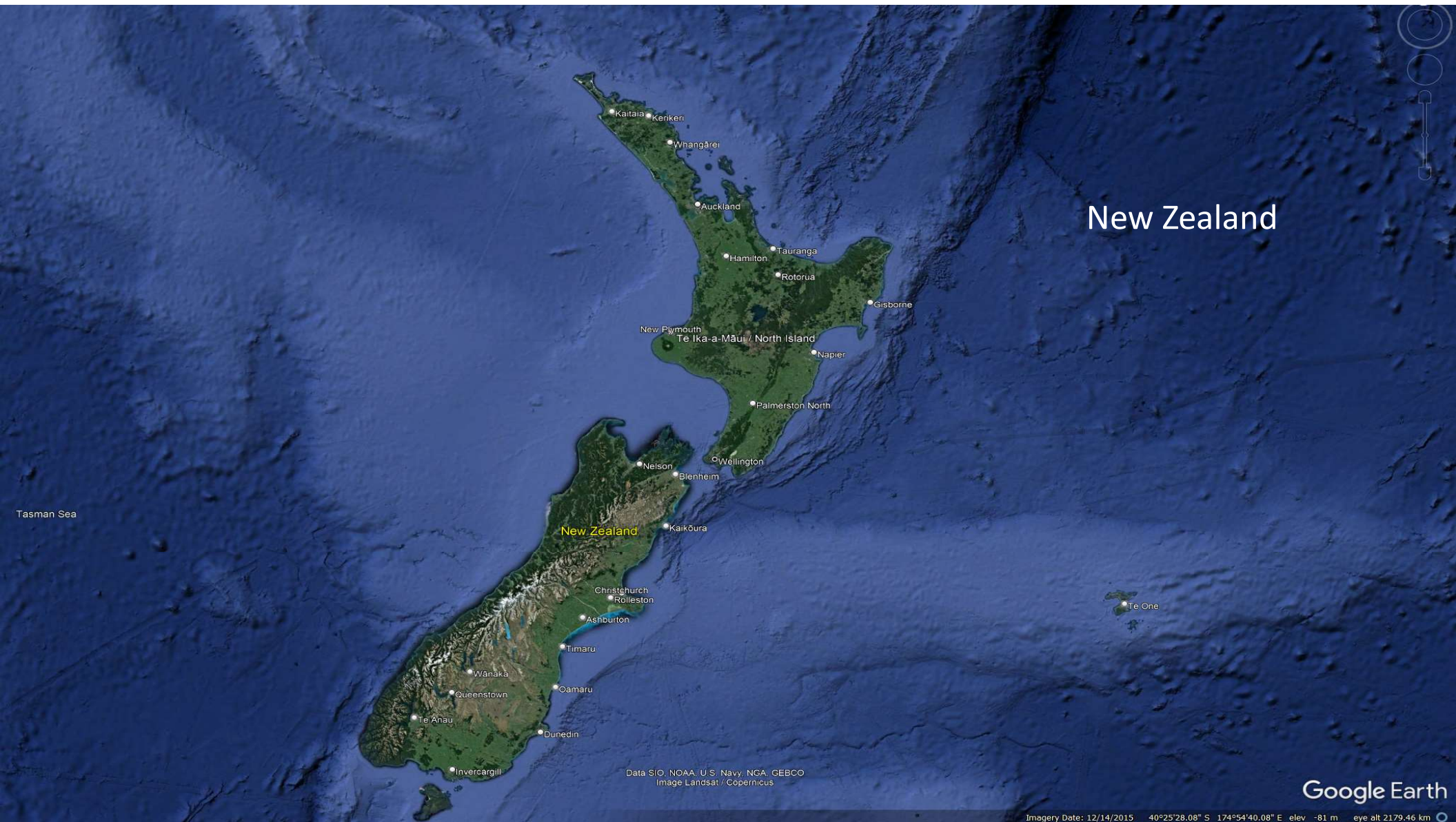


Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat / Copernicus

Google Earth

Imagery Date: 12/14/2015 40°25'28.08" S 174°54'40.08" E elev -81 m eye alt 2179.46 km





New Zealand

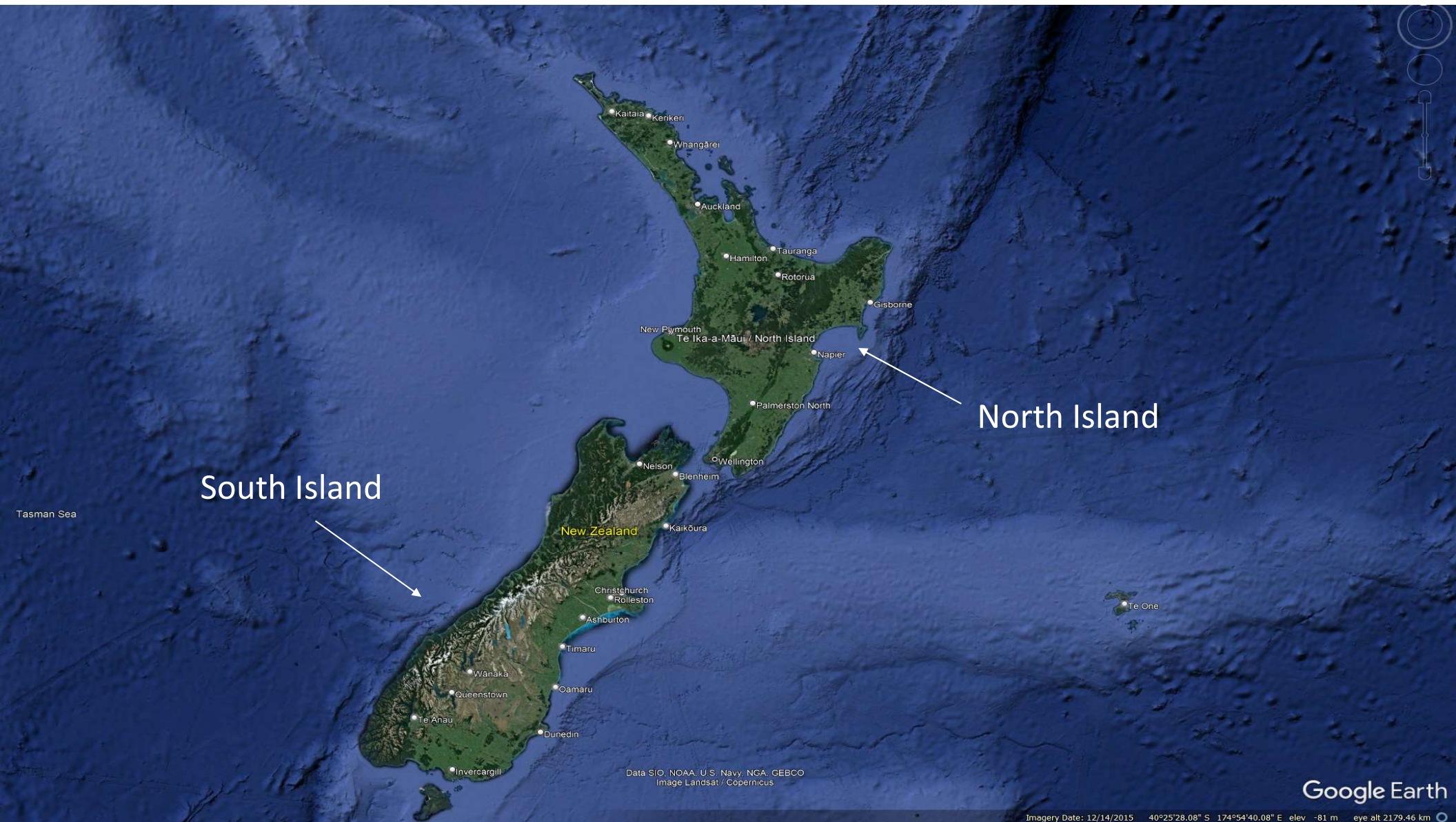
New Zealand

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat / Copernicus

Google Earth

Imagery Date: 12/14/2015 40°25'28.08" S 174°54'40.08" E elev -81 m eye alt 2179.46 km





South Island

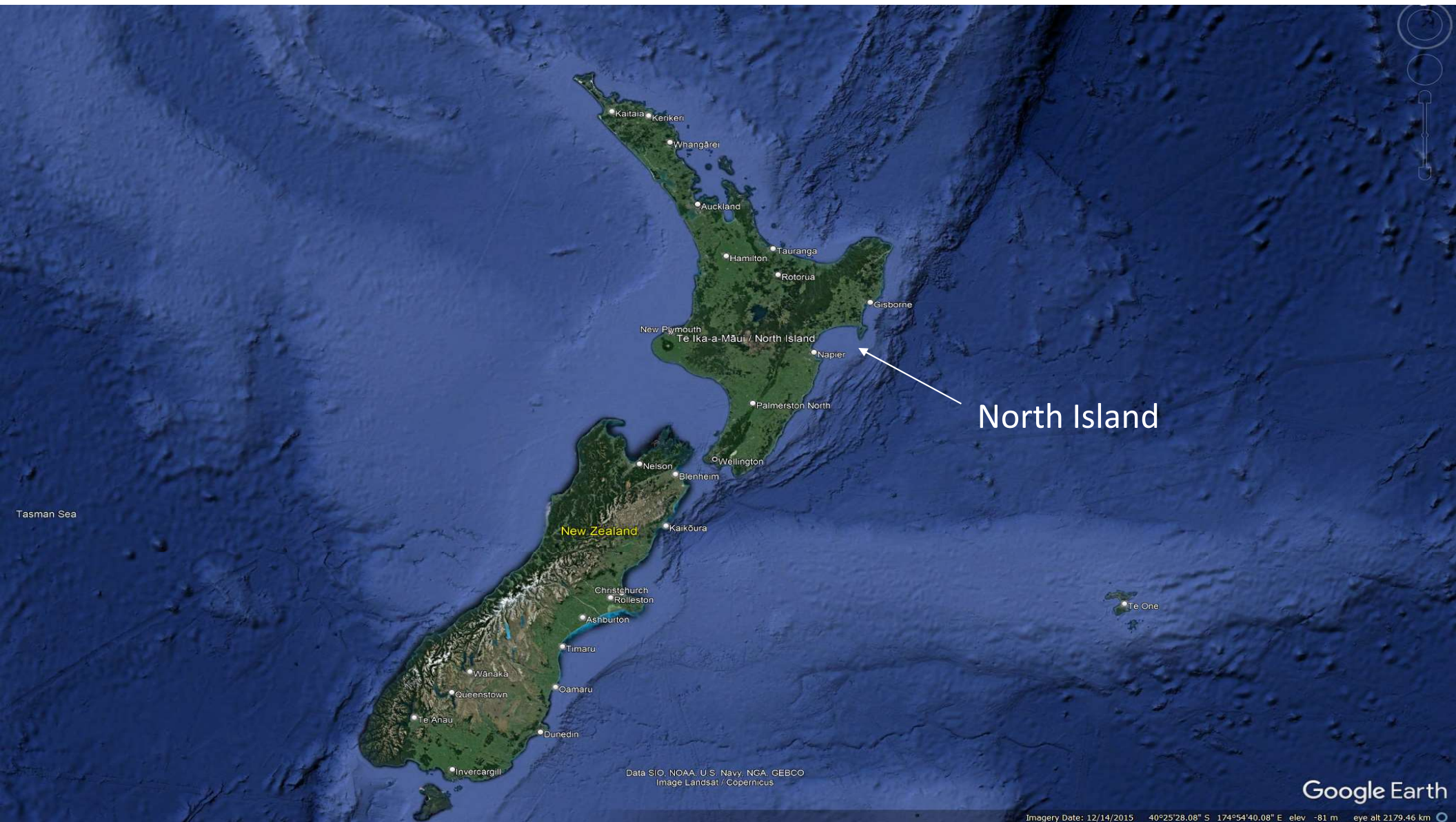
North Island

Google Earth

Imagery Date: 12/14/2015 40°25'28.08" S 174°54'40.08" E elev -81 m eye alt 2179.46 km

Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image Landsat / Copernicus









Ruler

Line Path Polygon Circle 3D path 3D polygon

Measure the distance between multiple points on the ground

Length: 109.90 Miles

☐ Show Elevation Profile

☒ Mouse Navigation

Save Clear

Roughly 110 miles

Cape Reinga  
Te Hāpua

Karikari Peninsula

Mangonui

Mangonui

Ahipara

Kaitiaki

Kerikeri

Paihia

Opononi

Omāpere

Whangarei

Kaitiaki

Omāpere

Dargaville

Waipu

Mangawhai

Warkworth

Silverdale

Whangaparāoa

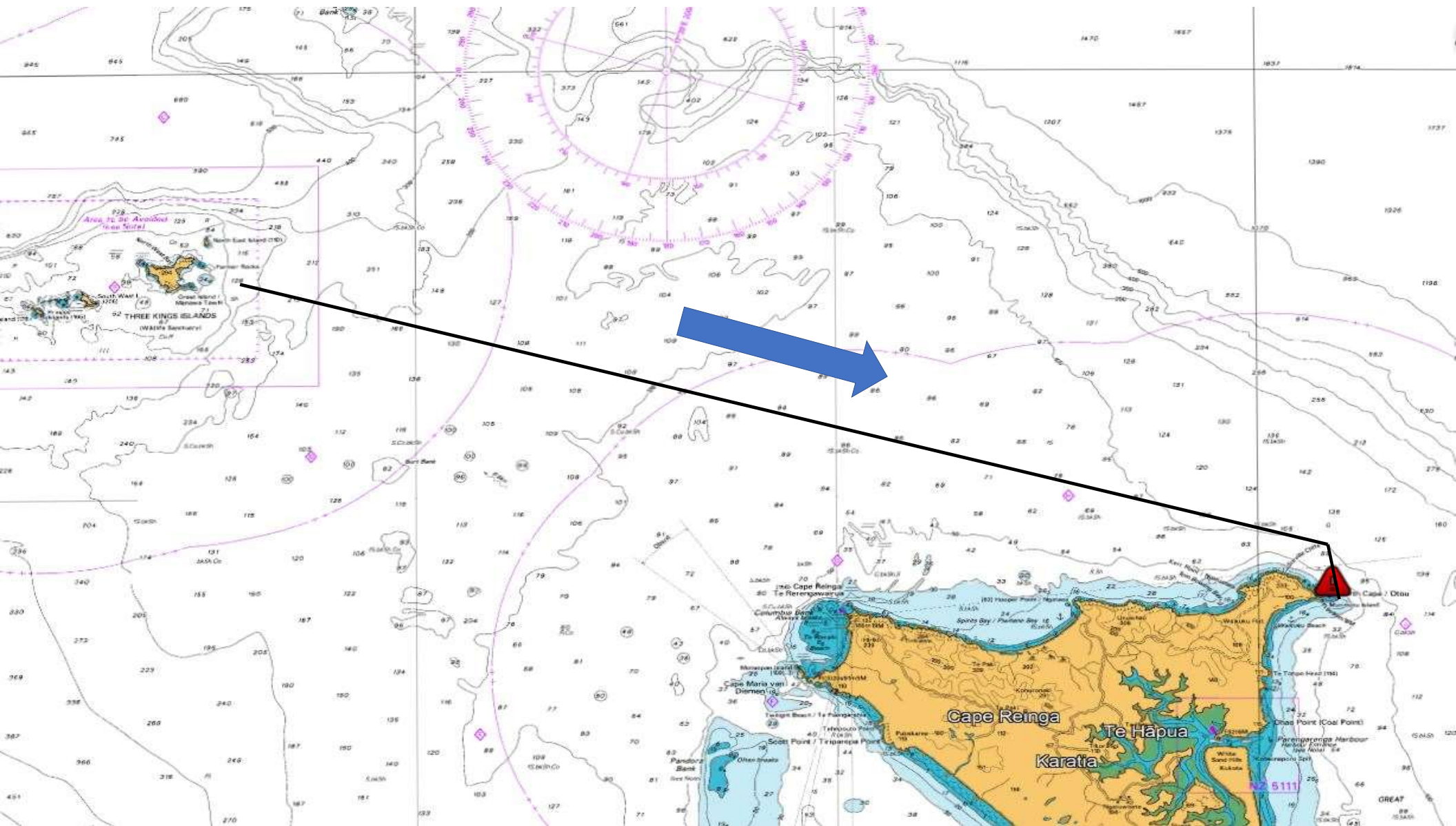
Auckland

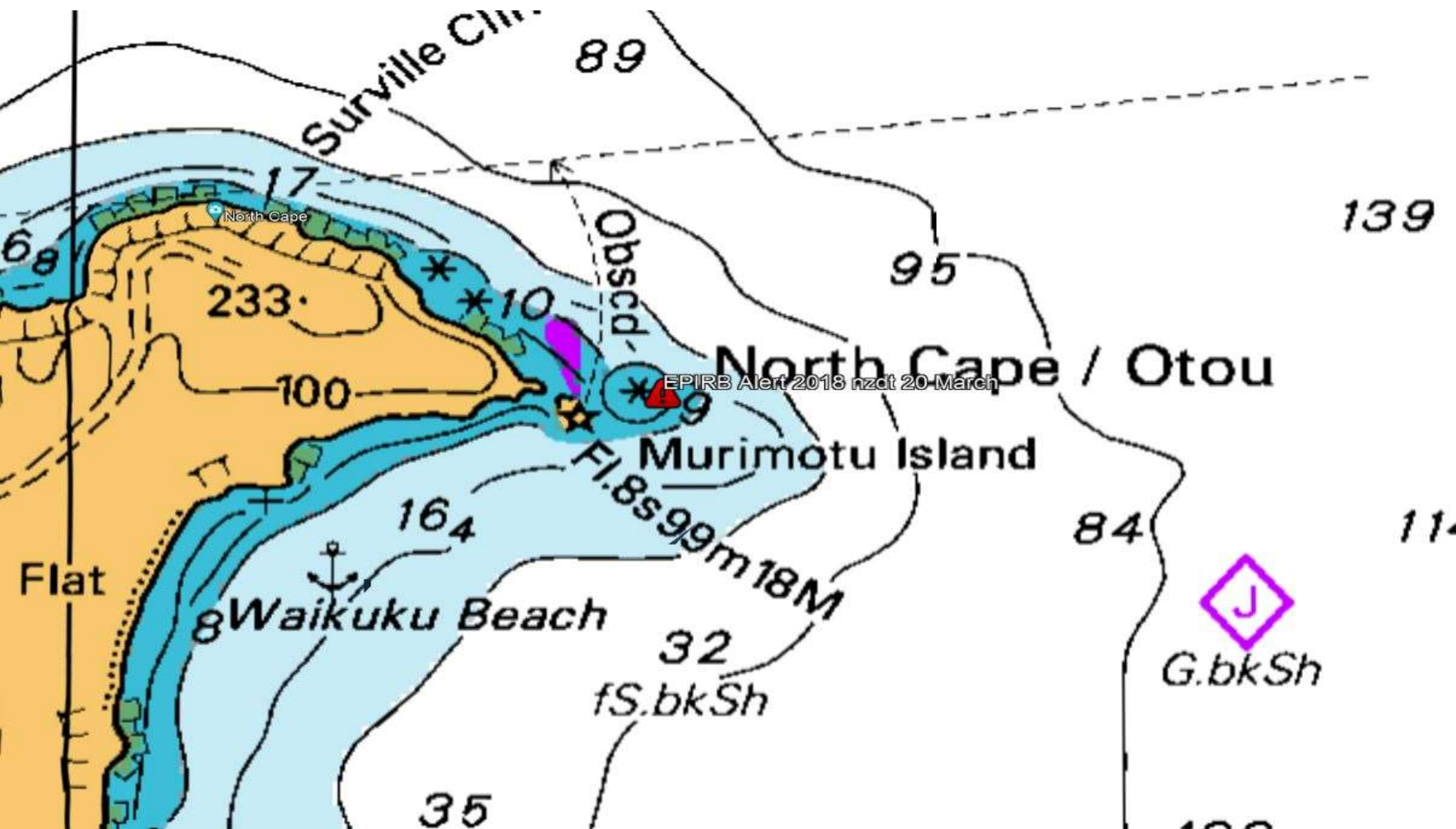
Coromandel

Whitianga

Coromandel Forest Park

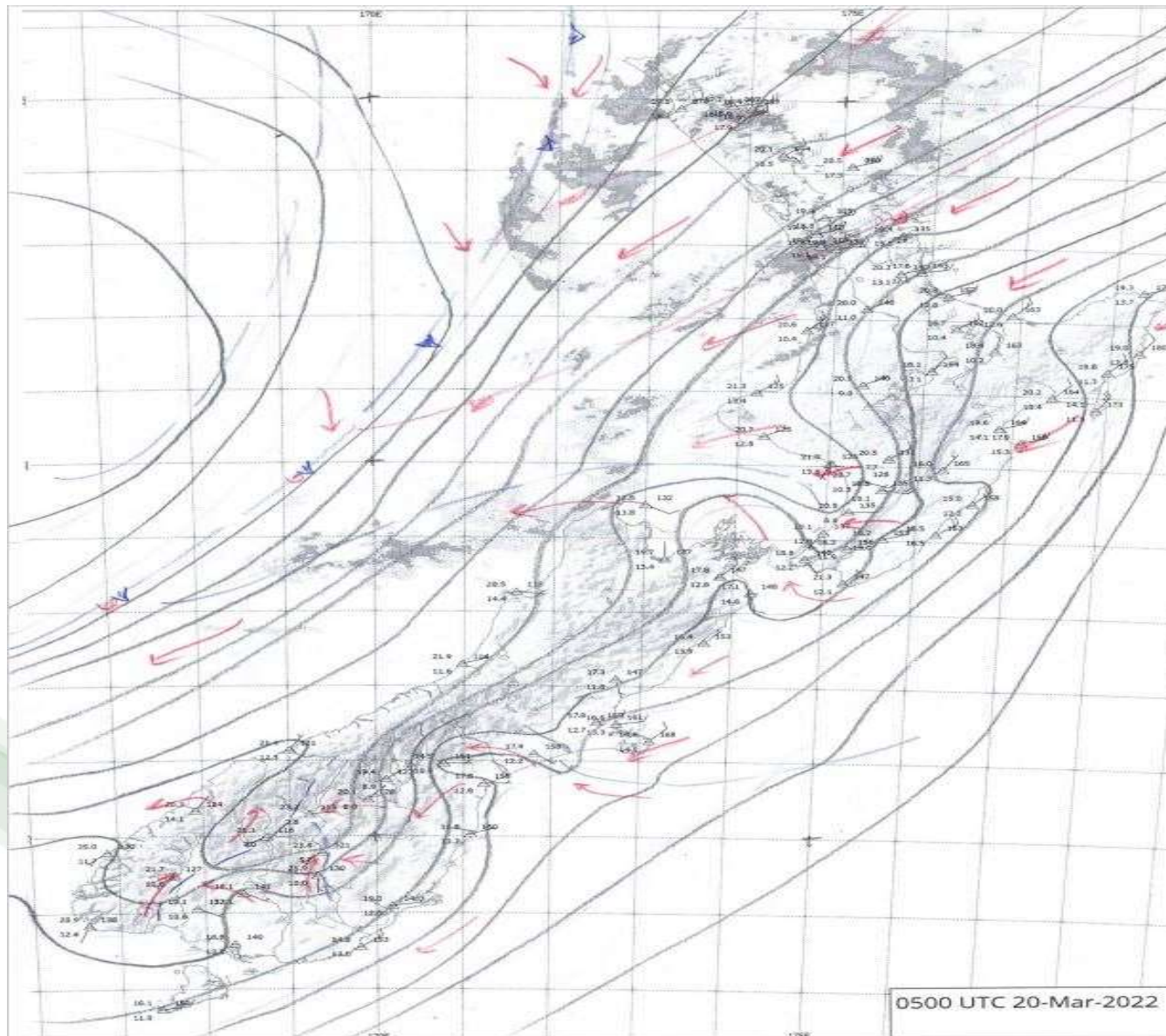








Weather  
20 March  
1800 LT



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## First 12 hours

- Initial Actions
- Planning
- Response





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## MOC (Maritime Operations Centre)

- Tasked with Distress broadcasts on VHF, HF and Satellite.
- Identify vessels of opportunity within 100 NM radius.
- Establish & maintain VHF Ch16 comms with Air and Marine assets.



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## SAR Effort



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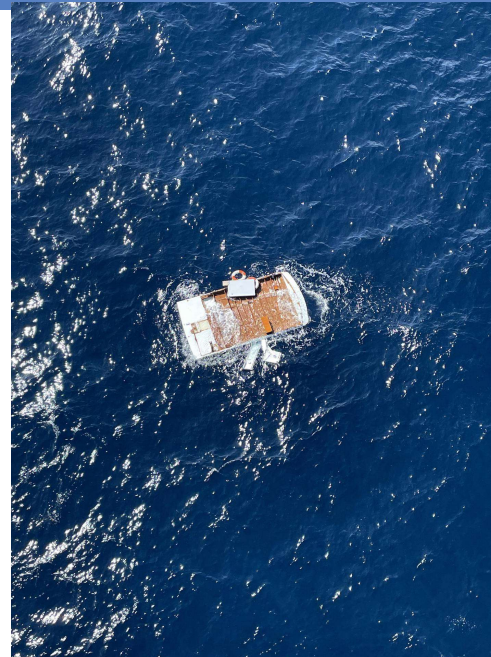
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New Zealand | Rapa Taiwhenua



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## Police On Scene Coordinator (OSC)

- 2054 hours – Contacted Police and requested SAR Coordinator be urgently paged.
- 2107 hours – Briefed Police SAR Coordinator.
- 2150 hours – Tasked to head North, find a suitable location for a Forward Base, discussed Police in OSC role, assist as required in the event there are casualties.



