



## Measurements of Glacial Isostatic Adjustment in Greenland

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The Greenland GPS network (GNET) was constructed to provide a new means to assess viscoelastic and elastic adjustments driven by past and present-day changes in ice mass. Here we assess existing glacial isostatic adjustments (GIA) models by analysing 1995–present data from 61 continuous GPS receivers located along the edge of the Greenland ice sheet. Since GPS receivers measure both the GIA and elastic signal, we isolate the GIA signal, by removing the elastic adjustments of the crust due to present-day mass loss using high-resolution ice surface elevation change grids derived from satellite and airborne altimetry measurements (ERS1/2, ICESat, ATM, ENVISAT, and CryoSat-2). In general, our observed GIA rates contradict models, suggesting GIA models and hence their ice load history for Greenland are not well constrained.