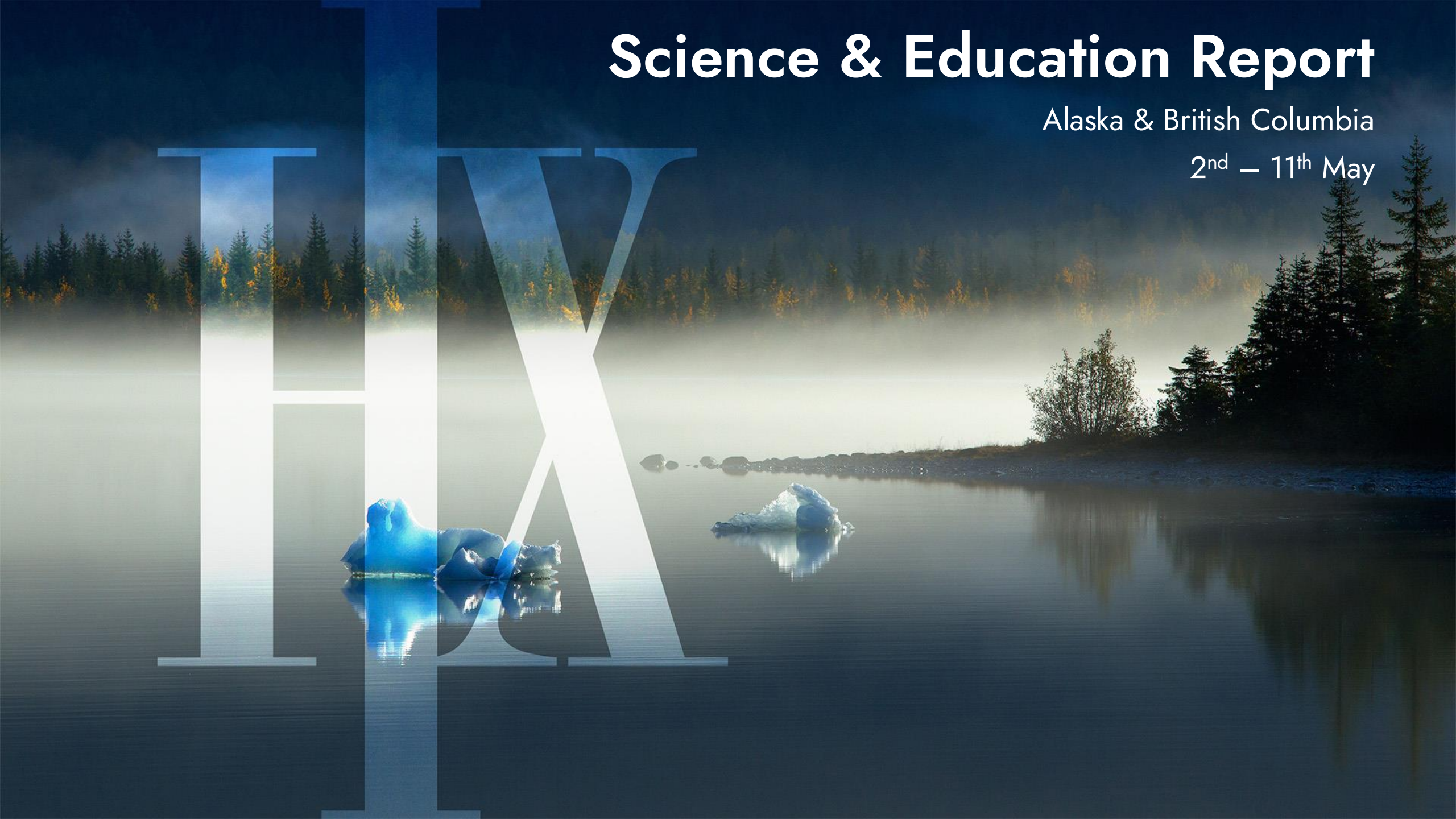
Science & Education Report

Alaska & British Columbia

2nd – 11th May



MS Roald Amundsen

02 – 11 May 2026

Alaska and British Columbia

When you arrived on MS Roald Amundsen, you boarded a research-focused expedition ship fully equipped as a floating laboratory and designed to be a centre of learning and discovery. During your time on board, you contributed to scientific studies and expanded your knowledge of the world around you. Let's take a look back at our journey and what we accomplished while sailing through Alaska and British Columbia.

Arts, Crafts & Creativity

We witnessed the remarkable landscapes and culture of Alaska and British Columbia, and were inspired to create art reflecting our surroundings — including watercolour postcards and clay totem poles.

Science & Education Program

Our onboard Naturalists guided guests using scientific tools to investigate the world around us. Through lectures, discovery sessions, expedition boat cruises, and visits ashore, we aimed to make every expedition day a memorable and unique learning experience.

Alaska & British Columbia: Culture

There is a world of difference between hearing, reading, or watching documentaries about the native cultures of Alaska and witnessing that cultural heritage first-hand.

In Kake, we were greeted by the local community, who performed a traditional dance ceremony alongside local schoolchildren and explained the customs and traditions of the Tlingit people. They also showed us the regalia worn by different clans and gave us a demonstration of the Inuit Olympic Games.

History & Culture

Beyond the native Alaskan cultures, this voyage took us deep into the human history of the region — from the moment the Russians arrived in this territory and the centuries of change that followed.

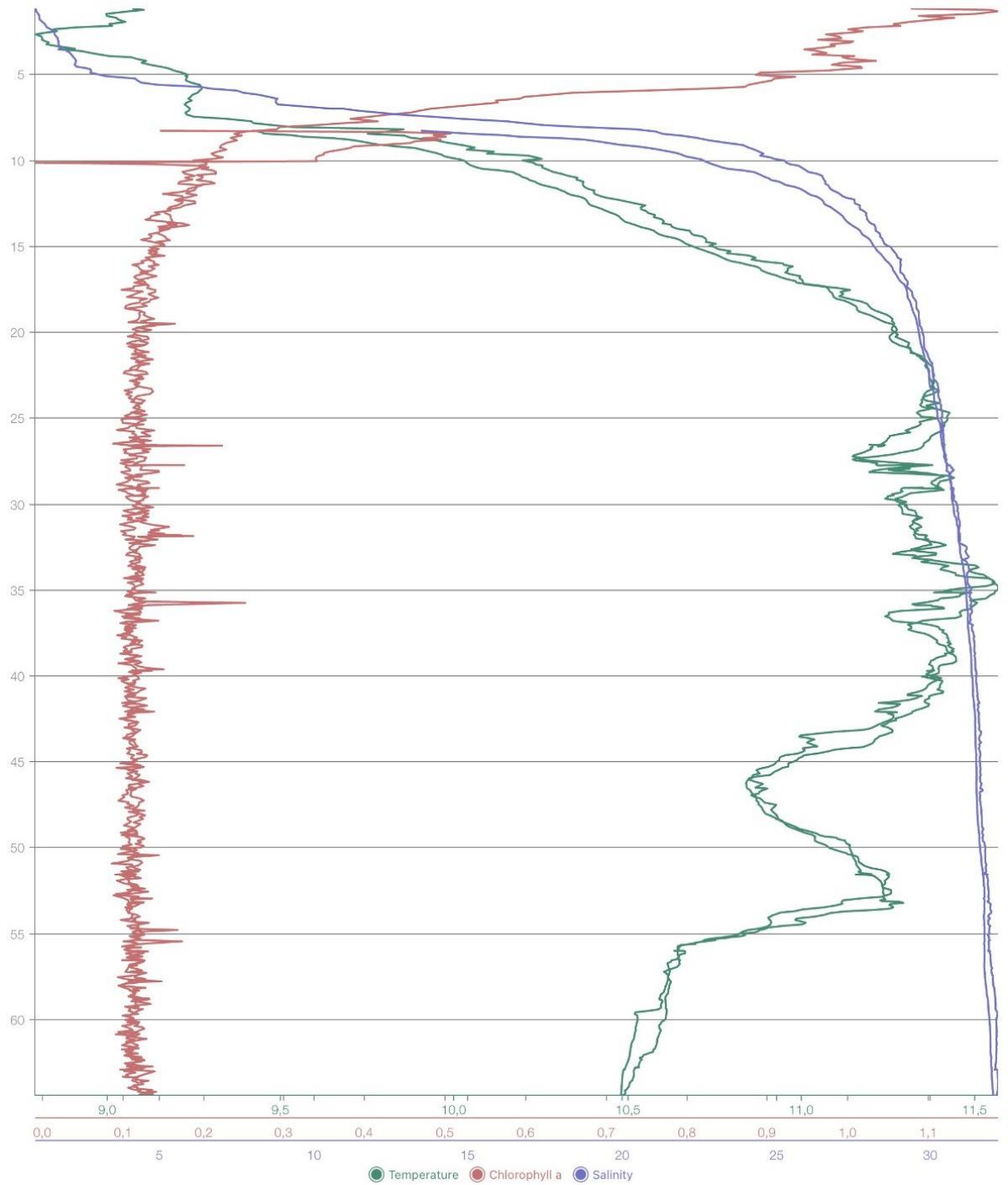
We explored the Russians' motivations, the height of their influence, their eventual decline, and the dramatic impact all of this had on the peoples who had long called this land home. We also looked at the reasons behind the US purchase of Alaska and how the territory developed from that point on, as well as key historical events in south-east Alaska, including the Exxon Valdez oil spill.

Science Boat

During our voyage, we conducted plankton sampling techniques focused on the abundance and species of phytoplankton present in Alaskan waters.

The samples and data collected provided invaluable information for the NOAA-funded Harmful Algal Bloom (HAB) project, which monitors potentially harmful phytoplankton blooms.