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## Coastguard Houhora



- 2035 hours – Briefed CGNR, requested CG Houhora be paged.
- 2057 hours – CG Houhora undertaking risk assessment.
- 2109 hours – CG Houhora declined task – likely be available for daylight task.



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## ZK-HQO (NEST Whangarei)

- **2039 hours** – **Called, briefed and tasked NEST.** Weather may prevent them getting to the location.
- 2110 hours – Weather assessment plus trying to get a rescue swimmer, could take some time.
- **2205 hours** – Departed Whangarei.
- **2341 hours** – **On scene at EPIRB position.**
- 0027 hours - **Reported - three survivors rescued, dropping off at the Forward Base.**
- 0034 hours – Reported - heading back to scene, will have 15 to 20 mins on station then back to Kaitaia to refuel.
- **0108 hours** – **Two more survivors rescued**, en route Kaitaia for refuelling. **Survivors report seeing 2 deceased**, one under the hull and one amongst debris.
- 0133 hours – Report from skipper at Kaitaia Hospital. No Lifejackets worn or liferaft deployed. Unable to do anymore due to lack of fuel and weather “turned to custard.”





The Scene

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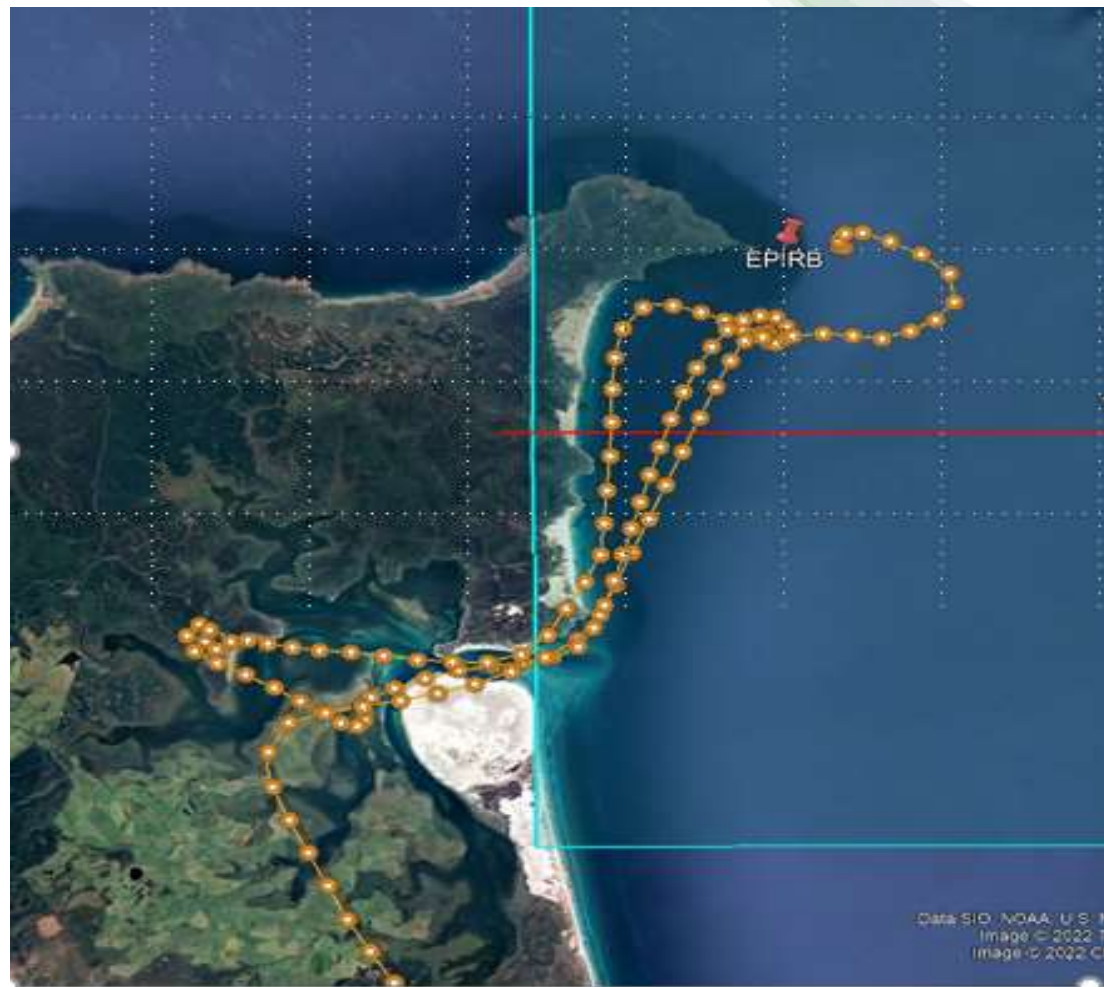


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ZK-HQO (NEST)  
2315 – 0120LT





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ZK-IZB

Auckland



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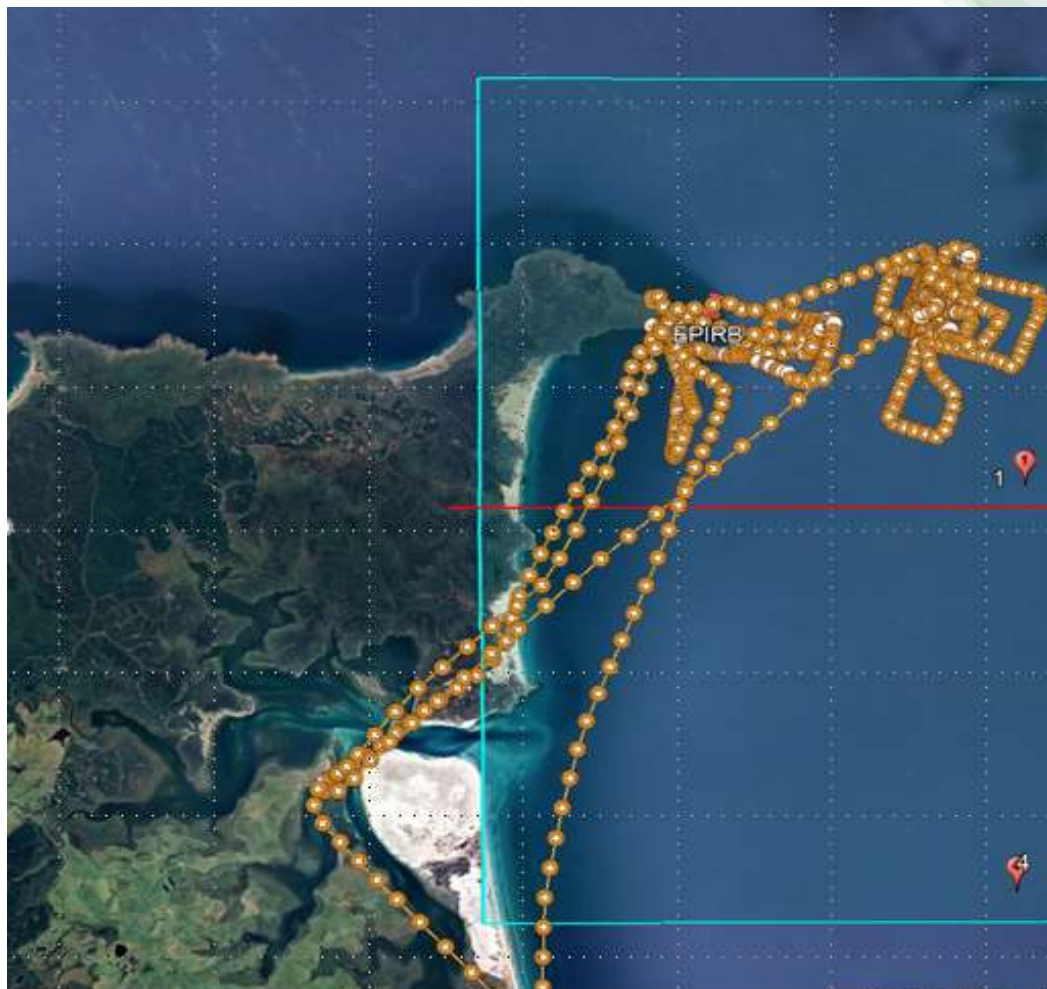
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ZK-IZB Auckland  
0110 – 0255 LT

