

COORDINATES: 66°S, 64°W

TWITTER TIME

7:00 AM
Woke up and had breakfast. Last night's snowfall covered everything! ❄️

7:55 AM
Using the snowmobile and RADAR to scan the glacier! #Glacier

9:37 AM
The scan revealed the inside of the glacier and we found a spot to drill our fourth ice core. After drilling, Roxana will help me move the cores to the snow tunnel.

10:14 AM
This video shows weather similar to what we are seeing in Antarctica. 

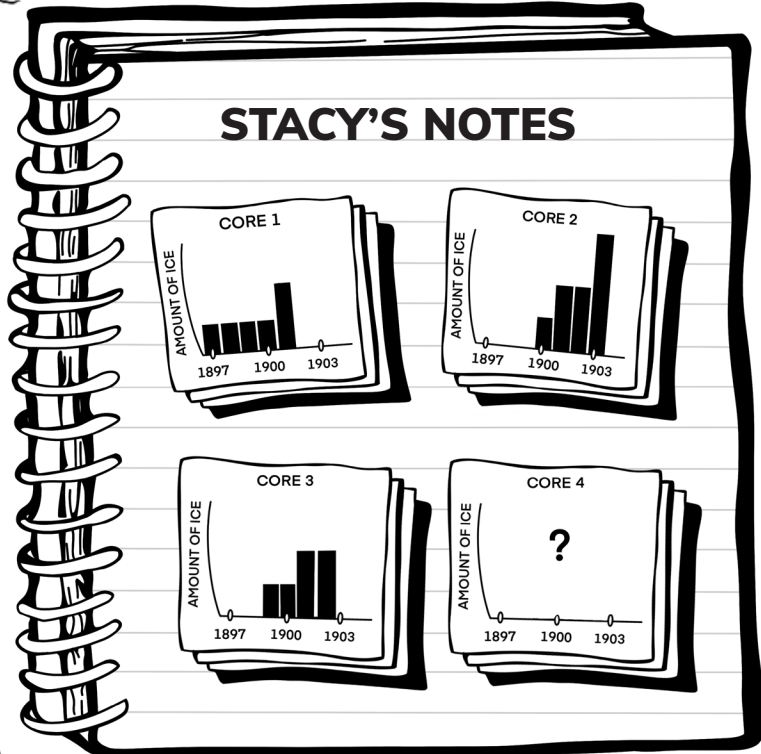
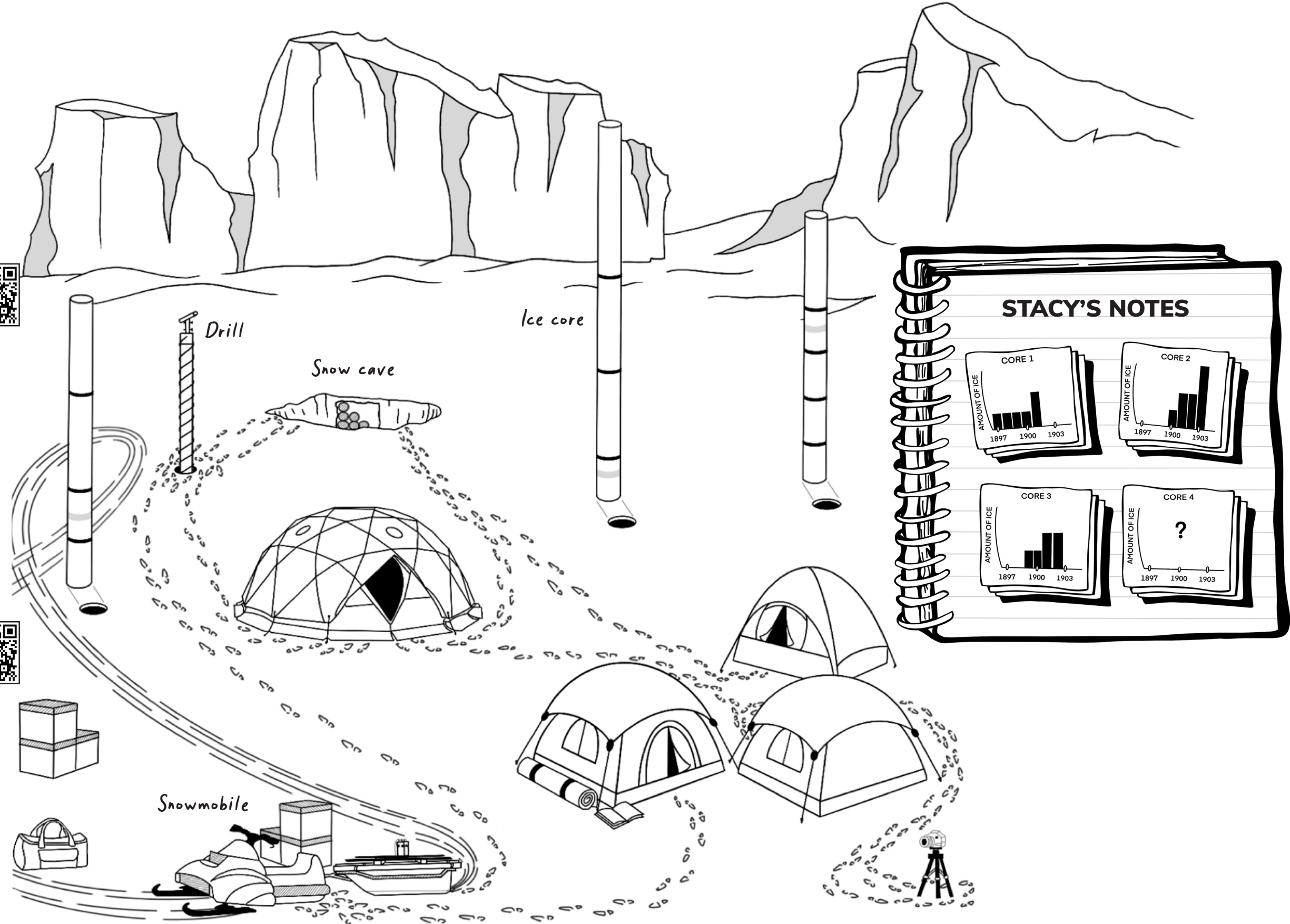
12:06 PM
Time to eat lunch with Roxana and Emilie and review the data from the first three ice cores! #NewData 🇮🇹

