



Science & Education Report

MS FRIDTJOF NANSEN

Highlights of Antarctica

29 February –
8 March 2025





Science & Education Programme

During this voyage, we collected data for **7 Citizen Science** projects in total: eBird, Happywhale, iNaturalist, ORCA, NASA's GLOBE Cloud Observer, the Secchi Disk and FjordPhyto Projects. You were able to enrich your mind with **18 lectures** on different topics, from birds to rocks. You also took part in the **12 discovery sessions** we organized.

We also helped our Guest Scientist from SOOP – Shaping an Ocean of Possibilities – to collect data on different water parameters like: temperature, environmental DNA (eDNA) oxygen, carbon dioxide, microplastics, and plankton

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



Lectures & Discovery Sessions

- 18 lectures
- 12 discovery sessions
 - 7 Citizen Science projects
- 17 science boat outings
- 2 Guest Scientist projects



Wildlife Watch

53 species:
20 mammals
33 birds

History & Culture

On our voyage we have discussed the explorers that charted the part of the Antarctic Peninsula we sailed in. We have talked about how Charcot and his French expedition overwintered on Peterman Island from January to November 1909 at the same spot as where we made our landing. When MS Fridtjof Nansen sailed through the Lemaire Channel, we were following the journey of Adrian de Gerlache and his ship the *Belgica* did in 1898.

On Deception Island, we visited the remains of an old Chilean whale station, and later, a Norwegian whaling station, active from 1906–1931. The buildings were later reused for British station B, but were evacuated and abandoned during the eruption of 1969.



NASA GLOBE Cloud Observer

On this Highlights of Antarctica expedition we conducted three Cloud observation sessions and sent our data off to NASA!

Thank you to the 66 Cloud Observers who participated in the program, and remember, you can continue to do this at home!

Observations from the Drake Passage are critical, as they reflect the ocean-atmosphere interface of the Circumpolar Current and winds.

Thank you for your active participation

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

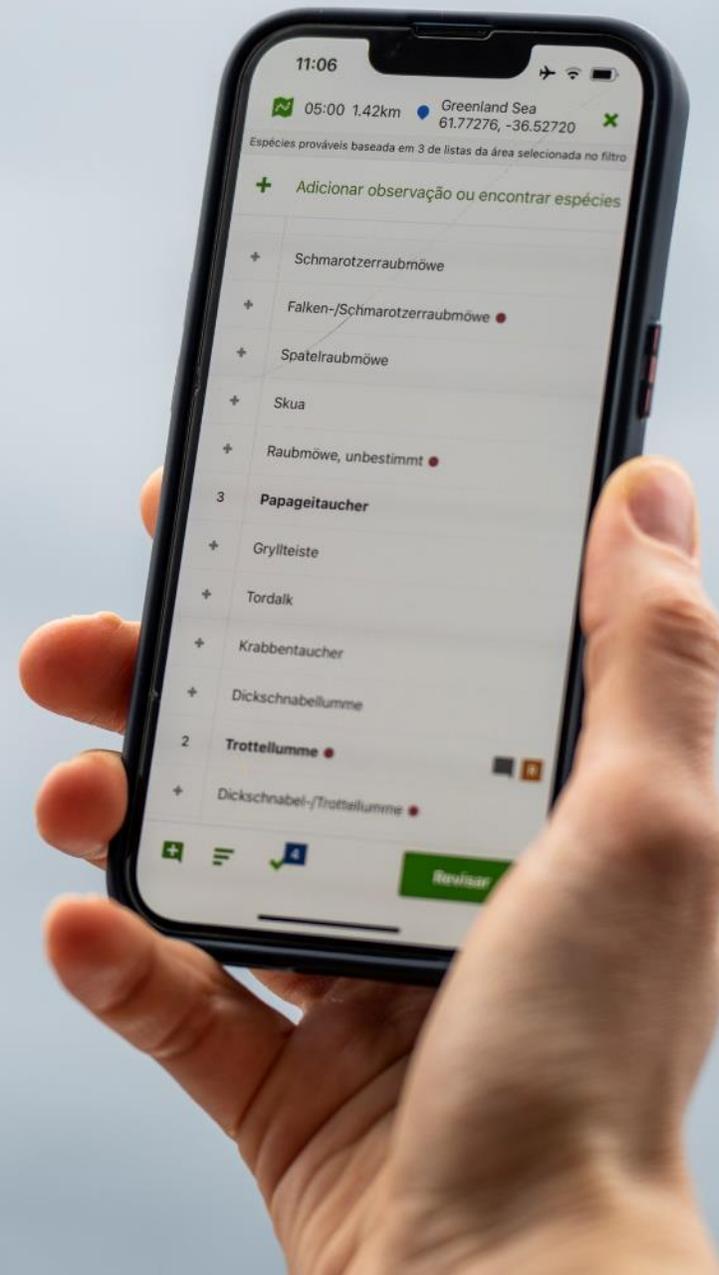




The eBird project

During this voyage, our Ornithologist conducted **25 surveys**. At least **25 species** were observed. The most frequently observed species were gentoo penguins, sooty Shearwaters, black-browed Albatrosses, and southern fulmars.

Find the trip report for the voyage and the checklists here:
<https://ebird.org/tripreport/470381>



Trip Report on eBird

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Map **Satellite**

South Georgia and the South Sandwich Islands

Google Keyboard shortcuts | Map data ©2026 Google Imagery ©2026 NASA | Terms

FNANT2604 Fridtjof Nansen Highlights of Antarctica 29 January - 7 February 2026

29 Jan – 7 Feb 2026 (10 days) **Public**

Antarctica | Argentina | Chile Subregions

Simon Delany

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Narrative

Owners and editors of a Trip Report may write a narrative.

[Add narrative](#)

25
Species Observed
+4 other taxa

25
Checklists

LIFERS 1

<https://ebird.org/home>

Species Observed

Show all details

3	Chilean Skua	▶ 1
1	Brown Skua	▶ 1
2	South Polar Skua	▶ 2
4	South American Tern	▶ 1
10	Antarctic Tern	▶ 5
1055	Gentoo Penguin	▶ 5
2	Chinstrap Penguin	▶ 1
3	Magellanic Penguin	▶ 1
5	Macaroni Penguin ✓	▶ 1
1	Light-mantled Albatross	▶ 1
2	Gray-headed Albatross	▶ 2
172	Black-browed Albatross	▶ 10
35	Wilson's Storm-Petrel	▶ 13
4	Black-bellied Storm-Petrel	▶ 3
22	Southern Giant-Petrel	▶ 6

37	Southern Fulmar	▶ 8
7	Antarctic Petrel	▶ 1
26	Pintado Petrel	▶ 3
3	Blue Petrel	▶ 3
1	Antarctic Prion	▶ 1
5	Slender-billed Prion	▶ 3
2	White-chinned Petrel	▶ 1
173	Sooty Shearwater	▶ 7
1	Magellanic Cormorant	▶ 1
8	Imperial Cormorant	▶ 2

ADDITIONAL TAXA

10	skua sp.	▶ 5
6	penguin sp.	▶ 2
24	prion sp.	▶ 3
17	Blue Petrel/prion sp.	▶ 4

eBird



iNaturalist

Joining iNaturalist offers a unique opportunity to engage with a global community of naturalists and Citizen Scientists, simply by uploading your pictures.