Recovered two bodies





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## FV Katrina

(15 M fishing boat)

- 2322 hours – FV Katrina, ETA 8-10 hrs.
- 2346 hours – via MOC on VHF Ch16
- 0612 hours – In area searching debris field.



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## FV Florence Nightingale

(18m commercial fishing)

- 2322 hours – responded en route, likely to be quicker than FV Katrina.
- 0238 hours – ETA 0450 LT
- 0612 hours – Located upside down hull, appeared to be sinking.





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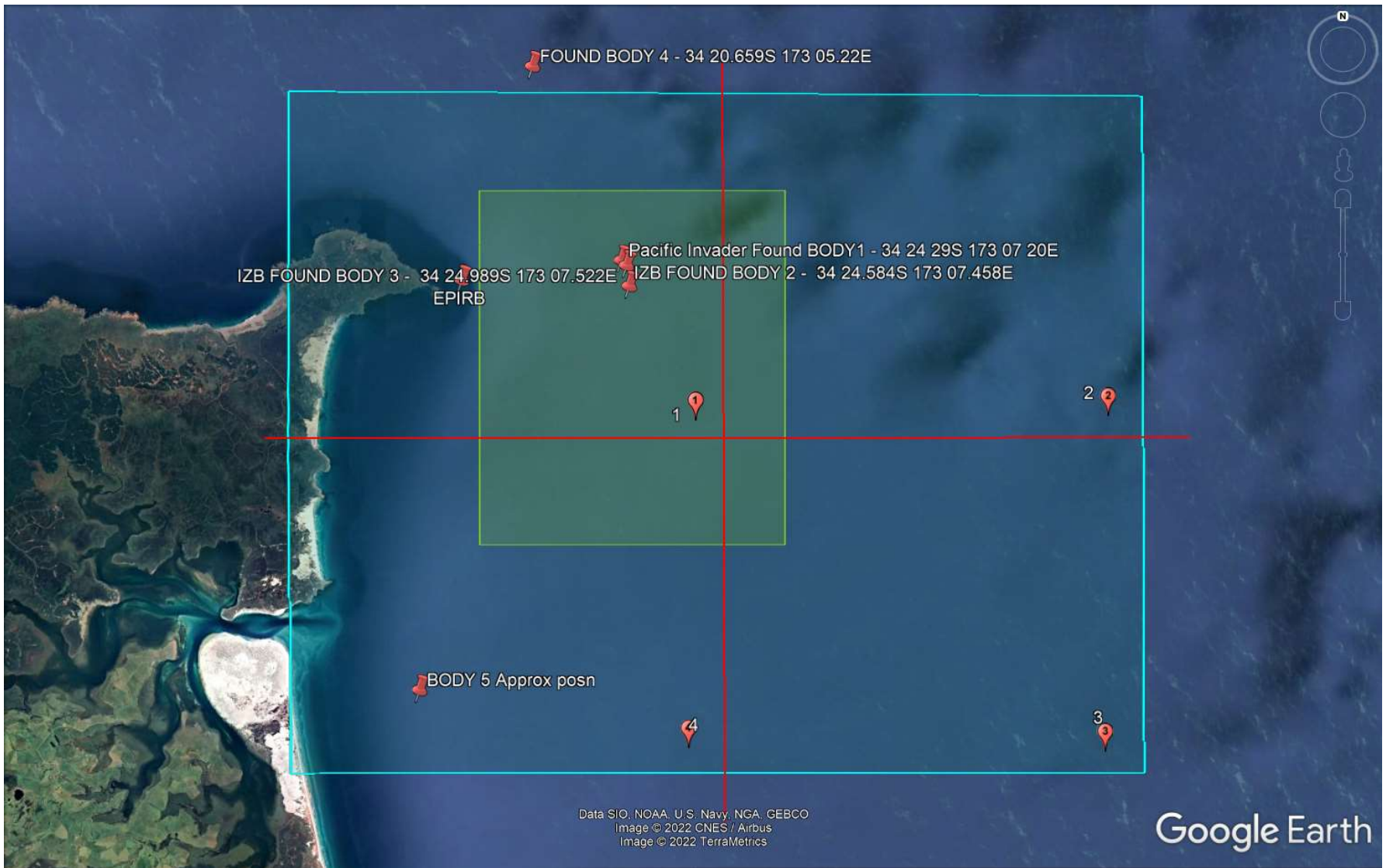
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## FV Pacific Invader

(15.1m charter vessel from same company as Enchanter)

- 2329 hours – ETA from Mangonui 4 hours.
- 0000 hours – Departed Mangonui.
- 0400 hours – On scene.
- 0416 hours – Located top cabin with EPIRB.
- 0712 hours – **Located a body.**







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## P3K2 Orion

- **2208 hours** – Requested P3 Orion assistance Tasked to:
  - Transit to LKP, establish comms,
  - Ascertain nature of distress and
  - Provide assistance as required.
- 2233 hours – Tasked accepted by 5 Squadron,
- **0056hours** – KRC986 departed Whenuapai.
- 0125 hours – KRC986 on scene.
- 0742hours – KRC896 RTB.



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## HMNZS TAUPO

- 2125 hours – Called to advise were available
- Position was in the Hauraki Gulf, 185NM SE of position, ETA 10 to 12 hours
- 2153 hours – Departed ETA 1050 hours Monday 21 March



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## Monday 21 March - Day 1 Searching

At approx. 09:00 NZT Monday 2 persons missing

### **Marine assets**

- Coastguard Houhora
- HMNZS TAUPO
- PACIFIC INVADER
- KATRINA
- FLORENCE NIGHTINGALE

### **Air assets**

- ZK-HLH
- ZK-HZZ
- ZK-HWW
- RNZAF P3

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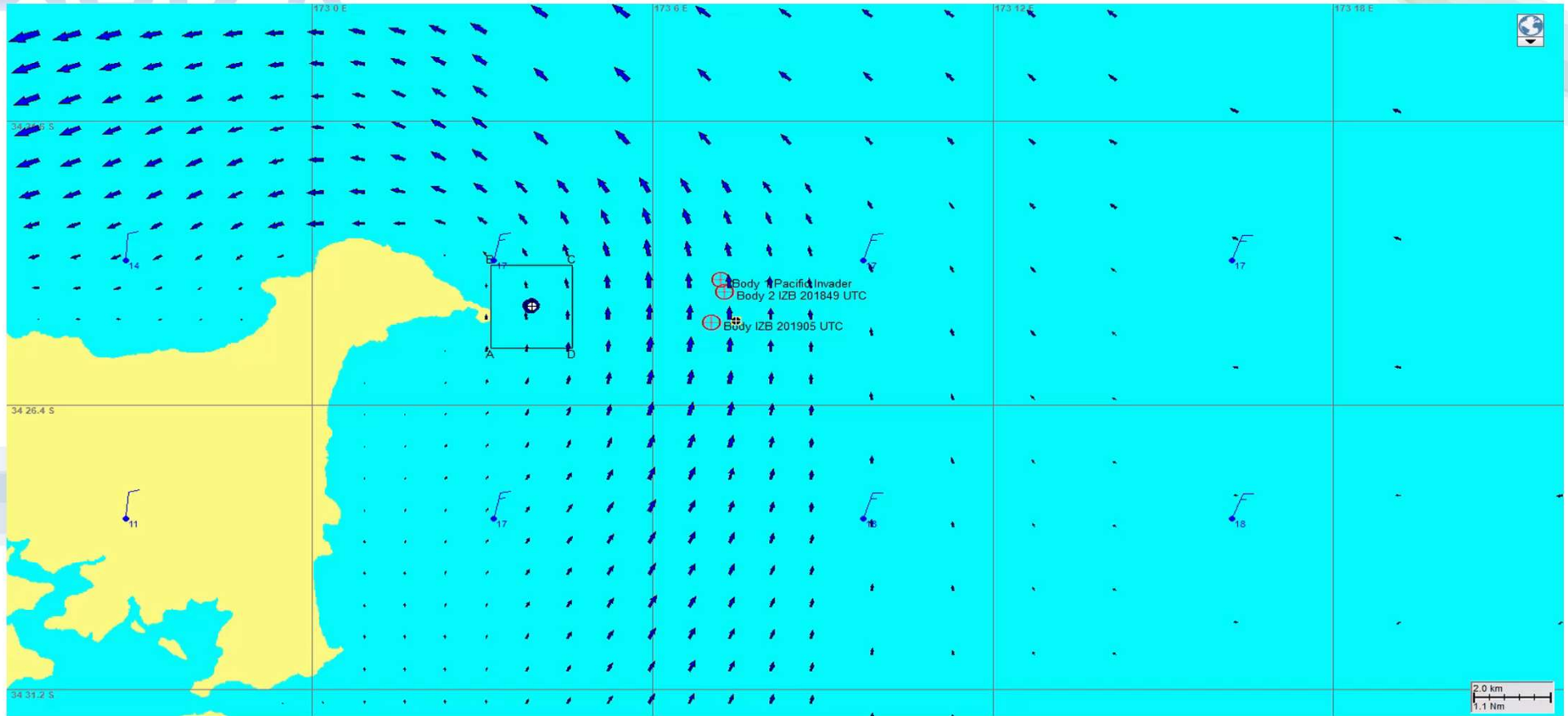
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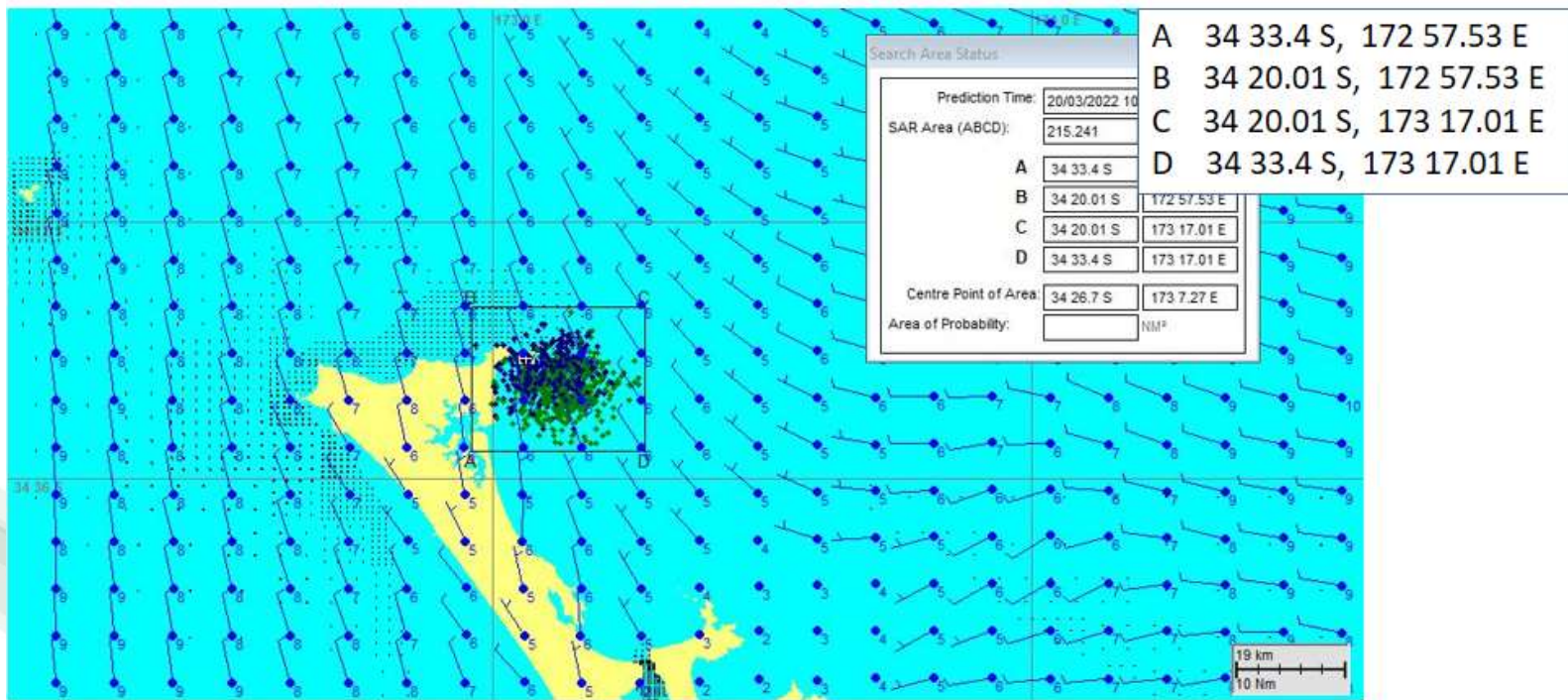


