

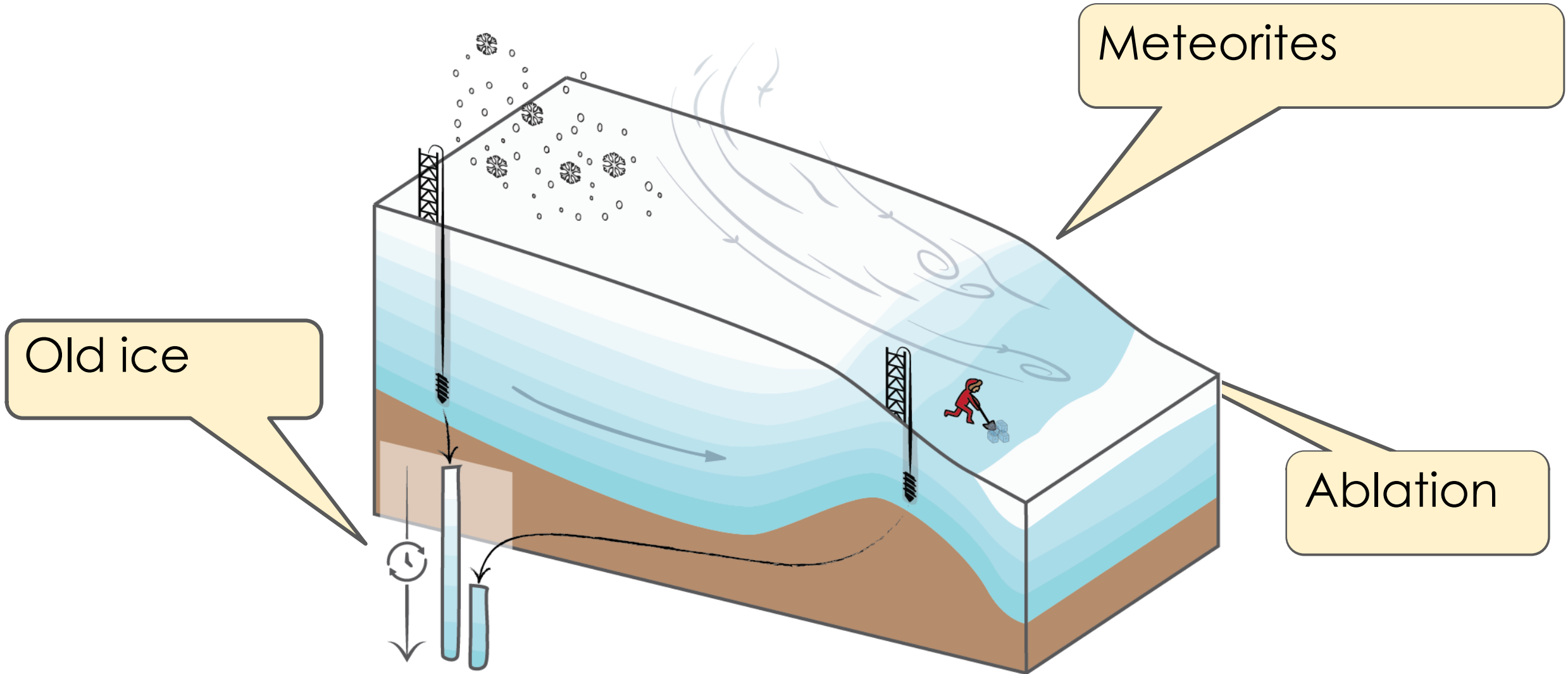
What determines the location of Antarctic blue ice areas?