- Get the subjects of your photographs identified
- Use and improve your ID skills
- Contribute to scientific research
- Learn the distribution patterns of different species
- Meet expert biologists online in their field of study
- Support conservation efforts
- Explore the world and discover what species can be observed and where

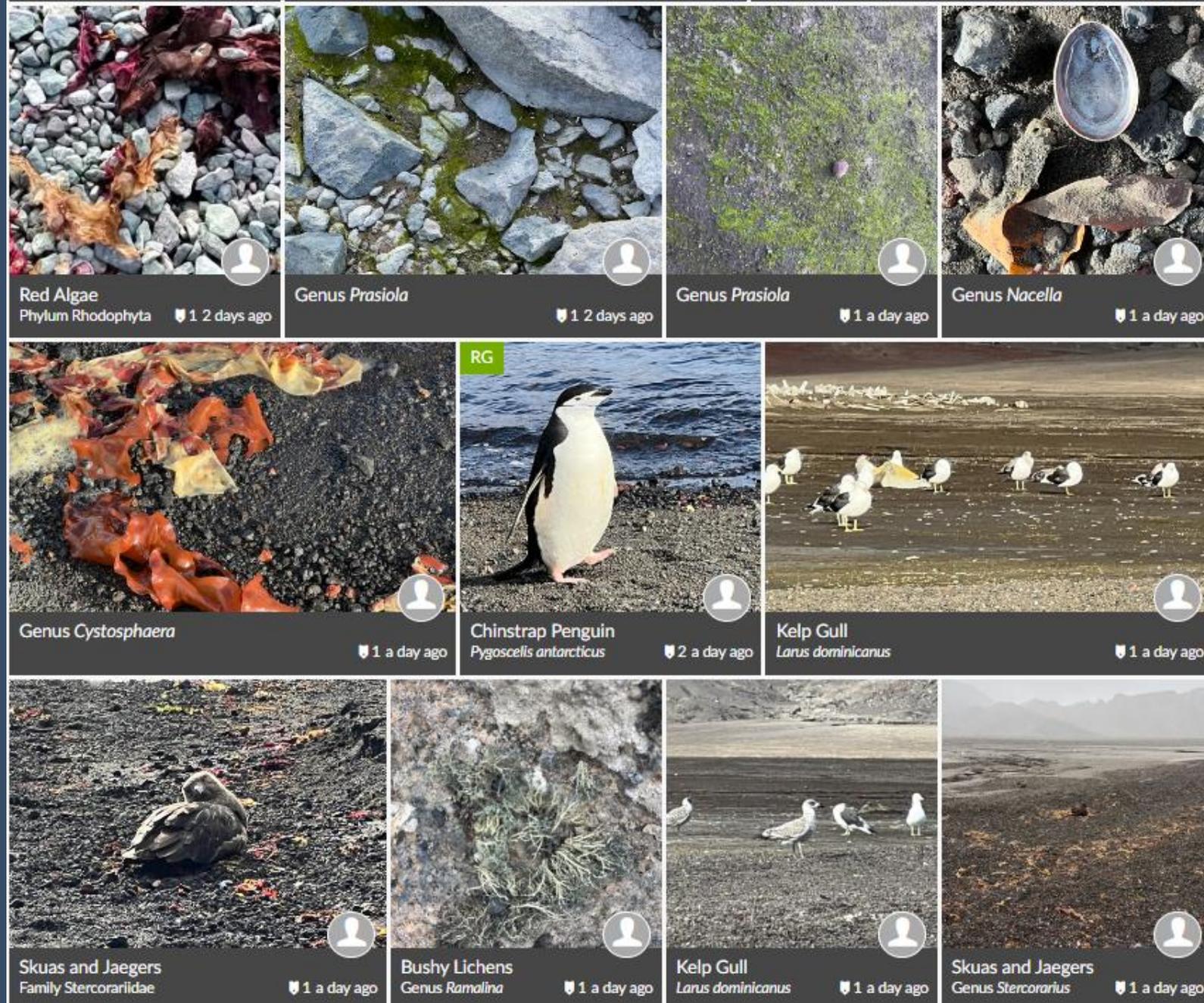


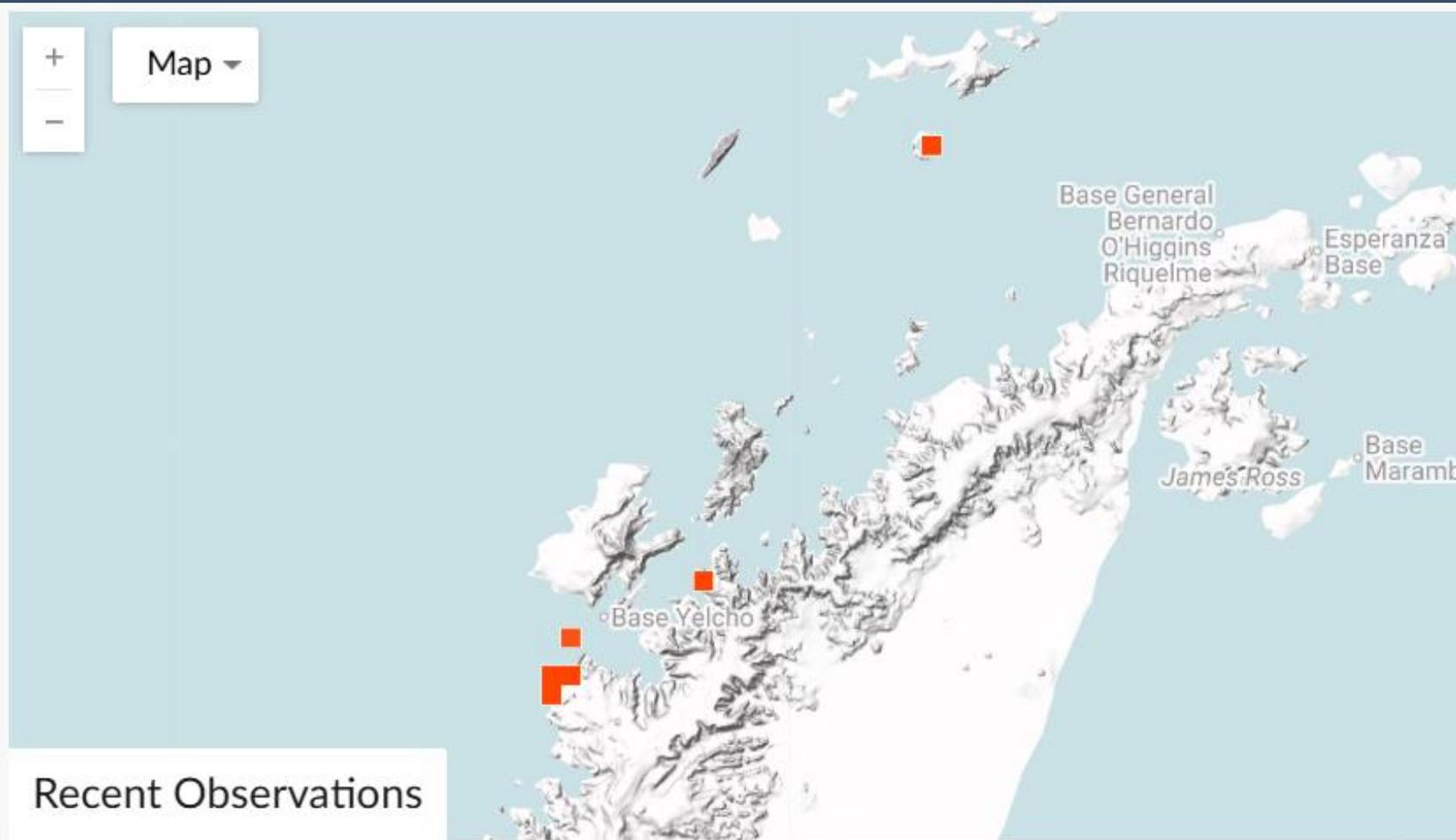
iNaturalist

We submitted around 53 observations, identifying 25 different organisms. The most observed species were the gentoo penguins, followed by the Antarctic limpets. There is still time to join our project once you are back home and have had time to go through your photos.

Helping us document the local biodiversity will help scientists worldwide monitor the changes of distribution and abundance of the most iconic Antarctic species.

Join our project by searching its code name or clicking this link: [2026 Jan 29 - Highlights of Antarctica - MS Fridtjof Nansen's Journal](#)





iNaturalist

Here is the map of our iNaturalist project's observations. Please note that only observations of the members with dates between the 29 January and 8 February 2026 will appear in this project.

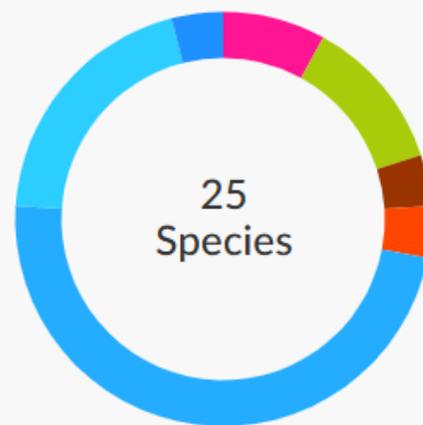
Recent Observations



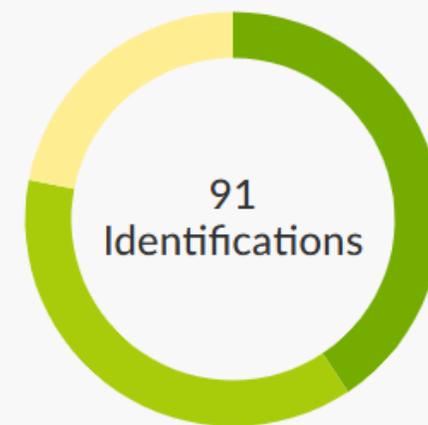
Stats



- 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

Happywhale

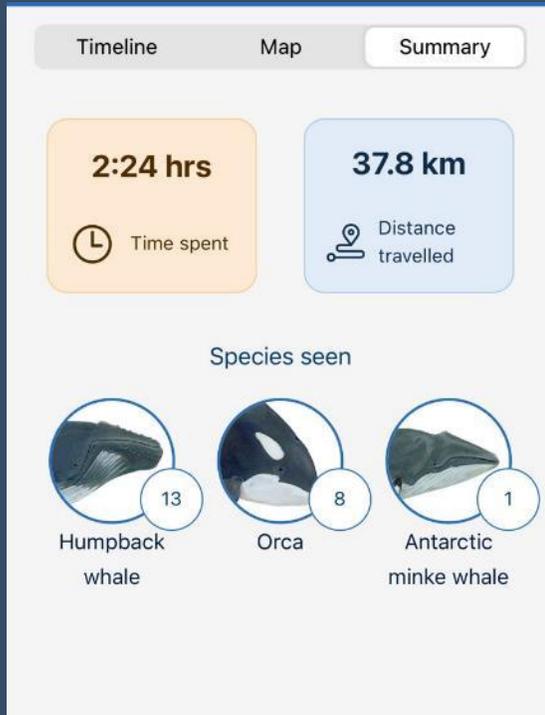
This voyage was a success in terms of whale sightings and our Marine Scientist Daniela, together with the Science Team, submitted **1 fluke photo** to the platform. As of writing this report, no match has been reported.

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

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



ORCA Ocean Watchers



Survey

- 12 surveys completed
- 17 hrs 58 minutes
- 269.80 kilometres

Sightings

- 12 dusky dolphins
- 2 fin whales
- 59 humpback whales
- 1 Antarctic minke Whale
- 8 killer whales / orcas
- 1 unidentified whale
- 4 unidentified dolphins



Science Boat

We had 17 science boat sessions during this trip. They were held in the waters off Petermann Island, Pleneau Island, Orne Harbour, Danco Island, and Whalers Bay. We sampled for different projects.

We used Secchi Disk measurements to document the turbidity/clarity of the water and assess the abundance of phytoplankton.

For the FjordPhyto project, which aims to monitor the changes in abundance and distribution of phytoplankton in Antarctic & Arctic waters in relation with glacial ice melting.

We towed a plankton net of 20 um mesh size to gather water samples, deployed our CTD sensor to understand the oceanographical parameters of the water (temperature, salinity, chlorophyll a), and preserved meltwater samples to measure later on dissolved oxygen. The whole mission was a success, thank you for participating!

