Applied Aerodynamics Technical Committee

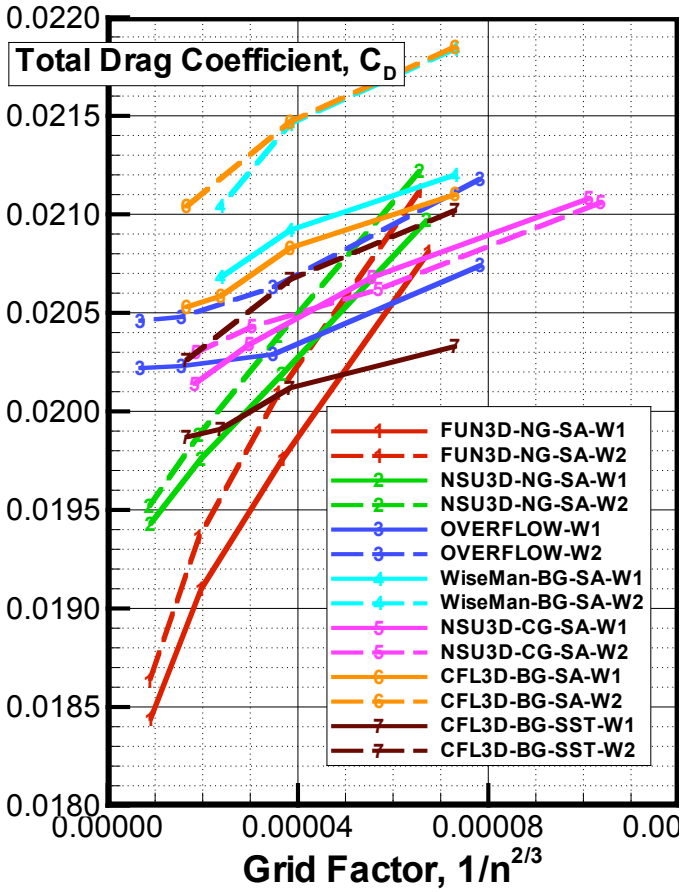
3rd AIAA CFD Drag Prediction Workshop

DPW-W1/W2