During the science boat outings in Misty Fjord, the Inian Islands, Icy Bay, and College Fjord, we used a CTD to create a physical profile of the water column, took measurements of turbidity to estimate phytoplankton abundance, and deployed a plankton net to collect phytoplankton and zooplankton samples.



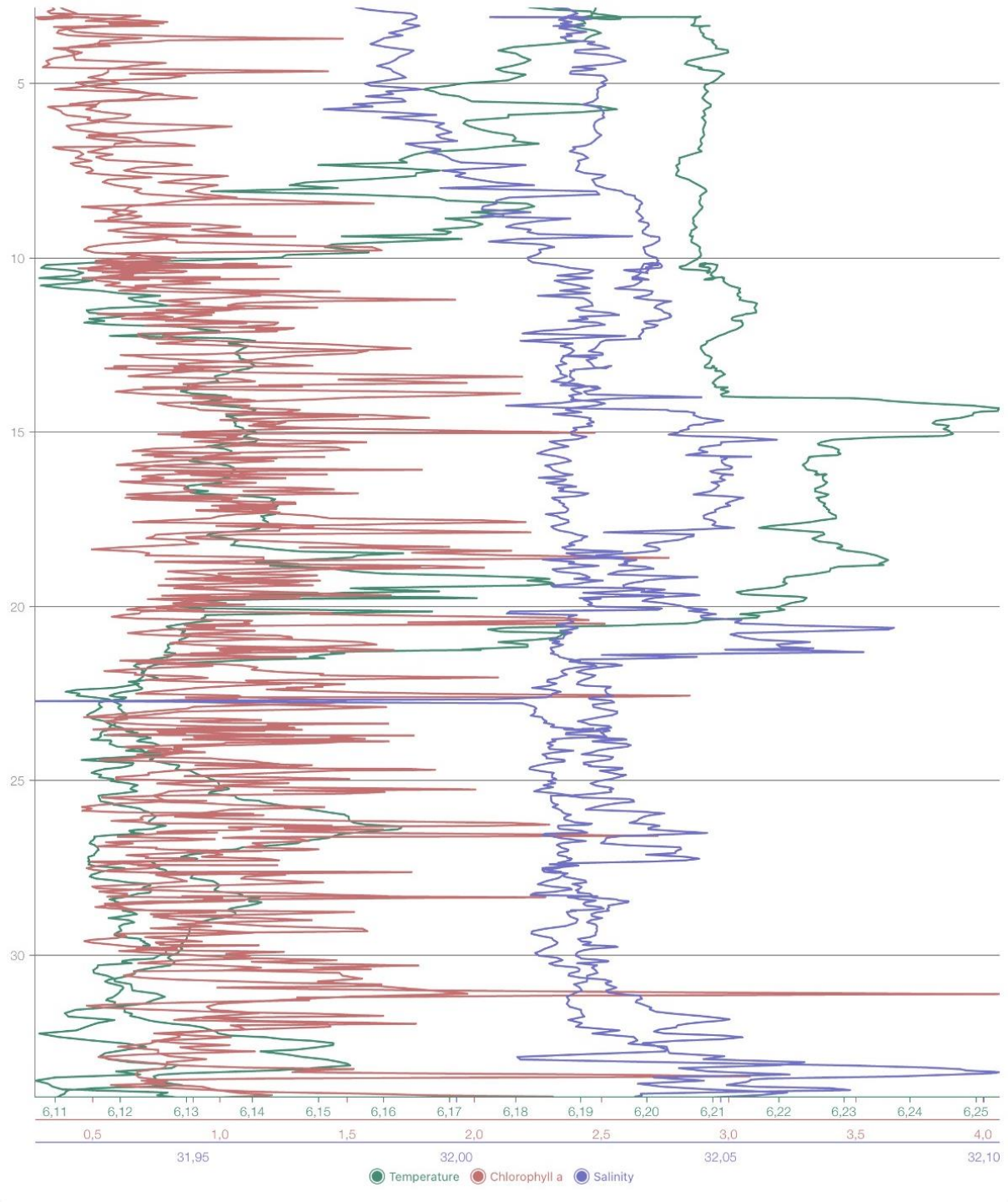
Science Boat: CTD data – Misty Fjord

Our CTD casts gave us insight into the way salinity, temperature, and chlorophyll changed with depth.

Temperature (green): at the surface there is a cold layer around 9°C, then between 10–30 m it is relatively warm at ~11.3–11.5°C. Temperature then decreases after 35 m, reaching ~10.5°C by ~60 m. Overall, this indicates warm surface waters influenced by solar heating and freshwater input overlying cooler, denser marine water.

Salinity (blue) is much lower at the surface (~5 PSU), then increases rapidly between ~5–15 m depth before stabilising around ~32 PSU deeper in the profile. This strong halocline suggests a significant freshwater influence at the surface, likely from rainfall, snowmelt, river discharge, and glacial runoff typical of south-east Alaskan fjords.

Chlorophyll a (red) is highest in the upper ~3–8 m at 1.1 µg/l. Below ~10 m, chlorophyll concentrations rapidly decrease and remain very low throughout the deeper water column. This pattern suggests phytoplankton productivity is concentrated in the sunlit surface layer.



Science Boat: CTD data – Inian Islands

Temperature (green): despite the noisy data, temperature is very stable throughout the profile, remaining around ~6.11–6.22°C from the surface to ~33 m depth. Unlike sheltered fjords such as Misty Fjord, there is no strong warm surface layer — typical of high-energy tidal environments like the Inian Islands, where strong currents continually redistribute heat through the water column.

Salinity (blue) remains high and consistent throughout the cast at ~31.95–32.1 PSU, indicating a predominantly marine water mass with little freshwater influence. The lack of a strong halocline suggests vigorous tidal mixing is preventing the formation of stable surface layers.

Chlorophyll a (red) is moderately elevated throughout the upper ~10–25 m, rather than forming a single sharp surface peak. In energetic tidal systems, nutrient-rich deeper water is frequently brought to the surface through upwelling, supporting productive phytoplankton growth across a broader depth range.

Overall, this profile reflects a dynamic, well-mixed coastal system strongly influenced by tidal exchange.

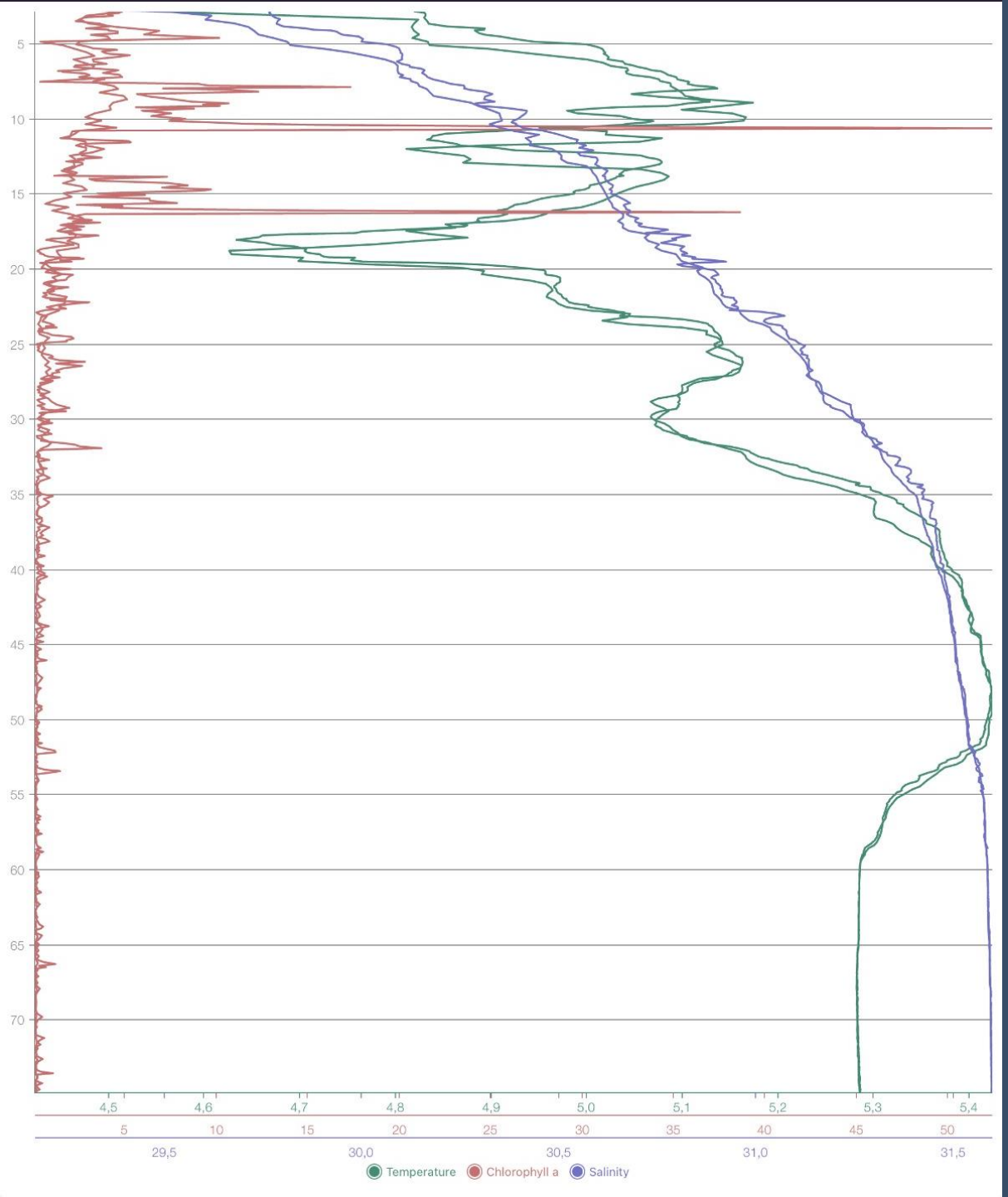
Science Boat: CTD data – Icy Bay

Temperature (green) is coldest near the surface at ~0–1°C in the upper ~5 m, then gradually increases with depth, reaching ~3.6°C below ~30–35 m. This inverted temperature structure is common in glacier-influenced systems like Icy Bay, where cold meltwater and runoff cool the surface waters, while deeper layers contain warmer marine water entering from the Gulf of Alaska.