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SAR Area At 10:18:00 PM 20/03/2022 (GMT)



Drift start position based on EPIRB position – Drift start time 202018 Local time, valid until datum 201018 Local. Targets: PIW (blue dots) and life raft (green dots).

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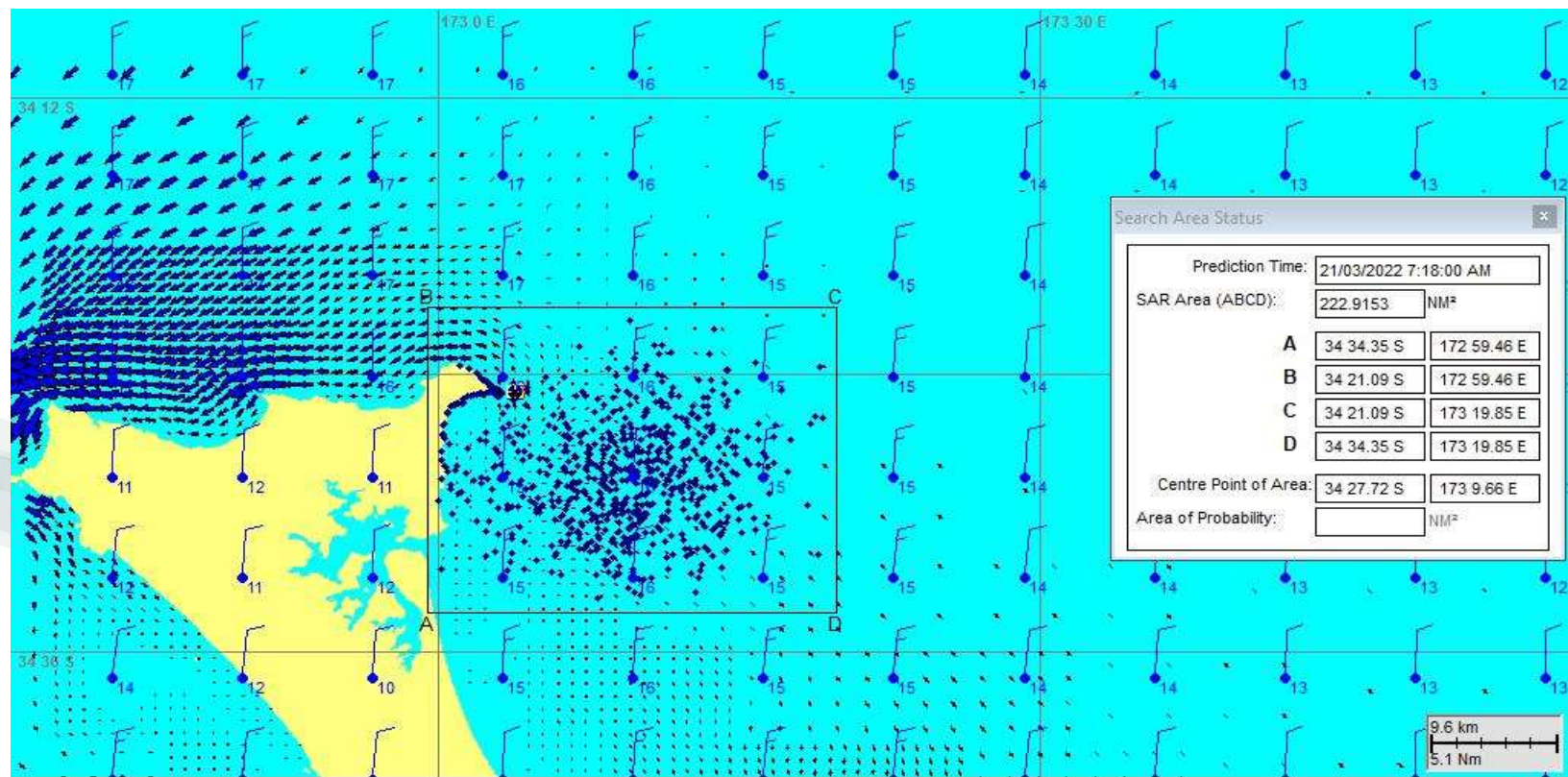


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## SAR Area At 20:18 (NZT) Monday 21 March





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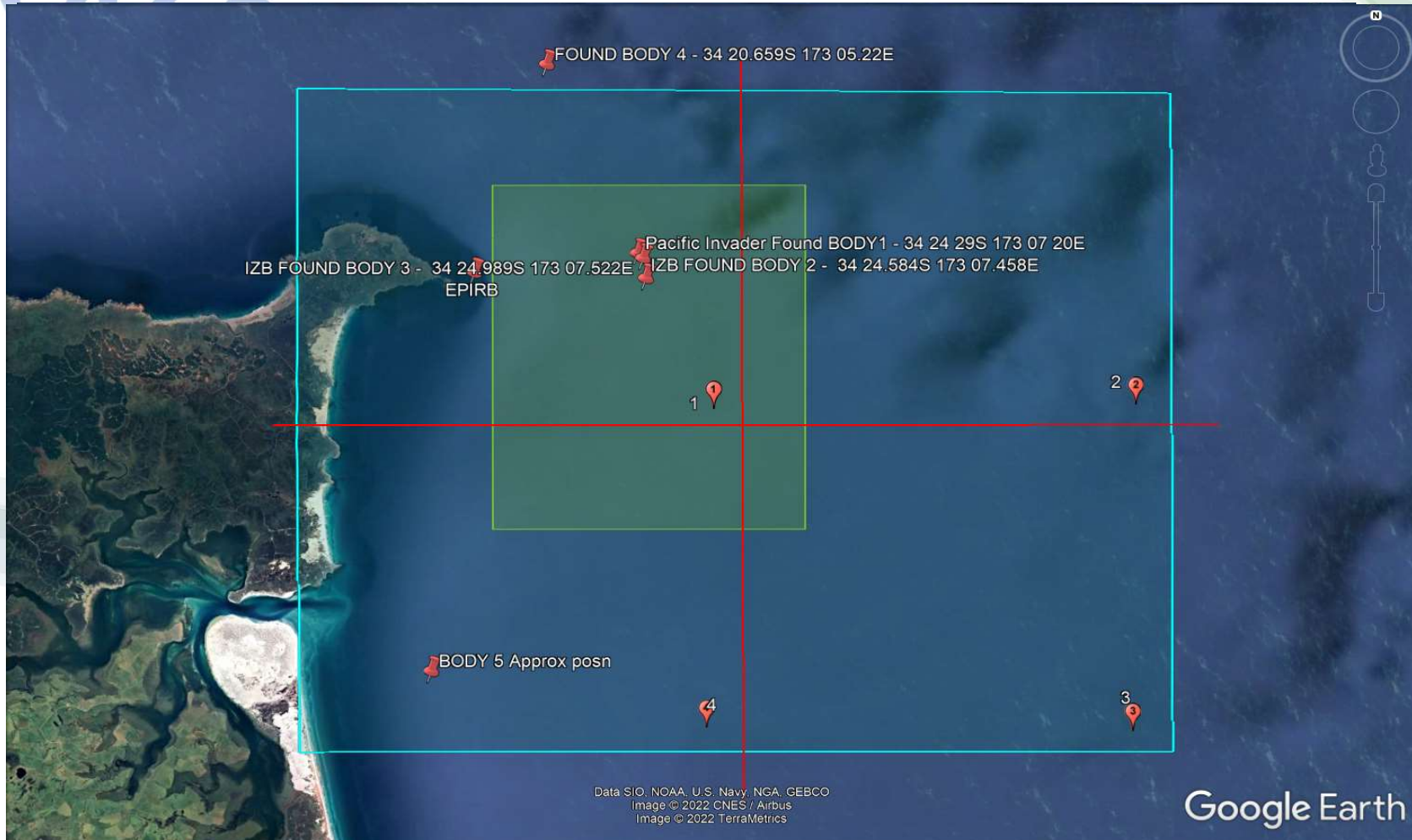
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## Allocated Aviation Search areas