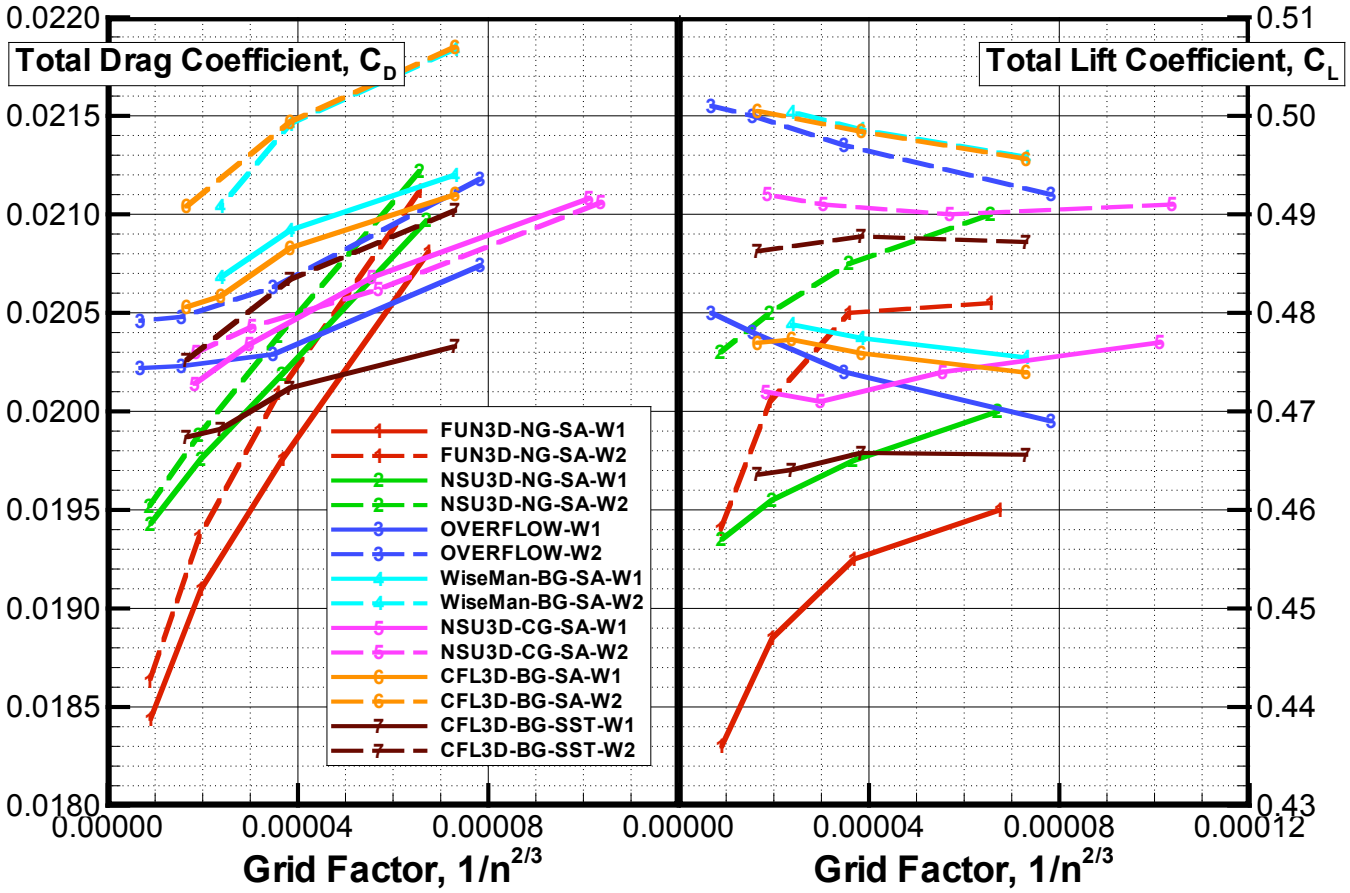
Data Summary and Comparison

Tom Zickuhr

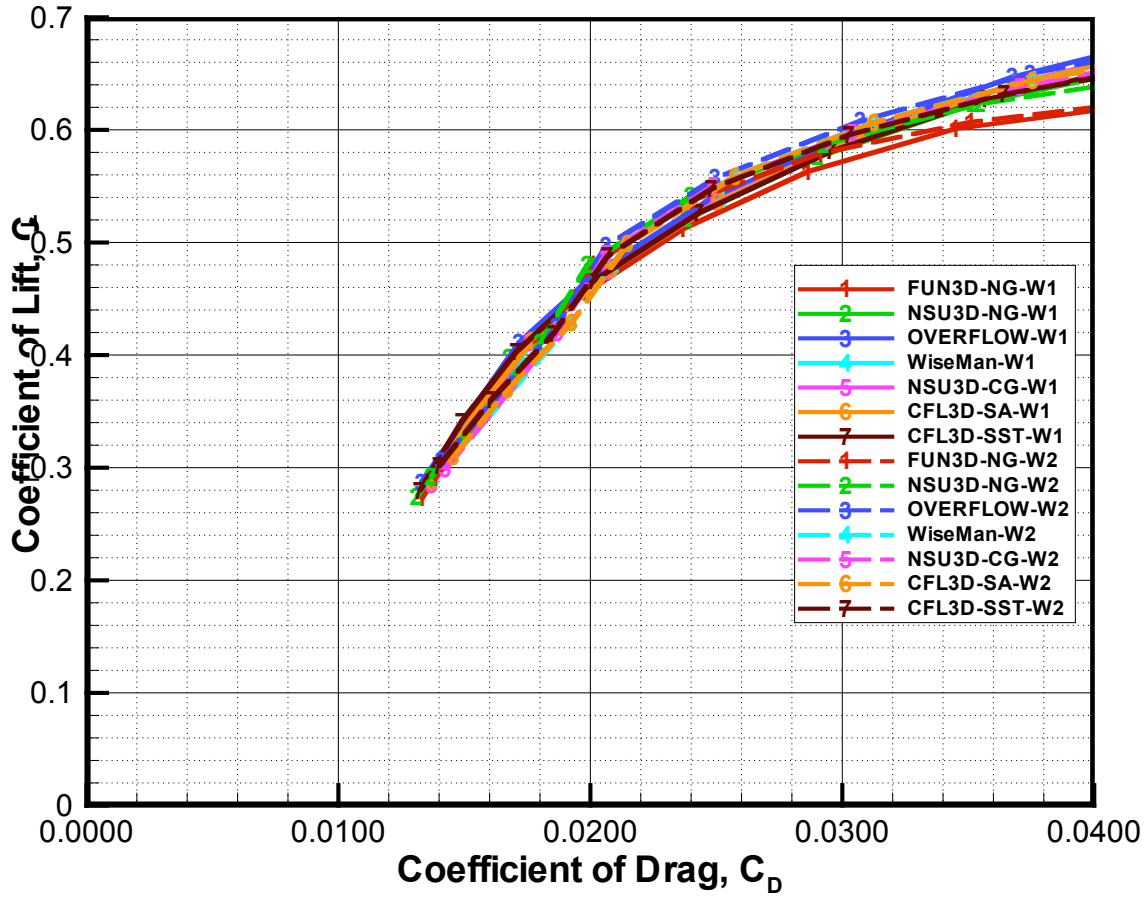
Total Coefficient Grid Convergence