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

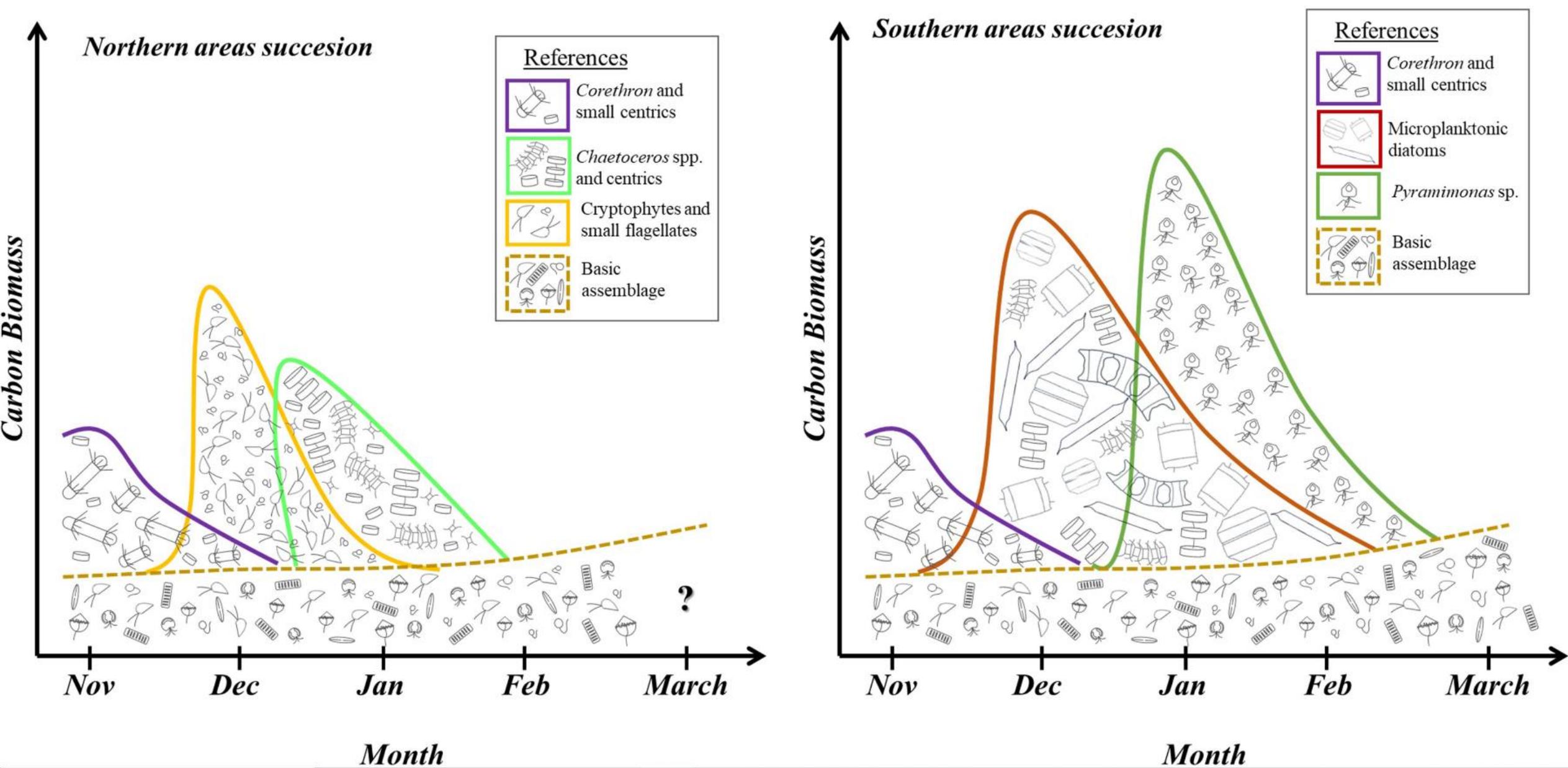


If you like to help us make the project a success



Follow us on social media @fjordphyto

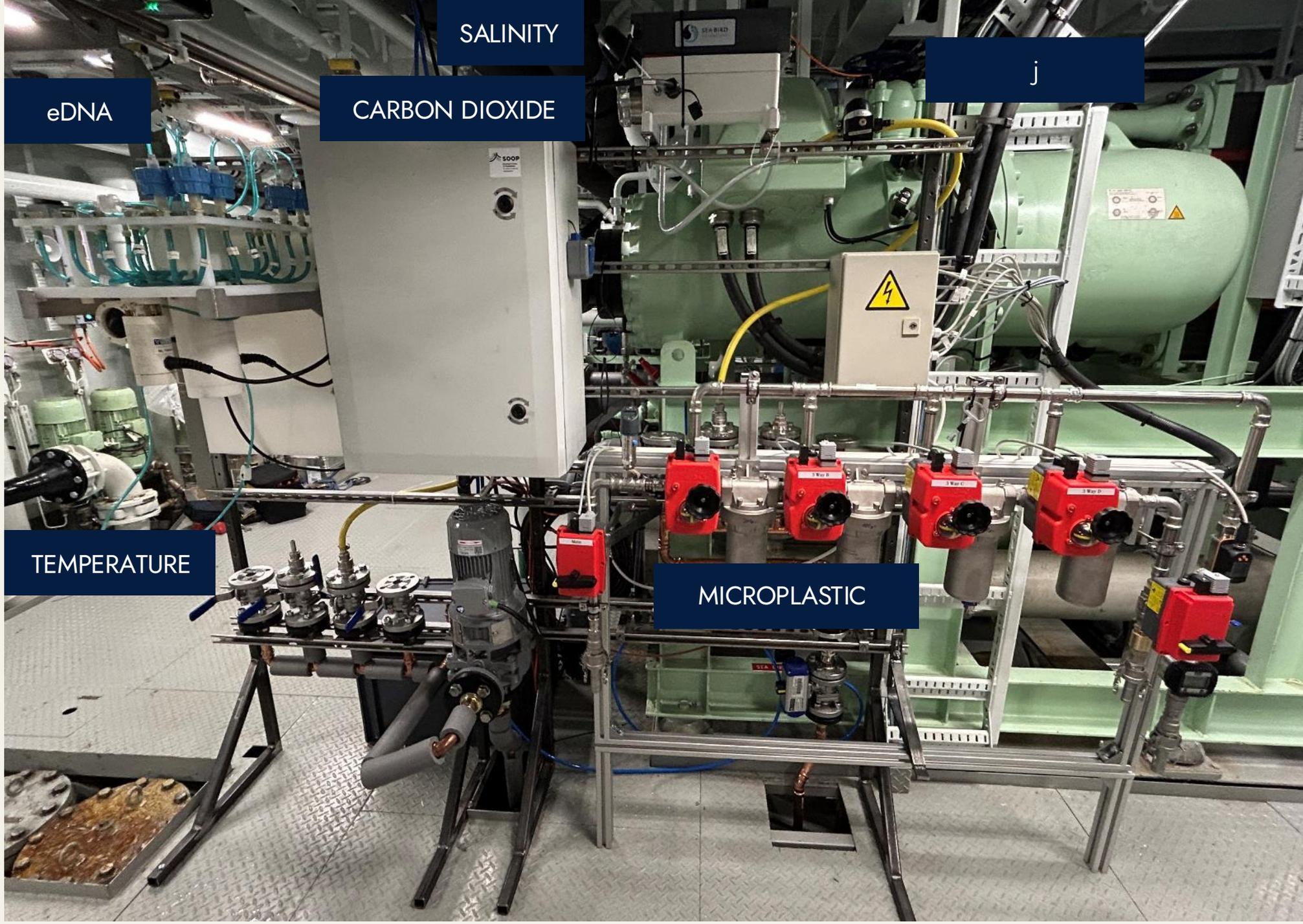




Here is a diagram that explains the temporal succession of phytoplankton communities. Our voyage allowed us to visit both the northern and southern areas of the Gerlache Strait. We observed big differences in the abundance and diversity of species between the north (Lemaire) and the south (Marguerite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

