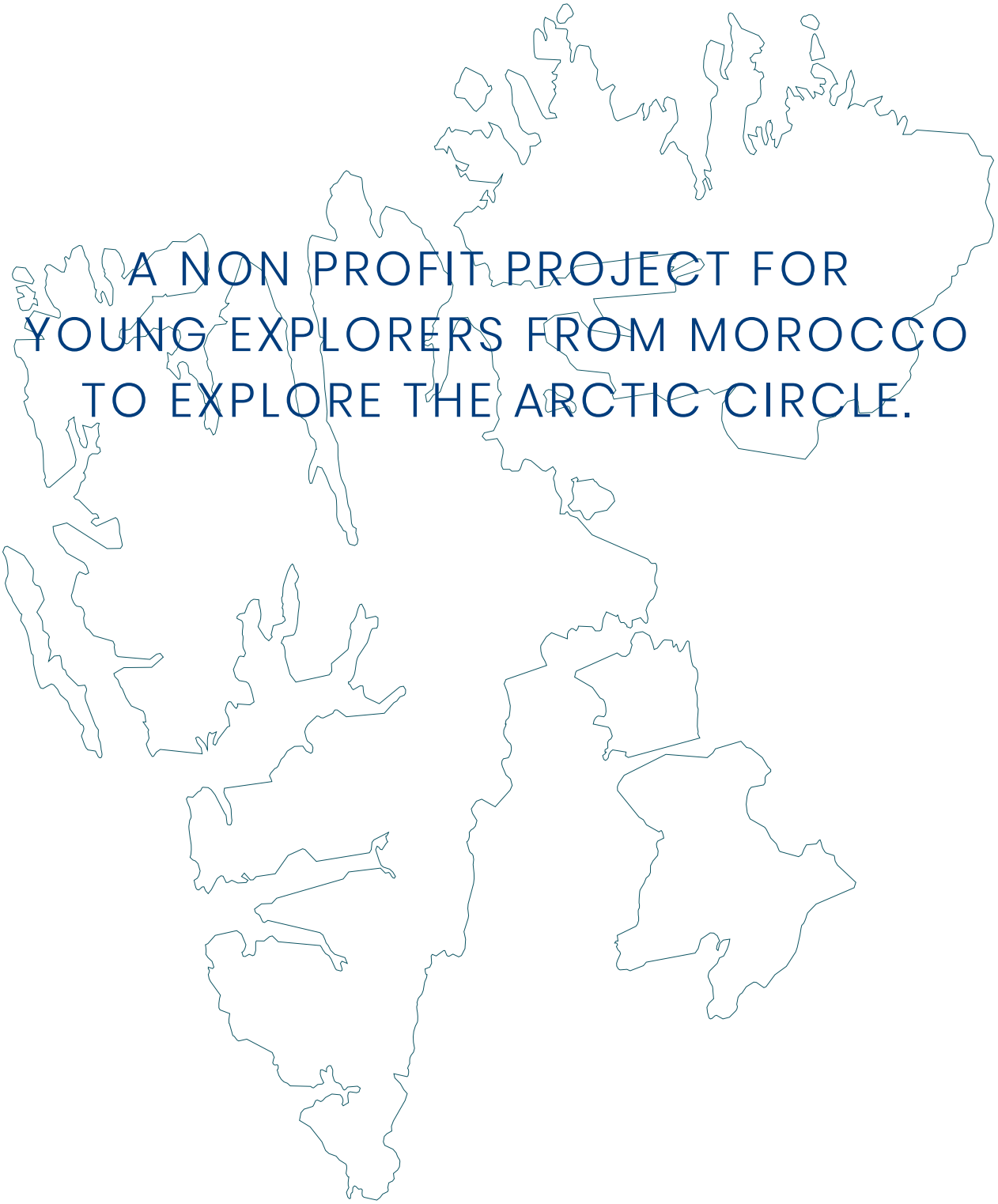
# DESTINATION SVALBARD

## 34° TO 78° N



A NON PROFIT PROJECT FOR YOUNG EXPLORERS FROM MOROCCO TO EXPLORE THE ARCTIC CIRCLE.

@explore.svalbard


We believe the outdoors can change lives!

