

Run BR	Run RS	Run DS (Run DScoll)
Ice–ice collisional breakup $\eta_{DS} = \eta_{RS} = 0\%$	Rime splintering $\eta_{BR} = \eta_{DS} = 0\%$	Droplet shattering (collisional droplet shattering) $\eta_{BR} = \eta_{RS} = 0\%$
Run BRth	Run RSth	Run DSth
Thermodynamic variations for ice–ice collisional breakup $T_0 = \{256, 258, 260, 262, 264, 268, 270, 272\text{ K}\}$	Thermodynamic variations for droplet shattering $u_z = \{0.1, 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4\text{ m s}^{-1}\}$ $T_0 = \{256, 258, 260, 262, 264, 268, 270, 272\text{ K}\}$	Thermodynamic variations for rime splintering $T_0 = \{272, 275, 280, 285, 288, 290, \dots, 293, 295, 298\text{ K}\}$
Run BRpp	Run RSpp	Run DSpp
Parameter perturbations for ice–ice collisional breakup $F_{BR} = \{0, 90, 140, 200, 280\}$ $T_{\min} = \{246, 249, 252, \dots, 255, 258\text{ K}\}$	Parameter perturbations for rime splintering $F_{RS} = \{9, 15, 30, 45, 80\}$ $\times 10^7 (\text{kg rime})^{-1}$	Parameter perturbations for droplet shattering $F_{DS} = \{25, 75\} \times 10^{-12} (2 r_D)^{-4 \text{ or } -3}$ $(\beta, \gamma) = \{(-0.016, 500), (-0.015, 400)\}$ $p_{\text{sh}}^{(\max)} = \{1, 5, 10, 20, 30\%\}$