

An aerial photograph of a rugged coastline. In the foreground, a rocky outcrop juts into the sea, topped with a white lighthouse and a small building. The sea is a deep blue-green, with white foam from waves crashing against the rocks. In the background, a green valley stretches towards rolling hills under a sky with soft, colorful clouds. A large, semi-transparent logo consisting of the letters 'IITV' is overlaid on the left side of the image. The 'I' is a vertical bar, and the 'V' is a large, stylized letter that spans across the middle of the image.

# Science & Education Report

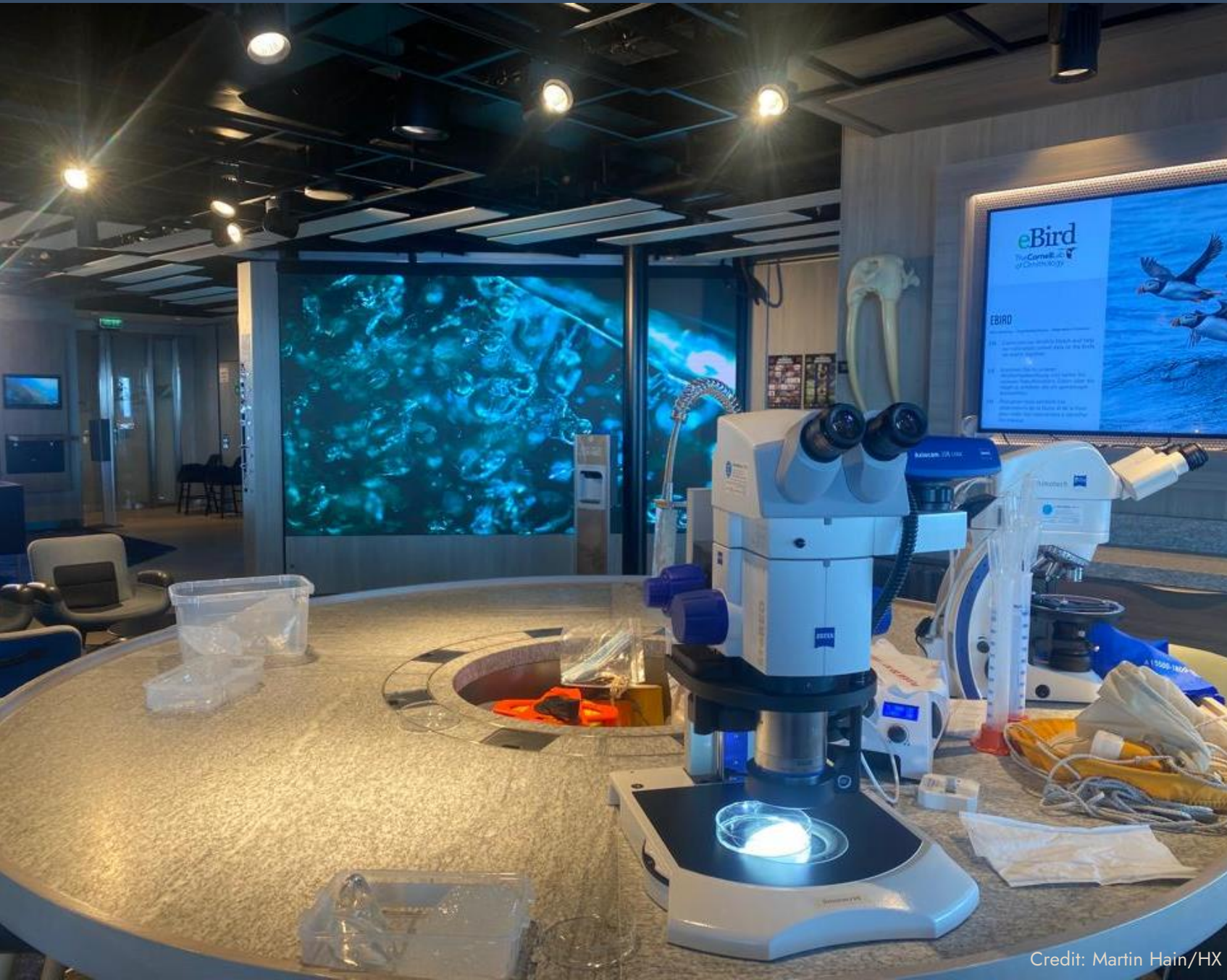
MS Fridtjof Nansen 2025

# MS Fridtjof Nansen

Iceland Circular Saga — Hamburg via  
Reykjavik via Windswept Isles of the  
North

4 May 2025 — 10 May 2025





# Science & Education Program

From Hamburg to the fjords of Norway, the cliffs of Shetland, the green hills of the Faroes, and finally the wild landscapes of Iceland, the Science and Education Team journeyed with you, uncovering the wonders of the North Atlantic world.

