

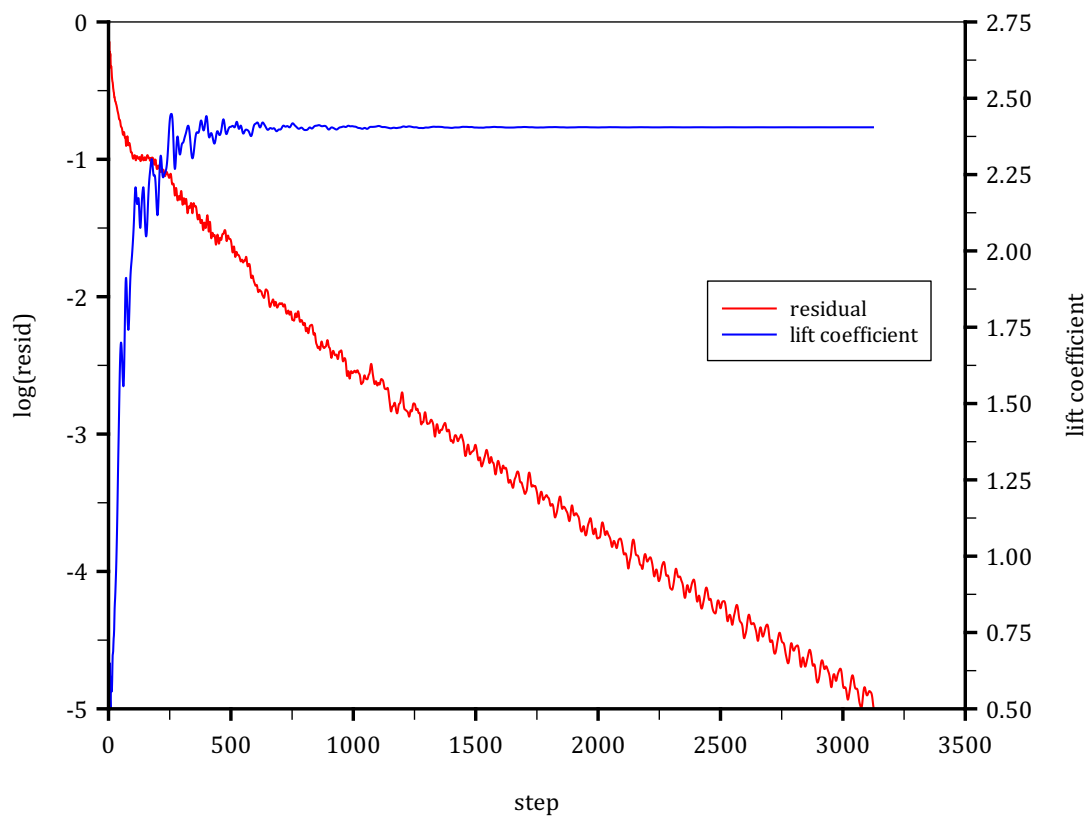
Solution of 2-D Euler Equations: NACA 4415 Airfoil with Flap

Spatial discretization by Roe's upwind scheme:

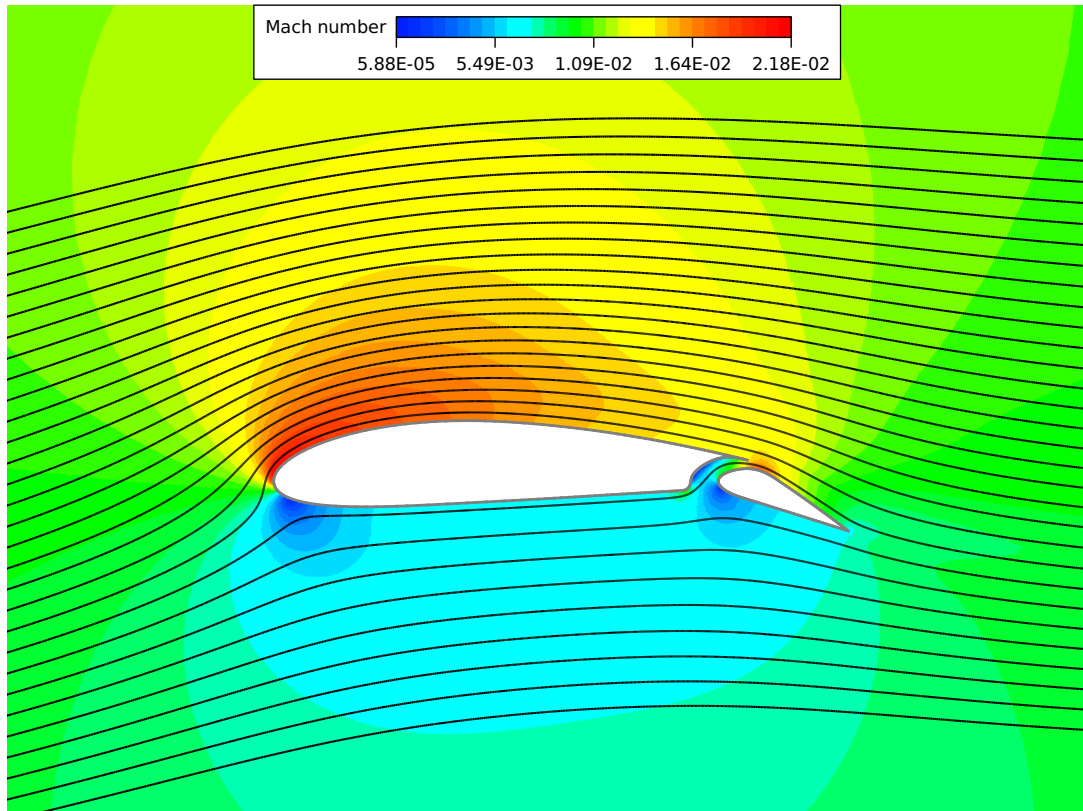
$$\sigma = 5.5, \varepsilon = 0.4, K = 100$$

