

The background of the slide features a deep blue underwater scene with two whales. A large, semi-transparent watermark consisting of the Roman numerals 'IX' is positioned on the left side of the image. The text 'Science & Education Report' is centered horizontally across the middle of the image.

Science & Education Report

MS Fridtjof Nansen

8 – 18 Mar 2025

Highlights of Antarctica





Science & Education program

During this voyage, we ran **5 citizen science** projects in total: eBird, HappyWhale, INaturalist, Nasa Globe Cloud observer & SecchiDisk project. You were able to enrich your mind with **26 lectures** on different topics from birds to rocks. You also took part in the **15 discovery sessions** we put on.

We had guest scientist on from two different projects that were collecting data whilst you were onboard. The Freidlander lab was collecting biopsies and drone footage. Where the by the Durham University samples of the inter-tidal seaweed was collected aswell as snow algae samples.

A lot of you were very interested in the scientific aspect of our voyage and we thank you all for your enthusiasm. Here we provide a resume of our science activities.



Lectures & Discovery sessions

- 26** Lectures
- 15** Discovery sessions
- 5** Citizen Science projects
- 12** Science boats
- 2** Guest Scientist projects



Wildlife Watch

40 Species:
10 Mammals
30 Birds



NASA Globe observer

On this Highlights of Antarctica Expedition we conducted 2 cloud observations for the Globe Observer NASA program that were matched to satellite flyovers and we submitted a total of 13 observations. We have received 4 Satellite Matching reports.

Thank you to the 42 Cloud Observers who participated in the program, and remember you can continue to do this at home!

View our data on the global map

2 Observation Locations recorded

Total Sessions: 2

Total Submissions: 13

Matches Received: 4





Satellite Matching Reports

GLOBE Cloud Observations Paired with NASA Satellite Data

Total Satellite Comparisons: 170

Useful Resources: [How to Read My NASA GLOBE Clouds Satellite Comparison Table](#), [How to Compare My Cloud Observations with Satellite Data](#), [Cloud Cover](#), [Cloud Type](#), [Cloud Opacity](#), [Satellites](#)

Observation	GLOBE	NOAA-20 Satellite
Universal Date/Time	2025-03-10 19:51:00	2025-03-10 19:55
Latitude	-63.65	-64.1 to -63.3
Longitude	-64.89	-65.37 to -64.57
Total Cloud Cover	Overcast (>90%)	Overcast 99.85%
High Clouds	Cirrocumulus Cover: Scattered (25-50%) Opacity: Opaque	Cover: Few (0.57%) Altitude: 6.46 (km) Phase: Ice 234.11 (K) Opacity: Transparent
Mid Clouds		Cover: Overcast 99.28% Altitude: 4.22 (km) Phase: Ice/Water Mix 249.54 (K) Opacity: Opaque
Low Clouds	Stratus Cover: Overcast (>90%) Opacity: Opaque	
GLOBE Cloud Photos and Corresponding NASA Satellite Images.	<p>GLOBE Photos</p> <div> <div>North</div> <div>East</div> <div>South</div> <div>West</div> <div>Up</div> <div>Down</div> </div> <p><i>Note: Photos submitted though GLOBE need approval before being displayed, this may take a few days.</i></p>	<p>VIIRS NOAA-20</p> <p>Worldview</p> <p>Worldview Tutorial</p>
Sky Conditions,	Sky Conditions Sky Visibility : no report	Are there any comments you would like to add? Be sure to include the satellite for our record.



Please register your email address when using the app.

This will ensure you receive satellite matching reports.



The eBird project

During this voyage, our ornithologists and environmental scientist, did with your help at least **24 surveys** between Ushuaia and the Antarctic Peninsula, recording a total of **30 species**. Some of the highlights were the abundant Wilson's storm-petrel, black-browed albatrosses and southern giant petrels.

Find the trip report for the voyage with the full list of species and checklists [here](#).

We hope you keep eBirding, both around the world and in your backyard



Kim Rormark/HX

These are all the locations of eBird observations done during this voyage



eBird

Event in progress



2025_08-03_Antarctica_MS Fridtjof Nansen

Mar 8, 2025 - Mar 18, 2025

About

Leave

7

Shared observations from guests and Expedition Team onboard MS Fridtjof Nansen during the expedition cruise "Highlights of Antarctica" from 08th of March to 18th of March 2025.

