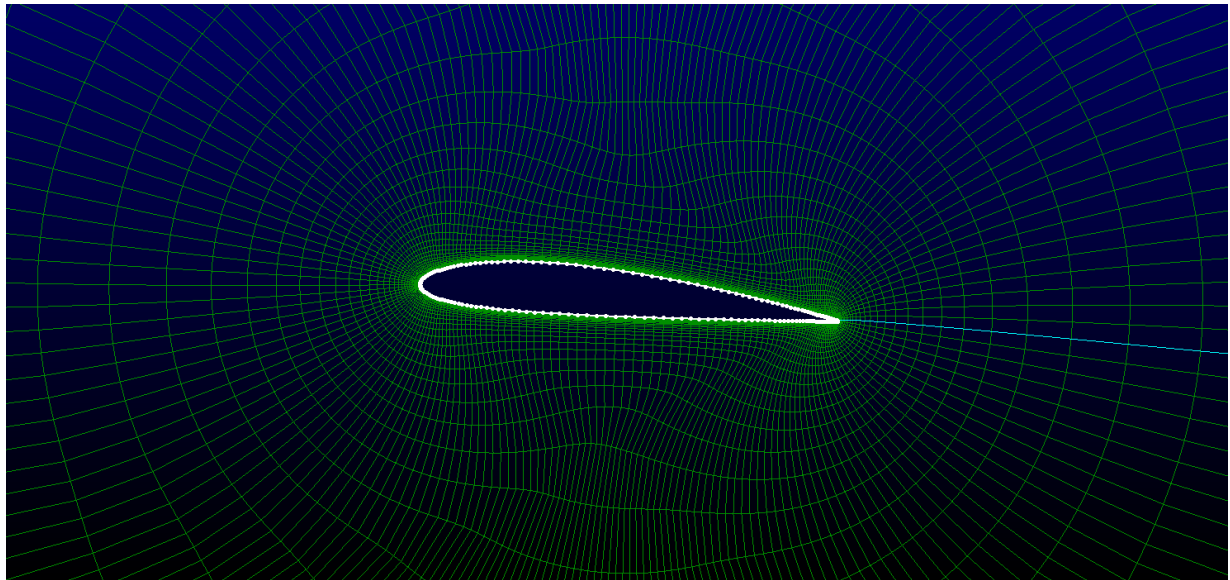
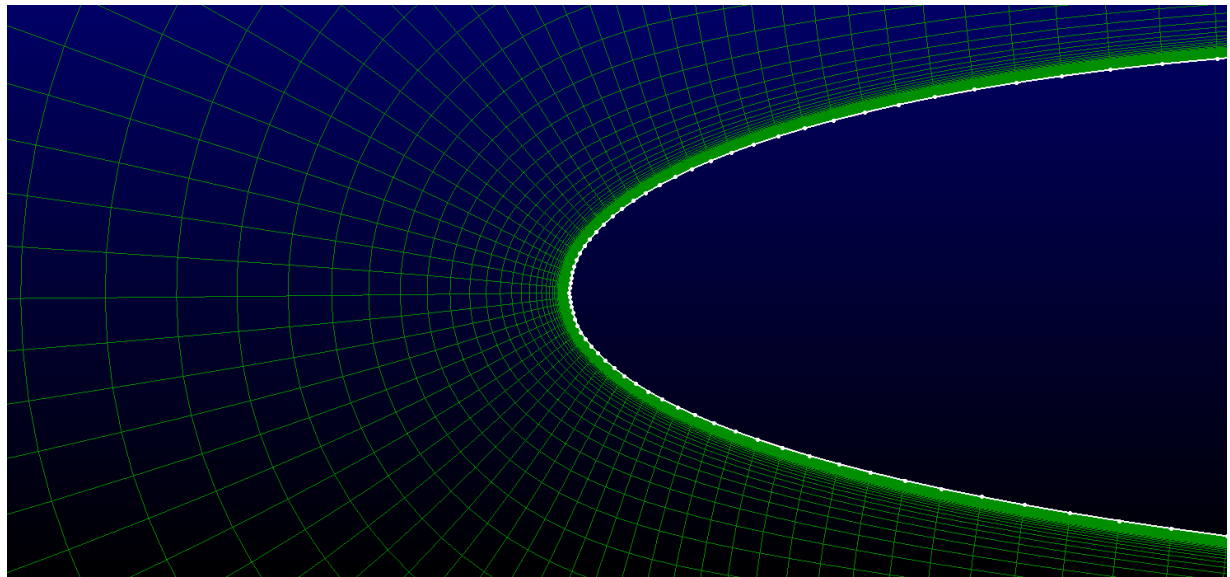