Educating through emotion, through discovery and experience, and creating empathy with nature are the best ways to awaken young people to the seriousness of climate change.
This is a once in a lifetime opportunity.  Join us for an extraordinary adventure.

« Life changing »  is how you will describe it!

expedition
SVALBARD
34°  78°N

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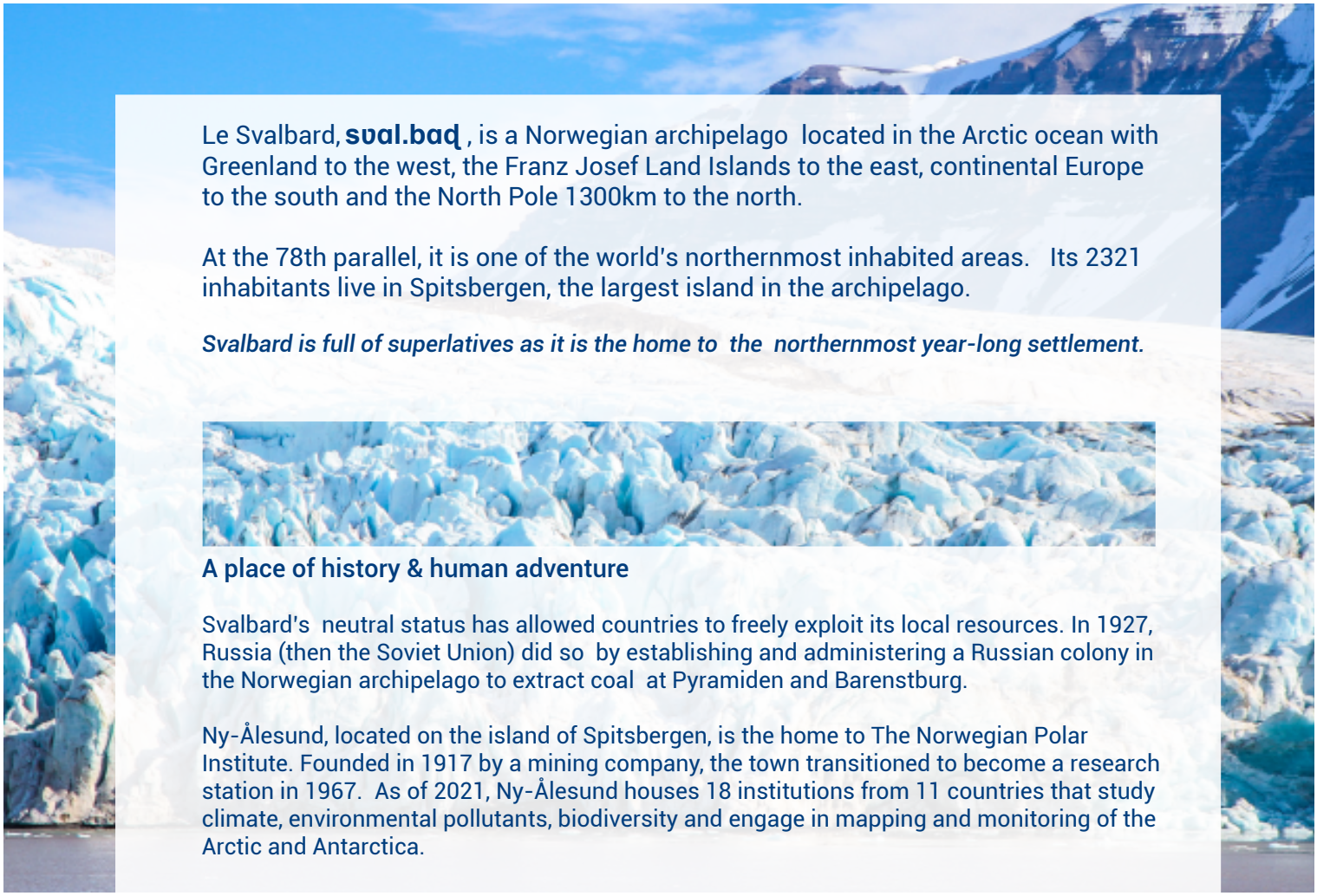
# PRESENTATION



Le Svalbard, **svɑl.bɑɖ** , is a Norwegian archipelago located in the Arctic ocean with Greenland to the west, the Franz Josef Land Islands to the east, continental Europe to the south and the North Pole 1300km to the north.

