

Time evolution of the interface dynamics up to  $t/t_c = 5$ , where  $t_c = L_x/\overline{u_c}$  is the channel crossing time defined based on the length of the domain,  $L_x$ , and on the mean centerline velocity,  $\overline{u_c}$ . Size of the domain is  $L_x = 8\pi h$ ,  $L_y = 4\pi h$ ,  $L_z = 2h$  in the streamwise, spanwise and wall normal direction, respectively. Interface is coloured based on the magnitude of the vertical velocity fluctuations,  $w'/u_\tau$ .