DECK 1
Installed
SOOP
Measurement
Equipment

Compressor
Room of MS
Fridtjof Nansen



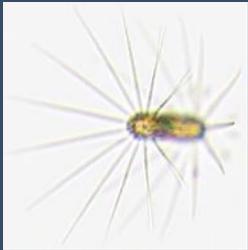
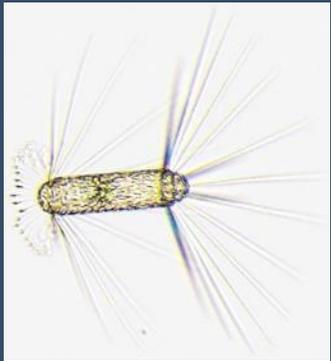
Plankton Analysis with the PlanktoScope

As part of the SOOP project, which aims to improve data collection across broader spatial and temporal scales, plankton samples were collected aboard the science boat in remote and rarely studied regions of Antarctica. To assess plankton diversity, the PlanktoScope was used, a tool that provides rapid insights into the different plankton species present in the samples. Salinity and temperature data were then used to explore how changing environmental conditions affect the composition of both phytoplankton and zooplankton communities

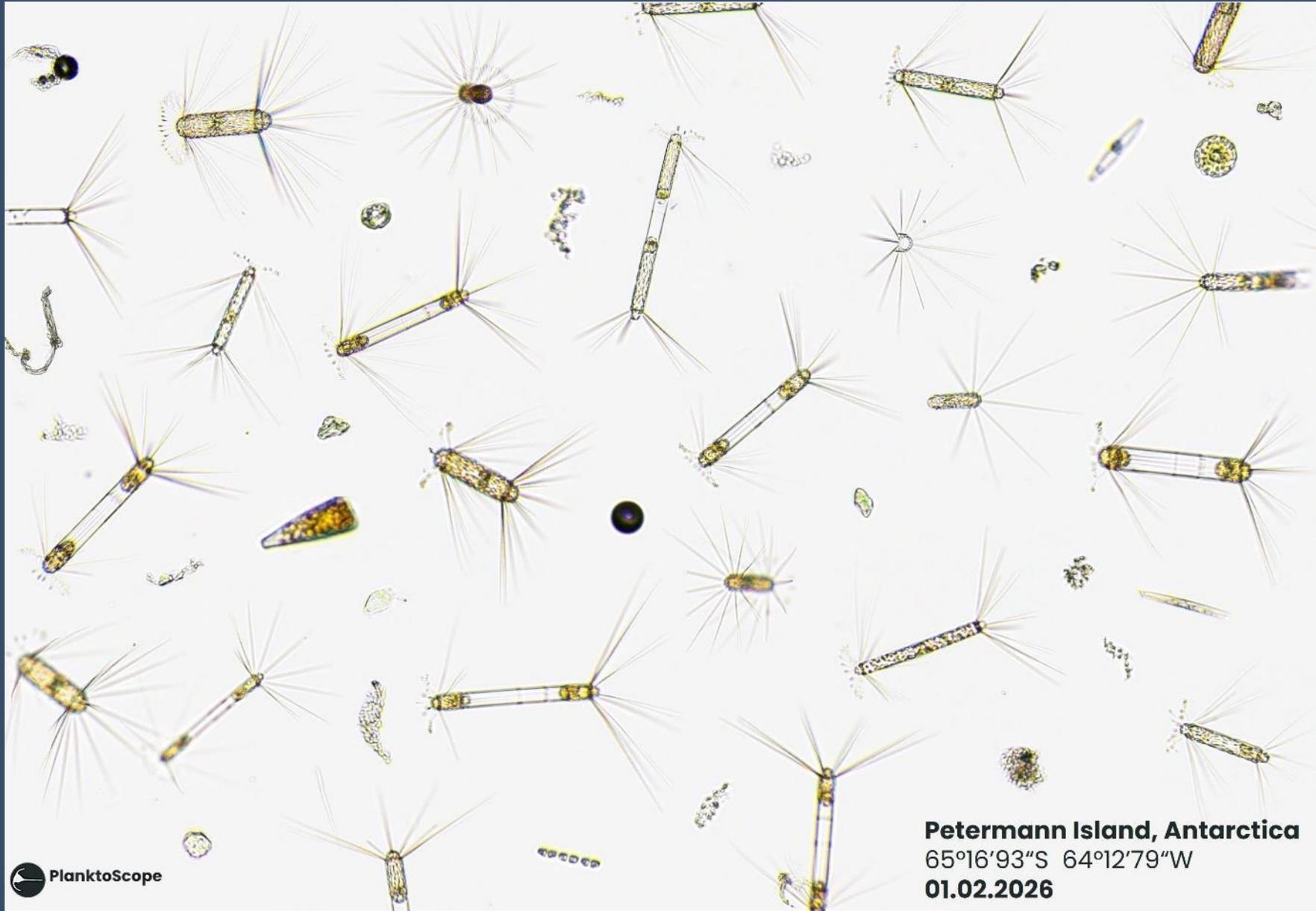


Credit: Katharina Kordubel/SOOP

Petermann Island



Corethron (diatom)



 PlanktoScope

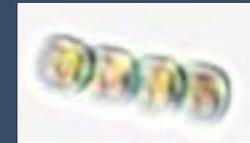
Petermann Island, Antarctica
65°16'93"S 64°12'79"W
01.02.2026