A deep learning approach

Veronica Tollenaar, Harry Zekollari, Devis Tuia, Benjamin Kellenberger, Marc Rußwurm, Stef Lhermitte, and Frank Pattyn

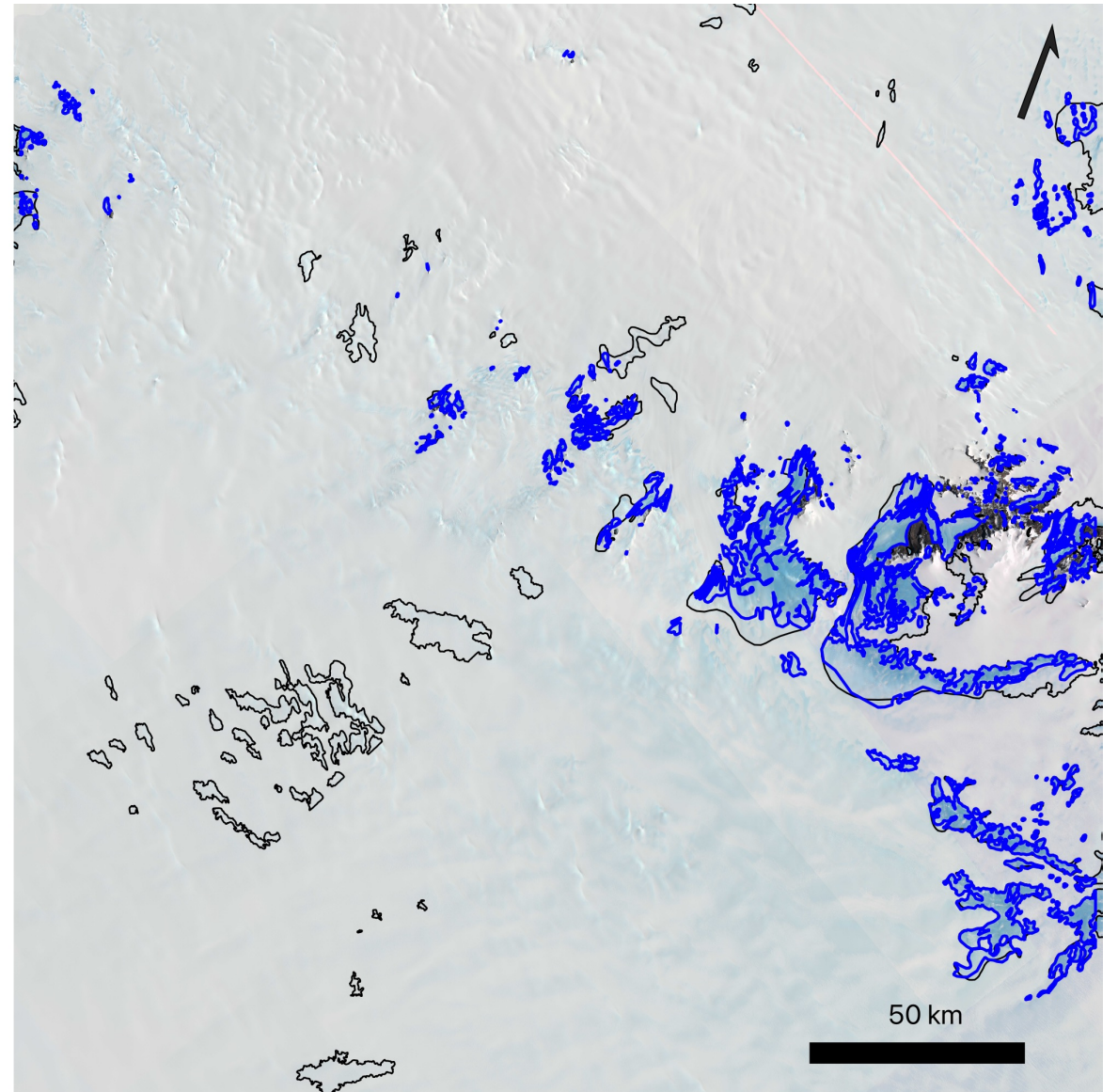


Antarctic blue ice areas

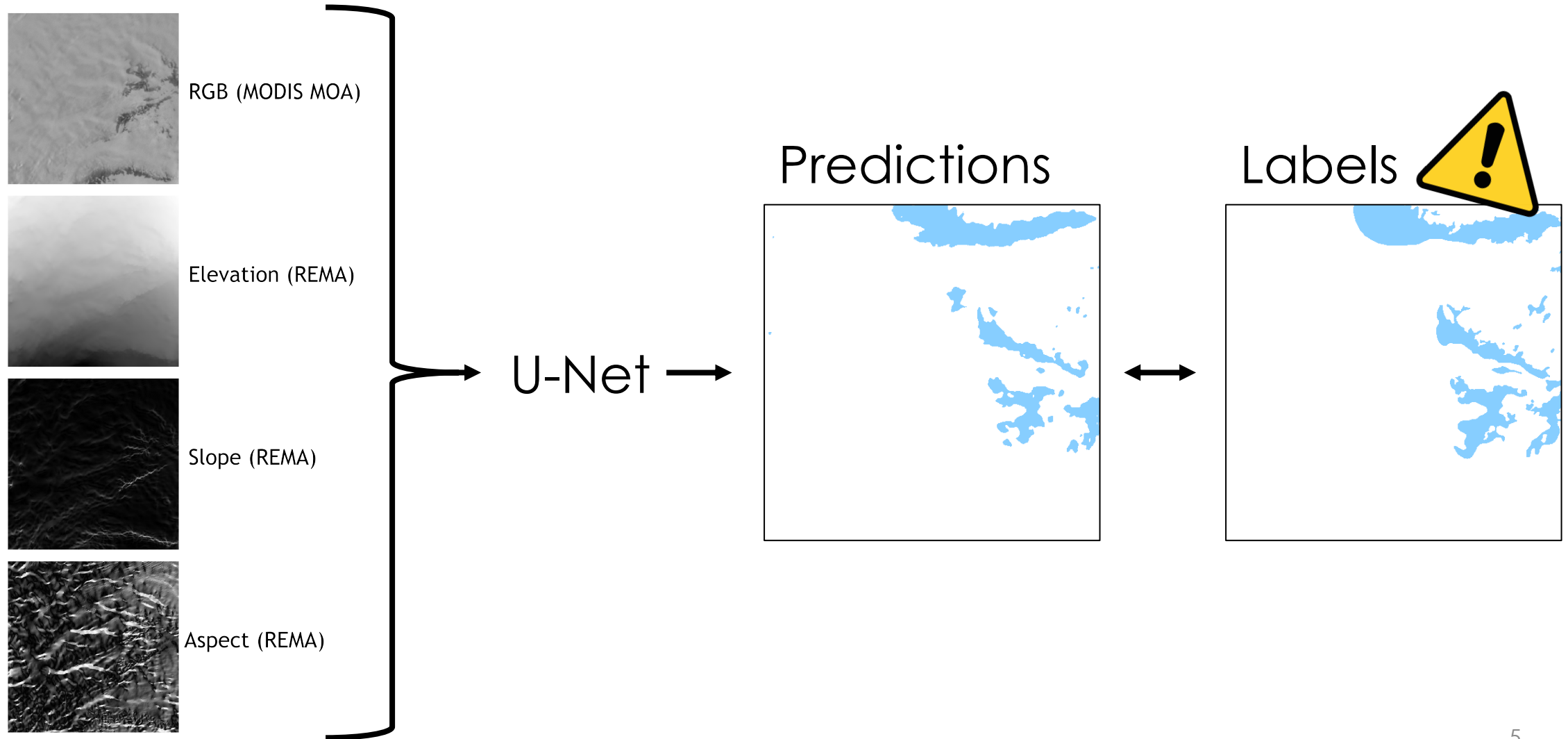