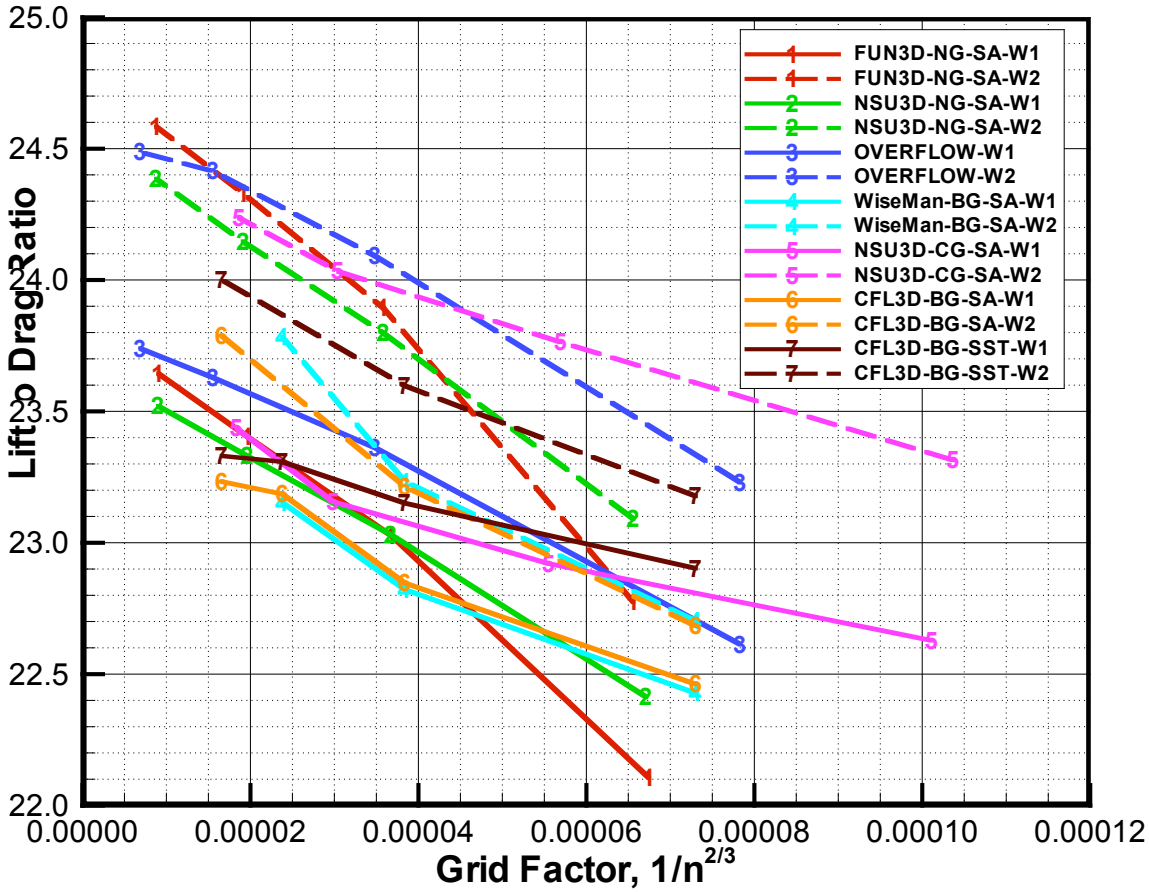
Total Coefficient Grid Convergence



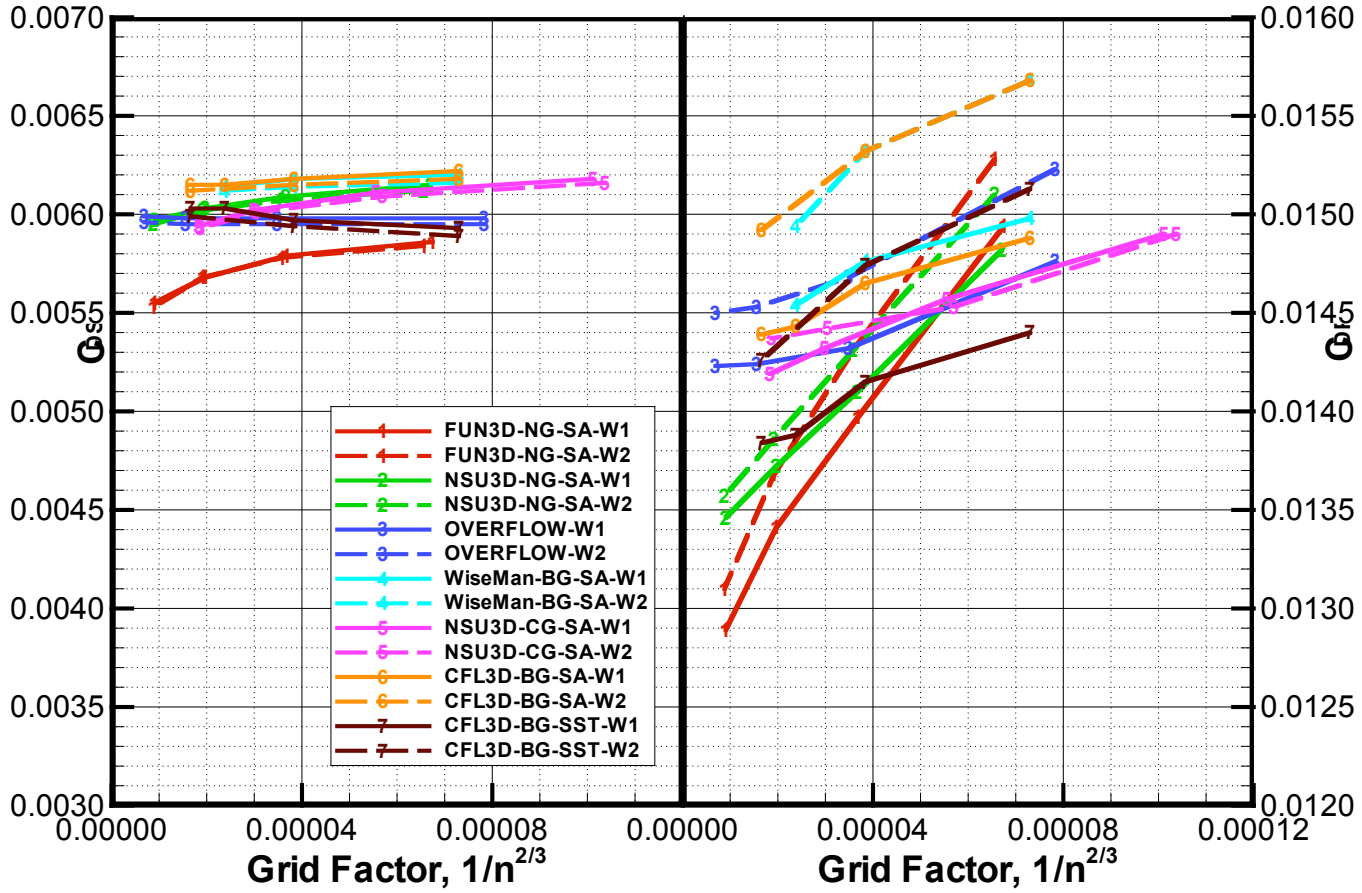
Drag Polar – L/D