Credit: © Katharina Kordubel/SOOP

Pleneau Island



Corethron



Chain-forming diatom

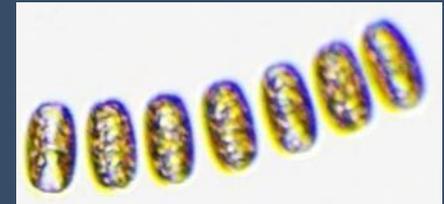
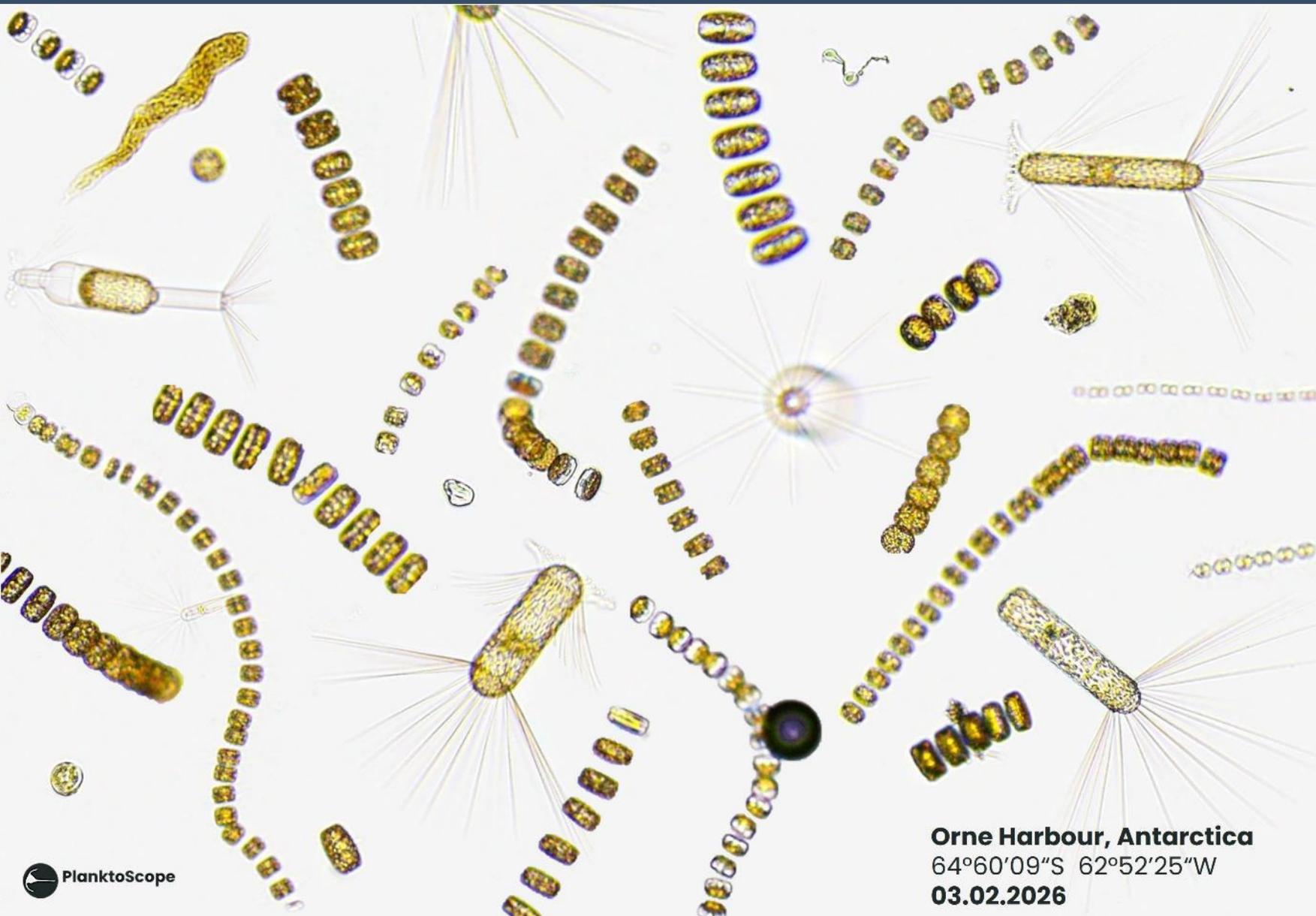


Particles



Pleneau Island, Antarctica
65°06'45"S 64°02'29"W
02.02.2026

Orne Harbour



Thalassiosira spp. (diatom)



Chaetoceros spp. (diatom)

Orne Harbour, Antarctica
64°60'09"S 62°52'25"W
03.02.2026

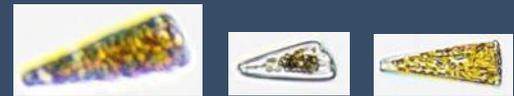
Danco Island



Thalassiosira spp.



Chaetoceros spp.



Tintinnids (zooplankton)