Mapping

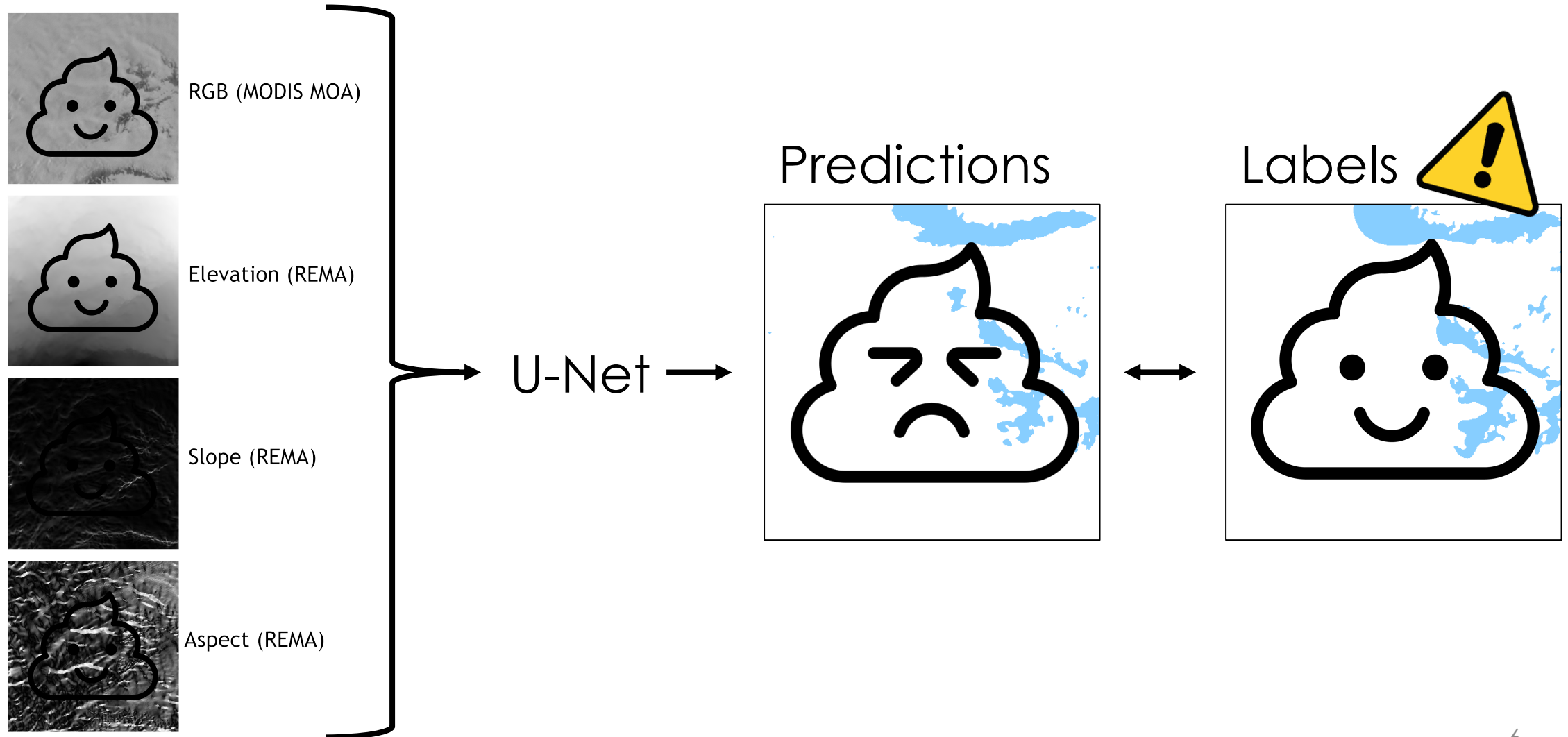
- BIA outlines Quantarctica
- Handlabeled BIA outlines