At the 78th parallel, it is one of the world's northernmost inhabited areas. Its 2321 inhabitants live in Spitsbergen, the largest island in the archipelago.

***Svalbard is full of superlatives as it is the home to the northernmost year-long settlement.***



## A place of history & human adventure

Svalbard's neutral status has allowed countries to freely exploit its local resources. In 1927, Russia (then the Soviet Union) did so by establishing and administering a Russian colony in the Norwegian archipelago to extract coal at Pyramiden and Barenstburg.

Ny-Ålesund, located on the island of Spitsbergen, is the home to The Norwegian Polar Institute. Founded in 1917 by a mining company, the town transitioned to become a research station in 1967. As of 2021, Ny-Ålesund houses 18 institutions from 11 countries that study climate, environmental pollutants, biodiversity and engage in mapping and monitoring of the Arctic and Antarctica.

## A unique ecosystem

The land of ice and polar bears, Svalbard is one of the fastest warming regions on Earth. Its position and its fragile ecosystem make it a place where climate change is visible, notable and witnessed.

Approximately, sixty percent of Svalbard is covered with glacier ice. Thirty percent is covered by barren rock, leaving ten percent vegetated. It experiences midnight sun for 99 days during summertime and polar night for 84 days during the winter.

## A witness of climate change

The dome-like shape of Svalbard's glaciers causes them to be more susceptible to climate warming. They can be considered the canary in the coal mine and thermometers of climate change. During the 1980s, rising air temperatures caused the glaciers to lose some of their protective fern layer, causing a large increase in melting. In 2013's warm summer, loss of ice mass doubled compared to previous years.

Between 1970 and 2020, the average annual temperature and average winter temperature in Svalbard increased by 4°C and 7°C respectively. In July 2020, the weather station on Longyearbyen, the fastest warming city in the world, recorded a temperature of 21.7°C breaking the 41 year old record. Since 1971, Svalbard's average temperatures have increased five times faster than the global average.