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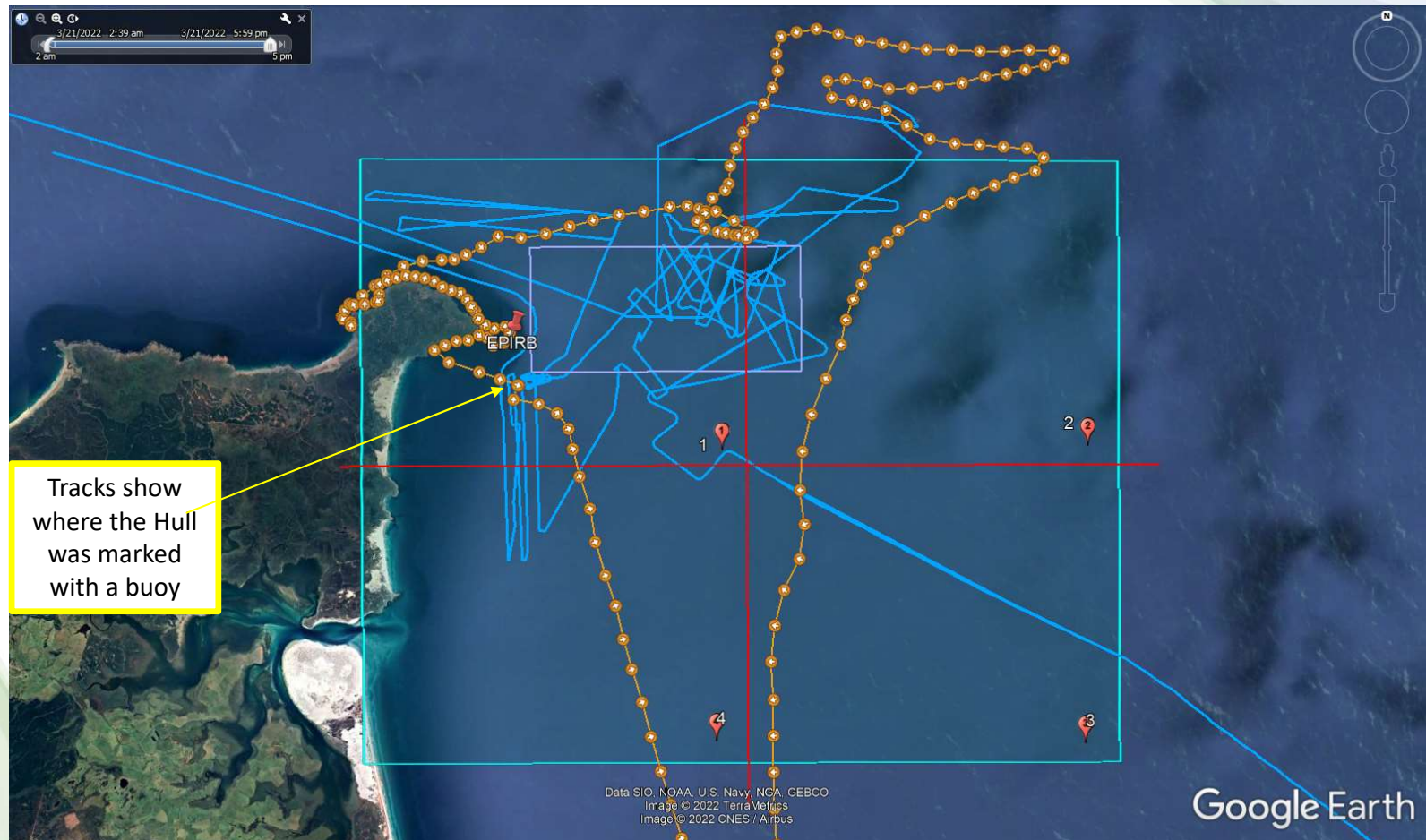


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## All Available Tracks of Marine assets





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## Overview of all Air asset tracks



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## SMC Day 1 points

- The entire search area hadn't been effectively searched.
- Possibility of missing body still in hull, confirmed by crewman's statement;
- Survivability model – Cold water emersion tables & Dr Charmaine Tate;
- Fuel – There was very limited fuel in the area and this was becoming a real problem.

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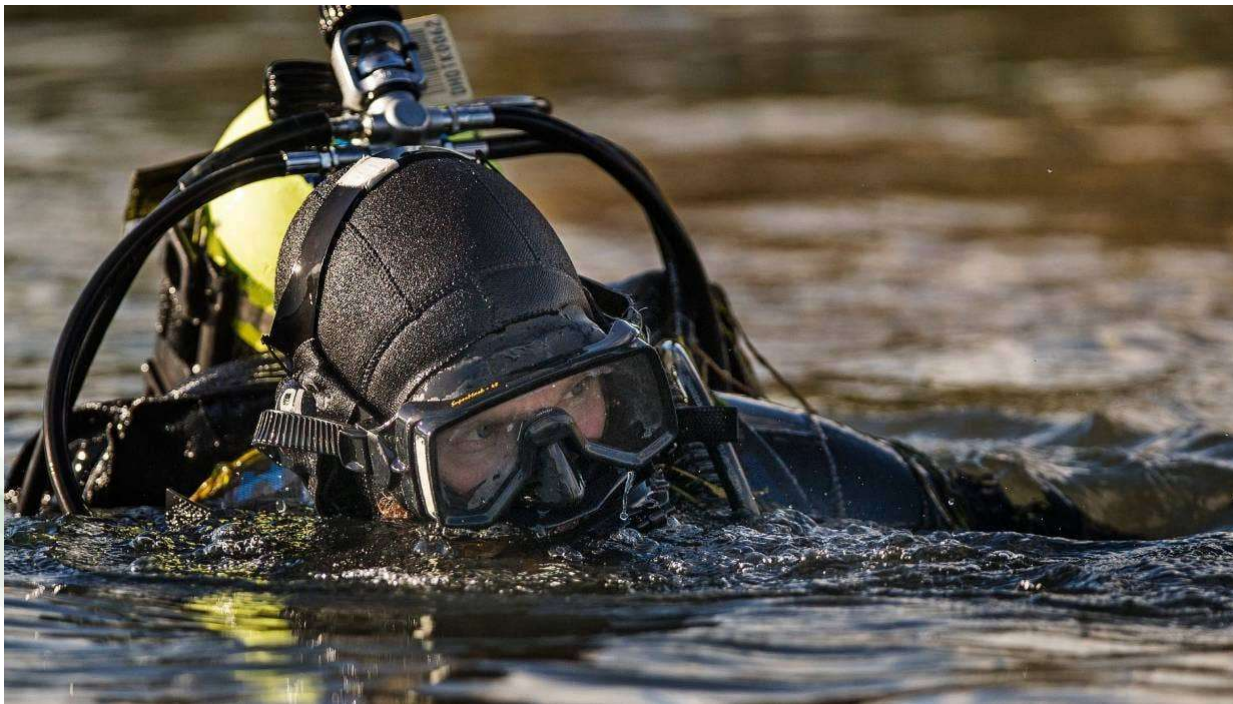


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## NZ Police National Dive Squad





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## Tuesday 22 March - Day 2 Searching

1 person missing

### Two operations running

1. Investigation of hull for last person.
2. Search of defined search area for last person in case they were in the water.

Survivability assessments showed that by end of day 2 (Tuesday) would be the last chance of being found alive in the conditions.

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## Tuesday 22 March - Day 2 Searching

### **Marine assets**

- Coastguard Houhora
- PACIFIC INVADER and Police National Dive Squad
- KEILA
- MATAITAI

### **Air assets**

- ZK-HLH
- ZK-HZZ
- ZK-HWW
- ZK-IWT
- ZK-CGD

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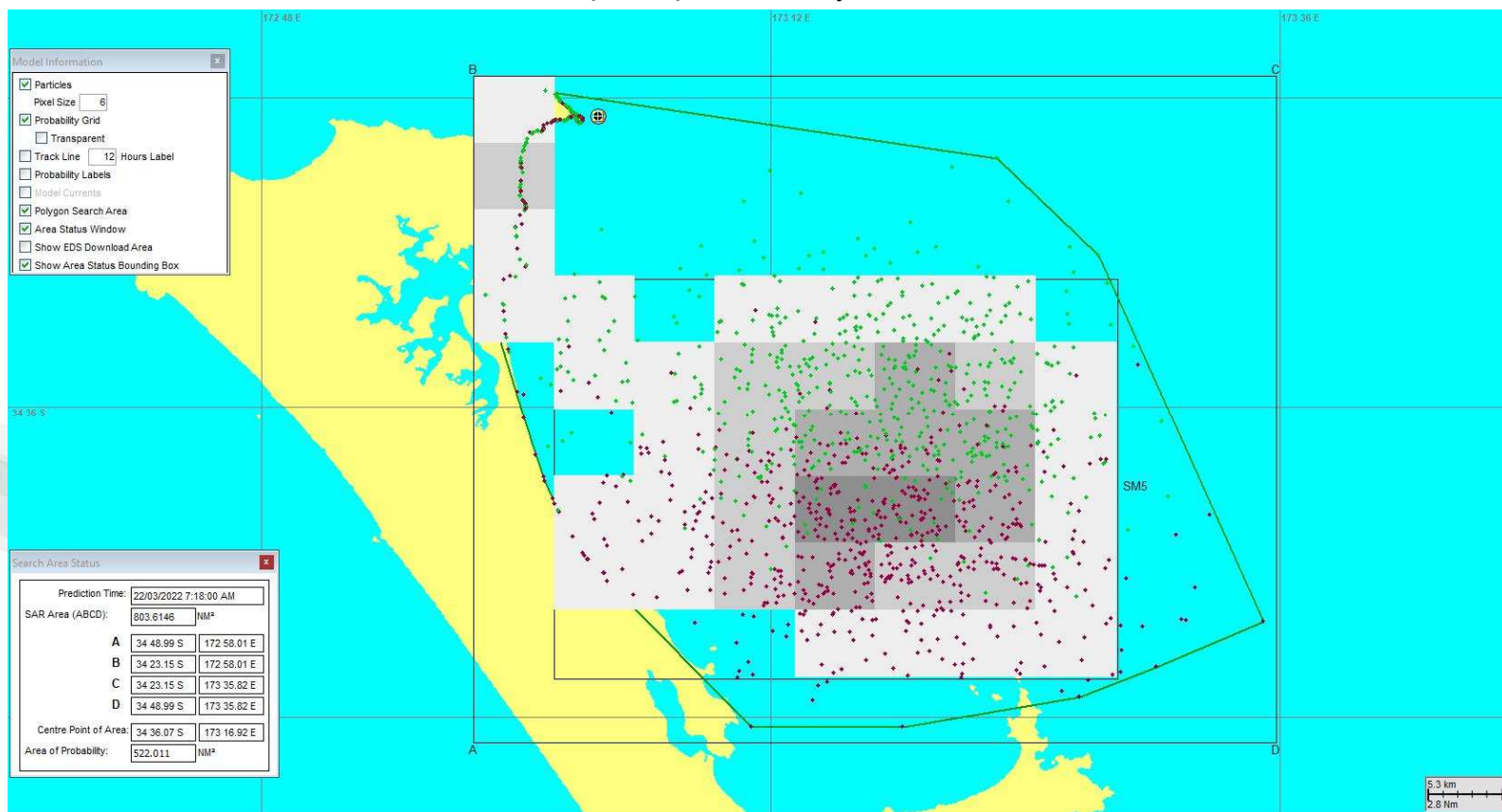


