

Read Me

This dataset contains frontal ablation estimates for 49 tidewater glaciers in Greenland with the variables being defined as follows:

- **F** – Frontal ablation during time intervals [Gt/d]
- **Max_Error_F** – Maximum error over total time period [Gt/d]
- **Date** – Midpoint of time intervals on which output data defined [yyyy-mm-dd]
- **D** – Discharge during time intervals [Gt/d]
- **TMC** – Terminus mass change (dM/dt) during time intervals [Gt/d]

For completion, we also include data that is used to calculate terminus mass change (TMC) in the folder of the same name. Terminus mass change (dM/dt) is determined as the difference between subsequent observations ($M_2-M_1, \dots, M_{n+1}-M_n$). Each file contains the following variables:

- **Date** – Date of terminus position [yyyy-mm-dd]
- **A** – Area of polygon [km^2]
- **H** – mean ice thickness H [km] (see methods and Figure 6 in Fahrner et al., 2023).
- **V** – Volume of polygon [km^3]
- **M** – Mass of polygon [km^3] assuming constant ice density ($\rho = 0.917 \text{ kg}/\text{km}^3$)

We also include the filtered, and extrapolated/clipped TermPicks terminus positions which are used to determine the frontal ablation estimates in geopackage and shapefile format (“TerminusPositions” folder)