1) Super-Resolution model

Not just a fancy BEDMAP2 interpolator. The neural network is conditioned with high resolution ice surface datasets!

2) Results

Our model matches independent groundtruth observations better than simple bicubic interpolation.

3) Applications

- For ice sheet modellers running catchment-scale simulations
- For glaciologists working on Antarctica’s subglacial hydrology and ice flow dynamics

4) Next steps

Better data ⇒ Better model
- Add other glaciologically relevant datasets e.g. surface accumulation and ice surface elevation change
- Model performance will improve when trained with more high-resolution groundtruth grids.

References
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