Glacier

Projection: surface mass balance
 Data output from 3-D regional climate model MAR for surface mass balance (Fettweis et al., 2013) (Fig. S1)

Plume

Temperature–salinity profiles
 Fjord measurements and reanalysis data T(Z), S(Z) (Fig. S3)

Projected temperature trend
 3-D ocean-circulation models ΔT(t) (Table 1)

3-D ice sheet model SICOPOLIS and hydrological model HYDRO route basal melt and runoff to glaciers (Calov et al., 2018) (Fig. S4)

m(x)

smb(x,t)

smb(lat, lon, t)

sin(α(x))

Q(t)

ΔT(t)