Parameter	Description	Value
$\bar{v}$	Mean velocity	
φ	Porosity	
v_s	Solid velocity	
v_l	Melt velcoity	
N	Elastic flexural rigidity	
w_0	Surface displacement	
P_{ice}	Ice sheet load	
τ_e	Viscoelastic decay time	
E	Youngs modulus	10^{11} Pa
T_e	Elastic thickness *	10 km *
η_s	Solid lithosphere viscosity *	10^{21} Pas *
w	Displacement due to ice sheet as a function of depth	
λ	Wavelength (width) of the ice sheet *	200 km *
u	Upwelling velocity *	20 $mmyr^{-1}$ *
m	Melt production rate	
L	Latent heat due to melting	
T	Mantle temperature	
κ	Thermal diffusion coefficient	$10^{-6}\,m^2s^{-1}$
ΔS	Entropy change due to melting	400 $JK^{-1}kg^{-1}$
C_p	Heat capacity	1200 $Jkg^{-1}K^{-1}$
k_0	Permeability coefficient *	10^{-5} m^2 *
n	Permeability exponent	3
η_l	Melt viscosity	1 Pas
$\Delta\rho$	Density difference between melt and the solid mantle	300 kgm^{-3}
T_{Sdry}	Dry solidus	
T_S	Solidus at the Earth surface	1081 °C
$\partial T_S/\partial F\big\vert_P$	Solidus depletion gradient	800 °C
$\partial T_S/\partial P\big\vert_F$	Solidus pressure gradient	$132x10^{-9}$ $°CPa^{-1}$
α	Thermal expansion coefficient	$3x10^{-5}\,K^{-1}$
ρ	Solid mantle density	3100 kgm^{-3}
P	Pressure	
T_{Swet}	Wet solidus	
K	Wet solidus pre-factor	0.75
γ	Wet solidus exponent	-43
D_{H_2O}	Water partition coefficient	0.01
C_l	Melt composition	
C_s	Mantle composition	
D	Solid to melt partition coefficient	