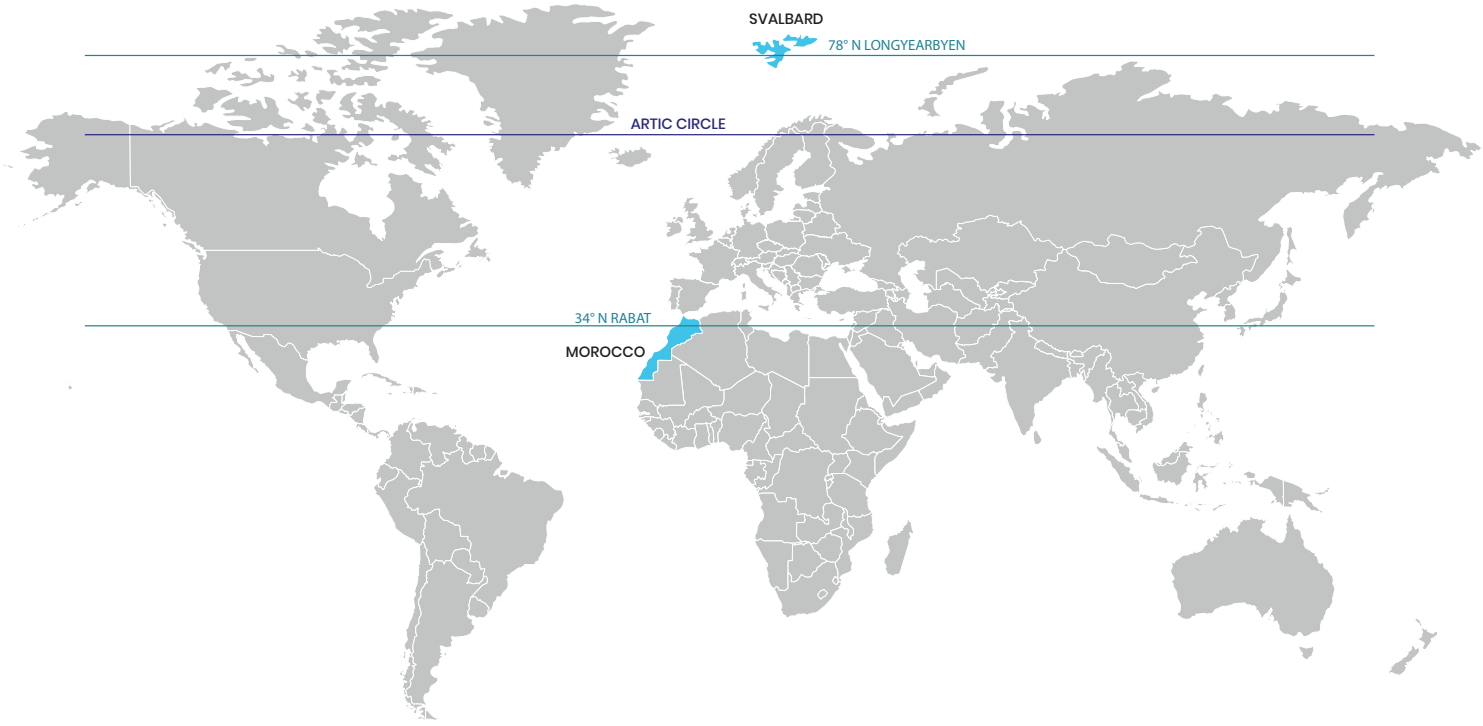
# PRESENTATION

## Solutions for the future

A special feature of Svalbard is the Svalbard Global Seed Vault (Norwegian: Svalbard global frøhvelv). Located deep inside a mountain, the seed vault  holds the world's largest crop collection of seed samples. With more than one million samples from almost every country in the world, the aim of the Vault is to safeguard the world's genetic crop material.

The location of the Vault is ideal for long-term storage. It is built 100m into the mountain, is located in a geologically stable area, and is well above sea level.  The surrounding permafrost helps conserve the seed collection at -18° C.  Owned by the Norwegian government, it is co-funded by the Rockefeller Foundation, the Syngenta Foundation and various private organizations.

*" Svalbard is not just a place, it's an experience to be lived ! "*

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# THE PROJECT

## Experiential learning teaches students to reflect on their actions and thought processes.

The focus of our trip to Svalbard is to engage students in a direct experience with climate change in the Arctic. With the Arctic acting as a thermometer of the Earth and Africa being a continent that could likely be the hardest hit by climate change, we hope to empower the students at the Rabat American School to take climate action into their own hands. While climate change affects the lives of many, it is the younger generations who will likely witness and experience extreme environmental changes.

According to the UN's Climate Change News in October 2020, Africa has experienced a study increase in temperature with 2019 being one of the warmest on record for the continent. Rising sea levels and coastal erosion have affected approximately 56 percent of the coastlines in West Africa. Extensive drought, floods, heavy rainfall, and landslides have plagued communities throughout Africa along with drastic impacts on food security.

The UN's Climate News also states that Africa has made great progress in its climate action efforts. Over ninety percent of the continent has ratified the Paris Agreement and clean energy and agriculture are the priority in over seventy percent of African NDCs (nationally determined contributions).

We hope that by witnessing climate change in the Arctic and learning about its effect on Africa, our students, the future generations of Morocco and other nations, will reflect on their own lives and play a leadership role in taking action on climate change.

The journey from Rabat to Svalbard, the 34th parallel to the 78th, North Africa to the most northern community in the world, is long. However, these two distinct and different ecosystems are intimately connected by the impacts of climate change. We hope to highlight this connection with our students and school community.

# OVERVIEW OF THE TRIP

During this trip, we will spend our time on Spitsbergen, the largest island in the Svalbard
archipelago, exploring the town and surrounding area of Longyearbyen, and the Sveabreen glacier area.

