Table 2

Variables

Variable	Description	
ΔP	Pressure Change, Pa/sec	$K*\Delta V/V_0$
E_b	Brittle Youngs Modulus, Pa	
E_{td}	Temperature dependent Youngs Modulus, Pa	$E_b*(T-T_m)/(T_0-T_{grad}*z-T_m)$
G_{0td}	Initial Shear Modulus, Pa	$E_{td}/(2*(1+\nu))$
K_{td}	Temperature dependent Bulk Modulus, Pa	$E_{td}/(3*(1-2*\nu))$
$MagmaLd_{dt}$	Initial pressure of magma chamber, Pa	$\Delta P*t + \rho_r*g*z - \rho_i*g*i_h$
T	Temperature, K	
TGEO	Geothermal gradient, K	$273.15 - z*T_{grad}$
t	Time, sec	
τ_0	Maxwell Relation Times of rock, sec	$N/(G_0*\mu_1)$
τ_1		$(((3*K) + G_0)/((3*K)+G_0*\mu_1))*\tau_0$
τ_{0i}	Maxwell Relation Times of ice, sec	$N_i / (G_i*\mu_1)$
τ_{1i}		$(((3*K_i) + G_i)/((3*K_i)+G_i*\mu_1))*\tau_{0i}$
z	Depth, km	