Salinity (blue) is lowest at the surface at ~28–29 PSU and remains relatively fresh down to ~20–25 m depth. Below this, salinity increases to ~30–31 PSU and remains stable deeper in the profile. This strong halocline indicates pronounced stratification, with a buoyant freshwater layer sitting above denser oceanic water, likely driven by glacial melt.

Chlorophyll a (red) shows a clear surface/subsurface maximum within the upper ~0–7 m at around 30 µg/l, with concentrations dropping rapidly below ~10 m and remaining very low at depth. This high concentration of chlorophyll suggests a phytoplankton bloom concentrated within the sunlit surface layer.

Overall, this profile reflects a classic glacier-influenced fjord system: cold, fresh surface waters from meltwater input overlying warmer, saltier marine water.



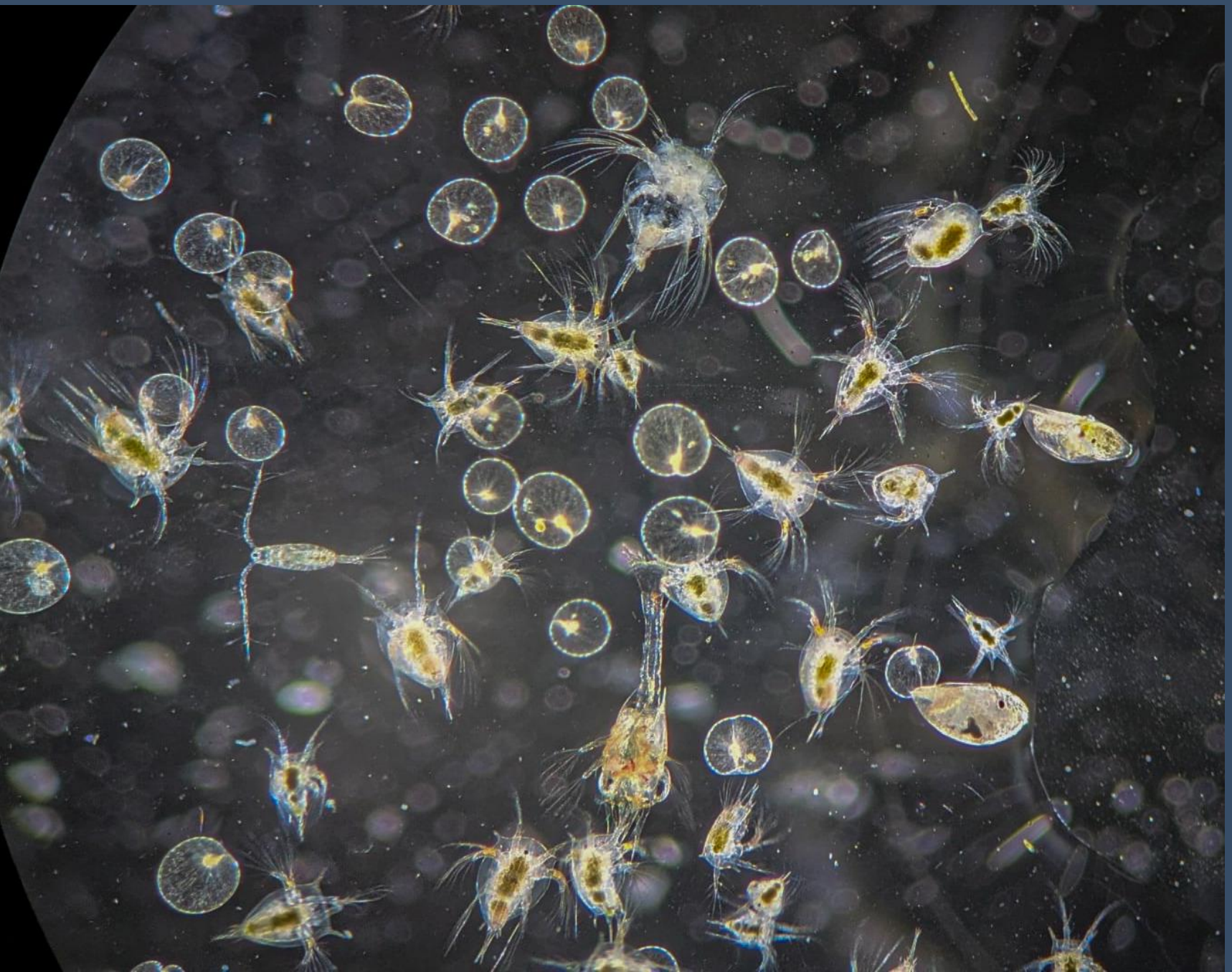
Science Boat: CTD data – College Fjord

Temperature (green) is coolest near the surface at ~4.5–4.7°C, then gradually increases with depth to ~5.4°C by ~45 m. Below ~50 m, temperature becomes more stable at ~5.3°C. The cooler surface waters likely reflect strong glacial meltwater influence.

Salinity (blue) is lowest at the surface at ~29.5 PSU and steadily increases with depth, reaching ~31.5 PSU below ~40 m. This gradual increase indicates a stratified water column, with fresher meltwater-influenced surface waters overlying saltier, denser marine water below. Compared to some fjords, the halocline is relatively broad rather than sharply defined, suggesting ongoing mixing between surface and deeper layers.

Chlorophyll a (red) is highest in the upper ~5–18 m at approximately 20 µg/l, before dropping rapidly below ~20–25 m and remaining near zero at depth. This suggests a surface phytoplankton bloom, with productivity concentrated within the upper illuminated layer of the fjord. In glacier-fed fjords like College Fjord, meltwater can stabilise the surface layer while also supplying micronutrients such as iron, helping support phytoplankton growth during the productive season.

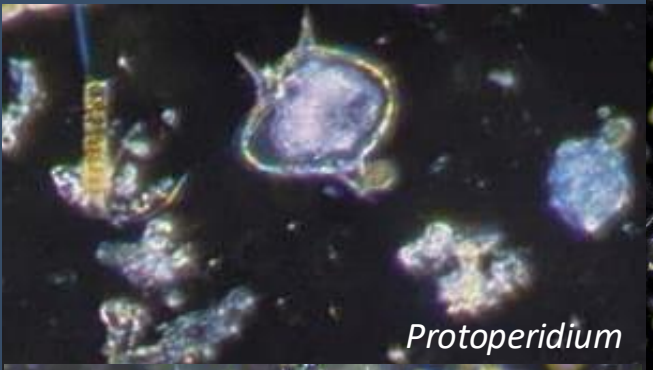
Overall, this profile reflects a classic glacier-influenced fjord system: cool, fresh surface waters from meltwater input overlying warmer, saltier marine water at depth, with biological productivity concentrated within the upper photic zone.

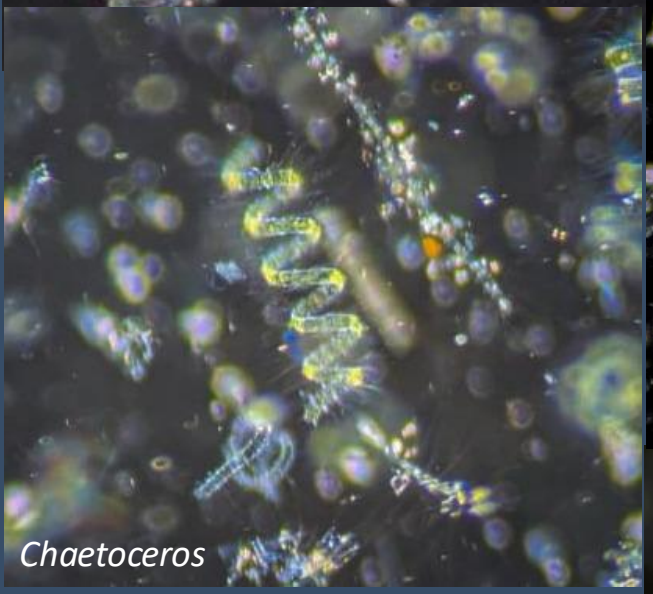


Plankton samples

Plankton are ocean drifters, transported by currents and tides and lacking the ability to navigate against these natural forces. Animals (zooplankton) and plant-like algae (phytoplankton) play a key role in supporting the marine food web and the health of our oceans.

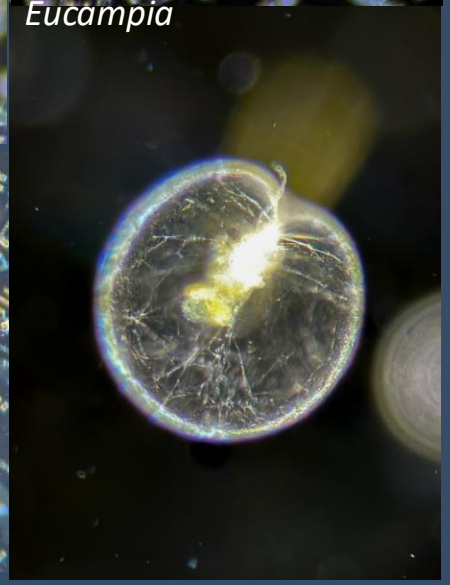
The image on the left shows a plankton sample from Kake, Alaska, including barnacle nauplius larvae, barnacle cypris larvae, a calanoid copepod, and Noctiluca phytoplankton, also known as 'sea sparkle'.