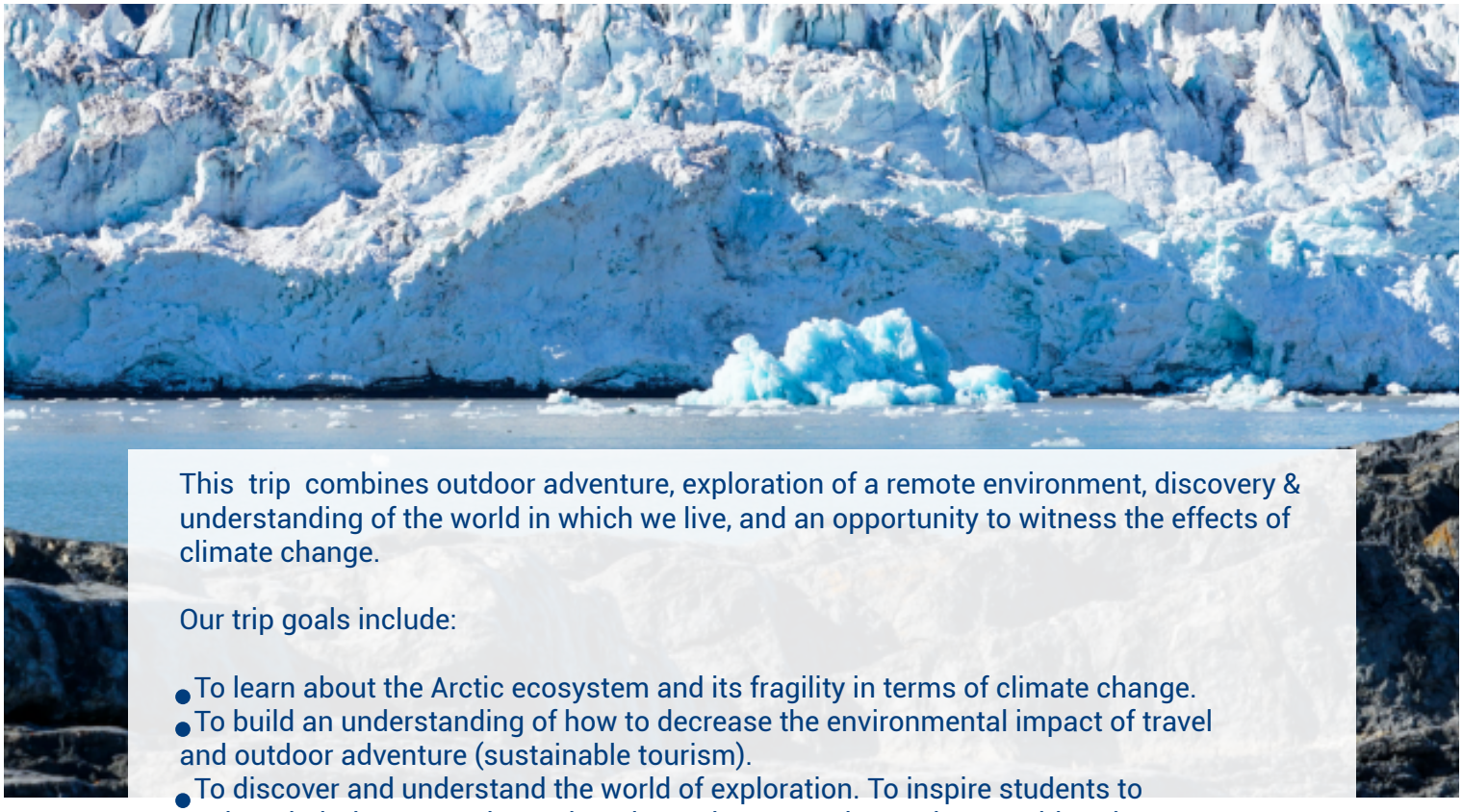
**Longyearbyen** is located at latitude 78˚ North – just 1,316 km from the North Pole. During our stay here, we will learn about the history of this coal mining town at the Svalbard museum, engage with students and scientists studying at The University Center in Svalbard (UNIS), visit the surrounding bird sanctuaries, the Seed Vault, and fossil hunt while hiking on the Longyearbreen and Larsbreen glaciers at the head of the valley where Longyearbyen lies. In between these adventures, we will explore the town, meeting locals who call this Arctic island home and observe the reindeers roaming around town undistributed by the passersby.

We will then head by zodiac to the majestic **Sveabreen Glacier** for 6 days of camping on the beach close to the glacier. Beware it is Polar Summer during which time the sun doesn't set so day becomes night and night becomes day!

we will spend our time in this region hiking on the glacier and the tundra
and exploring the surrounding glacier and icebergs by kayak.

