Figure S1. Comparison of the ice thickness of the initial state to BedMachine (Morlighem et al., 2017) (remapped to 15 km resolution to be comparable).

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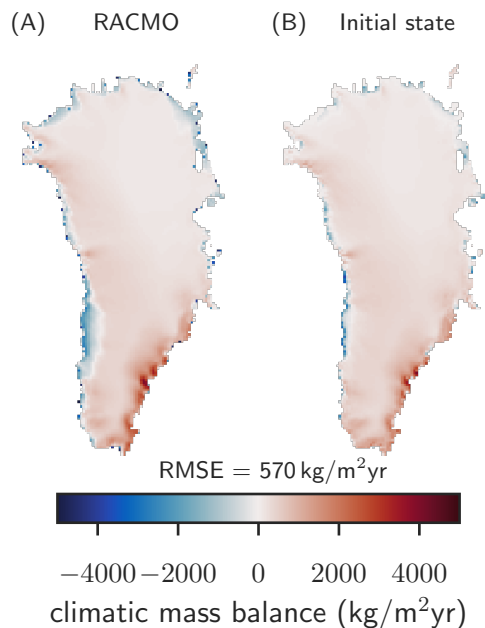
Figure S2. Comparison of the climatic mass balance of the initial state, computed with the positive degree day method and without temperature anomaly, to annually averaged RACMO v2.3 data averaged over 1958 to 1967 (Noël et al., 2019) (remapped to 15 km resolution to be comparable).
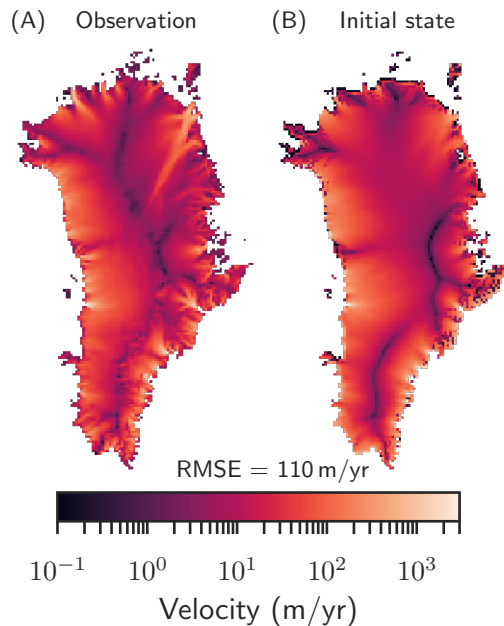
Figure S3. Comparison of the magnitude of the surface velocities of the initial state to observation data (Joughin et al., 2018) (remapped to 15 km resolution to be comparable).