Through lectures, hands-on workshops, and cultural visits ashore, we explored the resilience of wildlife, the rich cultural history, and the powerful natural forces that shape this ever-changing region.

We hope these moments—watching seabirds soar along rugged cliffs or listening to the wind sweep across volcanic landscapes—have deepened your appreciation for the North Atlantic and inspired a lasting curiosity for the natural world.



# Science & Education Program

Aboard HX vessels, we are guests in the remote and remarkable North Atlantic—but through citizen science, you've become part of something bigger. Science is for everyone, happening everywhere, every day, and your participation makes a difference.

By observing, collecting data, and contributing to global research, you've gained a deeper connection to the natural world—one that sustains us all. This journey doesn't end here. The tools are in your hands to continue exploring, documenting, and protecting nature wherever you go.

Together, we can turn curiosity into action, ensuring a future where people and the planet thrive.

# History

History isn't just a collection of old names and dates—it's a living thread, woven through language, architecture, and the stories people tell. This is more evident than in the enduring connection between Shetland and Norway.

As we traced north, we passed through lands shaped by Norse heritage. In Shetland, the Viking Age isn't just a chapter in a textbook—it's part of everyday life. For centuries, these islands belonged to the Norwegian crown, and even today, echoes of that time remain: in the place names, the dialect, the festivals. The fire-lit celebration of *Up Helly Aa* is more than a spectacle—it is a memory kept alive.

Shetlanders once spoke Norn, a language descended from Old Norse, now lost but not forgotten. In Lerwick, many of you will have seen the lodberries—stone buildings built partly over the sea so goods could be hauled straight from boat to doorstep. These unique structures once served as both homes and trading posts, and today stand as powerful symbols of Shetland's maritime heritage.

By journeying here, you've entered a story stretching back over a thousand years. A story of crossing seas, of cultural exchange, and of resilience in the face of isolation. And like all stories worth telling, it's not finished yet.



# Faroe Islands

Out in the windswept North Atlantic, the Faroe Islands stand as a testament to the resilience of landscape, culture, and community. Like Shetland, their story is rooted in the Viking Age, when Norse settlers arrived around the 9th century and laid the foundations of today's society.

The Faroes were part of the Norwegian kingdom for centuries, later transitioning into Danish rule. Yet, unlike Shetland, they retained a stronger sense of political independence that lives on through their modern home rule system.

At the heart of it all is Tórshavn, the capital and one of the oldest parliamentary meeting places in the world. Faroese leaders still gather in the historic district of Tinganes, where red-painted wooden buildings line a narrow peninsula, just as Viking chieftains once did when this was the site of the *ting*, their ancient parliament.

Much like Shetland's Norse assemblies, the *ting* reflects a long self-governance tradition that continues to shape the Faroese identity. And walking through the quiet alleys of Tórshavn, it's clear: the past here isn't just preserved—it's lived.



# Geology

In Lysefjord, nature speaks in scale—towering cliffs, deep waters, and the quiet echo of a glacial past. This 42-kilometre fjord in southwestern Norway plunges to over 400 metres, with granite walls that rise 600 metres above the surface. At its heart stands Preikestolen, the Pulpit Rock, a dramatic outcrop that seems to defy gravity and time.

As we cruised through these still waters by Zodiac, we weren't just moving through space—we were moving through history. On the fjord's sides, smooth, polished rock surfaces told the story of the last Ice Age. The ice once flowed from left to right here, slowly dragging its weight across the stone, carving and shaping the landscape into what we see today.

And even in this grand, ancient setting, life was close at hand. Limpets and barnacles clung to the shoreline, seaweeds danced below the surface, birds wheeled overhead, and a lone mountain goat looked on from above. In Lysefjord, the power of glaciers meets the quiet persistence of life—and we were lucky enough to witness both.