With safety and security at the forefront, our guides will plan our excursions according to weather conditions and guard us and instruct us on how to be on watch for polar bears.

# TRIP GOALS



This trip combines outdoor adventure, exploration of a remote environment, discovery & understanding of the world in which we live, and an opportunity to witness the effects of climate change.

Our trip goals include:

- To learn about the Arctic ecosystem and its fragility in terms of climate change.
- To build an understanding of how to decrease the environmental impact of travel and outdoor adventure (sustainable tourism).
- To discover and understand the world of exploration. To inspire students to explore their dreams and turn them into adventures that make a positive change in their community.
- To gain an awareness of the effects of climate change and translate this awareness into action for our community.
- To be independent, responsible, organized and cooperative in pursuit of healthy outdoor activities and learning.
- To build bonds and establish positive and productive team dynamics and culture within the group.

Areas of Interest

- Working with scientists in the field to learn how glaciers are studied, how they are linked to climate change, how growth and loss are measured.
- Discovering the flora and fauna through various hikes, kayak trips and boating excursions and to reflect on how this fragile ecosystem is affected by climate change and tourism.
- To learn about the history, conservation and geopolitics of Svalbard.
- Learning about the research center in Ny Ålesund and The University Center in Svalbard (UNIS).
- Visiting the seed vault to learn about its construction and its role in seed conservation.
- Working to understand the process of mountain guide certification and the world of exploration.
- Understanding the benefits and the environmental impact of tourism on Svalbard.

