Master Thesis: Notes

* Ekstrand: No huge difference, role of different ways to calculate corrected band? Does not respect cast shadows. Other Problem: Scene does not take surrounding mountains into account (glacier-wise) –> would entire tile be better? Sensitivity to k- Parameter
* Sentinel Level 2-A: Seems to overcorrect, still does not compensate for cast shadows (method unclear, wait for answer to mail) 🡪 continue with Ekstrand-corrected picture, compare later if classification is better with 2A or 1C data
* Tests to run:

Naegeli:

* Different values for ice <0.25? Necessary for some darker glaciers 🡪 Currently 0.2
* ( NIR instead of Albedo for Naegeli. Test other bands/combinations )
* Make 400 Meters flexible 🡪 how? Depending on slope
* Write proper output

Otsu:

* ( Shaded areas 🡪 Reflectance below 0.2. Exclude them from Otsu-Thresholding? )
* ( Deal with completely snow-free or snow-covered glaciers…? )
* ( Done: Deal with completely cloud-covered: cloud mask can’t detect it as cloud, does not get removed from classification )
* ( Deal with almost completely cloud-covered glaciers? Set threshold? If cloud cover over 60 %, set all values to 0)
* Apply Penalty function after Otsu-Tresholding?

Write Documentation! How? Which format?

* How much into Thesis?
* Preprocessing, etc?
* Cloud Mask, Thresholding
* How method works, threshold for clouds, algorithm

Start running model on Vierzack…

Which dataset/time?

What should I do as validation data set? Download it, which date, which glaciers?

How do I select/click things? Where/how do I store/organize it?

Most important: What is the goal of the validation? Snow cover mapping or SLA?

Naegeli Method is not designed for good SLA values – more of a Hilfsgröße (maybe apply Asmag-SLA retrieval?) 🡪 What is the method worth if Snow cover map is not analyzed properly?