Protoperidium


Chaetoceros


Thalassiosira

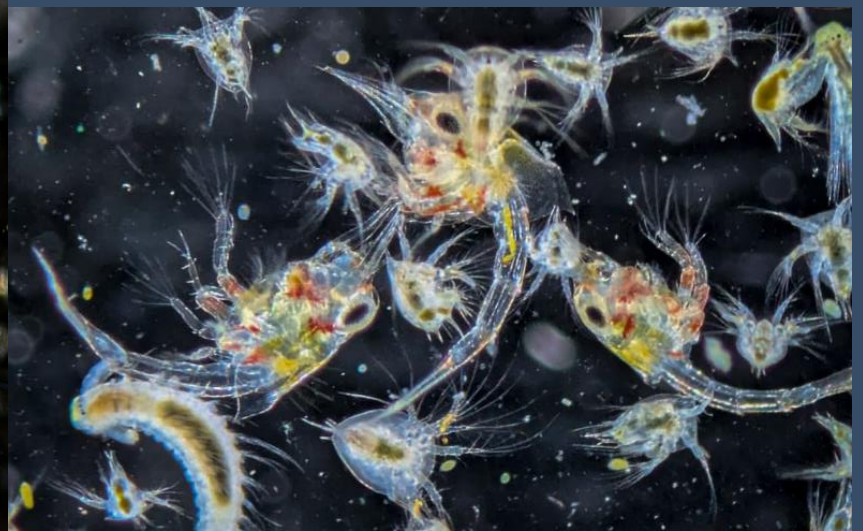

Eucampia


Noctiluca scintillans

Phytoplankton & Harmful Agal Bloom (HAB) Project

Phytoplankton underpin the marine food web: like plants on land, they contain photosynthetic pigments (chlorophyll) that convert sunlight into energy and oxygen, and sequester carbon dioxide.

We collected phytoplankton samples in Misty Fjord, the Inian Islands, Icy Bay, and College Fjord, and reported the abundance and species present for the HAB project, to detect harmful blooms of microalgae. These blooms, caused by excessive nutrient pollution and environmental changes, can produce toxins that harm aquatic life, disrupt ecosystems, and pose health risks to humans. The HAB project aims to monitor outbreaks, identify contributing factors, and develop strategies to predict, prevent, and manage HABs through scientific research. The data we collected suggested **no potential HABs** were present in our sample locations.



Zooplankton

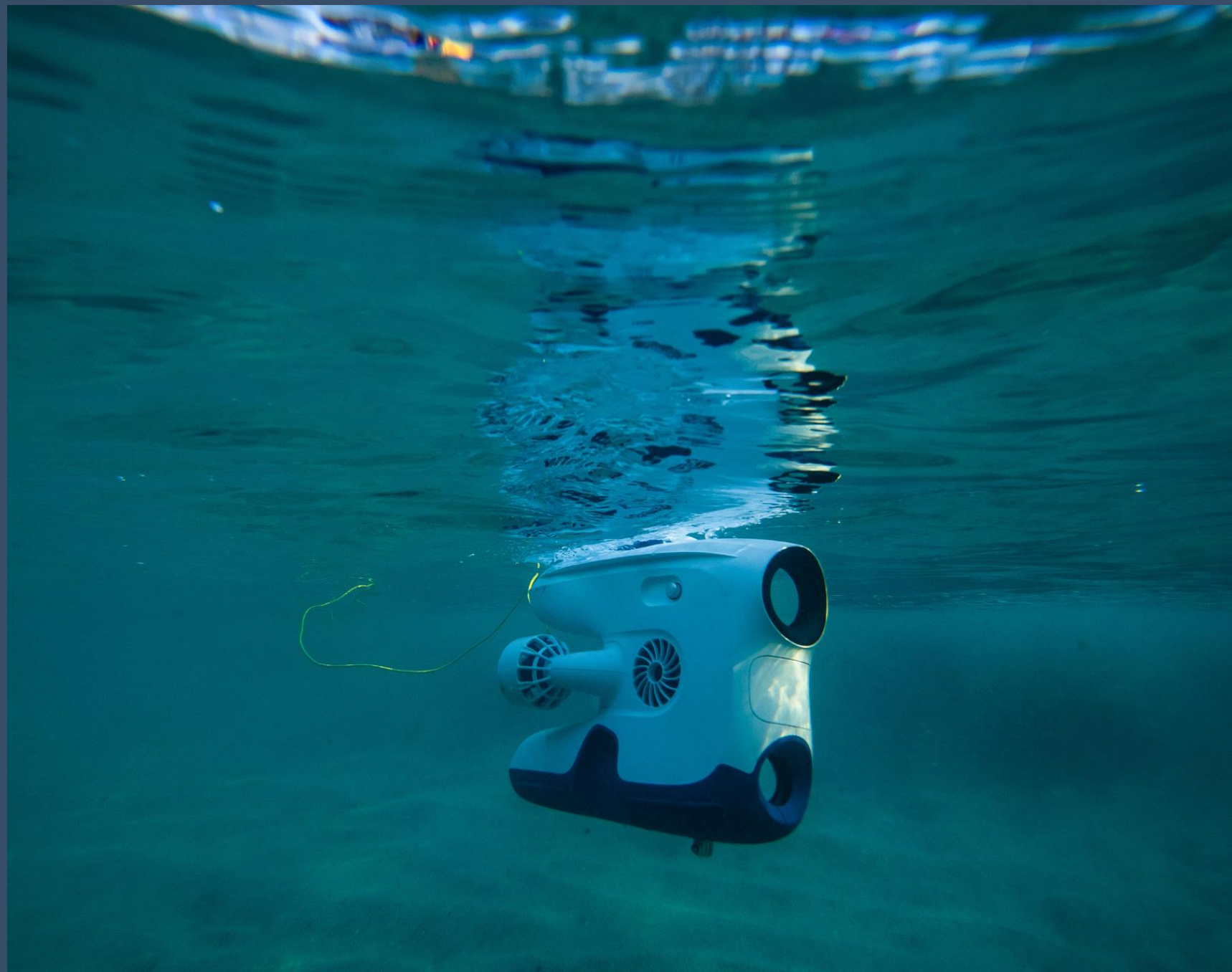
We also collected zooplankton samples in Kake, the Inian Islands, Icy Bay, and College Fjord. Samples included 'holoplankton', which remain planktonic throughout their whole life cycle — such as copepods and arrow worms — and 'meroplankton', which are only planktonic for part of their life cycle, such as crab and fish larvae.

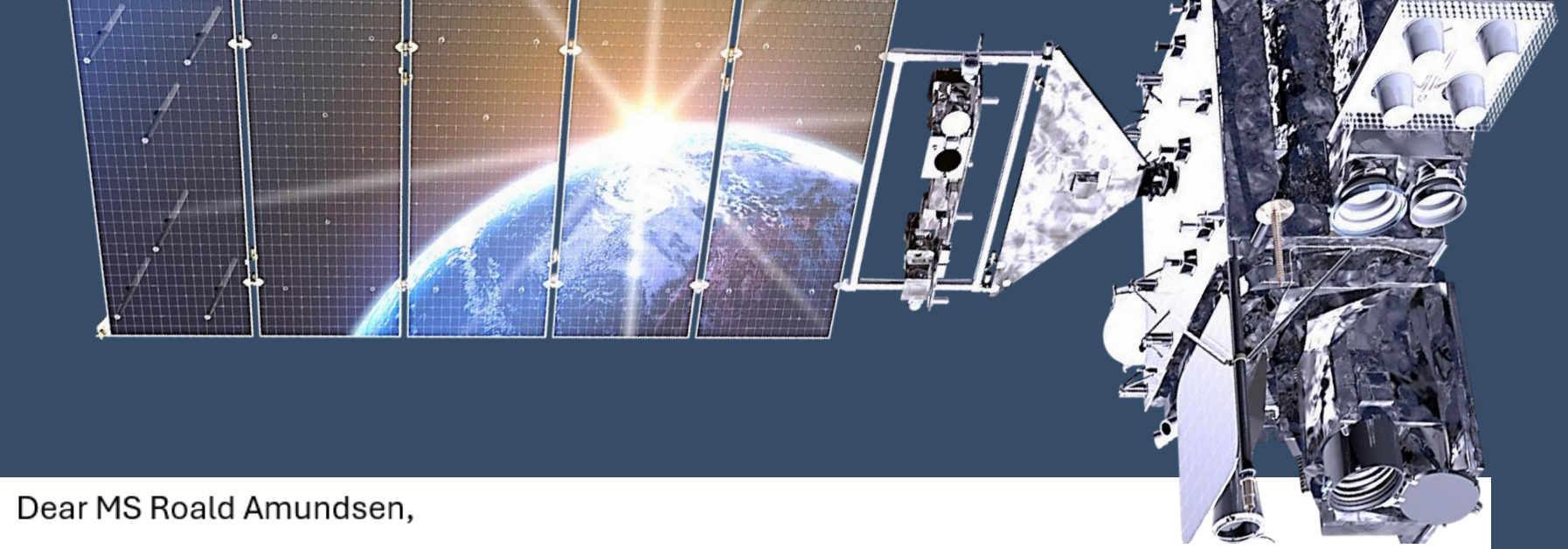
The photos taken on our microscopes have also been added to our iNaturalist project to help monitor plankton biodiversity.

Underwater drone

We had the opportunity to deploy our underwater drone in Kake, where we observed a variety of intertidal creatures, including sugar kelp, giant plumose anemones, and ochre sea stars.