1:32 PM
Each ice core layer = 1 year of snow. Thick layers mean more snow fell that year and thin layers mean there was dry weather. The oldest layer is always at the bottom of the ice core.

2:28 PM
The cores appear to have ash from a large volcanic eruption in 1990. This ash layer in all three cores will help us create a timeline of the weather over a few years. 🌋

3:49 PM
Emilie is taking pictures and videos with her camera. This is what the drilling process looks like. #Ice 

6:01 PM
We should be done collecting cores in a few days, but before we leave, we need to carefully pack the cores so they stay frozen during the trip home!



Engagement Activity: Keep It Cool!



Activity How-To Video

When paleoclimatologists move ice cores from glaciers to their labs, they need to make sure that the cores don't melt on the way. In this activity, you will design, build, and test a container made from household items to keep an ice core frozen. A day before you start, fill your ice cube tray with water and place it in your freezer! You will need two ice cubes for testing. These cubes will be your ice core! If you don't have ice cube trays, fill a yogurt or similar container 3/4 of the way with water and freeze it.

Materials:

- 2 ice cubes (these will be your ice core)
- 1 square piece of foil
- 1 full sheet of newspaper
- 1 sealable plastic sandwich bag
- 1 piece of cardboard (the front of a cereal box works well)
- 1 napkin
- 1 piece of black construction paper
- 1 piece of fleece or 1 oven mitt (optional)

Directions:

1. Brainstorming Phase: Spend 10-15 minutes brainstorming a design for your container. Draw this design so you can use it as a guide when building your container. Write down why you think your design will work well and why.
2. Building Phase: Spend 10-15 minutes building your container using the materials gathered. Make sure to leave a way to add your ice core at the end.
3. Testing Phase: Place the ice cores (your two ice cubes) into your plastic bag, seal the bag, and place the bag in your container. Place your loaded container outdoors in the sun for 30 minutes. When the 30 minutes are over, remove the plastic bag from your container and measure the water that melted using a teaspoon. You want as little water to melt as possible. How many teaspoons did you melt?

Questions:

1. Why do you think your container was successful or unsuccessful? What changes could you make to your container to keep more ice frozen?

Draw your design here:

Ice Is Nice

This person travels to massive sheets of ice; Coring through hundreds of feet is what she finds nice.

Her tools are RADAR, notebooks, and drills; She transports ice samples to the lab frozen still.

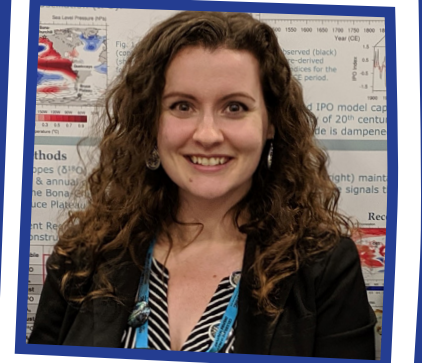
Though conditions in this frozen landscape can be snowy, windy, and cold; She works to make sure Earth's climate history is told.



With my team!



Playing games with friends.



Stacy Porter



Sharing what I have found.



Hiking near a glacier.