[Read More >](#)

[⚙ Your Membership](#)

Project Members Only

[📅 Project Journal](#)



iNaturalist

We submitted around **43 observations** identifying **18 species** of marine mammals and birds. The most observed species were the Gentoo penguin followed by the Antarctic fur seal. There is still time to join our project once you are back home and have time to go through your photos. Helping us document the local biodiversity will help the scientists worldwide to monitor the changes of distribution and abundance of the most iconic Antarctic species.

Join our project by searching its code name: 2025_08-03_Antarctica_MS Fridtjof Nansen

View our data submitted on our [iNaturalist project](#)

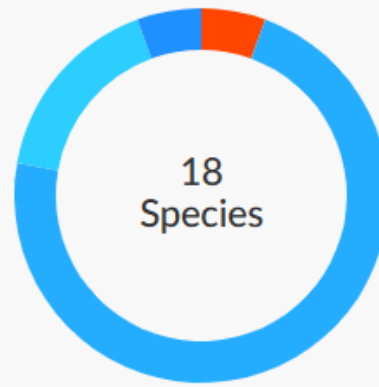


Dougie Wainwright/HX

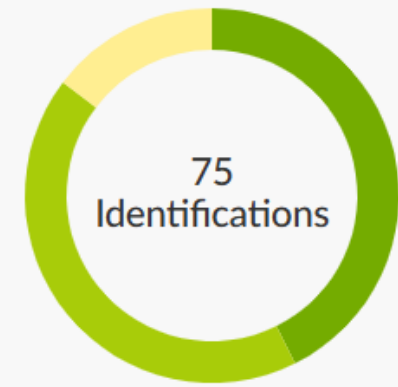
Stats



- Research Grade
- Needs ID
- Casual



- Unknown
- Protozoans
- Fungi
- Plants
- Chromista
- Mollusks
- Insects
- Arachnids
- Ray-Finned F...
- Amphibians
- Reptiles
- Birds
- Mammals
- Other Animals