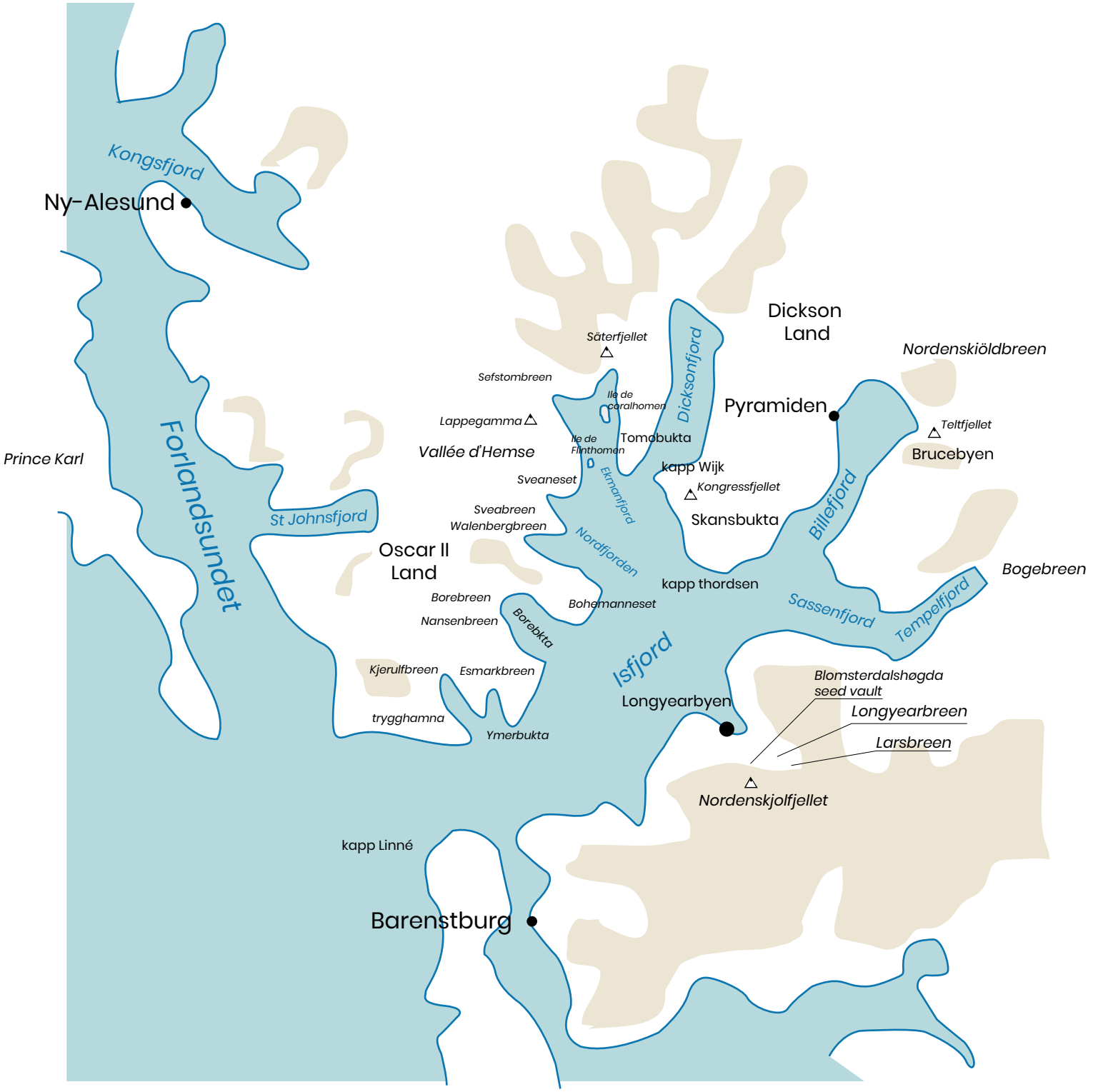
# IMPLEMENTATION

In order to prepare our trip with the students in 2023, we have already carried out a one-month reconnaissance trip in June 2022 to Svalbard.

**This scouting trip was enable us to :**

- Explore Svalbard and Longyearbyen
- Visit and explore areas of interest for the students.
- Work through various itineraries and options that can be explored with students.
- Gain an understanding of safety measures, logistics and gear that is needed for a trip in late spring.
- Create a comprehensive packing list to ensure comfort and safety on the trip.
- Meet and make contacts with local guides and facilities/venues of interest.
- Prepare the itinerary and trip budget for a group of students and three supervisors.
- Introduce our project and build partnerships.

# THE MAP




*Esmarkbreen is a glacier in Oscar II Land at Spitsbergen, Svalbard. It is named after geologist Jens Esmark. The glacier has a length of 15 kilometers, and debouches into the bay Ymerbukta at the northern side of Isfjorden.*

*Sveabreen is a glacier between Oscar II Land and James I Land at Spitsbergen, Svalbard. It has a length of 30 kilometers (19 mi), stretching from Kongsvegpasset at an altitude about 750 meters (2,460 ft), and debouching into Nordfjorden.*

# THE TEAM

**Our Svalbard team of students is an international group.**

They range in age from 14 to 16 and come from countries including Morocco, Ethiopia, Canada, Austria, Venezuela, and Spain, as well as the United States and France.

They can't wait to "build bonds," "enjoy exploring the Arctic," "explore new things in a location I've never been," and "hang out with friends"!

Their goals

"To build bonds and have a good time exploring the arctic"

"I want to learn about the Arctic ecosystem and take this to my advantage and have a great experience with my friends and use this in my future college application."

# THE TEAM

We're Sandy, Fatima Zhora & Olivier. Sandy is Canadian, Fatima Zohra is Moroccan and Olivier, French.

## Sandy

Sandy is a middle school math and science teacher at the Rabat American School. She also designed and coordinates the school's Week Without Walls program. This program takes students from grades 6 - 11 on a week-long adventure to explore different regions in Morocco. The goals of these trips are to encourage students to be independent, responsible, organized and cooperative in pursuit of healthy outdoor activities and learning, to build bonds and establish positive and productive team dynamics and culture within the class/grade and to improve student understanding and appreciation of the region and its cultures. She is an adventurer, swimmer and lifeguard. She enjoys sharing it with her students.

**Here adventures include**

- 800 km solo walk to Saint Jacques de Compostela
- The ascent of Kililandjaro at 5895 m
- The ascent of Mt Toubkal six times with student groups. at 4,167 m
- The tour of Mont Blanc in Solo
- Many other treks in Europe and Canada
- Lakes route in British columbia (hiking + canoeing)
- Crossing the Strait of Gibraltar on a paddleboard from Algeciras to Ceuta

## Olivier

He's the creator of the team. Working as a designer, he works with Sandy to create student booklets, posters and infographics.
From an early age, he learned to appreciate and respect the beauty of nature and its fragile ecosystems. In 1999, he worked for several weeks helping treat and clean birds affected by the Erika oil spill. He regularly participates in beach cleaning sessions and lives his life keeping his ecological footprint as small as possible.