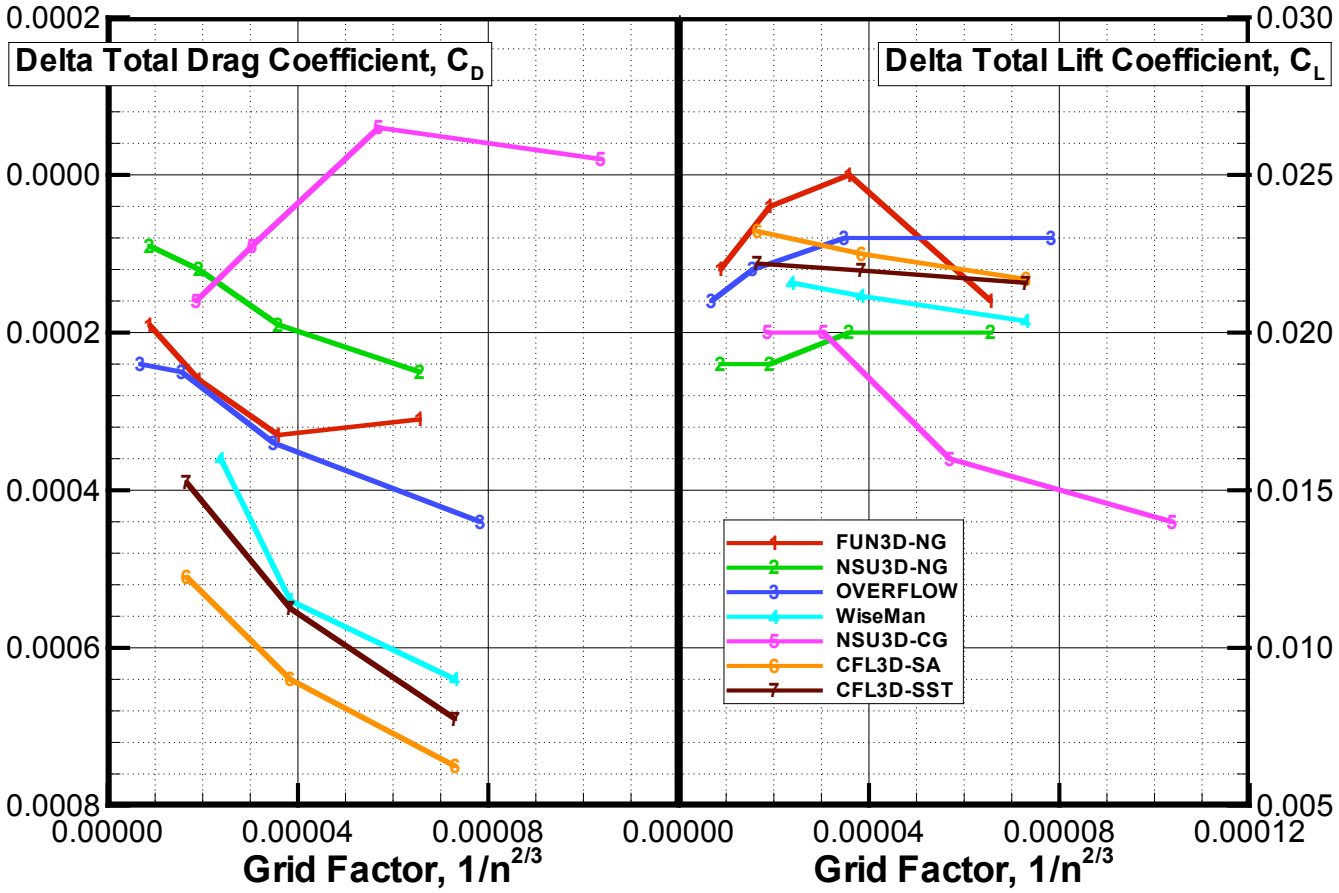
L/D Grid Convergence



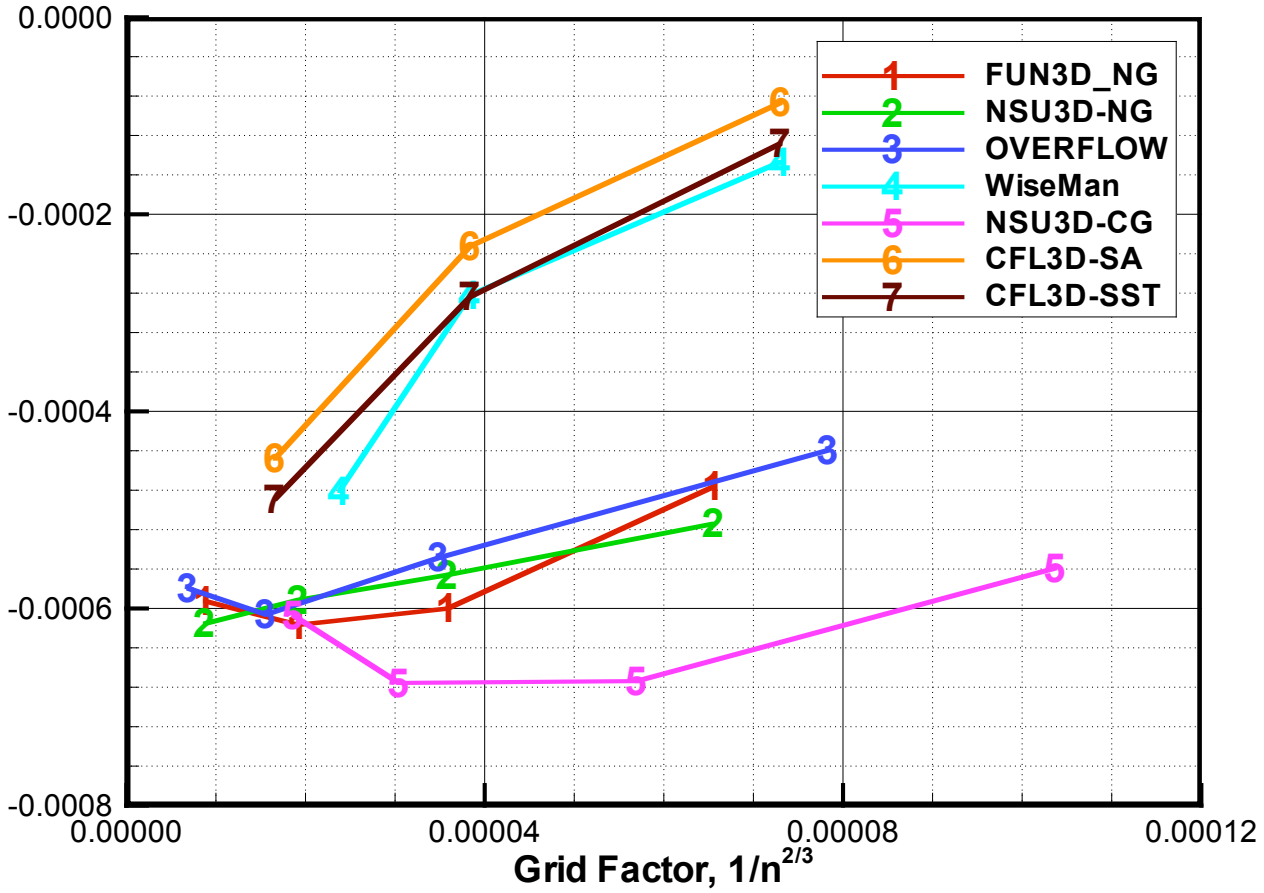
Drag Component Grid Convergence