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SAR Area At 07:18 (GMT) Tuesday 22 March  
20:18 (NZT) Tuesday 22 March





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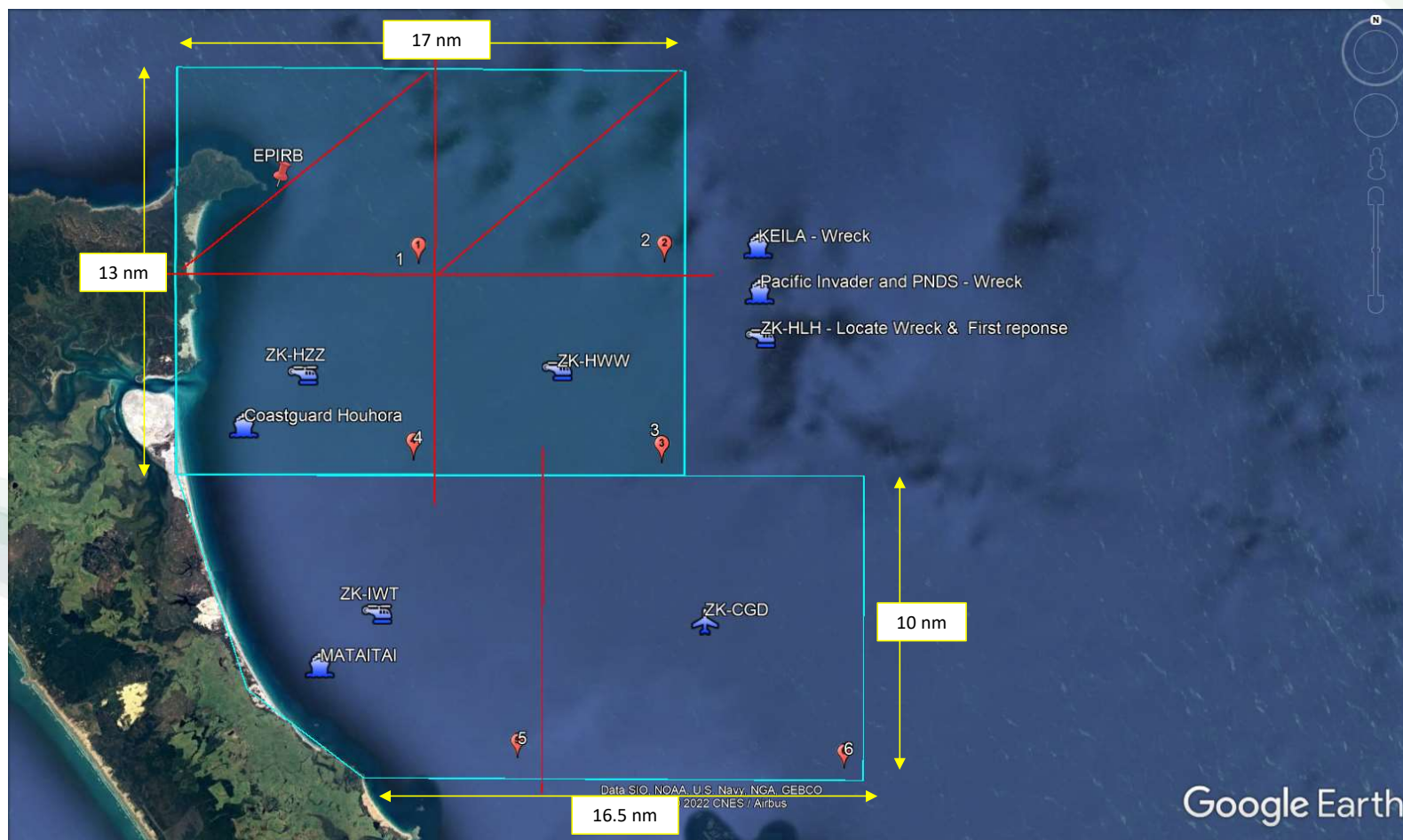
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## Locating the Hull



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## ZK-HZZ Skywork



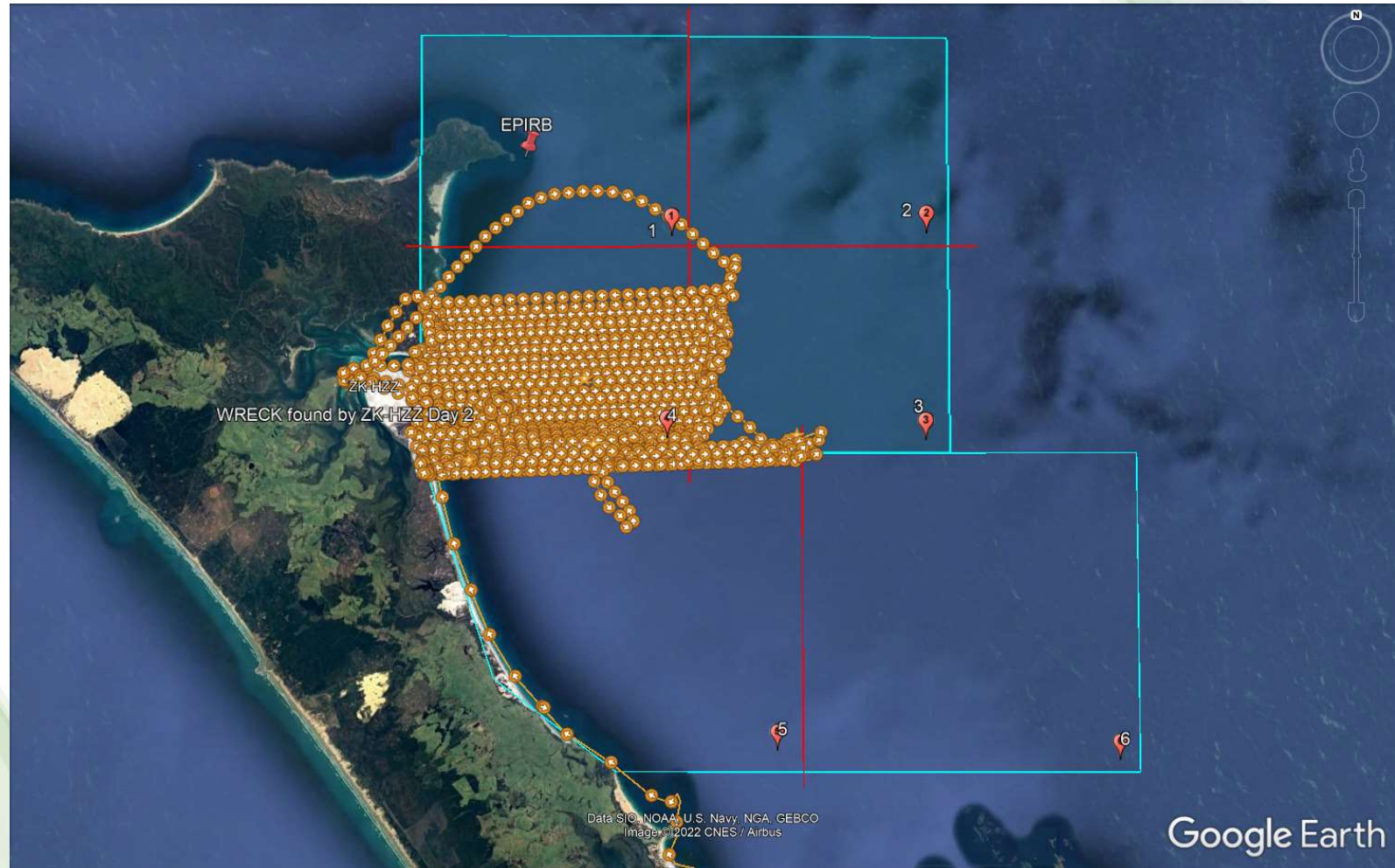
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All search  
tracks from  
Day 2