- Improving
- Supporting
- Leading
- Maverick



Snowy Albatross
Diomedea exulans

1 7 days ago



Southern Giant Petrel
Macronectes giganteus

1 7 days ago



Gentoo Penguin
Pygoscelis papua

2 5 days ago



Humpback Whale
Megaptera novaeangliae

2 5 days ago



Leopard Seal
Hydrurga leptonyx

2 3 days ago



Kelp Gull
Larus dominicanus

1 3 days ago



Antarctic Fur Seal
Arctocephalus gazella

2 3 days ago



Gentoo Penguin
Pygoscelis papua

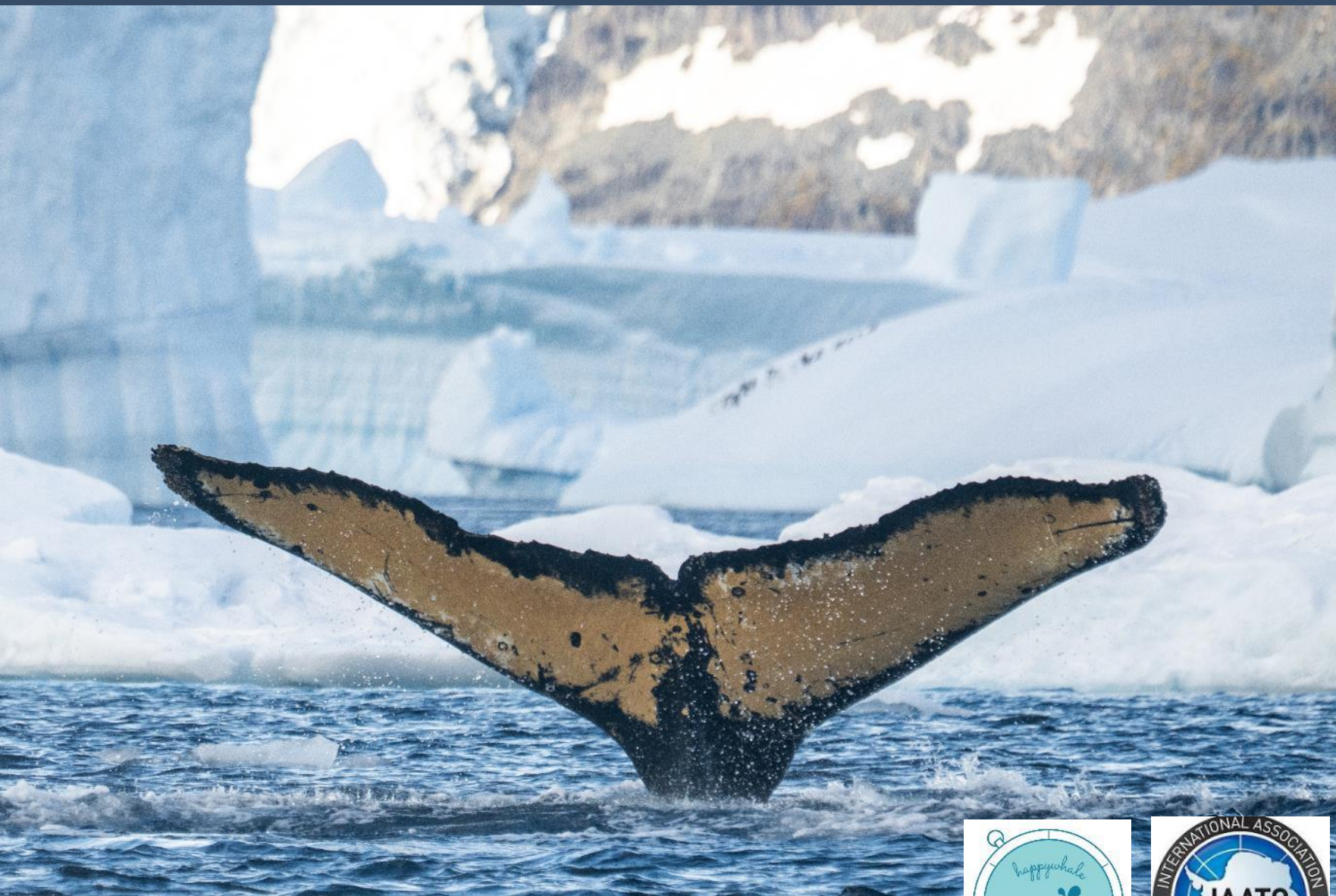
3 3 days ago



Southern Giant Petrel
Macronectes giganteus

2 3 days ago





HappyWhale

This voyage was a success in terms of whale sightings. Our marine scientist Lilia, together with the science team, submitted **23 fluke photos** to the platform. One whale was new to Happywhale's data base.

Over 10 other whale submissions had been observed previously.

Thank you so much for helping us gathering amazing pictures and moments!

[View our data](#) on the global map



Humpback Whale in Plenau © Timo Heinz / HX



HX (Hurtigruten Expeditions)

2027-03-11

Boat: MS Fridtjof Nansen

Our trip

Thank you for adopting
me!! My new name is
Callun Harris

Thank you, Mr. Robert Gallacher, for generously donating your photo! Your contribution made it possible for this whale to be adopted during this trip, and we truly appreciate your support.



FRIEDLAENDER LAB

Bio-telemetry and Behavioral Ecology



Total Whales Sampled this season

76 Humpback Whales

9 Minke Whales

Total Whales flown over **140**

Inter-tidal Seaweed

New Sites for Peterman
Island & Neko Harbour

7 different species

> 50 samples for CN isotope
analysis at Durham
University



Snow Algae

Snow algae collected from
all sites except Whalers
Bay

33 filters for DNA research

New terrestrial data to
compare to the marine
algae dataset



What will the data be used for?

- How is carbon and nitrogen cycling around the Peninsula
- How productive are these species?
- What are the seasonal changes from November to March
- Improve the Natural History Museum archive of Antarctic material





