



Introduction to Glacial Change in Greenland - Student Guide

Instructions: You will use this notebook to guide your explorations of QGreenland and take notes on the processes you follow. Note that *italicized words* refer to a specific file, data layer, or layer group name.

Bold terms refer to a button, menu, or function within QGIS.

Part 1: Navigating QGreenland

1. Both QGIS and QGreenland must first be installed on your computer. Follow the directions at qgreenland.org to install both.
2. Navigate to the QGreenland folder on your computer. Open QGIS by double-clicking *qgreenland.qgz*
3. Explore the layers panel on the left-hand side of your screen. Try expanding the category groups (click on the arrows ▶) and toggling layers on/off by clicking the box (☐/☑) next to the layer name.
4. Click to expand the *Glaciology* group and then click to expand the *Glacier terminus positions 2000-2021* group.
5. Click the check box to turn the *Glacier IDs* layer on. Examine the map view to what is now visible.

Part 2: Measuring Terminus Retreat

You will choose two different glaciers and measure the position of the terminus of each of the glaciers at several time points. Follow the directions presented in class and enter data on the next page.



Glacier name: _____ Location (Coordinates): _____

Year	Terminus End	Terminus End	Terminus Center

Glacier name: _____ Location (Coordinates): _____

Year	Terminus End	Terminus End	Terminus Center



Questions:

1. Which year/time period did the terminus move the most for each glacier?
2. Which glacier had the greatest change?
3. Compare the movement of the different glaciers. Did you note any trends in the change in the terminus location?