Movie1

Contour map of vorticity on the vertical cross section at *x* = 160 mm obtained by numerical simulation performed for *Ra* = 1.0 × 105 and *Q* = 3.2 × 104 (*Q*/*Ra* = 0.32), where red and blue contours represent positive and negative value of the vorticity, respectively

Movie2

Contour map of vorticity on the vertical cross section at *x* = 160 mm obtained by numerical simulation performed for *Ra* = 1.4 × 104 and *Q* = 5.7 × 103 (*Q*/*Ra* = 0.41), where red and blue contours represent positive and negative value of the vorticity, respectively