Figure 1: Estimated SWE found by kriging measured SWE. Arrows indicate glacier flow direction and black dots show snow depth sampling locations.

Background to kriging -¿ literature use Background on regression kriging Specific package

What to do with lower and upper bounds?

Kriged swe Kriged residuals and added to BMA

Final R2 value and rmse comparison of kriged, BMA, RK -¿ all density options? sweKRIG vs SWE sweRK vs SWE

Appendix -¿ manual for kriging

- background writing - describe figures - calculate R2, rmse, residuals hist for RK - table of kriging model params

Table 1: Nugget (m w.e.) estimated for SWE data using maximum log likelihood?? in DiceKriging package.

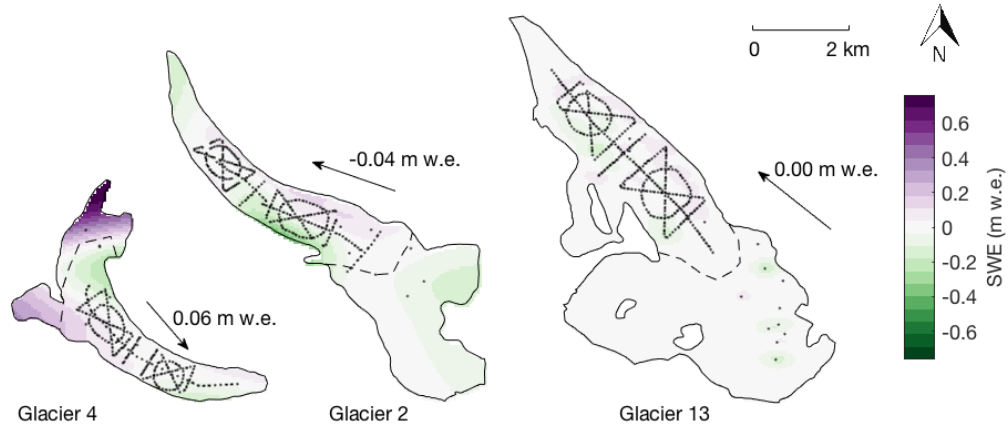| Density Option	Glacier 4	Glacier 2	Glacier 13
S1	0.015	0.004	0.004
F1	0.013	0.003	0.003
S2	0.009	0.004	0.004
F2	0.009	0.003	0.003
S3	0.016	0.004	0.005
F3	0.017	0.002	0.003
S4	0.014	0.004	0.004
F4	0.009	0.002	0.003

Figure 2: Estimate of BMA residuals found by kriging. Arrows indicate glacier flow direction and black dots show snow depth sampling locations.
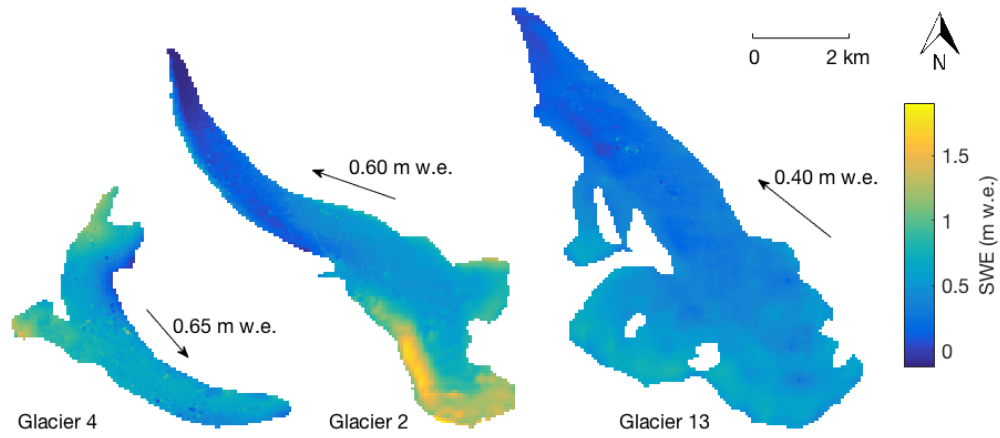
Figure 3: Estimated SWE found by adding the estimated residuals (kriging) to the estimated SWE found using BMA. Arrows indicate glacier flow direction and black dots show snow depth sampling locations.