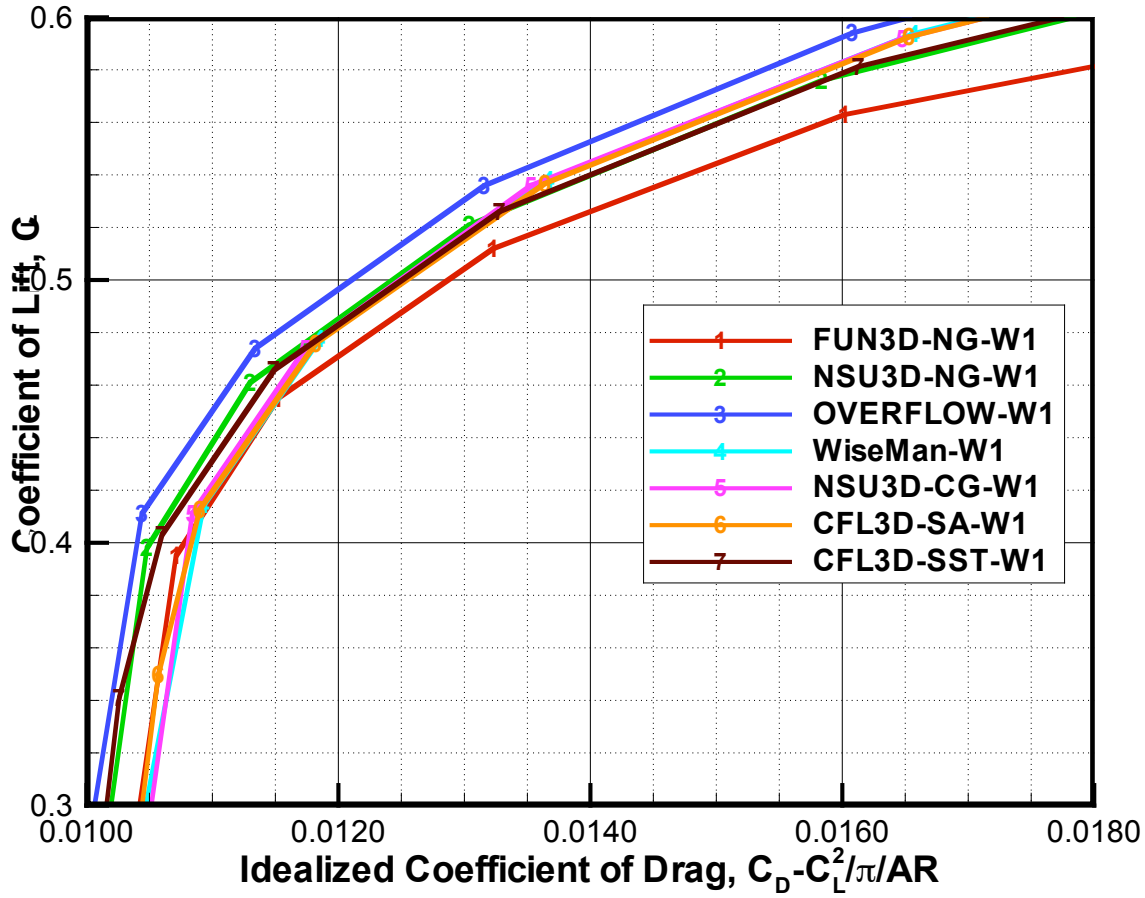
W2-W1 Delta - Grid Convergence



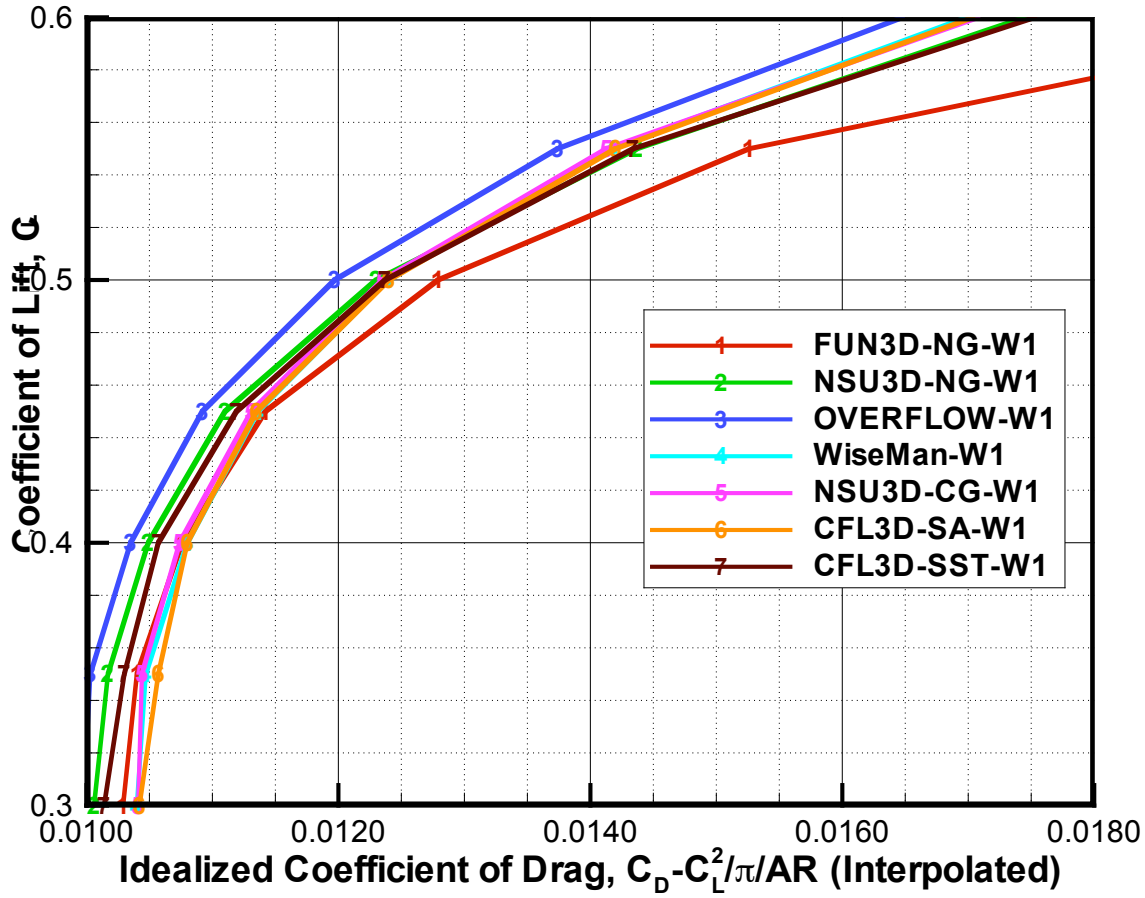
Idealized Drag - W2-W1 Delta Comparison



