

## Geophysical Research Letters

Supporting Information for

## Bathymetry beneath the Amery ice shelf, East Antarctica, revealed by airborne gravity

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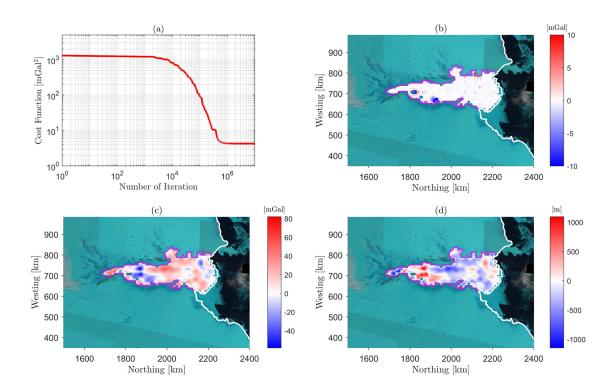
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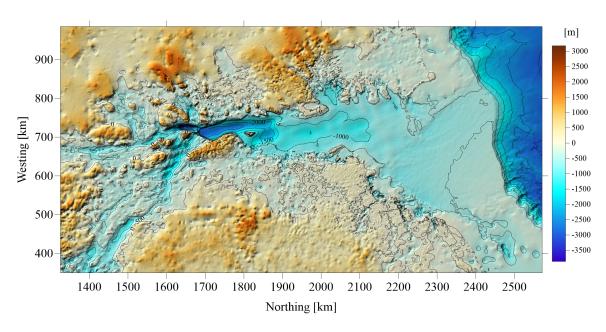
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**Figure S1.** (a) The cost function decreases as the iteration number increases. (b) Differences between the pseudo-observed gravity anomalies and the one forward computed from the gravity-estimated seafloor topography. The white line is the coast/calving front boundary. The thin magenta line is grounding line. The background Landsat 8 image is acquired in January 2018. (c) Differences between the pseudo-observed gravity anomalies and the one forward computed from bed elevations in BedMachine Antarctica v2. (d) Differences between the gravity-estimated seafloor topography and BedMachine Antarctica v2.



**Figure S2.** Bed elevations (orthometric height in meters referred to the EIGEN-6C4 geoid) around the Amery ice shelf from BedMachine Antarctica v2 model. Thin black lines are contours with 500 m interval.