Case 1
Closed window

Case 2
Opened window

FSE-21036-GFA-Fig. 2
Case 1

Case 2

FSE-21036-GFA-Fig. 3
Droplet diameter of 1 µm and time of 600 s

(i) Drag without $s$ and no interactions
(ii) Drag with $s$ and no interactions
(iii) Drag with $s$ and droplet interactions

Case 1

Case 2
Droplet diameter of 50 μm and time of 800 s

(i) Drag without e and no interactions
(ii) Drag with e and no interactions
(iii) Drag with e and droplet interactions

Case 1

Case 2

FSE-21036-GFA-Fig. 5

FSE-21036-GFA-Fig. 6
$t = 0 \text{ ms, } d_p = 50 \mu\text{m}$

Release 2 m/s

$t = 3 \text{ ms}$

No interactions

Interactions

$0.1d_p, 5d_p$

FSE-21036-GFA-Fig. 7
air $d_v = 50 \mu m$

Simulation time of 120 s

(i) drag without $\varepsilon$ and no interactions

(ii) drag with $\varepsilon$ and no interactions

(iii) drag with $\varepsilon$ and droplet interactions

Freeze in boundary

FSE-21036-GFA-Fig. 8
MESH 1: 906,514 elements

MESH 2: 802,644 elements

MESH 3: 418,865 elements

MESH 4: 206,974 elements
MESH 1: 906,514 elements
MESH 2: 802,644 elements
MESH 3: 418,865 elements
MESH 4: 206,974 elements