View the highlights from our underwater drone footage on the HX Underwater Drone Footage **YouTube channel.**





Citizen Science

NASA Cloud Observer

Clouds aren't just shapes in the sky; they are important components of Earth's heat budget and balance. Information about when, where, and what types of clouds are forming helps scientists understand more about Earth's climate and climate change. Through NASA's GLOBE Cloud Observer, we help contribute such data.

Our Citizen Scientists submitted three observations over four sessions to the global database run by NASA. Our observations were matched to data from weather satellites orbiting above and will be used to better understand global weather phenomena.

If you would like to continue cloud observations at home, you can download the GLOBE Observer app.

Dear MS Roald Amundsen,

Thank you for your NASA GLOBE cloud observation! The NASA GLOBE Clouds Team matched your cloud observation with corresponding satellite data. The satellite match is based on the time and location of your cloud report. You can learn more about how to understand your satellite match at GLOBE Clouds Satellite Comparison. The link(s) below show your data. The satellite names shown correspond to the satellites that matched the time and place of your report.

Measurement 2026-05-04 19:21:00 GOES-18

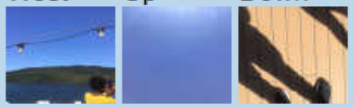
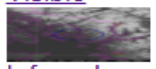
Satellite: 'GOES 18'.
Operator: NOAA / NASA.
Mass: 5192 kg.
Launched: 1st March 2022.
Orbit: Geostationary.
Application: Rainfall, fire, cloud cover and air quality.

View our data on the global map

GLOBE Cloud Observations Paired with NASA Satellite Data

Total Satellite Comparisons: 209

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	GOES-18 Satellite
Universal Date/Time	2026-05-04 19:21:00	2026-05-04 19:33
Latitude	55.3	54.98 to 55.62
Longitude	-130.96	-131.28 to -130.64
Total Cloud Cover	Few (<10%)	No Clouds
High Clouds	Short Lived Contrails: 1 Non Spreading Contrails: 0  Cirrus Cover: Few (<10%)	No Clouds
Mid Clouds	 Altostratus Cover: Few (<10%) Opacity: Translucent	No Clouds
Low Clouds	 Stratus Cover: Few (<10%) Opacity: Translucent	No Clouds
GLOBE Cloud Photos and Corresponding NASA Satellite Images. Click image to	**GLOBE Photos** North East South  West Up Down 	***GOES-18*** Visible  Infrared  GEO Tutorial

NASA Cloud Observer

Remember:
we couldn't see many clouds that day!

The light blue column marks the data we collected together out on Deck 10 that very day.

The white column marks the data collected by the satellite GOES 18.

When we have both columns side by side, we can fill in the gaps between ground observations and space orbital observations.

On this day, the sky was very clear and only a few clouds were visible closer to the mountains on land. We were therefore able to provide additional data on clouds that the satellite could not detect.

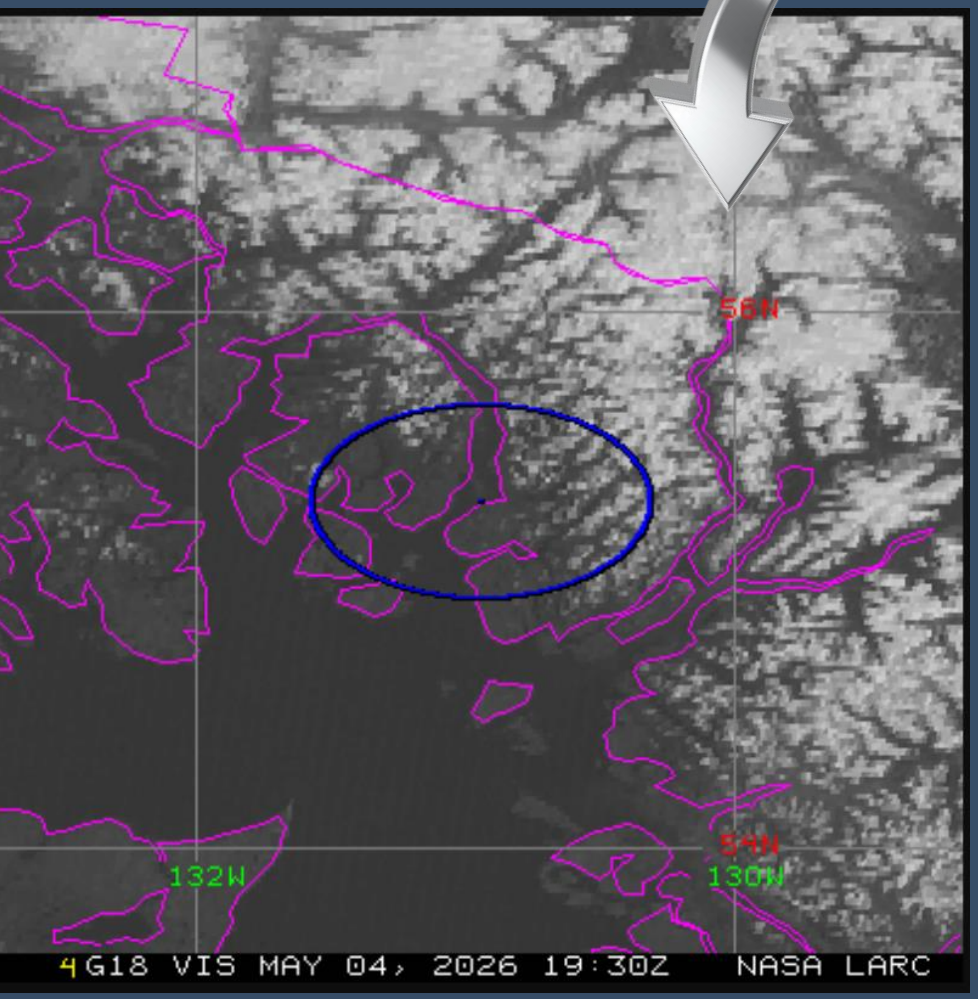
Thanks for your participation!

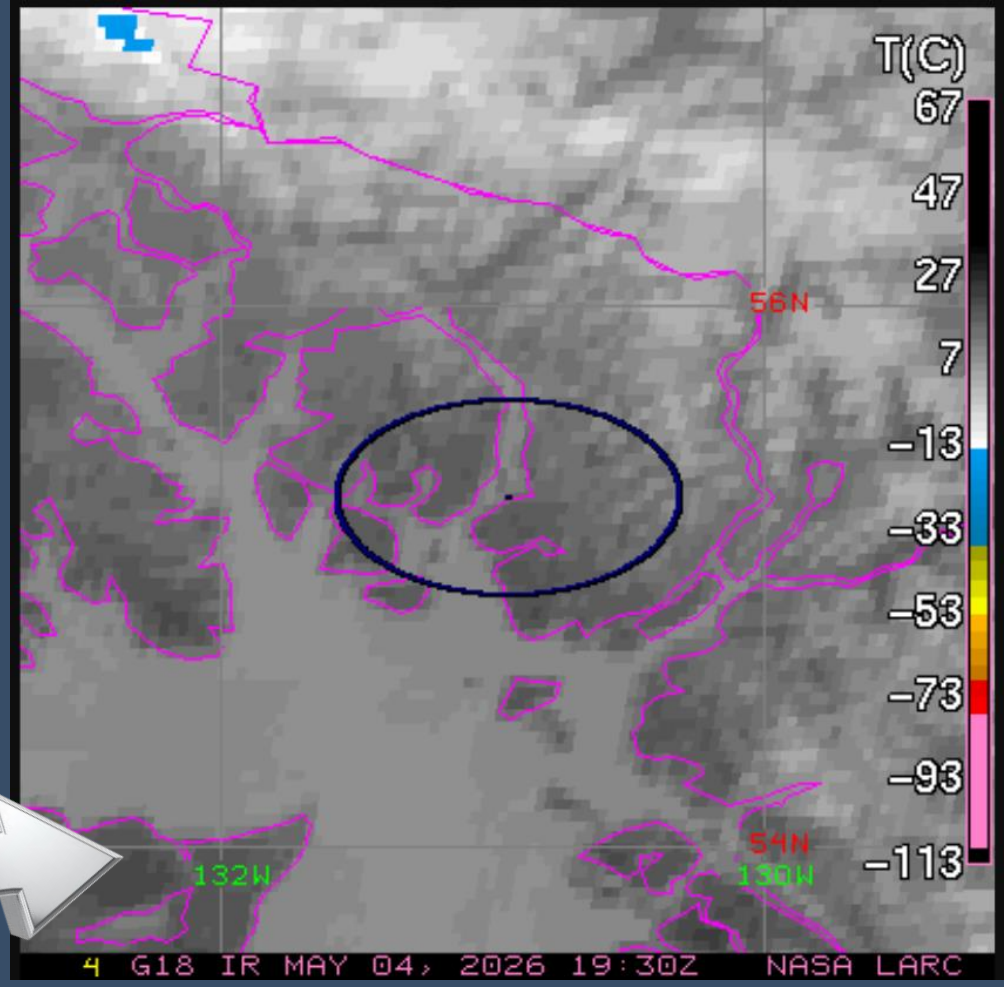
View our data on the global map

NASA Cloud Observer

Real colour image. The blue dot marks our position on the ship that day. The blue circle indicates a 40 km diameter from our single data point.

