Parameter	Value	Source
Fragment number		
$\aleph_{\mathrm{RS}} = F_{\mathrm{RS}} \rho_w \frac{\pi}{6} (2r_R)^3$	$F_{\mathrm{RS}} = 3 \times 10^8\ (\mathrm{kg\,rime})^{-1}$	Hallett and Mossop (1974)
$\aleph_{\mathrm{BR}} = F_{\mathrm{BR}} (T - T_{\mathrm{min}})^{1.2} \mathrm{e}^{-(T-T_{\mathrm{min}})/5}$	$F_{\mathrm{BR}} = 280$	Takahashi et al. (1995)
	$T_{\mathrm{min}} = 252\,\mathrm{K}$	
$\aleph_{\mathrm{DS}} = F_{\mathrm{DS}} (2r_R)^4 p_{\mathrm{fr}}(T, r_R, N_{\mathrm{d}}) p_{\mathrm{sh}}(T, r_R)$	$p_{\mathrm{sh}} = 0.2\mathcal{N}(258\,\mathrm{K}, 10\,\mathrm{K})$ for $r_R > 50\,\mu\mathrm{m}$	Based upon droplet levitation experiments
	$p_{\mathrm{fr}} = 100\ (1 - f_{\mathrm{imm}})\left[a_1\ \exp(a_2(T - a_3))\right]/N_{\mathrm{d}}$	
	with $f_{\mathrm{imm}} = 90\,\%$	Based upon Paukert et al. (2017)
$\aleph_{\mathrm{DS}}^{(\mathrm{coll})} = F_{\mathrm{DS}} (2r_R)^4 p_{\mathrm{sh}}(T)$	p_{sh} as above	
	$F_{\mathrm{DS}} = 2.5 \times 10^{-11}$ $(\mathrm{drop\,diam\,[\mu m]})^{-4}$	Lawson et al. (2015)
$\aleph_{\mathrm{DS}}^{(\mathrm{sig})} = \frac{\alpha\ p_{\mathrm{fr}}(t,T,r_R) p_{\mathrm{sh}}(T)}{1 + \exp[-\beta(2r_R - \gamma)]}$	$\alpha = 10$; $\beta = -0.016$ $\gamma = 500$	Based upon droplet levitation experiments
Initial conditions		
N_{X0}	$0\,\mathrm{cm}^{-3}$	
P_0, $s_{\mathrm{w},0}$	680 hPa, 10^{-6} %	
$r_{\mathrm{d}0}$, r_{r0}, r_{R0}	1, 12, 25 µm	Mossop (1978, 1985)
$r_{\mathrm{i}0}$, $a_{\mathrm{g}0}$, $a_{\mathrm{G}0}$	5, 50, 200 µm	Zhang et al. (2014) Reinking (1975)
Timescales		
τ_{d}, τ_r, τ_R	5, 15, 25 min	Approximate solution
τ_{i}, τ_{g}, τ_{G}	7.5, 20, 17.5 min	of growth equations
Droplet spectrum		
k_{CCN}, N_{CCN}	0.308, $100\,\mathrm{cm}^{-3}$	(Hegg et al., 1992)
Updraft u_z	$2\,\mathrm{m\,s}^{-1}$	(Korolev and Field, 2007)
Time step Δt	3 s	