Passionate about the outdoors, he regularly travels throughout Morocco, visiting remote areas to discover nature and the local culture.

For several years he worked in a contemporary art center working with children to build an awareness of Art, an understanding of its culture, and learning to see the world using this len.

He regularly contributes to educational and popular science projects.

Living in Morocco and exploring the great outdoors by land and sea has allowed Sandy and Olivier to discover its desert, mountains and coastline. One of their shared passions is paddle boarding because it allows us to connect with the sea and the air.

In 2018, we crossed together the Strait of Gibraltar making a connection between Europe and Africa.

# THE TEAM

## Fatima Zhora

Fatima grew up beside the water in Rabat, where she sailed and swam from an early age, becoming proficient with small boats, taking part in various 10k and 20k sailing competitions throughout her teens. She is a seasoned hiker,  with great experience throughout Morocco, especially the Rif and High Atlas Mountains, but also the Sahara and Atlantic Coast.

She has experience leading school field trips and managing group dynamics. These school trips are designed to help students to be independent, responsible, organized and cooperative in pursuit of healthy outdoor activities and learning.

At school, she teaches grades 8-10 Physical Education, alongside Science and Mathematics, a versatility that gives her a deep and solid understanding of the natural world. She currently coaches the swim team as swimming is her passion.

Fatima is fluent in three languages, English, Arabic, French, and proficient in Spanish.

# EQUIPMENT

City clothes :
- 1 pair of pants
- 2 t-shirts
- 3 pairs of underwear
- 3 socks

Technical clothing (other clothing can be rented if necessary)

- Waterproof hiking boots
- Knee height rubber boats
- Hiking poles (optional)
- 2 x Beanies (thick and thin)
- Hat for sun
- Sunglasses with UV protection
- Scarf/Neckwarmer
- Windproof/Waterproof jacket and pants
- Down jacket (packable) -
- 2x Wool sweater/fleece
- 2x Hiking pants -
- 2 x wool base layer top and bottom
- 4 pairs of hiking socks (2 thick and 2 thin)
- 1 pair of walking shoes/sneakers
- 2 x gloves (1 pair lightweight, 1 pair for warmth)
- 3 x short sleeve shirts - quick dry
- Water bottle or Thermos (750mL)
- Sleeping mask (to sleep in the polar light)
- Swimsuit for an arctic swims
- Travel size toiletries (personal basics, soap, toothbrush, toothpaste ecofriendly is better)
- Small First aid kit (personal medication, blister care, allergy and paracetamol tablets)
- Sunscreen & lip balm
- Quick dry towel and face cloth
- Camera
- Power bank
- Small inflatable pillow (optional - you can use your down jacket like a pillow)
- Binoculars (optional - We will have a couple pairs to lend)
- Backpack for hiking
- Notebook and pencil/pen
- Book
- Moroccan Babouche (something from the 34° to gift to the 78°N)

# CLIMATE

## Longyearbyen

| | JAN | FÉBR. | MARS | APR. | MAY | JUN | JUL | AUG | SEPT | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Durée du jour | 00h00 | 05h00 | 07h00 | 24h00 | 24h00 | 24h00 | 24h00 | 22h00 | 13h00 | 05h00 | 00h00 | 00h00 |
| Températures moyennes | -19° / 0° | -17° / 0° | -19° / 0° | -17° / 2° | -4° / 5° | 0° / 10° | 4° / 11° | 2° / 10° | 3° / -6° | 3° / -6° | 2° / -7° | -19° / 0° |

Time period for the trip

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# CONTACTS

By learning about and experiencing the Arctic ecosystem first hand, students will gain a deeper understanding of its fragility due to climate change and marine pollution (microplastics) and we challenge our students to translate this awareness into action for our and their own communities.

## WE BELIEVE THE OUTDOORS CHANGES LIVES

Educating through emotion, through discovery and experience, and creating empathy with nature are the best ways to awaken young people to the seriousness of climate change. We believe that learning to explore differently, to understand in order to better preserve, and simply to act while having a good time are important..

FOLLOW US ON INSTAGRAM
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OUR PROJECT AND SVALBARD.
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FOR YOUR SUPPORT !

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