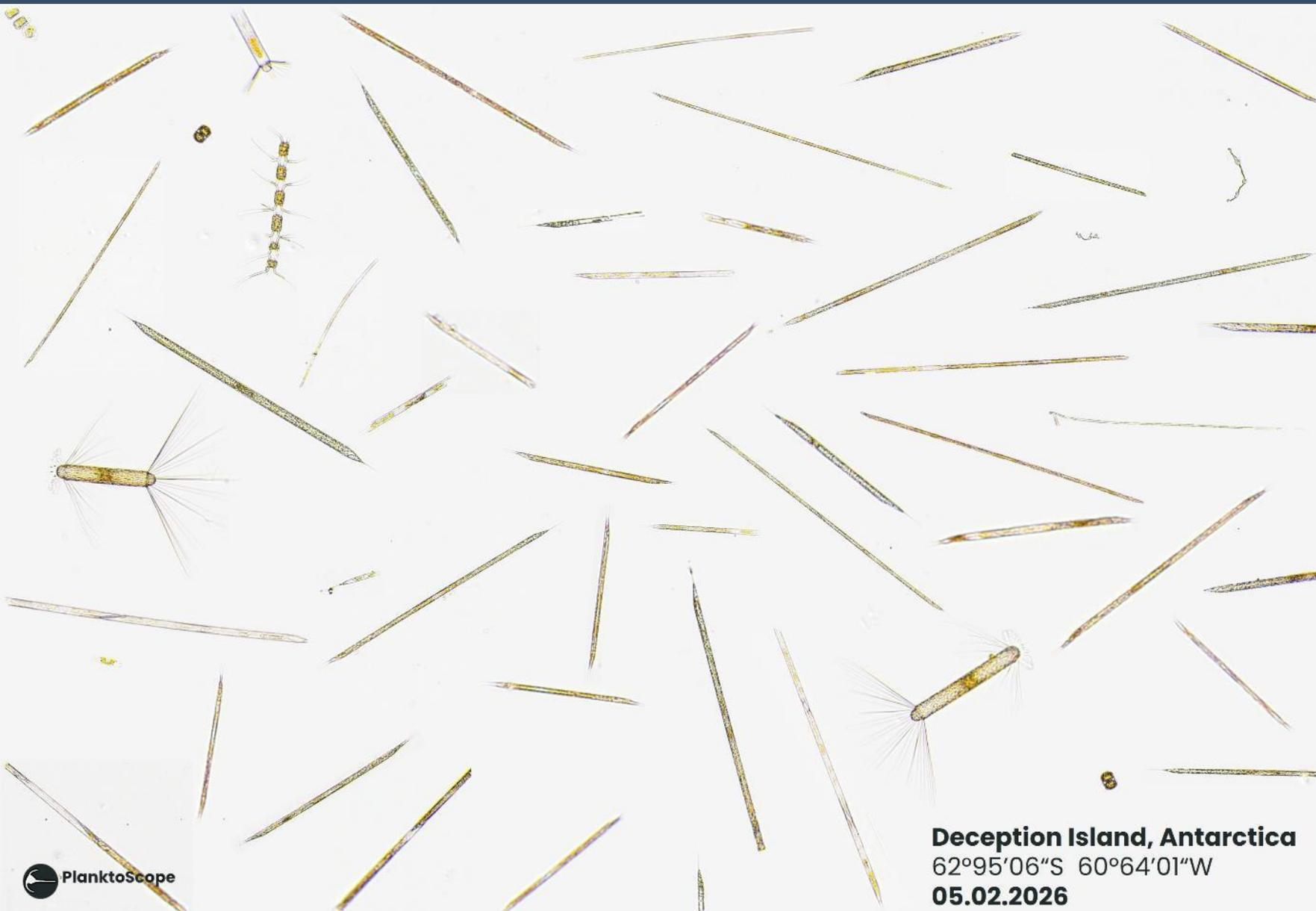


Danco Island, Antarctica

64°75'44"S 62°60'11"W

04.02.2026

Deception Island



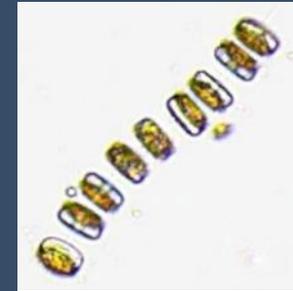
Rhizosolenia spp. (diatom)



Chaetoceros spp. (diatom)

Deception Island, Antarctica
62°95'06"S 60°64'01"W
05.02.2026

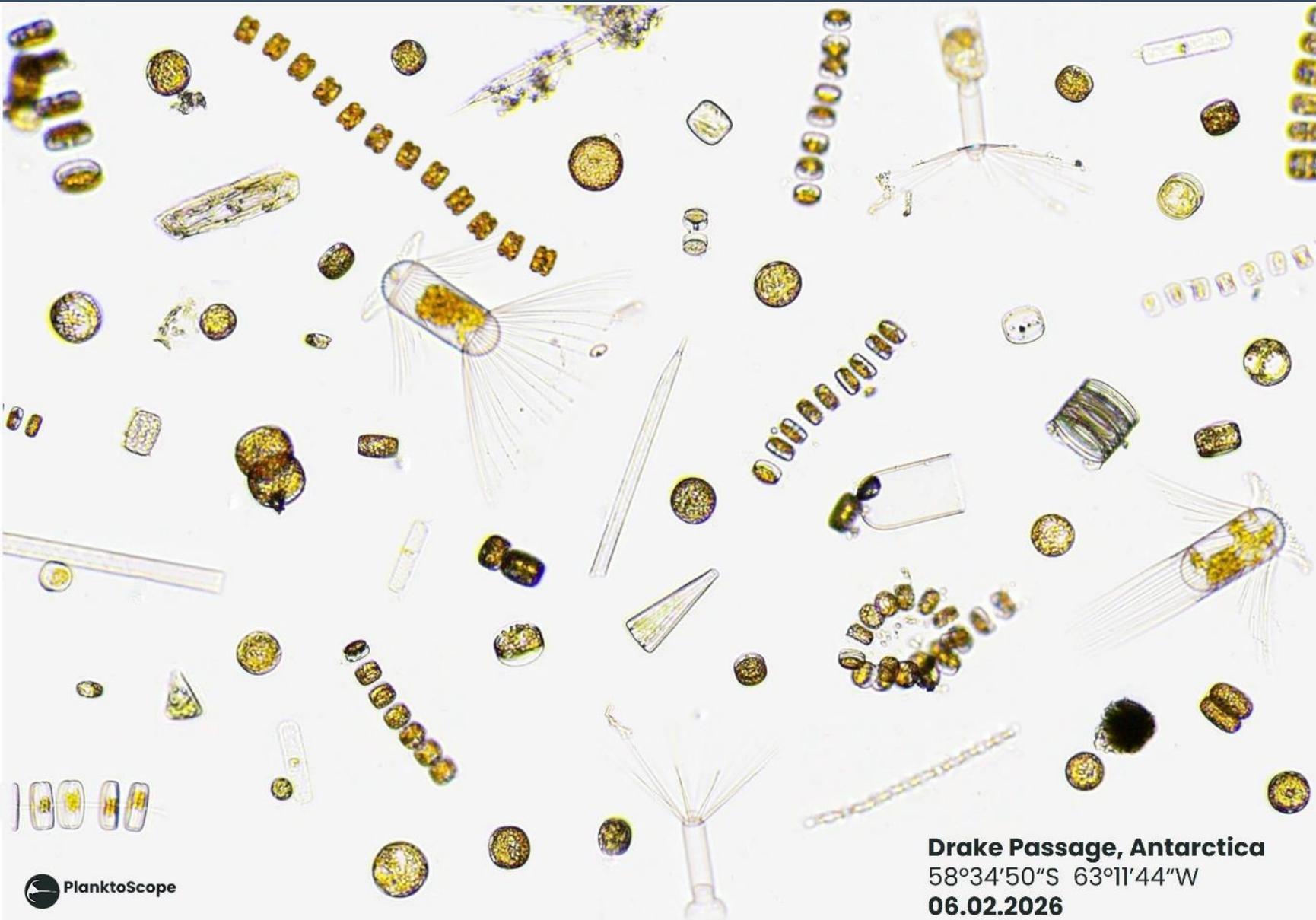
Drake Passage



Thalassiosira spp. (diatom)



Corethron (diatom)