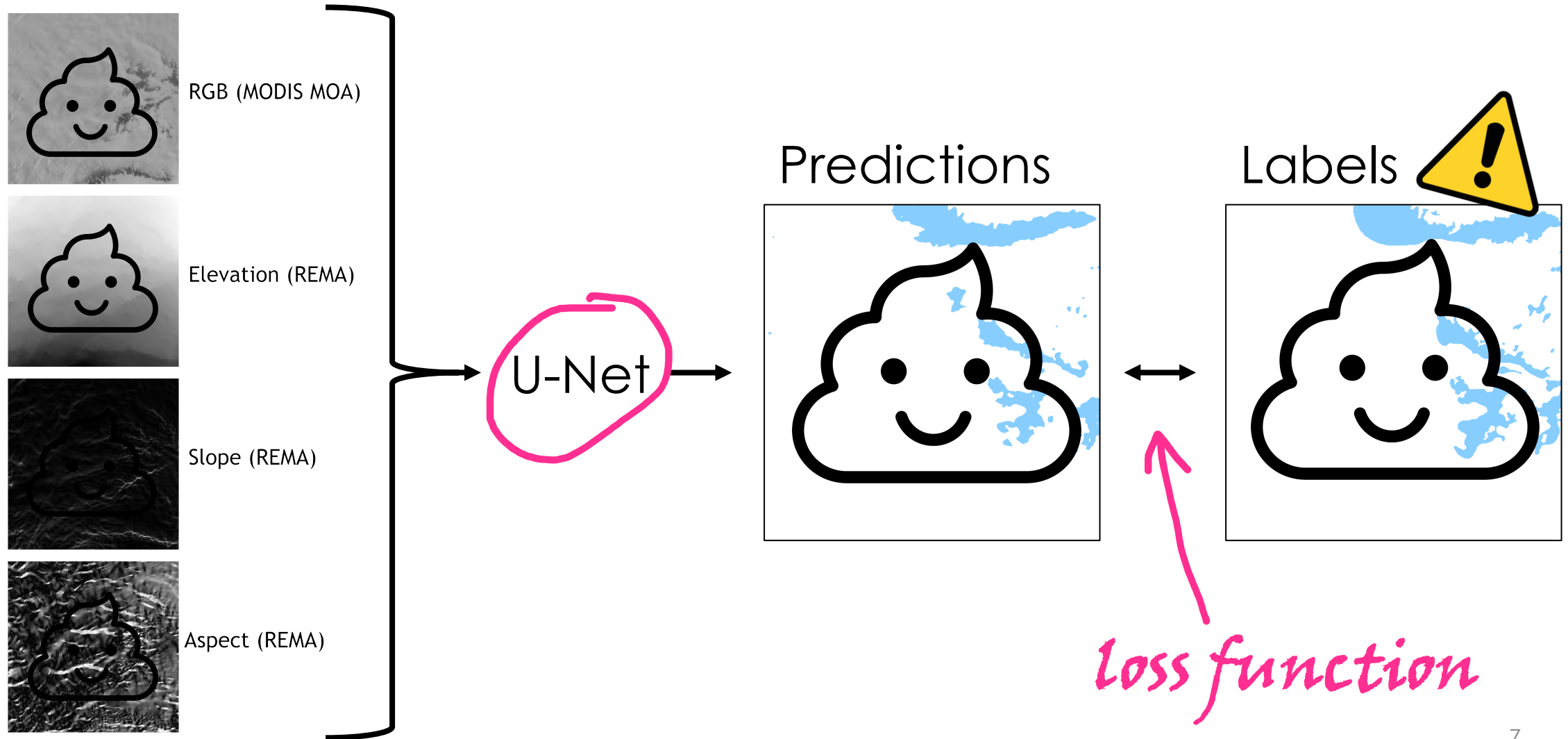
Mapping with Deep Learning



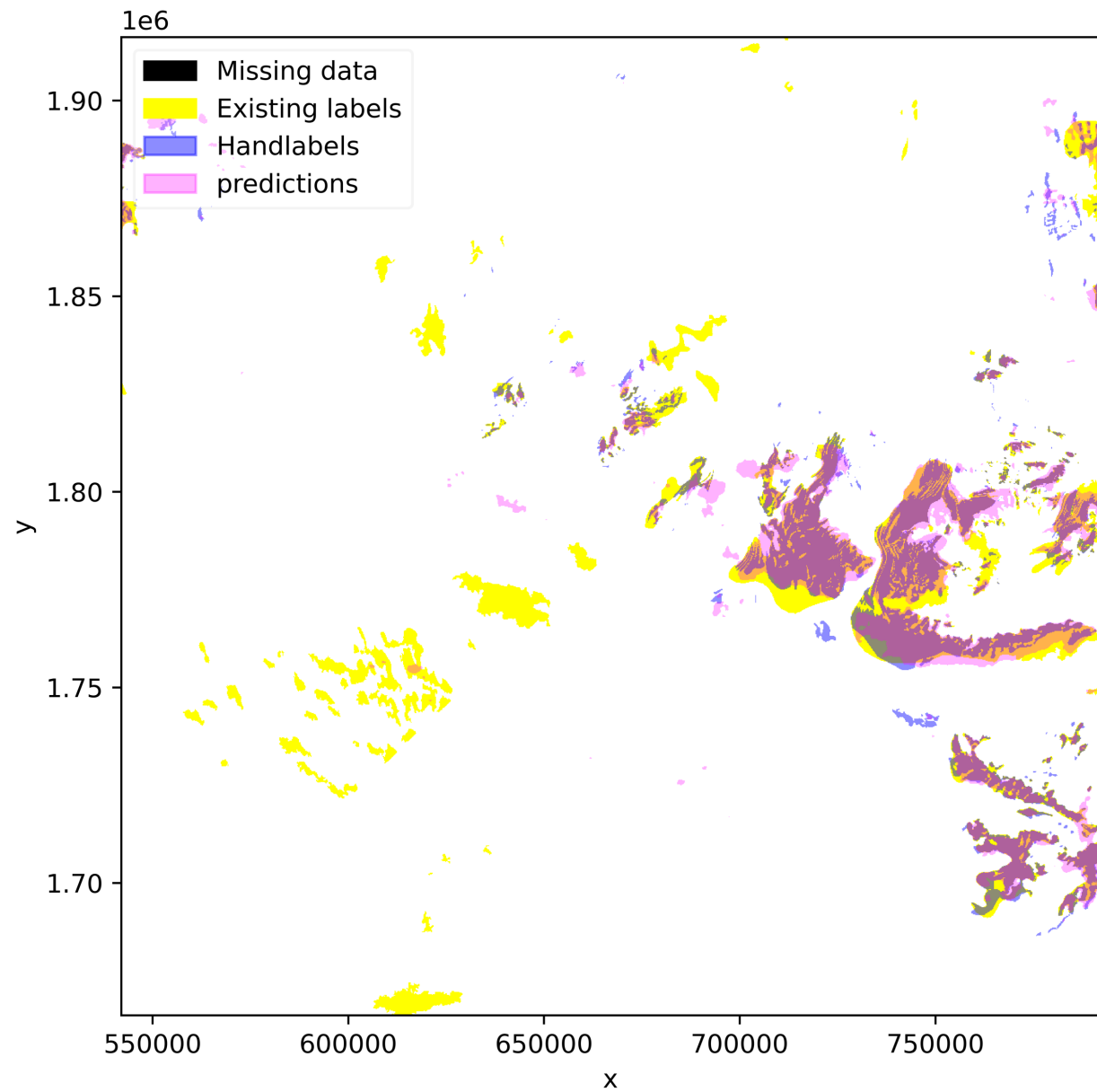
Mapping with Deep Learning



Mapping with Deep Learning



Preliminary results



Evaluation on hand labels

F1 score: harmonic mean **sensitivity** and **precision**

predictions

0.70

0.31

predictions == existing labels

0.64

0.56

References

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Preliminary results

