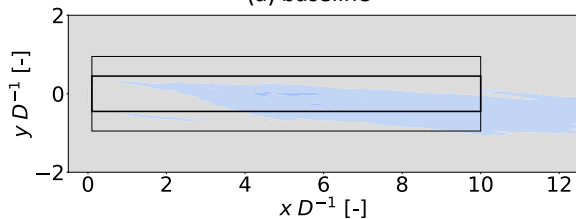
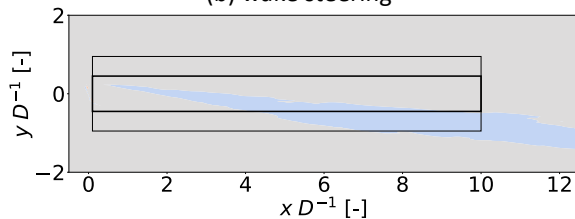


(a) baseline

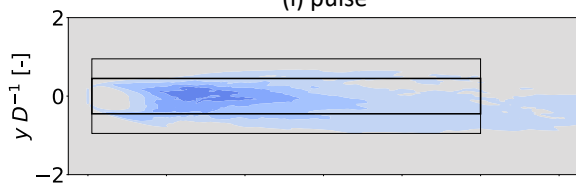


(b) wake steering

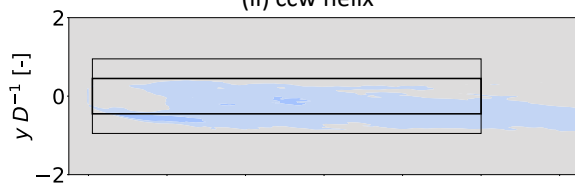


(c) active wake mixing

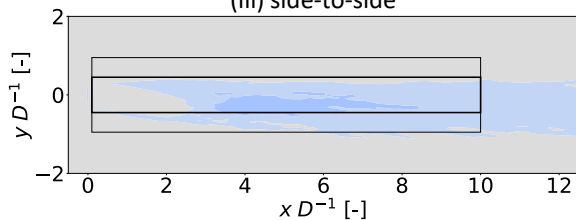
(i) pulse



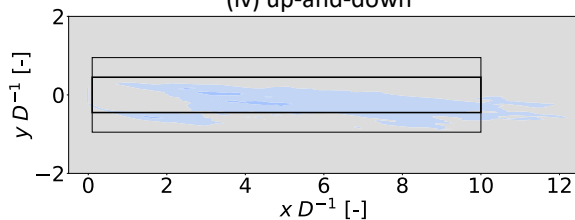
(ii) ccw helix



(iii) side-to-side



(iv) up-and-down



$$\square \quad l_y = l_z = \frac{\sqrt{\pi}}{2}D \quad (\approx 0.9D)$$

$$\square \quad l_y = (\frac{\sqrt{\pi}}{2} + 1)D \quad (\approx 1.9D), \quad l_z = \frac{\sqrt{\pi}}{2}D \quad (\approx 0.9D)$$