# Wildlife Watch

As we sailed through the wild waters of the North Atlantic, you were invited to step onto the deck and take in the shifting seascapes—steep cliffs, rolling swells, and skies alive with birds. But the true magic came in the quiet moments of discovery, as we scanned the horizon together for signs of life.

Along the way, we spotted a remarkable variety of seabirds: elegant Northern gannets slicing through the air, puffins flapping low over the waves, eider ducks bobbing near shore, and many others weaving their stories into the sea breeze. Each sighting brought the coastline to life and reminded us that even the most rugged edges of the world are full of motion and meaning.

These encounters are more than just memories—they are invitations to look closer, to stay curious, and to protect the fragile web of life that thrives in the cold waters of the North.



# NASA Cloud Observer

During our voyage, we contributed to NASA's **GLOBE Cloud Observations**, collecting data on:

- **May 5<sup>th</sup>** (At-sea)
- **May 9<sup>th</sup>** (At-sea)

By comparing your ground-based observations with satellite measurements, scientists can refine cloud classifications, enhance climate models, and improve weather predictions—advancing our understanding of Earth's atmosphere and climate.

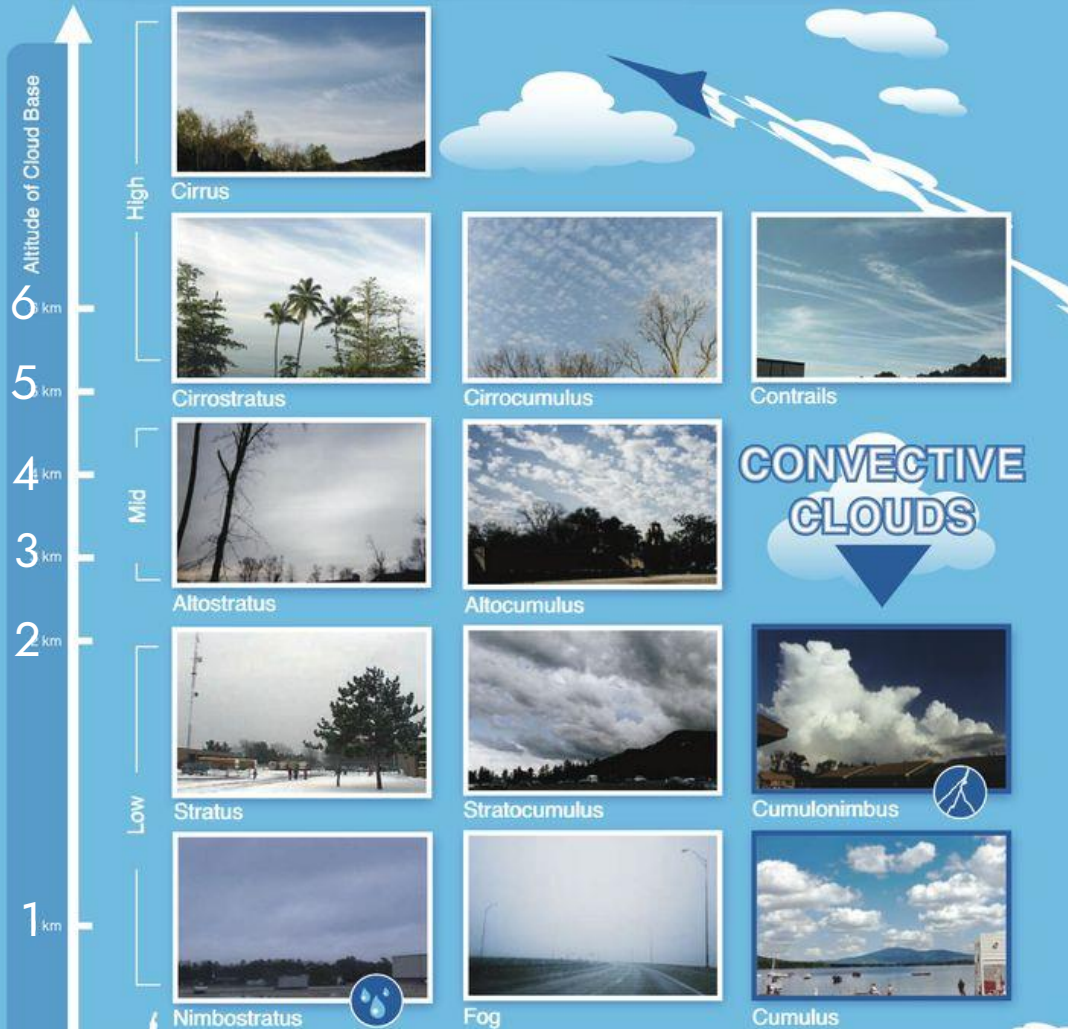
Curious to continue? You can keep observing and submitting data from home using the **GLOBE Observer** app, turning everyday cloud-watching into real scientific impact.

