

Graphical abstract: Isometric view of the prolate spheroid at 20° angle of attack for a Reynolds number $Re_L = 4.2 \times 10^6$, with trips. The surface is shaded by the skin friction coefficient c_f ; the transverse surfaces are colored by the instantaneous axial velocity and are located every $0.1x/L$, .

Movie 1: Animation of the skin friction coefficient c_f versus the axial and azimuthal coordinates at 20° angle of attack for a Reynolds number $Re_L = 4.2 \times 10^6$, with trips.