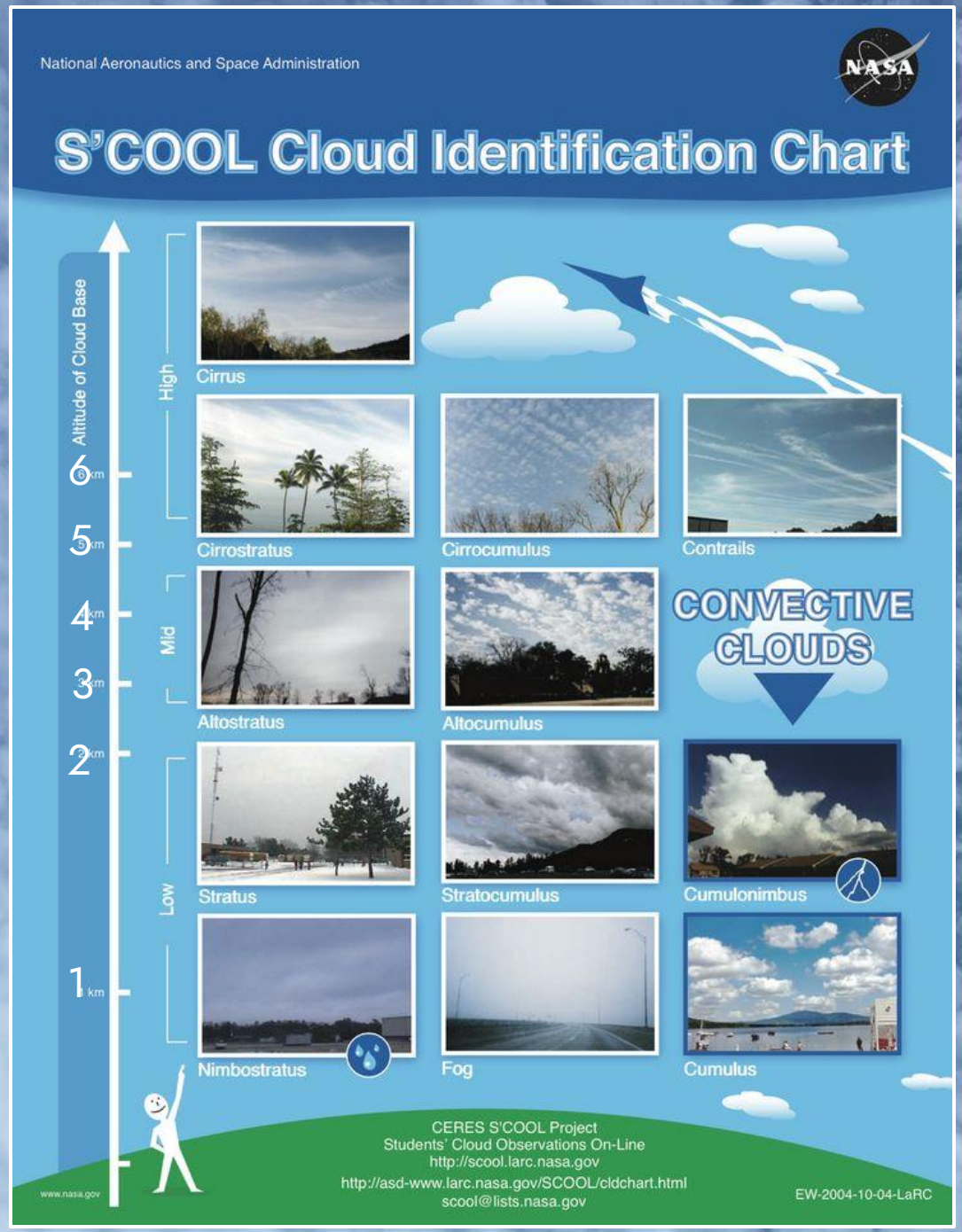
Grey marks the cloud cover, while darker hues indicate land or ocean close to the ship.





Infrared image where the data legend is in temperature (°C). Grey hues represent positive Celsius values around 7°C. The darker colour indicates land.

View our data on the global map



Citizen Science

NASA Cloud Observer

High clouds *(base above 6,000 metres)*:

- **Cirrus:** thin, wispy clouds composed of ice crystals, often appearing as delicate streaks or feathery wisps high in the sky.
- **Cirrostratus:** thin, sheet clouds that cover large portions of the sky, sometimes creating a halo around the sun or moon.
- **Cirrocumulus:** small, fluffy clouds resembling fish scales or ripples.

Medium clouds *(base between 2,000 and 6,000 metres)*:

- **Altocumulus:** puffy, greyish-white clouds with rounded edges, often forming parallel rows or patches.
- **Altostratus:** thick, greyish clouds that partially obscure the sun or moon, lacking the distinct features of cirrostratus.

Low clouds *(base below 2,000 metres)*:

- **Stratus:** uniform, grey clouds that cover the sky like a blanket, sometimes bringing drizzle or light rain.
- **Stratocumulus:** low, lumpy clouds with defined edges, often appearing in rows or patches.
- **Nimbostratus:** thick, dark grey clouds associated with steady rain or snow.

If you would like to explore more examples, you can check out **NASA's online cloud chart**. **View our data** on the global map.

Citizen Science

Happywhale

Cetaceans — whales, dolphins, and porpoises — capture our imaginations and our hearts whenever we witness them. Something as simple as taking a photograph can help scientists learn more about these animals. That is where Happywhale comes in: by using AI to match images of whales submitted by users, they can track individuals as they migrate across the world and throughout their lives. When you submit a photo of a whale, you will be notified of any past and future matches of that individual.

We spotted a pod of orcas just outside Lituya Bay and submitted pictures of several individuals to Happywhale. We hope to hear back about our orcas — to find out whether they have been seen before, and where and when.

View MS Roald Amundsen's submissions to Happywhale from our voyage to keep updated about this sighting.

Citizen Science
ORCA

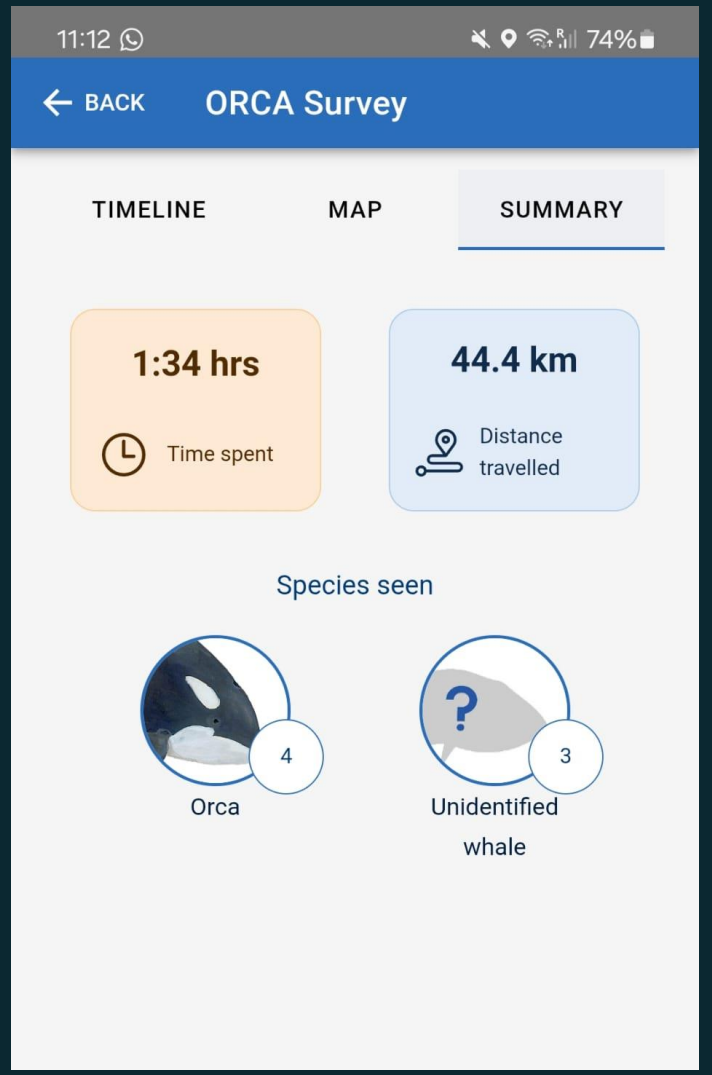
While on your journey through Alaska, you were joined by ORCA Ocean Conservationist Leo, who collected data during wildlife watches on whales, dolphins, and porpoises. This data was sent back to ORCA and made available to organisations working in cetacean conservation.