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





# S'COOL Cloud Identification Chart



# NASA Cloud Observer

## High Clouds (Base above 6,000 meters):

**Cirrus:** Thin, wispy clouds composed of ice crystals. They often appear as delicate streaks or feathery wisps high in the sky.

**Cirrostratus:** Thin, sheet-like clouds that cover large portions of the sky. They can create a halo around the sun or moon.

**Cirrocumulus:** Small, fluffy clouds in a regular pattern, resembling fish scales or ripples.

## Medium Clouds (Base between 2,000 and 6,000 meters):

**Altostratus:** Puffy, grayish-white clouds with rounded edges. They often form parallel rows or patches.

**Altostratus:** Thick, grayish clouds that partially obscure the sun or moon. They lack the distinct features of cirrostratus.

## Low Clouds (Base below 2,000 meters):

**Stratus:** Uniform, grayish clouds that cover the sky like a blanket. They can bring drizzle or light rain.

**Stratocumulus:** Low, lumpy clouds with defined edges. They often appear in rows or patches.

**Nimbostratus:** Thick, dark gray clouds associated with steady rain or snow.

Remember that these cloud types can vary in appearance and behaviour, but this basic classification helps meteorologists understand weather patterns and atmospheric conditions. If you'd like to explore more examples, you can check out NASA's [On-Line Cloud Chart](#).

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

# iNaturalist

Throughout this voyage, you played a vital role in documenting the incredible biodiversity of the North Atlantic— from towering cliffs in Norway and Shetland to the windswept shores of the Faroes and the wild coasts of Iceland.

By capturing and submitting images of wildlife and plant life, you contributed to a global effort to track species distribution and monitor ecosystems across some of the most remote and ecologically rich coastlines of the North Atlantic.

Together, we gathered:

**158** Observations

**74** Species Identified

**7** Observers Participating

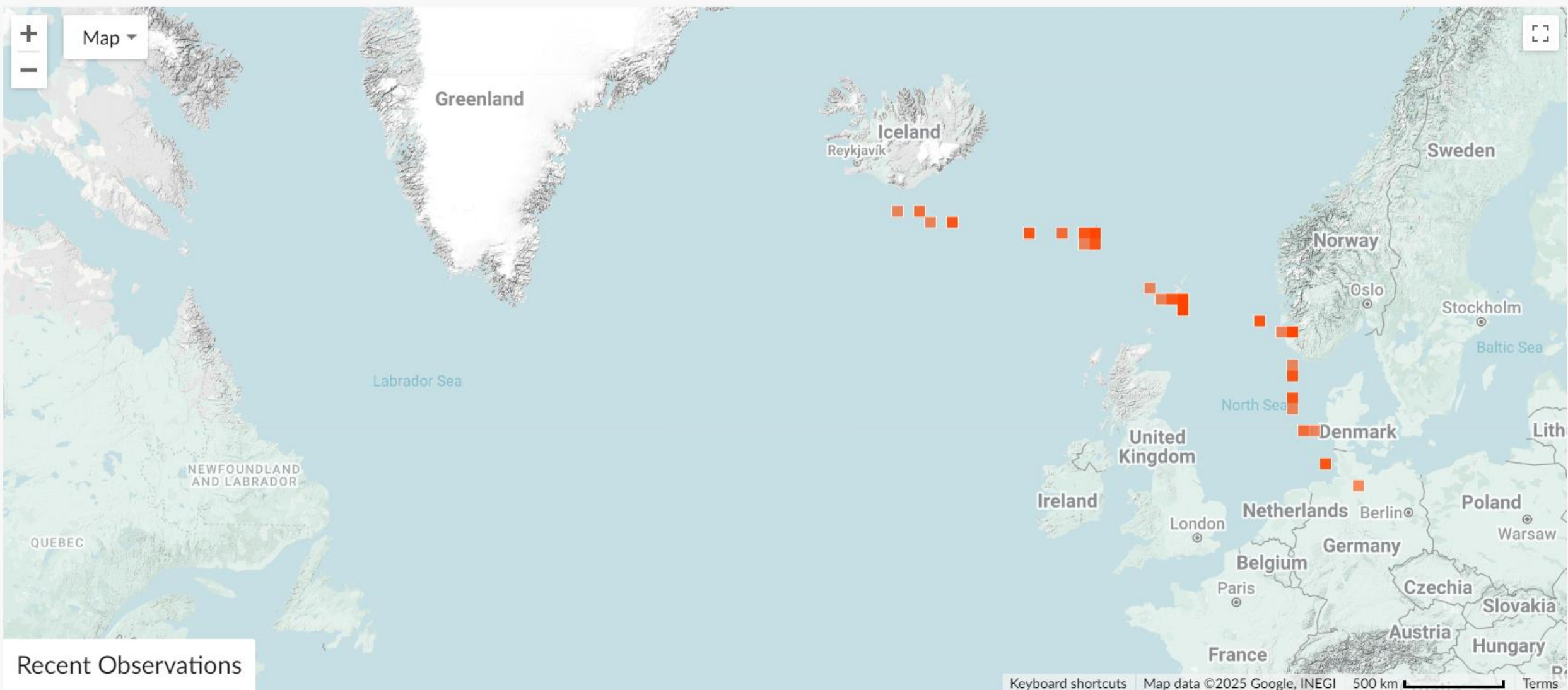
Click on the [link](#) to view our collective data and see the impact of your contributions:

View our [data](#) on the iNaturalist website



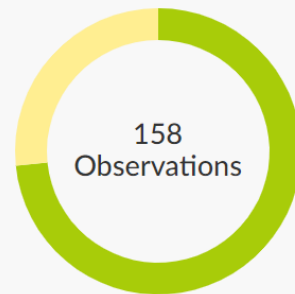
# FNICE2503 – MS Fridtjof Nansen 4-10.5.2025

## Map of Observations

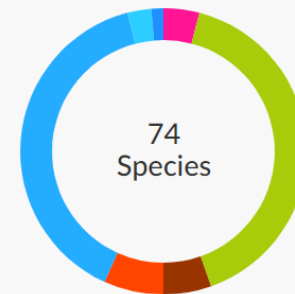


# FNICE2503 – MS Fridtjof Nansen 4-10.5.2025

## Stats



- Research Grade
- Needs ID
- Casual



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

## Recent Observations [→](#)

[View All](#)



Parasitic Jaeger  
*Stercorarius parasiticus*

2 19h



Northern Fulmar  
*Fulmarus glacialis*

3 1d



Northern Gannet  
*Morus bassanus*

2 1d



Northern Fulmar  
*Fulmarus glacialis*

2 1d



# eBird

Bird-watching isn't just a hobby—it's a powerful tool for science. eBird, a global citizen science platform, allows bird enthusiasts to record and share sightings, contributing valuable data for research and conservation.

During our voyage, our onboard ornithologists conducted 4 wildlife watches, completing 32 checklists and recording 44 bird species along the way.

Every entry adds to a growing database that helps scientists track migration patterns, monitor populations, and understand bird behaviour around the world.

Click on the **link** to view our collective data and see the impact of your contributions:

View our [data](#) on the eBird website



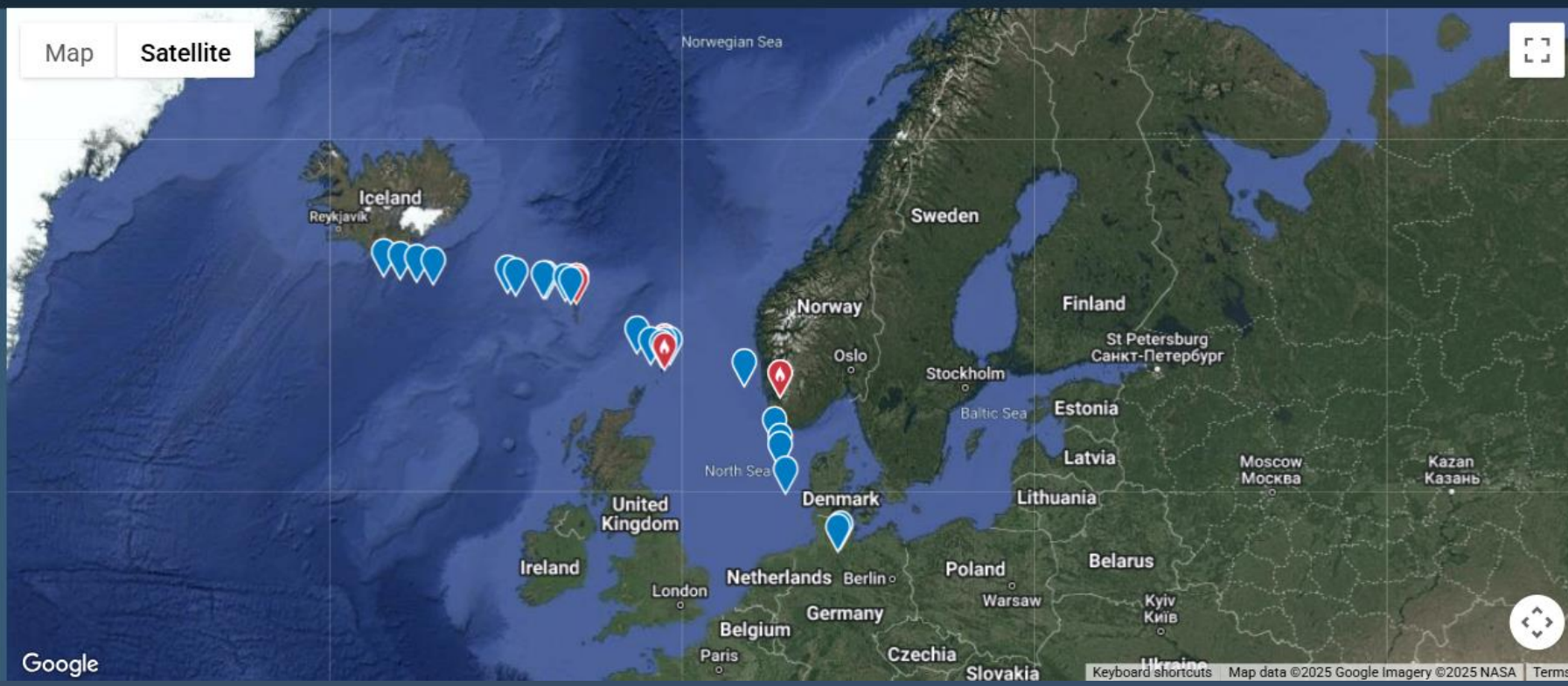
# FNICE2503 MS Nansen: Hamburg to Reykjavik (4-10 May 2025)

4 – 10 May 2025 (7 days) **Public**

Denmark | Faroe Islands | Germany | Iceland | Norway | United Kingdom **Subregions**

Simon Delany, Ingvild Riska, Marcus Bergström, Science Coordinator

Share Edit





# Wildlife List - Birds



# Wildlife List – Birds

Scientific Name	English	Deutsch	Français
<i>Anser anser</i>	Greylag Goose	Graugans	Oie cendrée
<i>Anser brachyrhynchus</i>	Pink-footed Goose	Kurzschnabelgans	Oie à bec court
<i>Cygnus olor</i>	Mute Swan	Höckerschwan	Cygne tuberculé
<i>Somateria mollissima</i>	Common Eider	Eiderente	Eider à duvet
<i>Anas platyrhynchos</i>	Mallard	Stockente	Canard colvert
<i>Tadorna tadorna</i>	Common Shelduck	Brandgans	Tadorne De Belon
<i>Columba livia</i>	Rock Dove/ Feral Pigeon	Felsentaube	Pigeon Biset
<i>Streptopelia decaocto</i>	Eurasian Collared Dove	Türkentaube	Toruterelle turque
<i>Haematopus ostralegus</i>	Eurasian Oystercatcher	Austernfischer	Huïtrier Pie
<i>Vanellus vanellus</i>	Common Lapwing	Kiebitz	Vanneau huppé
<i>Arenaria interpres</i>	Ruddy Turnstone	Steinwälzer	Tournepieuvre À Collier
<i>Stercorarius skua</i>	Great Skua	Skua	Grand Labbe
<i>Stercorarius parasiticus</i>	Arctic Skua/ Parasitic Jaeger	Schmarotzerraubmöwe	Labbe Parasite
<i>Uria aalge</i>	Common Guillemot/ Common Murre	Trottellumme	Guillemot Marmette
<i>Alca torda</i>	Razorbill	Tordalk	Petit Pingouin
<i>Cephus grylle</i>	Black Guillemot	Gryllteiste	Guillemot À Miroir
<i>Fratercula arctica</i>	Atlantic Puffin	Papageitaucher	Macareux Moine