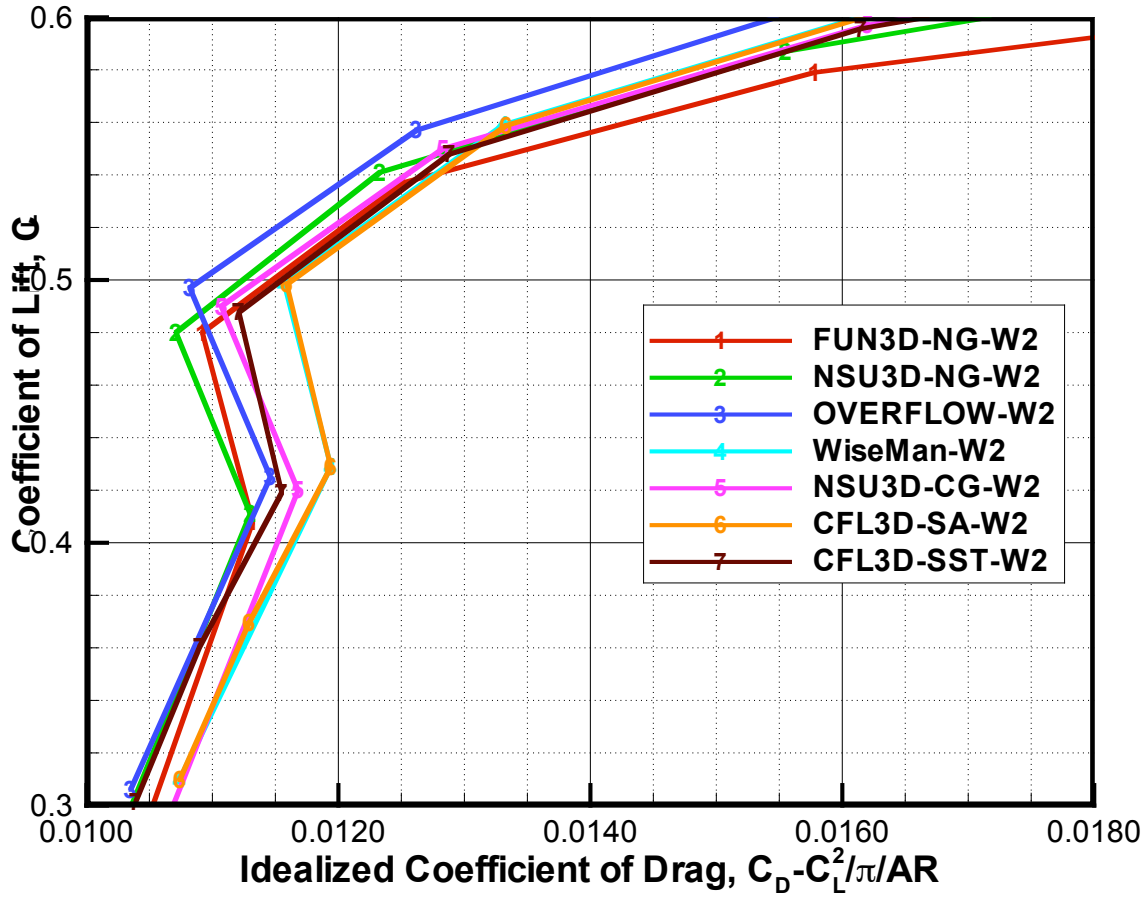
W1 Idealized Drag Polar



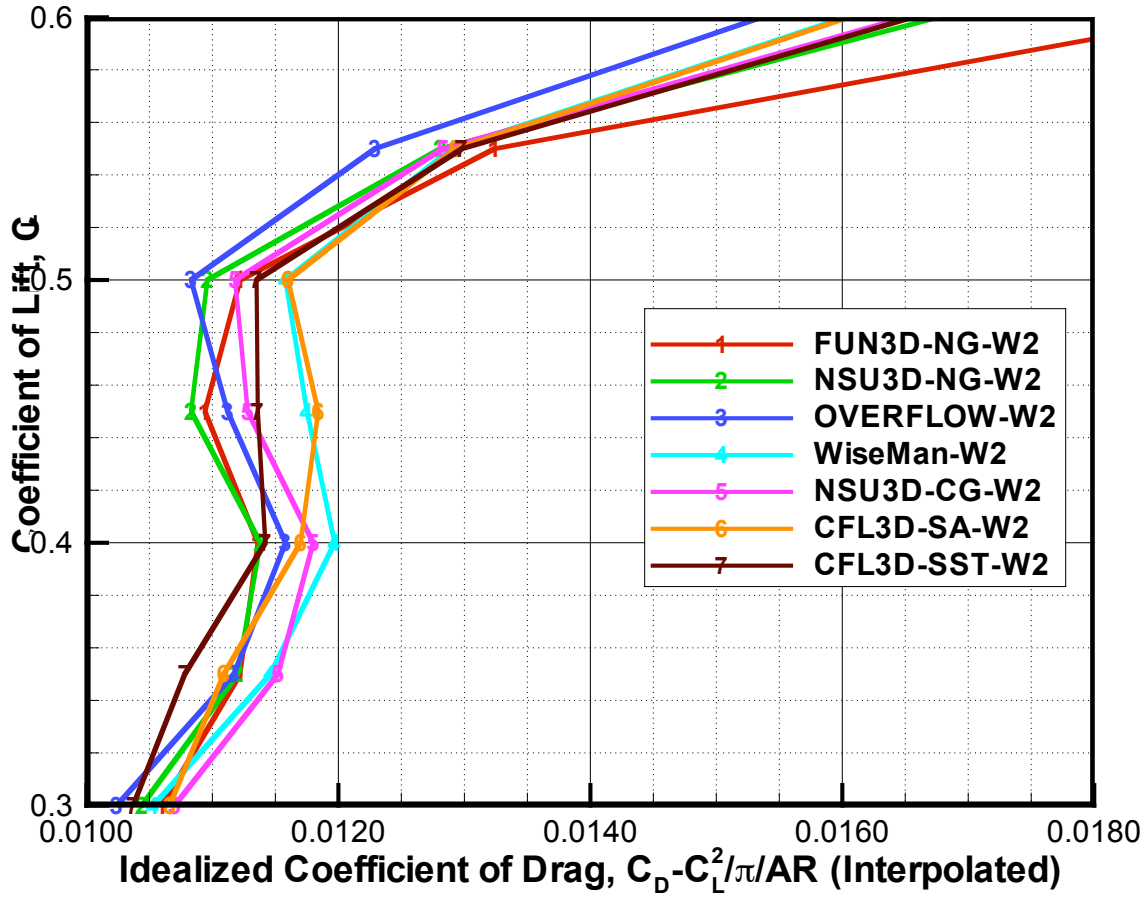
W1 Idealized Drag Polar (Interpolated)