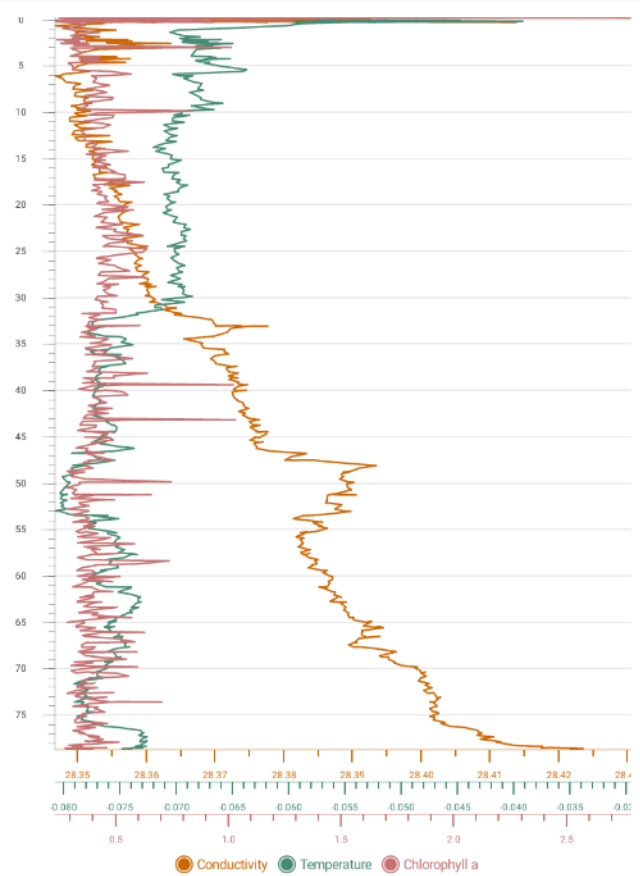
Science Boat

We had 12 science boat sessions during this trip in: Plenau island, Neko, Danco Island, Orne Harbour & Whalers Bay. We performed multiple secchi disk measurements to document the turbidity/clarity of the water and assess the abundance of phytoplankton.

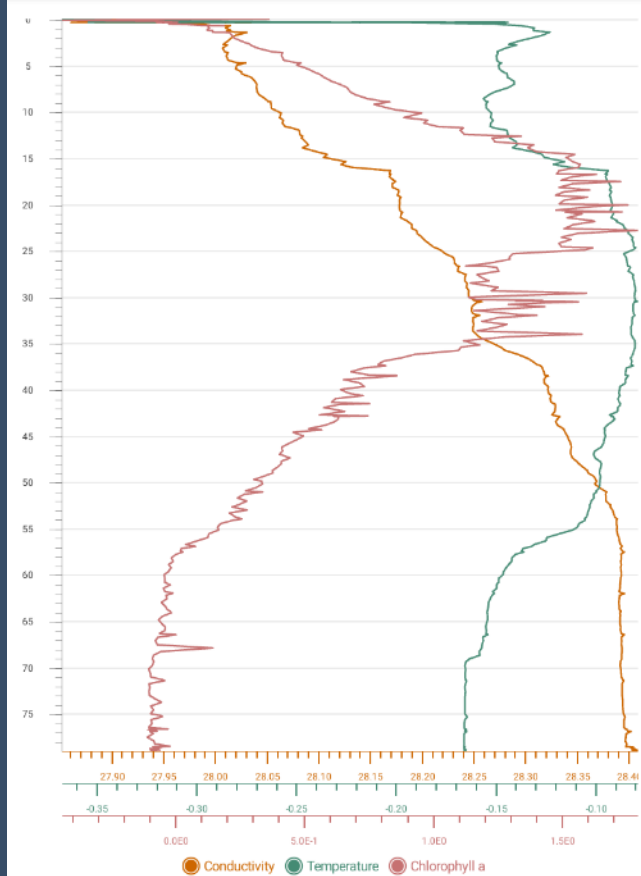
Date	Location	Depth (m)
11.03.25	Plenau Island	17,7
11.03.25	Plenau Island	17.5
14.03.25	Danco Island	12.9



