

How well do estimates of basal conditions from seismic surveys compare with those from inversions of surface data using ice-flow models?

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We present results from high-resolution inversions of surface data over distinct patches of Pine Island Glacier, Antarctica. The areas are rich in field data, which was obtained as part of the iSTAR project. The existence of these in-situ geophysical measurements alongside the model output allows us to look at answering some interesting questions. For example, how do results from seismic surveys compare with output from the model? Could seismic data be used more explicitly to inform parameter values in predictive forward models? How much are we helped by having very high resolution bed elevation data?