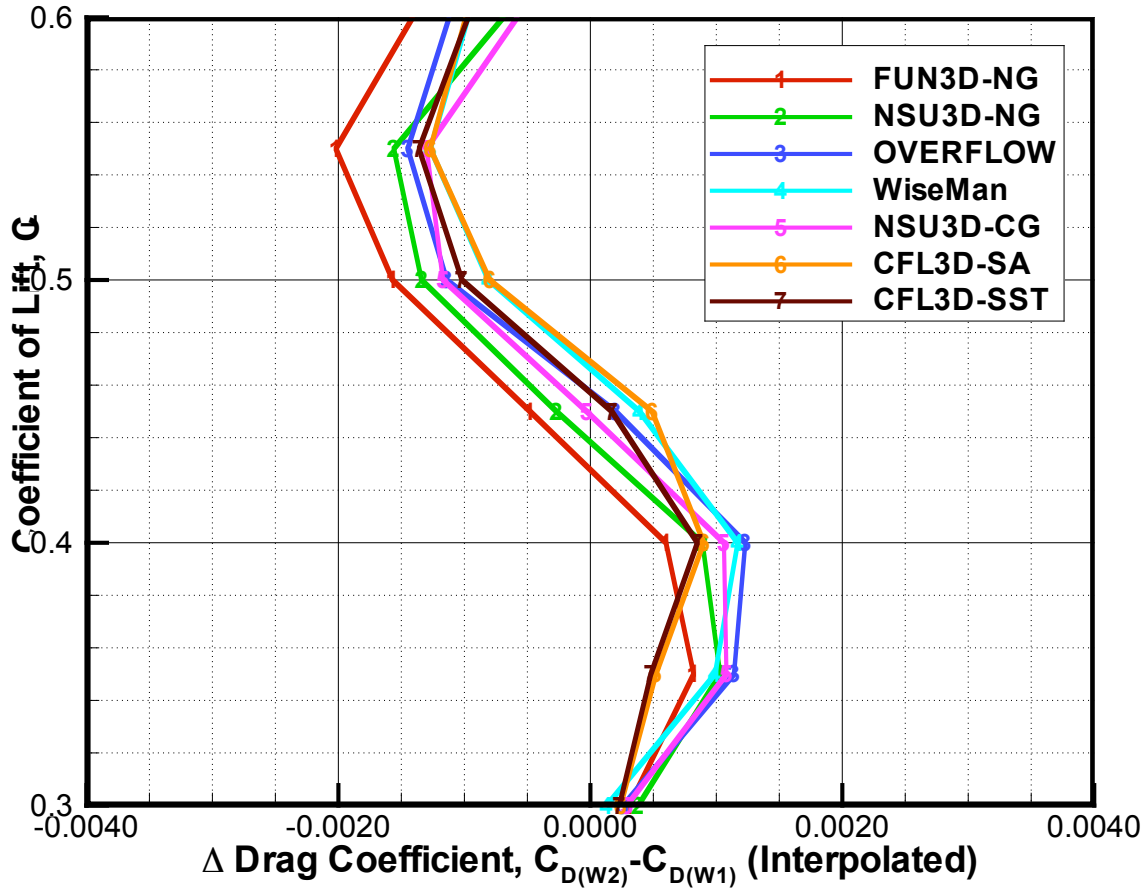
W2 Idealized Drag Polar



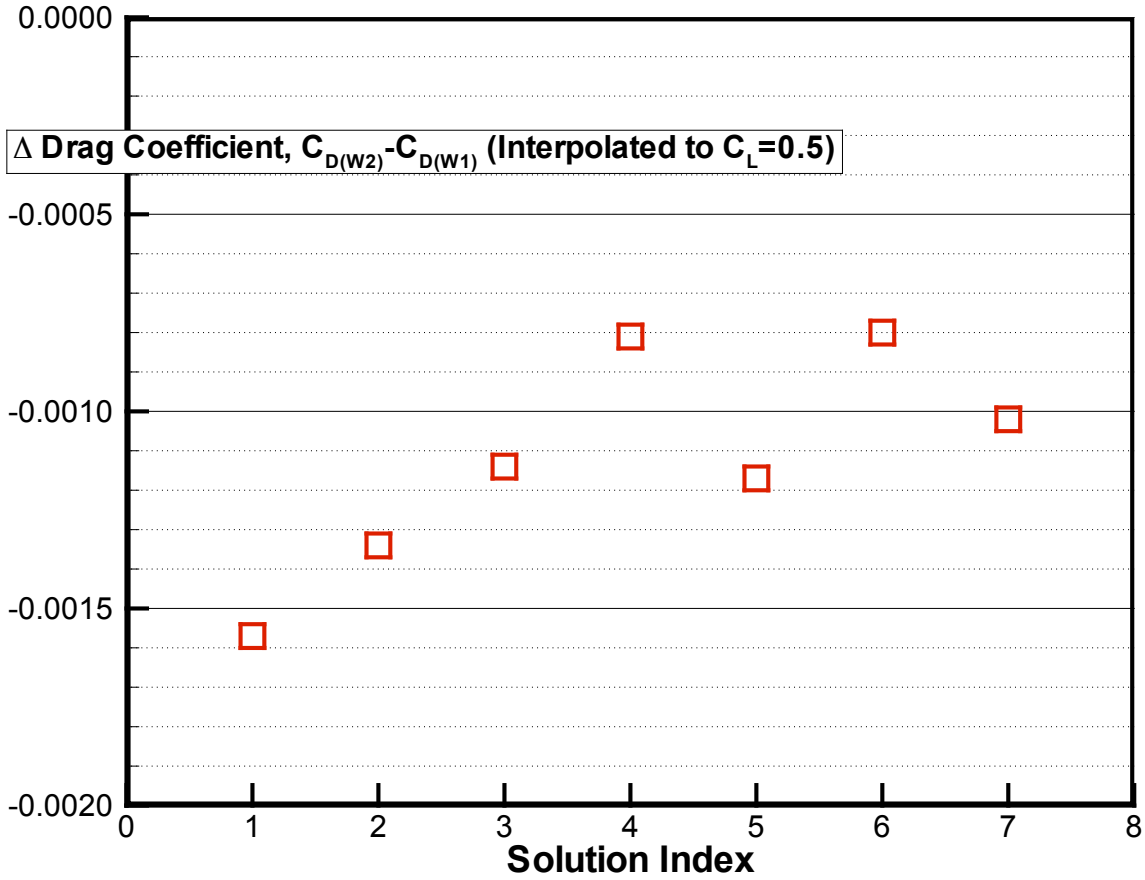