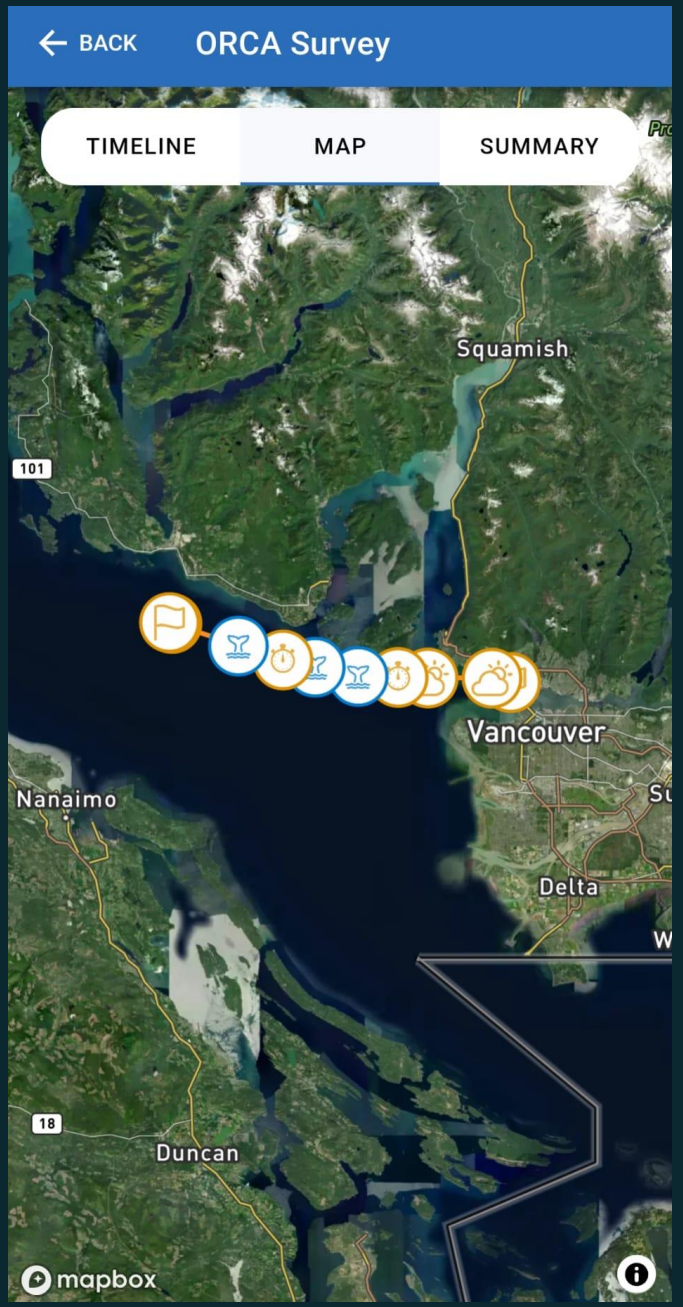
© Leonie Zimmermann

OceanWatchers Survey Effort

A huge thank you to everyone who came out and joined the Naturalists for the wildlife watches in all weathers. There might not always have been sightings, but it was a pleasure getting to know you all out on deck.

In total, **31 hours** of data collected, spanning **over 335.2 km**.





What Species Did We See?

7

Unidentified whales

6

Killer whale

10

Humpback whale

11

Dall's porpoise

1

Harbour porpoise

Citizen Science
iNaturalist

During our voyage we had the chance to explore many different ecosystems: from the rainforest to the intertidal zone and the kelp forest; from rivers and lakes to glaciated fjords. In these habitats we observed a great variety of trees, flowers, marine invertebrates, mammals, and birds.

In total we recorded:

- 146 species
- 430 observations

...and counting, as you upload more photos from home our dataset grows! Through iNaturalist, these observations can now be used as data in global scientific research.

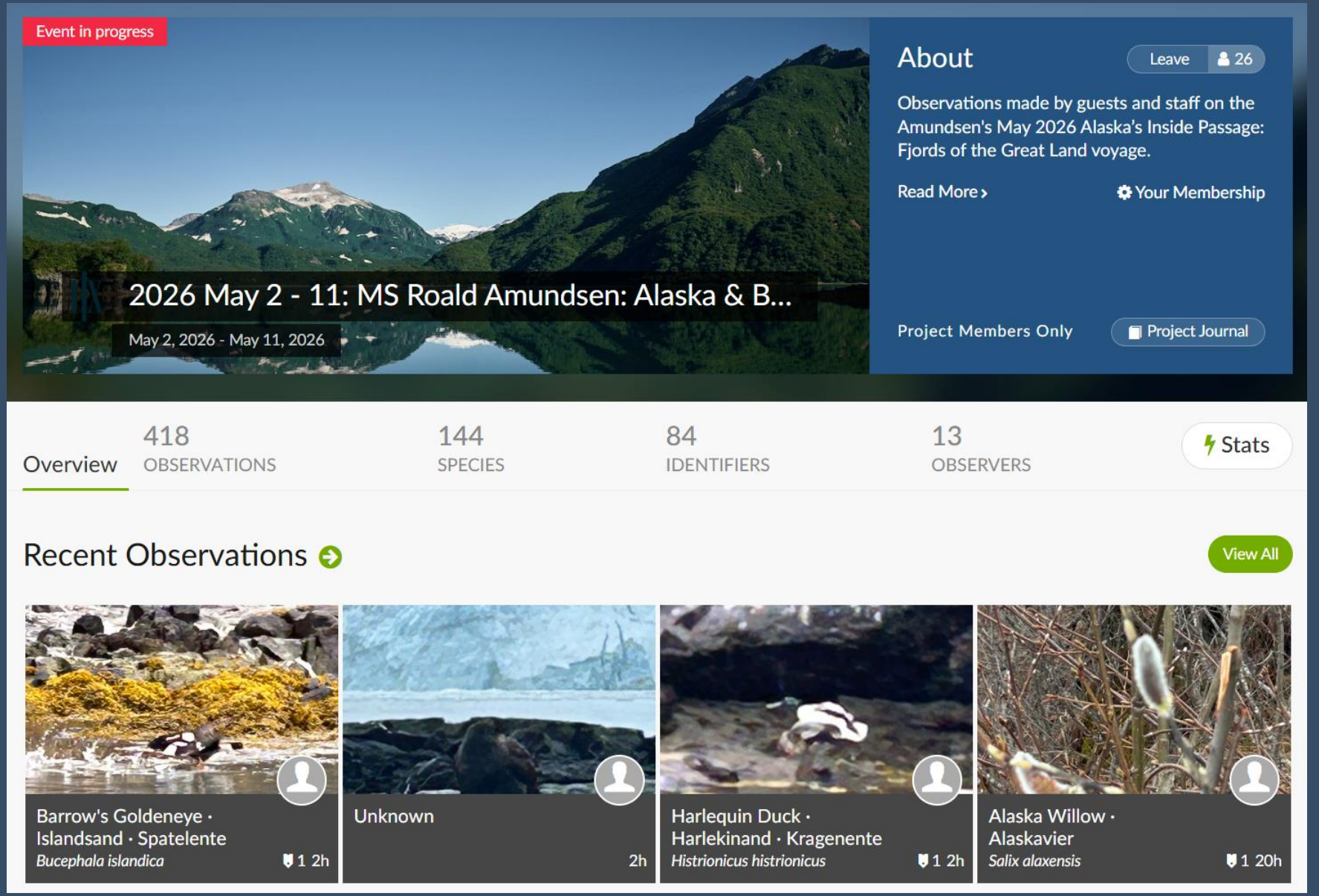
Thanks for your participation!

View our data submitted to our iNaturalist project here:
2026 May 2–11: MS Roald Amundsen: Alaska & British Columbia · iNaturalist

Citizen Science

iNaturalist

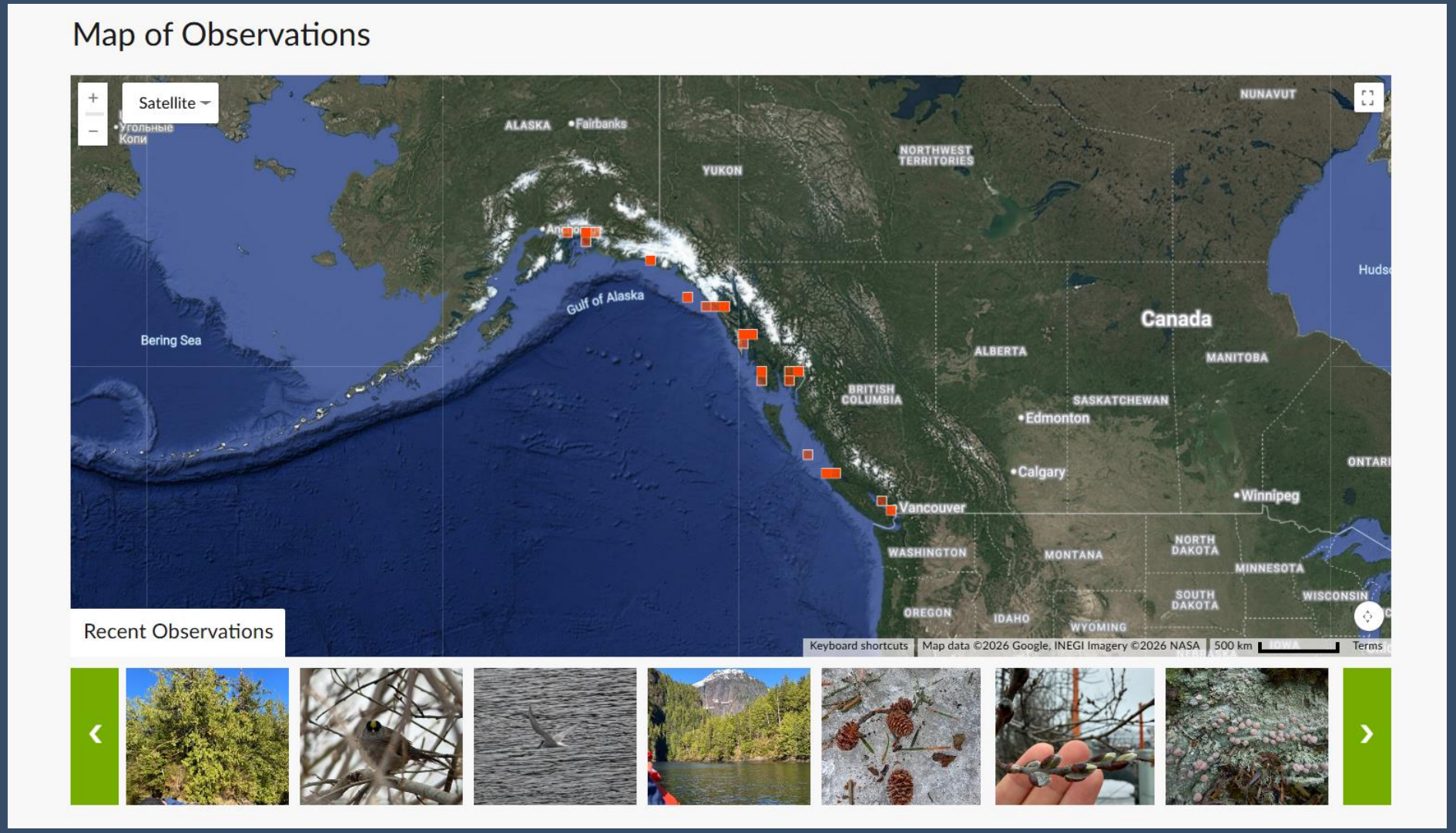
What Did We Observe?