# Wildlife List – Birds

Scientific Name	English	Deutsch	Français
<i>Rissa tridactyla</i>	Black-legged Kittiwake	Dreizehenmöwe	Mouette Tridactyle
<i>Chroicocephalus ridibundus</i>	Black-headed Gull	Lachmöwe	Mouette Rieuse
<i>Larus canus</i>	Common Gull/Mew Gull	Sturmmöwe	Goéland Cendré
<i>Larus marinus</i>	Great Black-backed Gull	Mantelmöwe	Goéland Marin
<i>Larus argentatus</i>	European Herring Gull	Silbermöwe	Goéland Argenté
<i>Larus fuscus</i>	Lesser Black-backed Gull	Heringsmöwe	Goéland Brun
<i>Gavia stellata</i>	Red-throated Diver/ Red-throated Loon	Stern-Taucher	Plongeon Catmarin
<i>Fulmarus glacialis</i>	Northern Fulmar	Eissturmvogel	Fulmar Boréal
<i>Morus bassanus</i>	Northern Gannet	Basstölpel	Fou De Bassan
<i>Phalacrocorax aristotelis</i>	European Shag	Krähenscharbe	Cormoran Huppé
<i>Phalacrocorax carbo</i>	Great Cormorant	Kormoran	Grand Cormoran
<i>Phalacrocorax carbo</i>	Great Cormorant	Kormoran	Grand Cormoran

# Wildlife List – Birds

Scientific Name	English	Deutsch	Français
<i>Corvus corax</i>	Northern Raven	Kolkrabe	Grand Corbeau
<i>Corvus corone</i>	Carrion Crow	Rabenkrähe	Corneille noire
<i>Corvus cornix</i>	Hooded Crow	Nebelkrähe	Corneille mantelée
<i>Phylloscopus trochilus</i>	Willow Warbler	Fitis	Pouillot fitis
<i>Phylloscopus collybita</i>	Common Chiffchaff	Zilpzalp	Pouillot veloce
<i>Troglodytes troglodytes</i>	Eurasian Wren	Zaunkönig	Troglodyte Mignon
<i>Sturnus vulgaris</i>	Common Starling	Star	Étourneau Sansonnet
<i>Turdus merula</i>	Common Blackbird	Amsel	Merle Noir
<i>Erithacus rubecula</i>	European Robin	Rödhake	Rougegorge familier
<i>Oenanthe oenanthe</i>	Northern Wheatear	Steinschmätzer	Traquet motteux
<i>Passer domesticus</i>	House Sparrow	Haussperling	Moineau domestique
<i>Motacilla alba</i>	White Wagtail	Bachstelze	Bergeronnette grise
<i>Fringilla coelebs</i>	Chaffinch	Buchfink	Pinson des arbres
<i>Anthus pratensis</i>	Meadow Pipit	Wiesenpieper	Pipit Farlouse
<i>Corvus cornix</i>	Hooded Crow	Nebelkrähe	Corneille mantelée



**Common Eider**(*Somateria mollissima*)



Credit: Ingvild Riska/HX



**Atlantic Puffin (*Fratercula arctica*)**

# Wildlife

## List - Marine Mammals



# Wildlife List – Marine Mammals

Scientific Name	English	Deutsch	Français
<i>Halichoerus grypus</i>	Grey seal	Kegelrobbe	Phoque gris
<i>Phoca vitulina</i>	Harbour seal	Kegelrobbe	Phoque commun
<i>Globicephala melas</i>	Long-finned pilot whale	Grindwal	Globicéphale commun
<i>Capra ibex</i>	Mountain goat	Alpensteinbock	Chèvre des montagnes Rocheuses

The image features two whales swimming in deep blue water. One whale is in the foreground, larger and more detailed, while another is behind it. The word 'INNER' is written in large, semi-transparent blue letters across the background. The text 'Connect With Your Inner Scientist' is overlaid in white, bold font.

**Connect With Your Inner Scientist**