

Movie Caption List

1. Caption for Movie 1

Dynamical variation of the streamwise-averaged low-speed (blue contour) and high-speed (red contour) streaks and in-plan vortex structure (pink arrows) during one spanwise wall oscillation period for case A ($Re = 400$, $T^+ = 166.4$, $A_w^+ = 2.6$). The streaks are visualised by the contour of $\langle u' \rangle_x$, and the vortex structure is visualised by the vector of $(\langle v' \rangle_x, \langle w' \rangle_x - \langle w' \rangle_{x,z})$.

2. Caption for Movie 2

Dynamical variation of the streamwise-averaged low-speed (blue contour) and high-speed (red contour) streaks and in-plan vortex structure (pink arrows) during one spanwise wall oscillation period for case B ($Re = 400$, $T^+ = 166.4$, $A_w^+ = 4.4$). The streaks are visualised by the contour of $\langle u' \rangle_x$, and the vortex structure is visualised by the vector of $(\langle v' \rangle_x, \langle w' \rangle_x - \langle w' \rangle_{x,z})$.

3. Caption for Movie 3

Exact coherent state under spanwise wall oscillation for case A ($Re = 400$, $T^+ = 166.4$, $A_w^+ = 2.6$). The time variation during one spanwise wall oscillation period is shown. Yellow iso-surface ($u'^+ = 2.0$) indicates the high-speed streak, and green iso-surface ($v'^+ = -0.2$) represents the vortical structure. Viewed from the wall into the flow.

4. Caption for Movie 4

Exact coherent state under spanwise wall oscillation for case B ($Re = 400$, $T^+ = 166.4$, $A_w^+ = 4.4$). The time variation during one spanwise wall oscillation period is shown. Yellow iso-surface ($u'^+ = 2.0$) indicates the high-speed streak, and green iso-surface ($v'^+ = -0.1$) represents the vortical structure. Viewed from the wall into the flow.