1. Pointwise

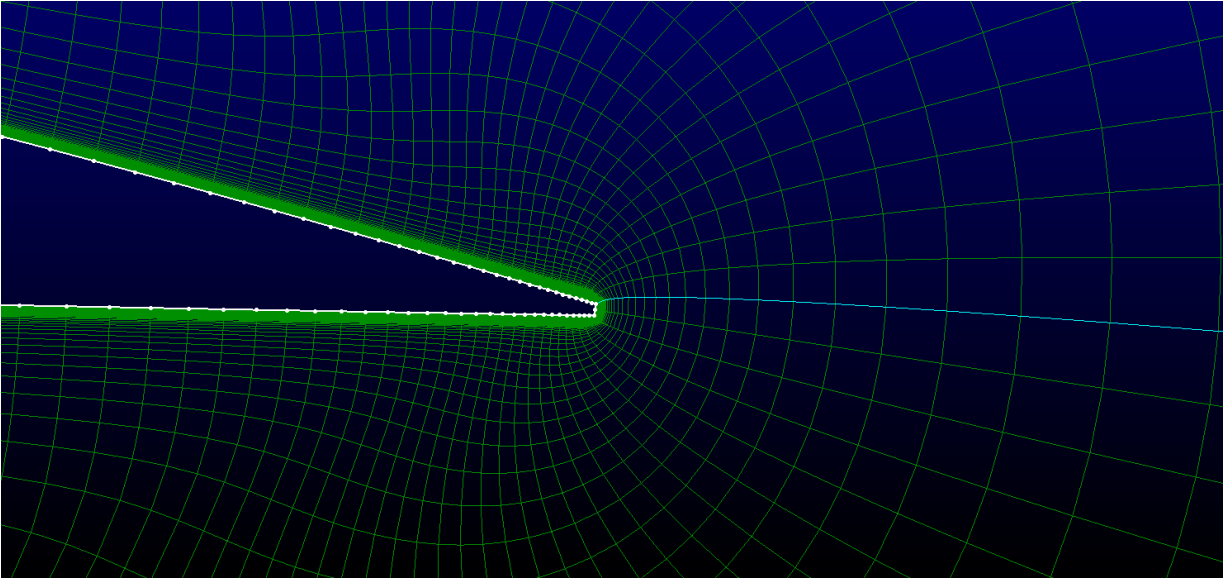
- NACA 2412
- $\alpha = 5^\circ$
- Normal-to-wall spacing growth rate = 100



