Table A.1. List of variables and free parameters used for the individual MAGICC sea level component calibrations.

Climate variables	Unit	Description
tas	K	surface air temperature
thetao	K	potential ocean temperature
zostoga	mm	thermal expansion

MAGICC ocean paramters		
K_z	$\frac{cm^2}{s}$	vertical thermal diffusivity
$\frac{dK_{z_{top}}}{dT}$	$\frac{cm^2}{sK}$	sensitivity to global mean *tas* at the mixed layer boundary
η	K	sea-ice adjustment offset
γ	$\frac{1}{K}$	sea-ice adjustment factor
w_0	$\frac{m}{yr}$	initial upwelling velocity
β		ratio of changes in temperature of entraining waters to polar sinking waters
$\frac{\Delta w_t}{w_t}$		ratio of variable to fixed upwelling for every time step
T_{w_t}	K	threshold temperatures for constant upwelling rates
ϕ		global thermal expansion scaling

Glacier parameters		
κ	$\frac{1}{K}$	glacier sensitivity
ν		temperature sensitivity exponent

Greenland SMB parameters		
υ	$\frac{mm}{K}$	temperature sensitivity
χ		relative magnitude of linear and non-linear terms
φ		temperature sensitivity exponent

Greenland SID parameters		
ϱ		discharge sensitivity
ϵ	$\frac{1}{K}$	temperature sensitivity
GIS_{max}^{outlet}	mm	maximum Greenland outlet glacier volume

Antarctic SMB parameters		
ξ	$\frac{mm}{K}$	temperature sensitivity
ρ		relative magnitude of linear and non-linear terms
σ		temperature sensitivity exponent