Supplementary Materials

A high-resolution pan-Arctic meltwater discharge dataset from 1950 to 2021

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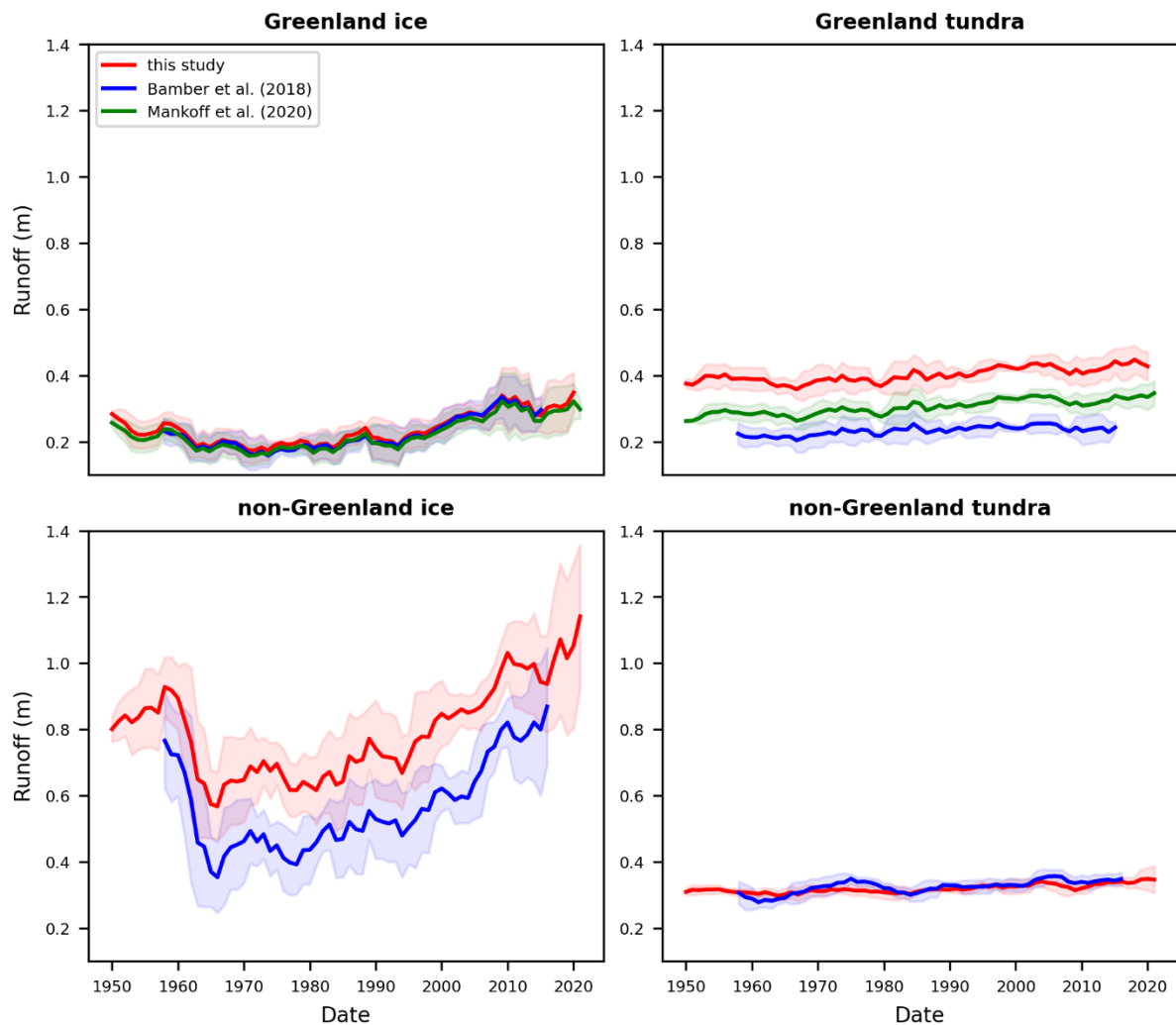
Figure S1. Bulk ice and land/tundra runoff for Greenland and all other Arctic regions, except the Russian Arctic. Bulk runoff is divided by the area of the corresponding region, the resulting unit area bulk runoff shows the characteristic mean runoff from the region. Graphs show the 5-year running means, while shaded areas show the 5-year running standard deviation. Note that Greenland ice includes PGIC.

Figure S1, shows bulk runoff – derived from the different datasets – that is divided by the area of the corresponding region. This reveals the specific intensity of runoff contribution to freshwater flux from different sources. The main feature of this graph is the strong freshwater flux contribution from glaciers and ice caps outside Greenland, which has been increasing significantly since 2000. These ice bodies are smaller and lie at lower elevations than the Greenland Ice Sheet, which explains the more intensive melt per unit area.