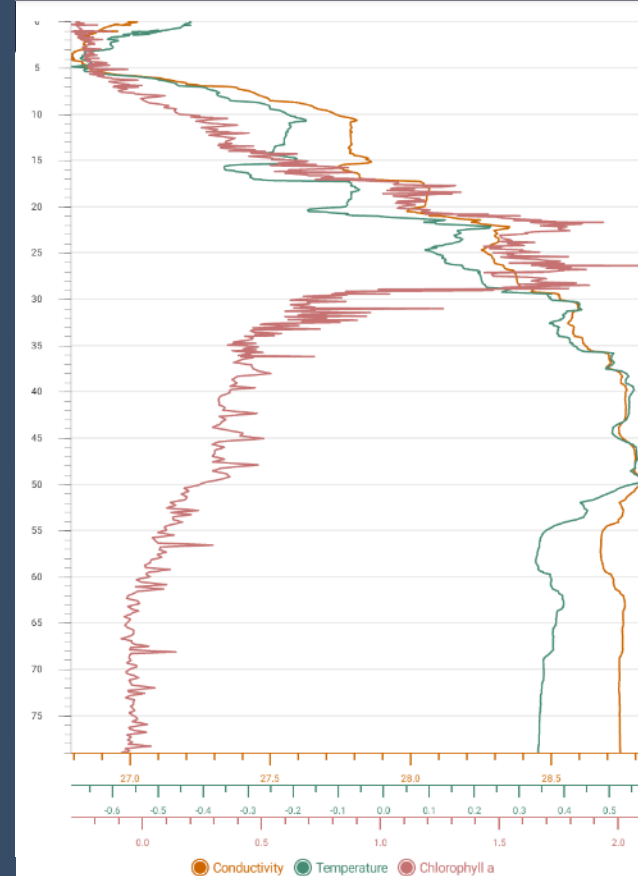
[View our data](#) submitted to the Secchi Disk Project