Drake Passage, Antarctica
58°34'50"S 63°11'44"W
06.02.2026

Wildlife List — Birds



Birds - Wildlife list		January - February												
Scientific Name	English	Deutsch	Français	Norsk	29	30	31	1	2	3	4	5	6	7
<i>Pygoscelis papua</i>	Gentoo Penguin	Eselspinguin	Manchot papou	Bøylepingvin				X	X	X	X	X		
<i>Pygoscelis adeliae</i>	Adelie Penguin	Adeliepinguin	Manchot d'Adélie	Adeliepingvin				X						
<i>Pygoscelis antarcticus</i>	Chinstrap Penguin	Zügelpinguin	Manchot à jugulaire	Ringpingvin			X			X	X	X		
<i>Eudyptes chrysolophus</i>	Macaroni Penguin	Goldschopfpinguin	Gorfou doré	Gulltoppingvin									X	
<i>Spheniscus magellanicus</i>	Magellanic Penguin	Magellanpinguin	Manchot de Magellan	Magellanpingvin	X									X
<i>Diomedea exulans</i>	Snowy Albatross (Wandering A.)	Wanderalbatros	Albatros hurleur	Vandrealbatross										
<i>Diomedea epomophora</i>	Southern Royal Albatross	Königsalbatros	Albatros royal	Kongealbatross										
<i>Thalassarche melanophris</i>	Black-browed Albatross	Schwarzbrauenalbatros	Albatros à sourcils noirs	Svartbrynalbatross	X	X	X						X	X
<i>Thalassarche chrystoma</i>	Grey-headed Albatross	Graukopfalbatros	Albatros à tête grise	Gråhodealbatross			X						X	X
<i>Phoebastria palpebrata</i>	Light-mantled Albatross	Graumantelalbatros	Albatros fuligineux	Gråalbatross			X							
<i>Macronectes giganteus</i>	Southern Giant Petrel	Riesensturmvogel	Pétrel géant	Sørkjempetrell	X	X	X	X	X	X	X	X		X
<i>Procellaria aequinoctialis</i>	White-chinned Petrel	Weißkinn-Sturmvogel	Puffin à menton blanc	Hvitthakepetrell			X							
<i>Pterodroma mollis</i>	Soft-plumaged Petrel	Weichfeder-Sturmvogel	Pétrel soyeux	Silkepetrell										
<i>Fulmarus glacialis</i>	Southern Fulmar	Silbersturmvogel	Fulmar argenté	Sørhavhest			X		X	X	X			
<i>Daption capense</i>	Cape Petrel	Kapsturmvogel	Damier du Cap	Flekkpetrell			X					X		
<i>Thalassoica antarctica</i>	Antarctic Petrel	Antarktissturmvogel	Pétrel antarctique	Antarktispetrell			X							
<i>Pagodroma nivea</i>	Snow Petrel	Schneesturmvogel	Pétrel des neiges	Snøpetrell					X					
<i>Halobalaena caerulea</i>	Blue Petrel	Blausturmvogel	Prion bleu	Blåpetrell		X	X						X	
<i>Pachyptila belcheri</i>	Slender-billed Prion	Dünnschnabel-Sturmvogel	Prion de Belcher	Smalnebbhvalfugl			X						X	
<i>Pachyptila desolata</i>	Antarctic Prion	Taubensturmvogel	Prion de la Désolation	Antarktishvalfugl			X						X	
<i>Oceanites oceanicus</i>	Wilson's Storm-petrel	Buntfuß-Sturmschwalbe	Océanite de Wilson	Wilsonstormsvale		X	X	X	X	X	X	X	X	X
<i>Fregetta tropica</i>	Black-bellied Storm-petrel	Schwarzbauch-Sturmschwalbe	Océanite à ventre noir	Svartbukstormsvale									X	
<i>Ardenna grisea</i>	Sooty Shearwater	Dunkelsturmtaucher	Puffin fuligineux	Grålire		X	X							X
<i>Leucocarbo atriceps</i>	Imperial Cormorant	Kaiserscharbe	Cormoran impérial	Knoppskarv	X			X	X	X	X	X		X
<i>Stercorarius maccormicki</i>	South Polar Skua	Antarktiskua	Labbe de McCormick	Sørjo				X	X	X	X	X	X	
<i>Stercorarius antarcticus</i>	Brown Skua (Subantarctic)	Subantarktiskua	Labbe antarctique	Sørhavsjo								X		
<i>Stercorarius chilensis</i>	Chilean Skua	Chileskua	Labbe du Chili	Kaneljo	X									X
<i>Larus dominicanus</i>	Kelp Gull	Dominikanermöwe	Goéland dominicain	Taremåke	X			X	X	X	X	X		X
<i>Leucophaeus scoresbyii</i>	Dolphin Gull	Blutschnabelmöwe	Goéland de Scoresby	Magellanmåke	X									
<i>Chionis albus</i>	Snowy Sheathbill	Weißgesicht-	Chionis blanc	Antarktisslirenebb				X		X	X			
<i>Sterna vittata</i>	Antarctic Tern	Antarktiskeeschwalbe	Sterne couronnée	Sørhavsterne				X	X	X	X	X		
<i>Sterna hirundinacea</i>	South American Tern	Falklandseeschwalbe	Sterna hirundinacée	Svaleterne	X									X
<i>Tachyeres pteneres</i>	Flightless Steamerduck	Magellan-Dampfschiffente	Brassemer cendré	Chileskovleand	X									



Wildlife

List — Marine Mammals

Wildlife List – Marine Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Balaenoptera musculus</i>	blue whale	Blauwal	baleine bleue
<i>Balaenoptera physalus</i>	fin whale	Finnwal	rorqual commun
<i>Balaenoptera borealis</i>	sei whale	Rorqual de Rudolphi	seiwal
<i>Megaptera novaeangliae</i>	humpback whale	Buckelwal	baleine à bosse
<i>Balaenoptera bonarensis</i>	Antarctic minke whale	Südllicher Zwergwal	petit rorqual de l'Antarctique
<i>Orcinus orca</i>	killer whale (orca)	Orca o Schwertwal	orque
<i>Lagenorhynchus cruciger</i>	hourglass dolphin	Stundenglas delfin	lagénorhynque sablier
<i>Cephalorhynchus eutropia</i>	chilean dolphin	Weißbauchdelfin	céphalorhynque noir
<i>Lagenorhynchus obscurus</i>	dusky dolphin	Schwarzdelfin	lagénorhynque obscur
<i>Lagenorhynchus australis</i>	Peale's dolphin	Peale-Delfin	lagénorhynque de Peale
<i>Cephalorhynchus commersonii</i>	Commerson's dolphin	Commerson-Delfin	dauphin de Commerson
<i>Physeter macrocephalus</i>	sperm whale	Pottwal	cachalot
<i>Globicephala melas</i>	long-finned pilot whale	Grindwal	globicéphale noir

Wildlife List – Marine Mammals



SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS
<i>Lobodon carcinophaga</i>	crabeater seal	Krabbenfresser	phoque crabier
<i>Leptonychotes weddellii</i>	Weddell seal	Weddelrobbe	phoque de Weddell
<i>Hydrurga leptonyx</i>	leopard seal	Léopard de mer	seeleopard
<i>Arctocephalus gazella</i>	Antarctic fur seal	Antarktischer Seebär	otarie à fourrure antarctique
<i>Mirounga leonina</i>	southern elephant seal	Eléphant de mer austral	südlicher See-Elefant
<i>Otaria flavescens</i>	South American sea Lion	Mähnenrobbe	lion de mer d'Amérique du Sud

THE

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