

External quantities		Units
z_b	Local depth of ice-shelf base	m
α	Local slope angle	–
z_{gl}	Depth of grounding line	m
T_a	Ambient ocean temperature	$^{\circ}\text{C}$
S_a	Ambient ocean salinity	psu
Constant parameters		Values
E_0	Entrainment coefficient	3.6×10^{-2}
C_d	Drag coefficient	2.5×10^{-3}
$C_d^{1/2} \Gamma_T$	Turbulent heat exchange coefficient	1.1×10^{-3}
λ_1	Freezing point-salinity coefficient	$-5.73 \times 10^{-2} \text{ } ^{\circ}\text{C}$
λ_2	Freezing point offset	$8.32 \times 10^{-2} \text{ } ^{\circ}\text{C}$
λ_3	Freezing point-depth coefficient	$7.61 \times 10^{-4} \text{ K m}^{-1}$
M_0	Melt-rate parameter	$10 \text{ m yr}^{-1} \text{ } ^{\circ}\text{C}^{-2}$
$C_d^{1/2} \Gamma_{TS_0}$	Heat exchange parameter	6.0×10^{-4}
γ_1	Heat exchange parameter	0.545
γ_2	Heat exchange parameter	$3.5 \times 10^{-5} \text{ m}^{-1}$