Plenau island



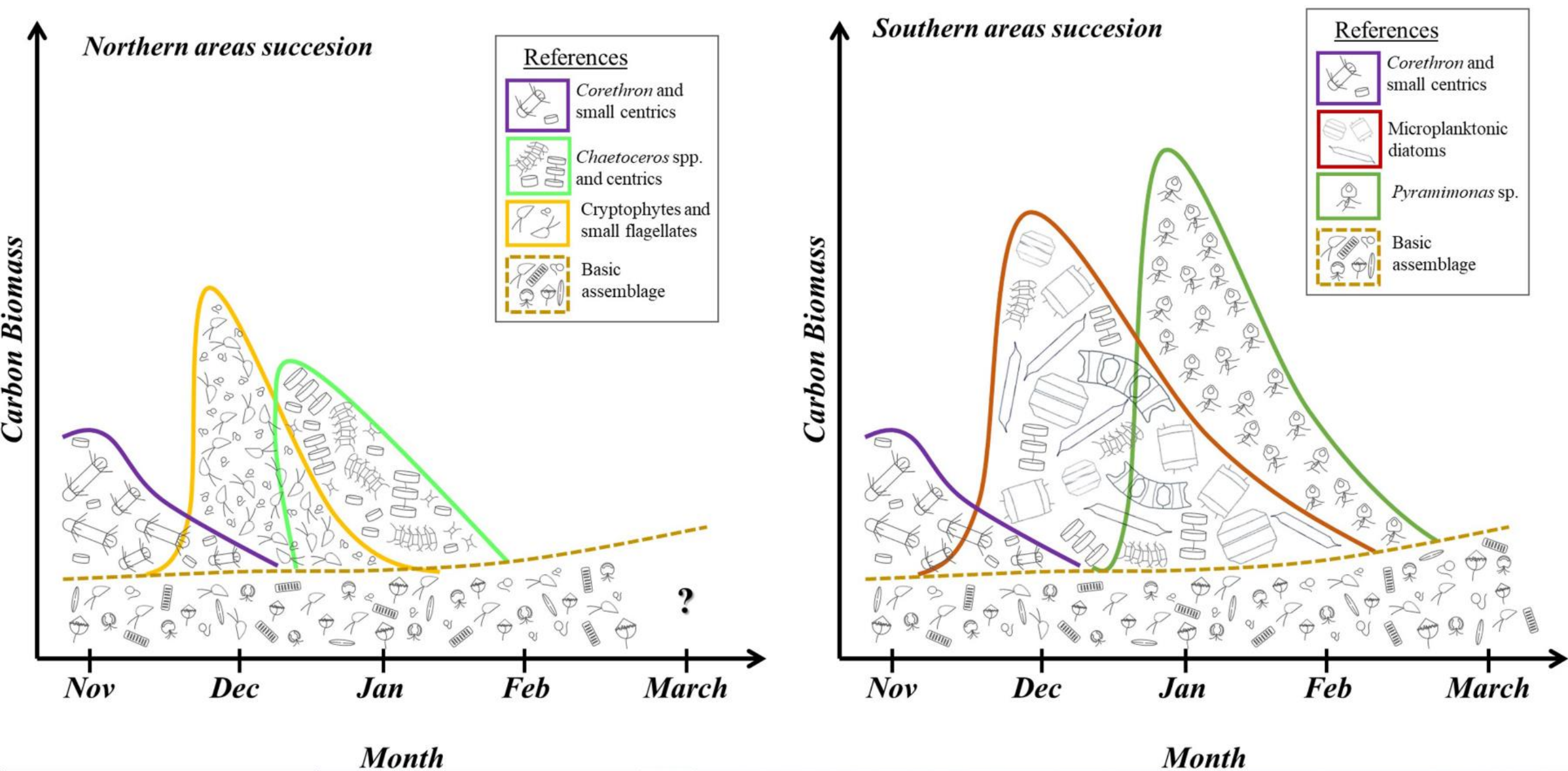
Neko



Danco Island







CTD Profiles



Here is a diagram that explains the temporal succession of phytoplankton communities. Our voyage allowed us to visit both the Northern and Southern areas of the Gerlache Strait. We observed big differences in the abundance and diversity of species between the north (Lemaire) and the south (Marguerite Bay), with higher and richer waters towards the south, matching those results. Data obtained thanks to the FjordPhyto project participants. Marscioni et al 2023.

Wildlife

List - Birds

Species		March									
		8	9	10	11	12	13	14	15	16	17
<i>Ardenna grisea</i> EN: Sooty Shearwater FR: Puffin fuligineux DE: Dunkelsturmtaucher NO: Grålire 中文: 灰鹱	 Credit: Liam Ragan/BoW		●	●							●
<i>Pachyptila desolata</i> EN: Antarctic Prion FR: Prion de la Désolation DE: Taubensturmvogel NO: Antarktishvalfugl 中文: 鸽锯鹱	 Credit: Marcus Bergström/HX			●							
<i>Pachyptila belcheri</i> EN: Slender-billed Prion FR: Prion de Belcher DE: Dünnschnabel-Sturmvogel NO: Smalnebbhvalfugl 中文: 细嘴锯鹱	 Credit: Marcus Bergström/HX		●								
<i>Pagodroma nivea</i> EN: Snow Petrel FR: Pétrel des neiges DE: Schneesturmvogel NO: Snøpetrell 中文: 雪鹱	 Credit: Marcus Bergström/HX			●			●				

Oceanites oceanicus

EN: Wilson's Storm-petrel

FR: Océanite de Wilson

DE: Buntfuß-Sturmschwalbe

NO: Wilsonstormsvale

中文: 黃蹼洋海燕



Credit: Marcus Bergström/HX



Fregetta tropica

EN: Black-bellied Storm-petrel

FR: Océanite à ventre noir

DE: Schwarzbauch-Sturmschwalbe

NO: Svartbukstormsvale

中文: 黑腹舰海燕



Credit: Marcus Bergström/HX



Chloephaga picta

EN: Upland Goose

FR: Oulette de Magellan

DE: Magellangans

NO: Sebragås

中文: 斑胁草雁



Wildlife List - Marine Mammals



CETACEANS - WHALES & DOLPHINS

Species		March									
		8	9	10	11	12	13	14	15	16	17
<i>Megaptera novaeangliae</i> EN: Humpback Whale FR: Baleine à bosse DE: Buckelwal NO: Knølhval 中文: 座头鲸	 <small>Credit: Massimo Demma/Ocean Conservation Society</small>										
<i>Balaenoptera bonaerensis</i> EN: Antarctic Minke Whale FR: Petit rorqual de l'Antarctique DE: Antarktischer Zwergwal NO: Antarktisk vågehal 中文: 南极小须鲸	 <small>Credit: SEAMMO (Sea Mammal Monitoring Organisation)</small>										
<i>Balaenoptera borealis</i> EN: Sei Whale FR: Rorqual de Rudolphi DE: Seiwale NO: Seihval 中文: 塞鲸	 <small>Credit: NOAA Fisheries</small>										
<i>Lagenorhynchus cruciger</i> EN: Hourglass dolphin FR: Lagénorhynque sablier DE: Stundenglasdelfin NO: Timeglassdelfin 中文: 间纹斑纹海豚 / 沙漏斑纹海豚											
<i>Lagenorhynchus obscurus</i> EN: Dusky dolphin FR: Lagenorhynque obscur DE: Schwarzdelfin NO: Morkdelfin 中文: 暗色斑纹海豚	 <small>Credit: Wikipedia</small>										

SEALS – TRUE AND EARED SEALS

[illegible]



IX

Connect with your inner scientist