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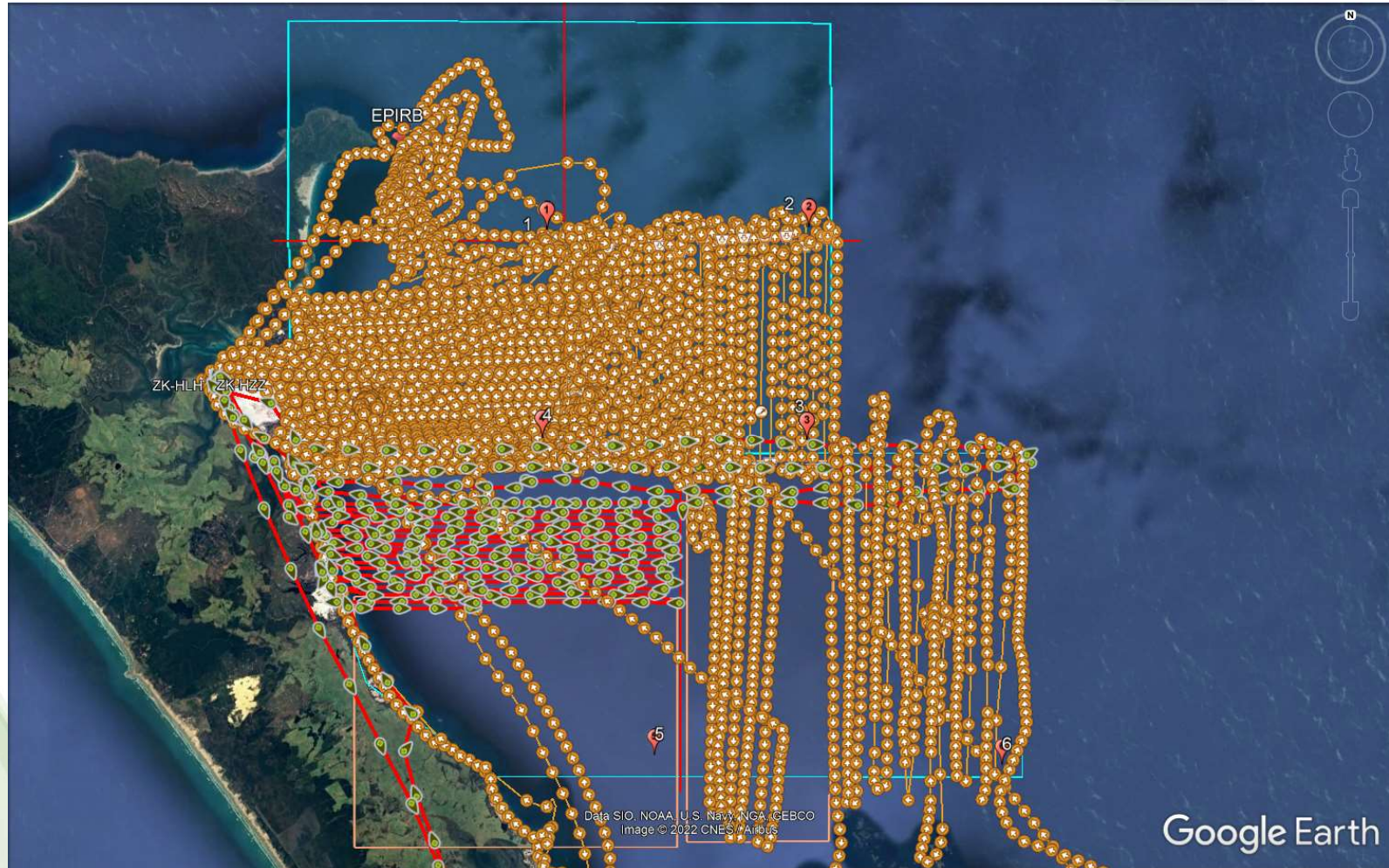


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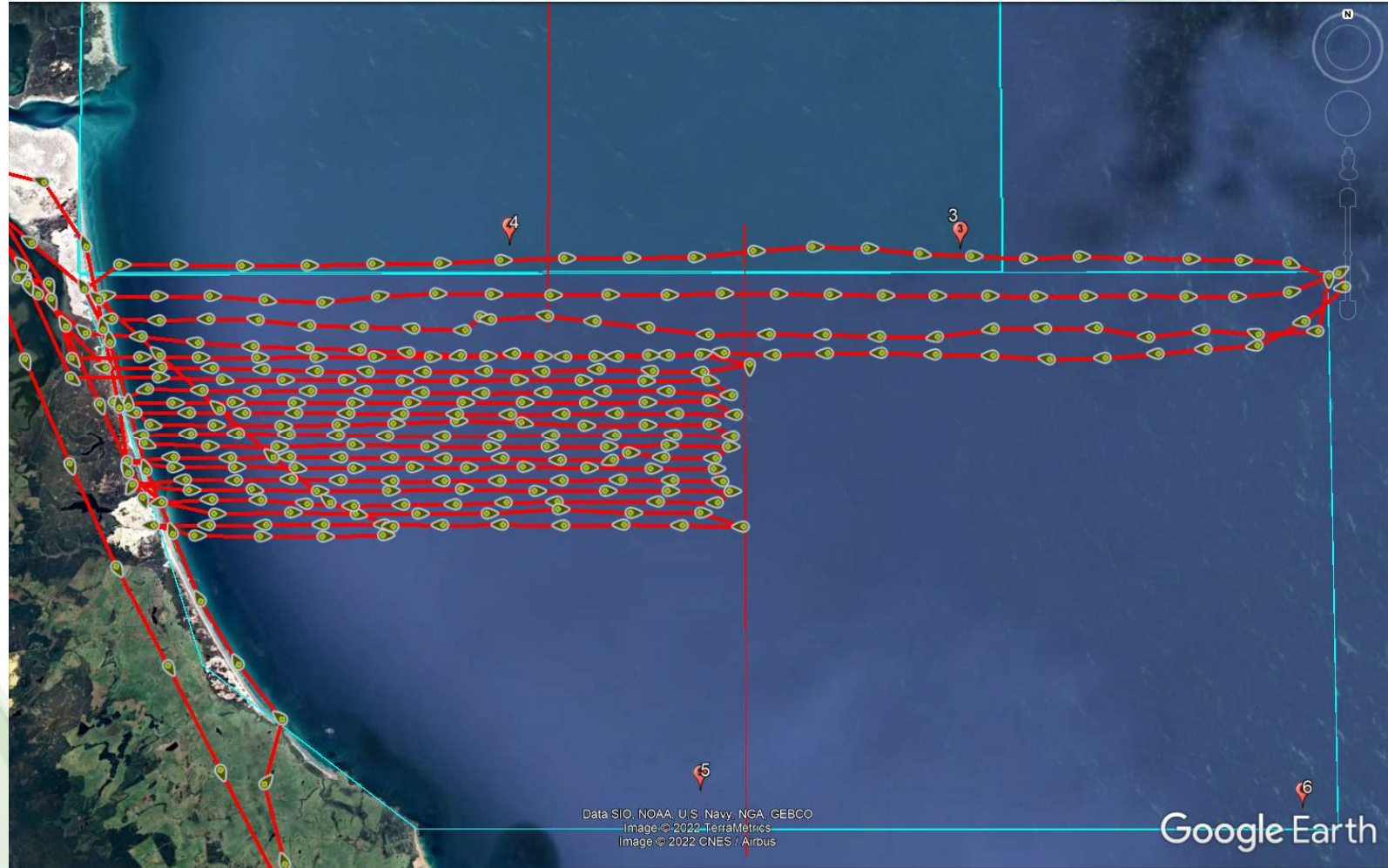
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# ZK-IWT





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## ZK-HZZ Skywork



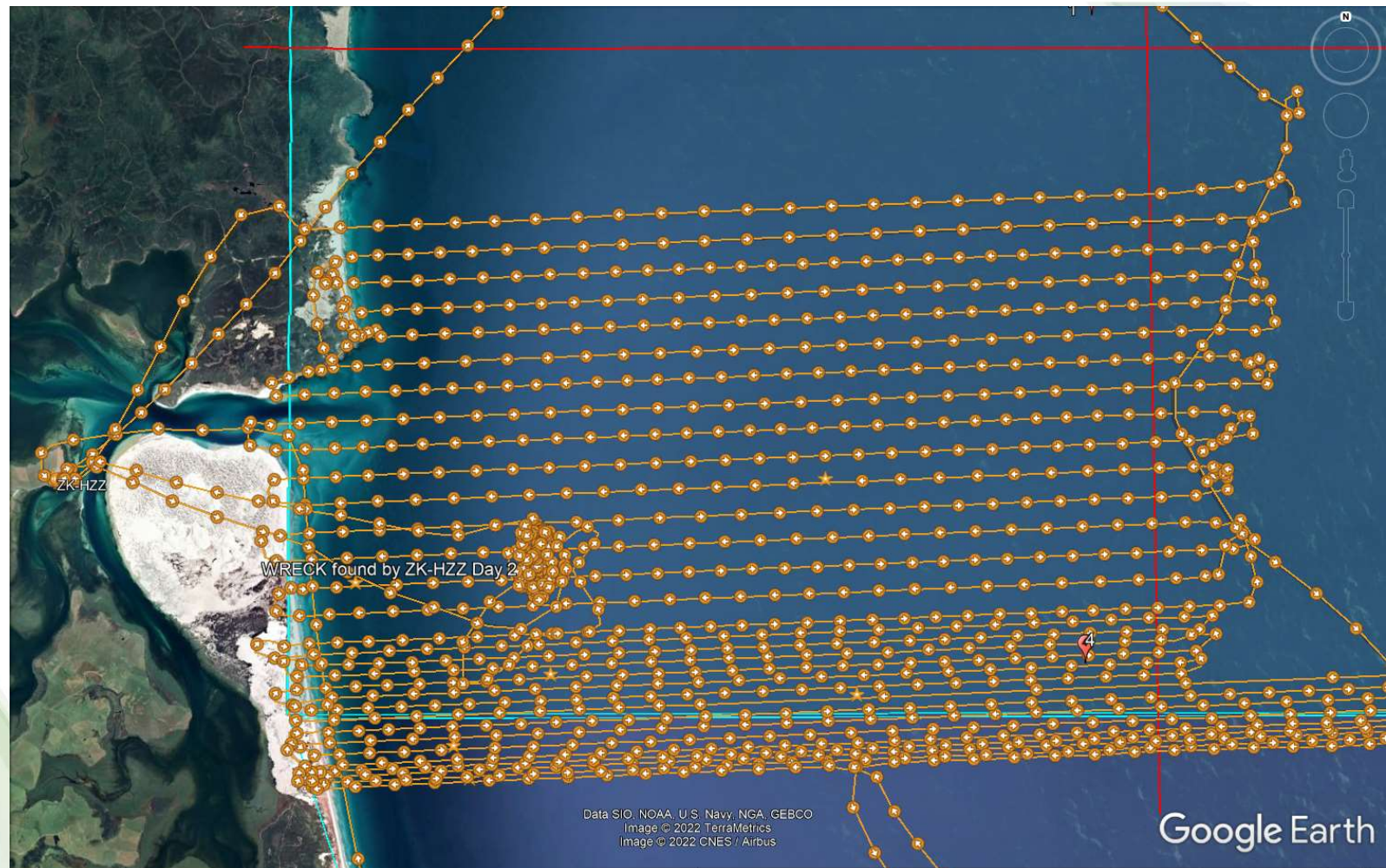
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## Final recovery

- At approx. 1615 the dive squad sighted the final body inside the upturned hull.
- The body was recovered safely at approx. 1700.



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## GROUP DISCUSSION





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## Things that went well

Police OSC and staging area set up

Some assets spoke up when they saw a mistake or queried an RCCNZ decision

When assets were searching properly, patterns were excellent

Cooperation from NZDF

Dive squad operations

Cooperation between search assets – eg about fuel

Media enquires

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## Things that could have been done better

RCCNZ should have assigned an asset to standby the wreck overnight

Assets should have consulted with RCCNZ before changing search tasks

RCCNZ should give more thorough briefings when using SAR terminology eg OSC

Better briefings regarding aviation frequencies.

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## Lessons learned

Stay with wreck overnight

SRUs to stick to the plan and follow instructions

Food, fatigue and SRU welfare considerations

RCCNZ to consider assets time availability at start of search – ask early in tasking process

RCCNZ to call more officers in to support the operation



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## Recommendations from review

RCCNZ to liaise and train with other agencies so common SAR terms are understood

Appoint ACO before aircraft are in the air

RCCNZ won't use aircraft unless there is tracking and it is visible to RCCNZ

Further planning regarding fuel for the Far North required.

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## QUESTIONS