Boundary conditions:

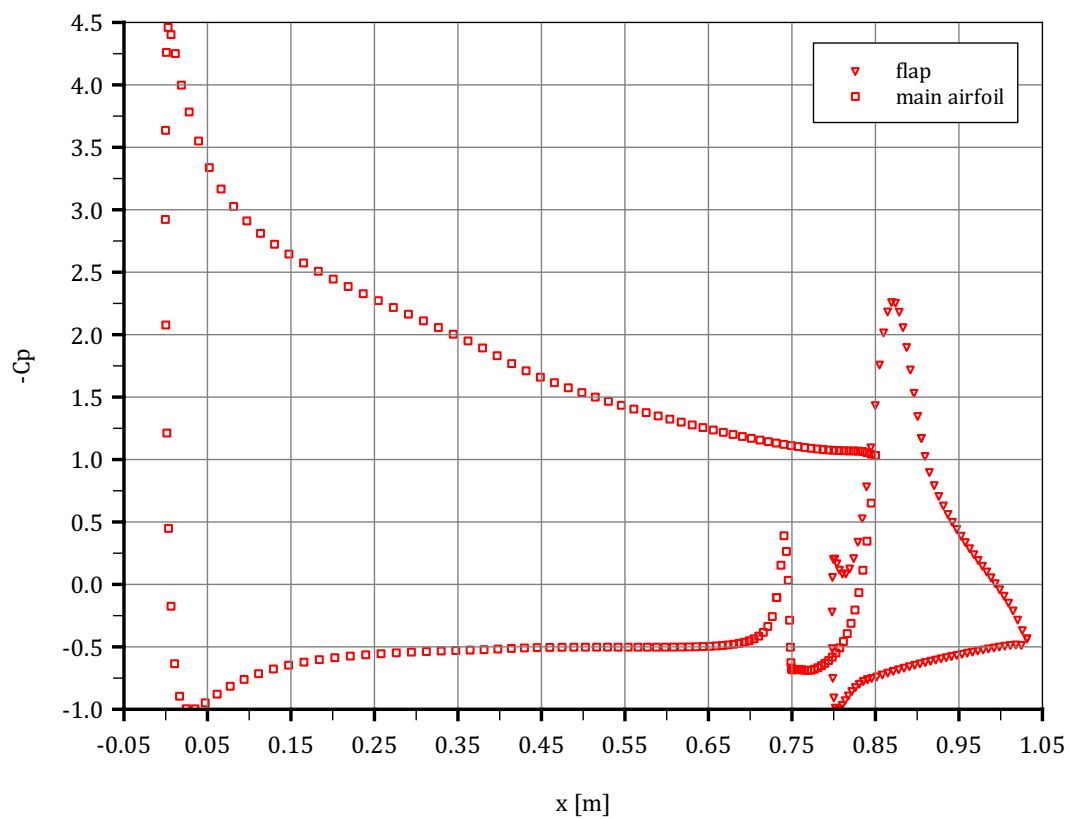
$$M_\infty = 0.01, \alpha = 5.0^\circ, p_\infty = 1.0 \cdot 10^5 \text{ Pa}, T_\infty = 288.0 \text{ K}.$$



Convergence history.



Mach number distribution and streamlines around the airfoil.



Pressure coefficient over the chord length.