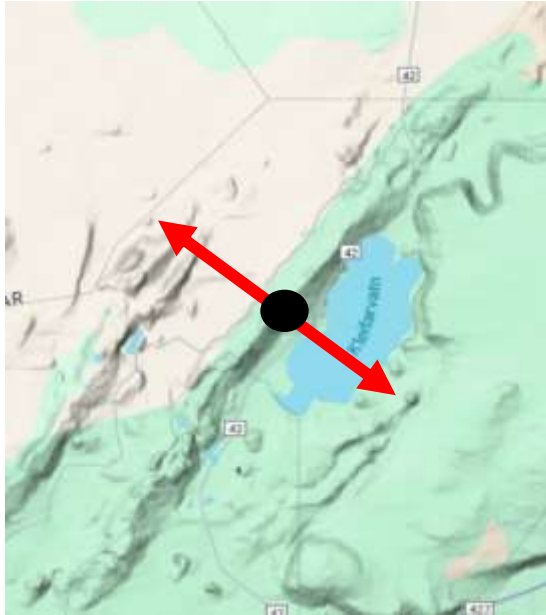


## Group Project 8

Groups 1 through 4 are each assigned a different of Iceland

You will be examining both (1) hyaloclastite ridges and (2) hyaloclastite hills and table mountains. Divide your group into two (possibly overlapping) sub-gr0ups for each.

**The ridge subgroup** will measure the apparent plate tectonic spreading direction using the orientation of the ridge.



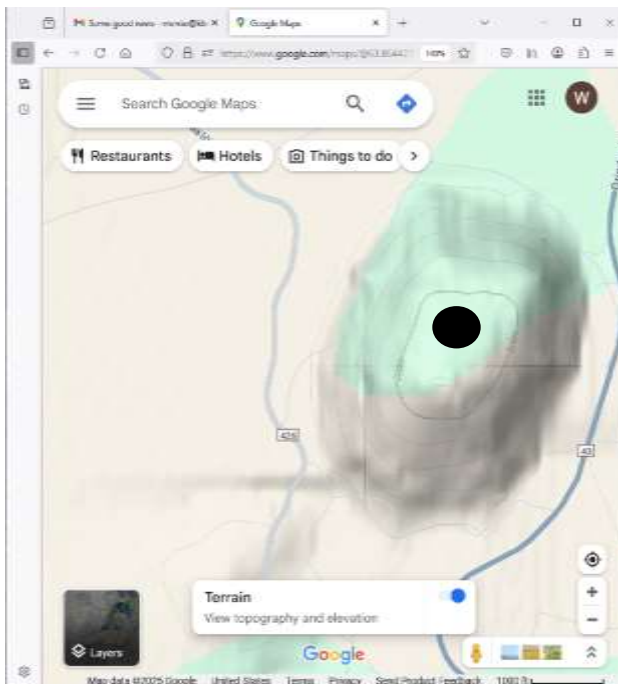
Make a table with the lat/lon of the center of the ridge and the apparent spreading direction, measured in the 0-180 degree range. For instance, this ridge has

63.9329, -22.0080, 125.0 deg

Measure 20-30 ridges in your part of Iceland. Divide the measurements into about geographical clusters, average the apparent spreading direction for each and plot them as red, double-ended arrows on the attached map of Iceland.

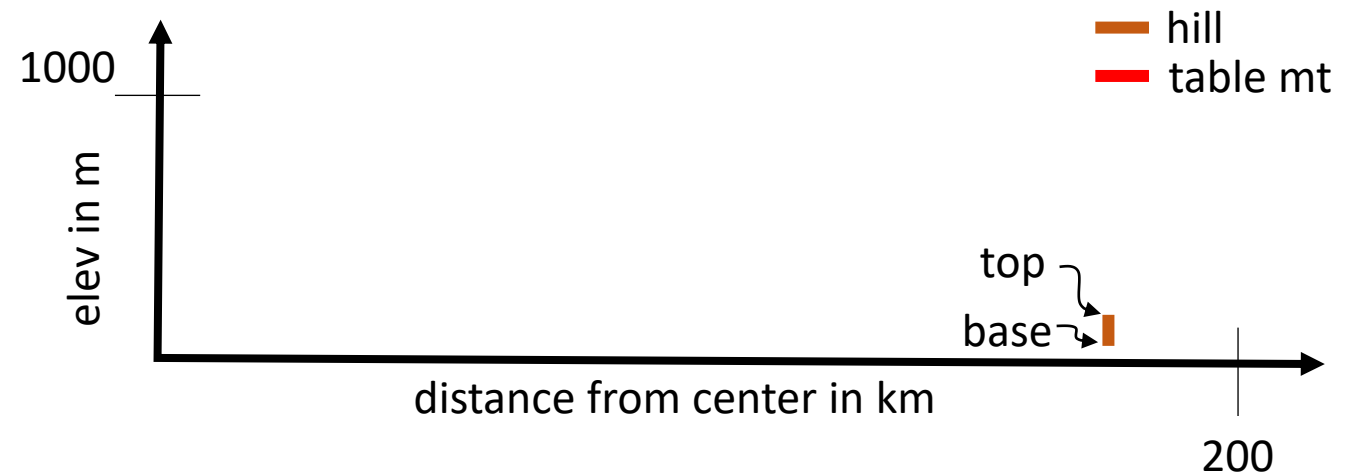
Beware that other geomorphological features, such as aretes, superficially resemble hyaloclastite ridges. o do you bet to avoid them.

**The hill/table mountain subgroup** will measure the lat/lon of the hill, its elevation and that of the surrounding land. Also assess whether there is evidence for the hill being a table mountain, for example its summit being very flat or having volcanic crater. Use H and T to distinguish. Finally, measure its distance in from the center of Iceland



63.8653, -22.4373, 240.0 m, 40.0 m, H, 184 km

Measure 20-30 hills broadly distributed in the study area, and then plot the data on the attached plot. An example is shown here



I urge using hills that have a simple shape and that are not too big (say diameter less than 20 km)

Center of Iceland: **64°46'56.9"N 18°18'01.3"W**

**Group 1: North of the center of Lake Askja**

**Group 2: South of the center of Lake Askja and east of the center of Lake Þórisvatn**

**Group 3: South of the center of Lake Askja, west of the center of Lake Þórisvatn, and east of the center of lake Þingvallavatn**

**Group 4: South of the center of Lake Askja, and west of the center of lake Þingvallavatn**