Citizen Science

iNaturalist

Where Did We Observe?



Citizen Science

e-Bird

At sea and on land, our onboard Ornithologists were constantly surveying the birdlife we encountered along our route. The diversity of habitats we travelled through provided an equally diverse array of birds, from the majestic bald eagle to a great variety of ducks and shorebirds.

Including eight onboard wildlife watches and eBird sessions on deck, we recorded 75 bird species across 63 eBird checklists. Through the e-Bird platform, the data we collected is available to scientists around the world, helping to understand patterns of bird distribution, migration, and habitat use.

View our data for this trip here:
2026 May 2 - 11: MS Roald Amundsen: Alaska & British Columbia, Fjords of the Great Land - eBird Trip Report

Wildlife List — Birds

Wildlife List – Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
Branta bernicla	brant	Ringelgans	bernache cravant	ringgås
Branta canadensis	Canada goose	Kanadagans	bernache du canada	kanadagås
Spatula clypeata	northern shoveler	Löffelente	canard souchet	skjeand
Mareca americana	American wigeon	Kanadapfeifente	canard d'amérique	amerikablesand
Anas platyrhynchos	mallard	Stockente	canard colvert	stokkand
Anas acuta	northern pintail	Spießente	canard pilet	stjertand
Anas carolinensis	green-winged teal	Carolinakrickente	sarcelle à ailes vertes	amerikakrikkand
Aythya collaris	ring-necked duck	Ringschnabelente	fuligule à collier	ringand
Aythya affinis	lesser scaup	Kanadabergente	petit fuligule	purpurhodeand
Histrionicus histrionicus	harlequin duck	Kragenente	arlequin plongeur	harlekinand
Melanitta perspicillata	surf scoter	Brillenente	macreuse à front blanc	brilleand
Melanitta deglandi	white-winged scoter	Höckersamtente	macreuse à ailes blanches	knoppsjøorre
Bucephala islandica	Barrow's goldeneye	Spatelente	garrot d'islande	islandsand
Mergus merganser	common merganser	Gänsesäger	grand harle	laksand
Mergus serrator	red-breasted merganser	Mittelsäger	harle huppé	siland

Wildlife List – Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
Podiceps grisegena	red-necked grebe	Rothalstaucher	grèbe jougris	gråstrupedykker
Columba livia	rock pigeon	Felsentaube	pigeon biset	klippedue (bydue)
Selasphorus rufus	rufous hummingbird	Rotrücken-Zimtelfe	colibri roux	rødkolibri
Haematopus bachmani	black oystercatcher	Klippenausternfischer	huîtrier de Bachman	amerikasvarttjeld
Numenius hudsonicus	Hudsonian whimbrel	Hudsonbrachvogel	courlis hudsonien	tundraspove
Limosa haemastica	Hudsonian godwit	Hudsonschnepfe	barge hudsonienne	svartvingespove
Actitis macularius	spotted sandpiper	Drosseluferläufer	chevalier grivelé	flekksnipe
Tringa incana	wandering tattler	Wanderwasserläufer	chevalier errant	alaskavandresnipe
Tringa flavipes	lesser yellowlegs	Kleiner Gelbschenkel	petit chevalier	gulbeinsnipe
Tringa melanoleuca	greater yellowlegs	Großer Gelbschenkel	grand chevalier	plystresnipe
Arenaria melanocephala	black turnstone	Schwarzkopf-Steinwälzer	tournepierre noir	svartsteinvender
Calidris alpina	dunlin	Alpenstrandläufer	bécasseau variable	myrsnipe
Antigone canadensis	sandhill crane	Kanadakranich	grue du Canada	kanadatrane
Cerorhinca monocerata	rhinoceros auklet	Nashornalk	macareux rhinocéros	neshornlunde
Fratercula cirrhata	tufted puffin	Gelbschopflund	macareux huppé	topplunde

Wildlife List – Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
Brachyramphus brevirostris	Kittlitz's murrelet	Kurzschnabelalk	guillemot de Kittlitz	kortnebbdvergteist
Brachyramphus marmoratus	marbled murrelet	Marmelalk	guillemot marbré	marmordvergteist
Cepphus columba	pigeon guillemot	Taubenteiste	guillemot colombin	beringteist
Uria aalge	common murre	Trottellumme	guillemot marmette	lomvi
Rissa tridactyla	black-legged kittiwake	Dreizehenmöwe	mouette tridactyle	krykkje
Larus brachyrhynchus	short-billed gull	Kurzschnabel-Sturmmöwe	goéland à bec court	kortnebbmåke
Larus californicus	California gull	Kaliforniermöwe	goéland de Californie	præriegråmåke
Larus glaucescens	glaucous-winged gull	Beringmöwe	goéland à ailes grises	gråvingemåke
Sterna paradisaea	Arctic tern	Küstenseeschwalbe	sterne arctique	rødnebbterne
Gavia stellata	red-throated loon	Sterntaucher	plongeon catmarin	smålom
Gavia pacifica	Pacific loon	Pazifiktaucher	plongeon du Pacifique	amerikastorlom
Gavia immer	common loon	Eistaucher	plongeon huard	islom
Phoebastria nigripes	black-footed albatross	Schwarzfußalbatros	albatros à pieds noirs	svartfotalbatross
Podiceps auritus	horned grebe	Ohrentaucher	grèbe esclavon	horndykker
Phalacrocorax pelagicus	pelagic cormorant	Meerscharbe	cormoran pélagique	beringskarv

Wildlife List – Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
Haliaeetus leucocephalus	bald eagle	Weißkopf-Seeadler	pygargue à tête blanche	hvithodehavørn
Megaceryle alcyon	belted kingfisher	Gürtelfischer	martin-pêcheur d'Amérique	belteisfugl
Sphyrapicus ruber	red-breasted sapsucker	Feuerkopf-Saftlecker	pic à poitrine rouge	rødbrystsevjespett
Cyanocitta stelleri	Steller's jay	Diademhäher	geai de Steller	furuskrike
Pica hudsonia	black-billed magpie	Hudsonelster	pie d'Amérique	svartnebbskjære
Corvus brachyrhynchos	American crow	Amerikakrähe	corneille d'Amérique	amerikakråke
Corvus corax	common raven	Kolkrabe	grand corbeau	ravn
Tachycineta bicolor	tree swallow	Sumpfschwalbe	hirondelle bicolore	tresvale
Ixoreus naevius	varied thrush	Halsbanddrossel	grive à collier	båndtrost
Catharus ustulatus	Swainson's thrush	Zwergmusendrossel	grive à dos roussâtre	brunkinnskogtrost
Catharus guttatus	hermit thrush	Einsiedler-Musendrossel	grive solitaire	eremittskogtrost
Turdus migratorius	American robin	Wanderdrossel	merle d'Amérique	vandretrost
Anthus rubescens	American pipit	Pazifikpieper	pipit d'Amérique	myrpiplerke
Passerella iliaca	fox sparrow	Fuchsammer	bruant fauve	revespurv
Junco hyemalis	dark-eyed junco	Winterammer	junco ardoisé	vinterjunko
Zonotrichia atricapilla	golden-crowned sparrow	Kronenammer	bruant à couronne dorée	gulkronespurv

Wildlife List – Birds

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
Passerculus sandwichensis	savannah sparrow	Grasammer	bruant des prés	musespurv
Melospiza melodia	song sparrow	Singammer	bruant chanteur	sangspurv
Leiothlypis celata	orange-crowned warbler	Orangefleck-Waldsänger	paruline verdâtre	oransjekroneparula
Setophaga townsendi	Townsend's warbler	Townsendwaldsänger	paruline de Townsend	granparula
Cardellina pusilla	Wilson's warbler	Mönchswaldsänger	paruline à calotte noire	kalottparula

Wildlife List – Mammals

Wildlife List – Marine Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
Megaptera novaeangliae	humpback whale	Buckelwal	baleine à bosse	knølhval
Orcinus orca	killer whale, orca	Schwertwal, Orka	orque	spekkhogger
Phocoenoides dalli	Dall's porpoise, Dall porpoise	Weißflankenschweinswal	marsouin de Dall	Dalls nise
Eumetopias jubatus	Steller sea lion	Stellerscher Seelöwe	lion de mer de Steller	hvalross
Phoca vitulina	harbour seal	Seehund	phoque commun	steinkobbe
Enhydra lutris	sea otter	Meerotter	loutre de mer	havoter

Wildlife List – Terrestrial Mammals

SCIENTIFIC NAME	ENGLISH	DEUTSCH	FRANÇAIS	NORSK
Tamiasciurus hudsonicus	American red squirrel	Gemeines Rothörnchen	écureuil roux américain	amerikansk ekorn
Oreamnos americanus	mountain goat	Schneezeige	chèvre es montagnes rocheuses	snøgeit
Lontra canadensis	North American river otter	Nord-amerikanischer Fischotter	loutre de rivière	amerikaoter
Neogale vison	American mink	Amerikanischer Nerz	vison d'Amérique	mink
Canis latrans ssp. Incolatus	northern coyote	Kojote	coyote	prærieulv

Thank you for your participation!