a) Overall Domain



b) Close-Up of Leading Edge

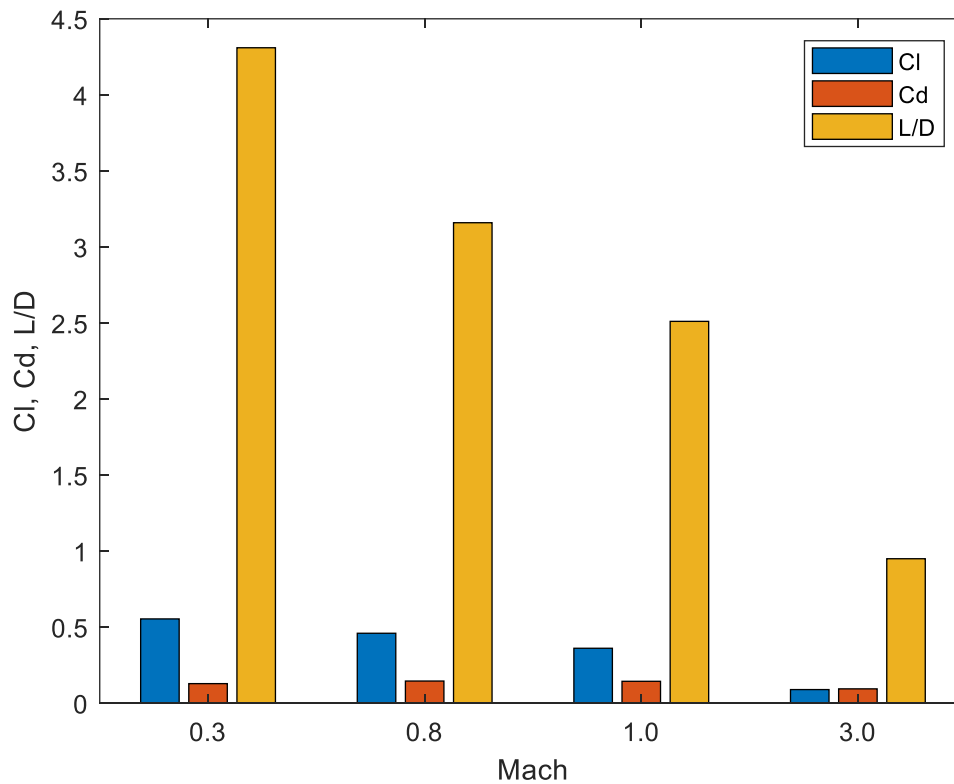


c) Close-Up of Trailing Edge

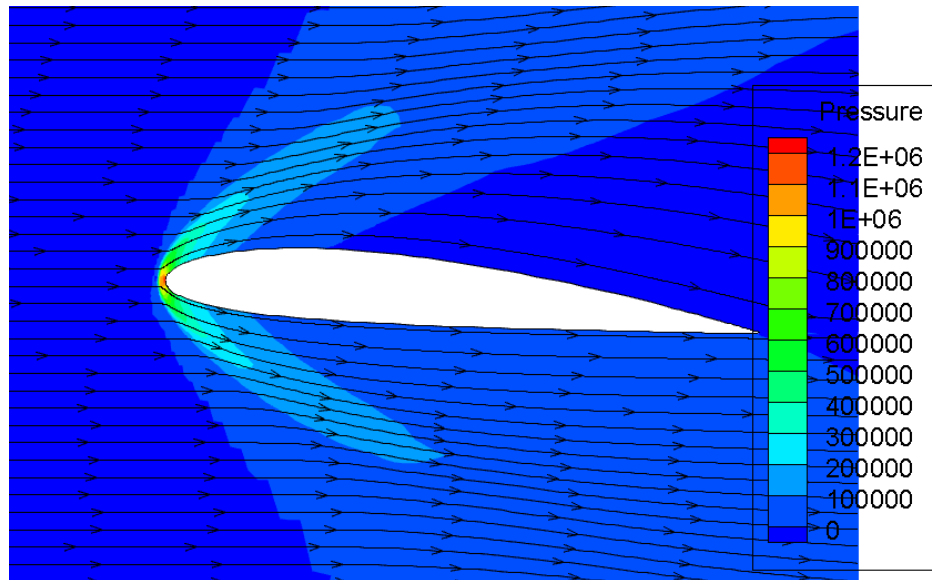
2. Ansys Fluent

- For Mach 3.0, 1.0, 0.8 (Solver Type = Density-Based)
- For Mach 0.3 (Solver Type = Pressure-Based)
- Viscous Model = Laminar (Solver Type = Density-Based)
- Viscous Model = k-omega (Solver Type = Pressure-Based)
- Air Density = Ideal Gas
- Flux Type = AUSM (Solver Type = Density-Based)
- Pressure-Velocity Coupling = SIMPLE (Solver Type = Pressure-Based)
- Courant Number = 0.5

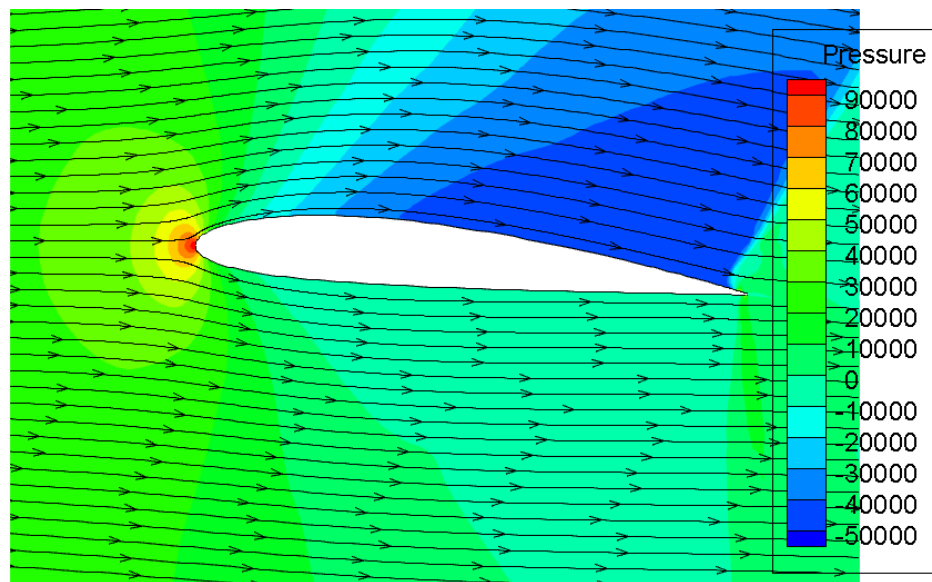
Mach	Cl	Cd	L/D
3	0.089406	0.094133	0.949775
1	0.361067	0.143821	2.510527
0.8	0.459726	0.145521	3.159181
0.3	0.553984	0.128546	4.309607



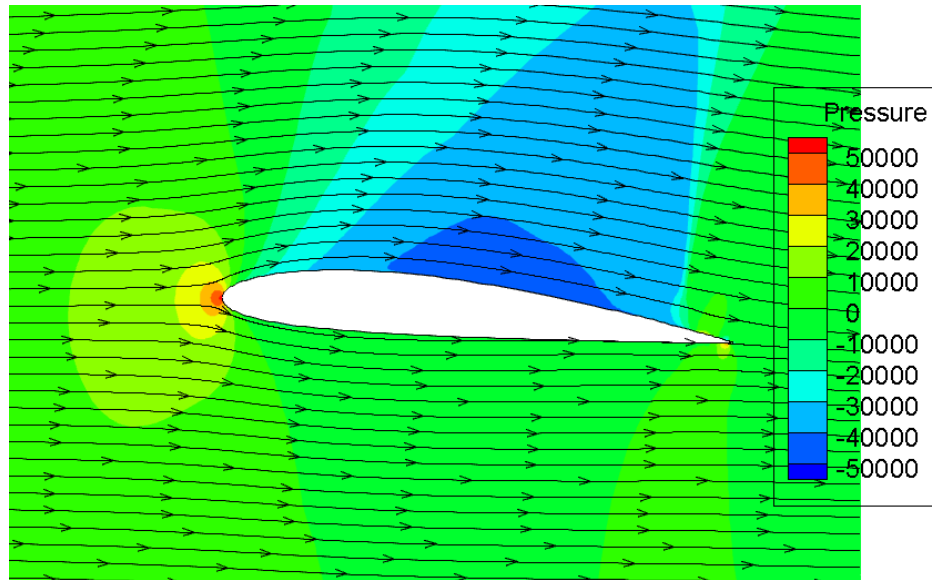
3. Tecplot



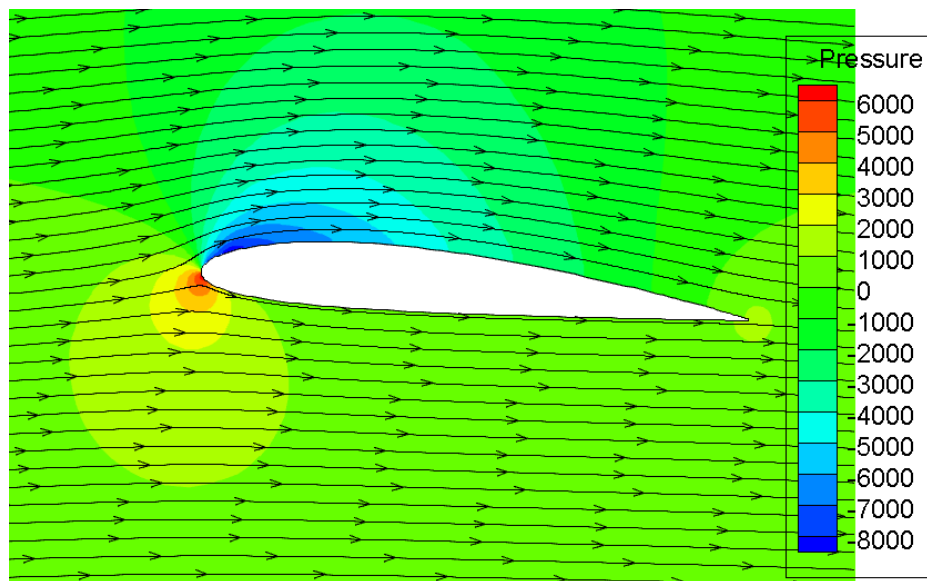
a) Mach = 3.0



b) Mach = 1.0



c) Mach = 0.8



d) Mach = 0.3