W2 Idealized Drag Polar (Interpolated)



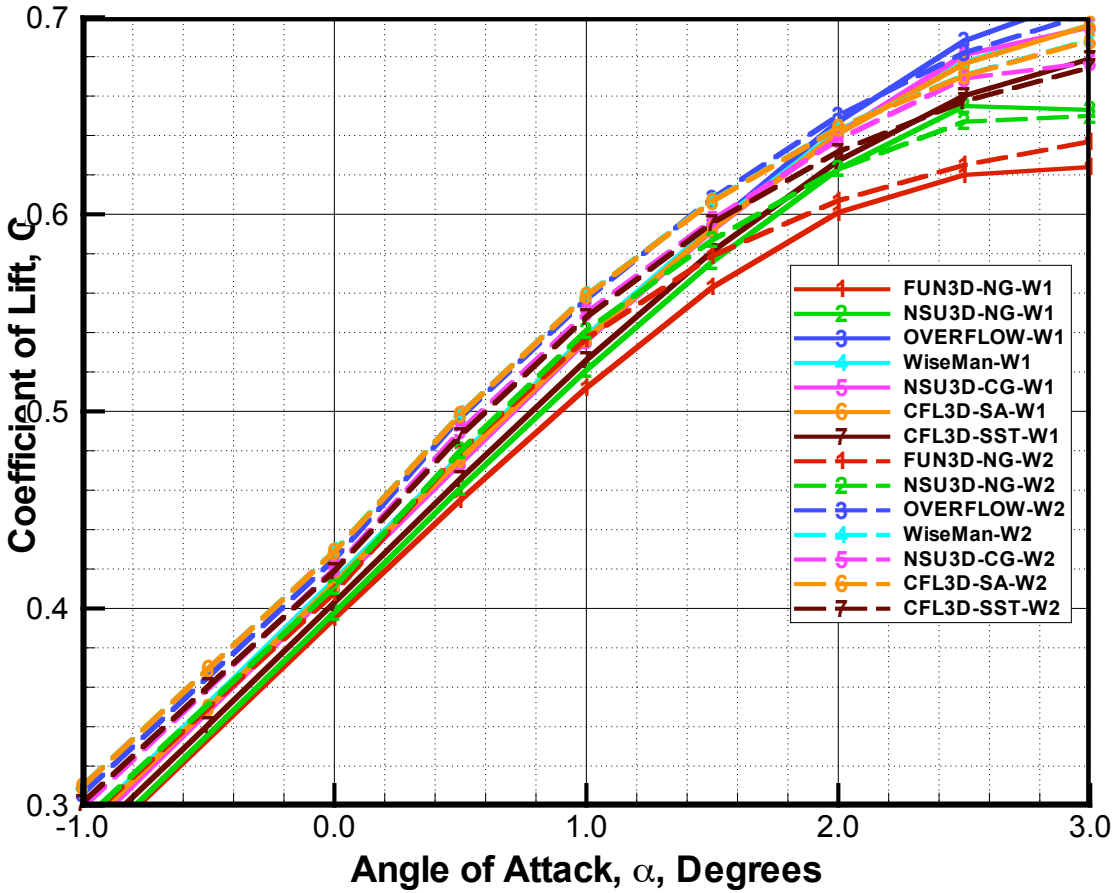
Delta Drag - Interpolated



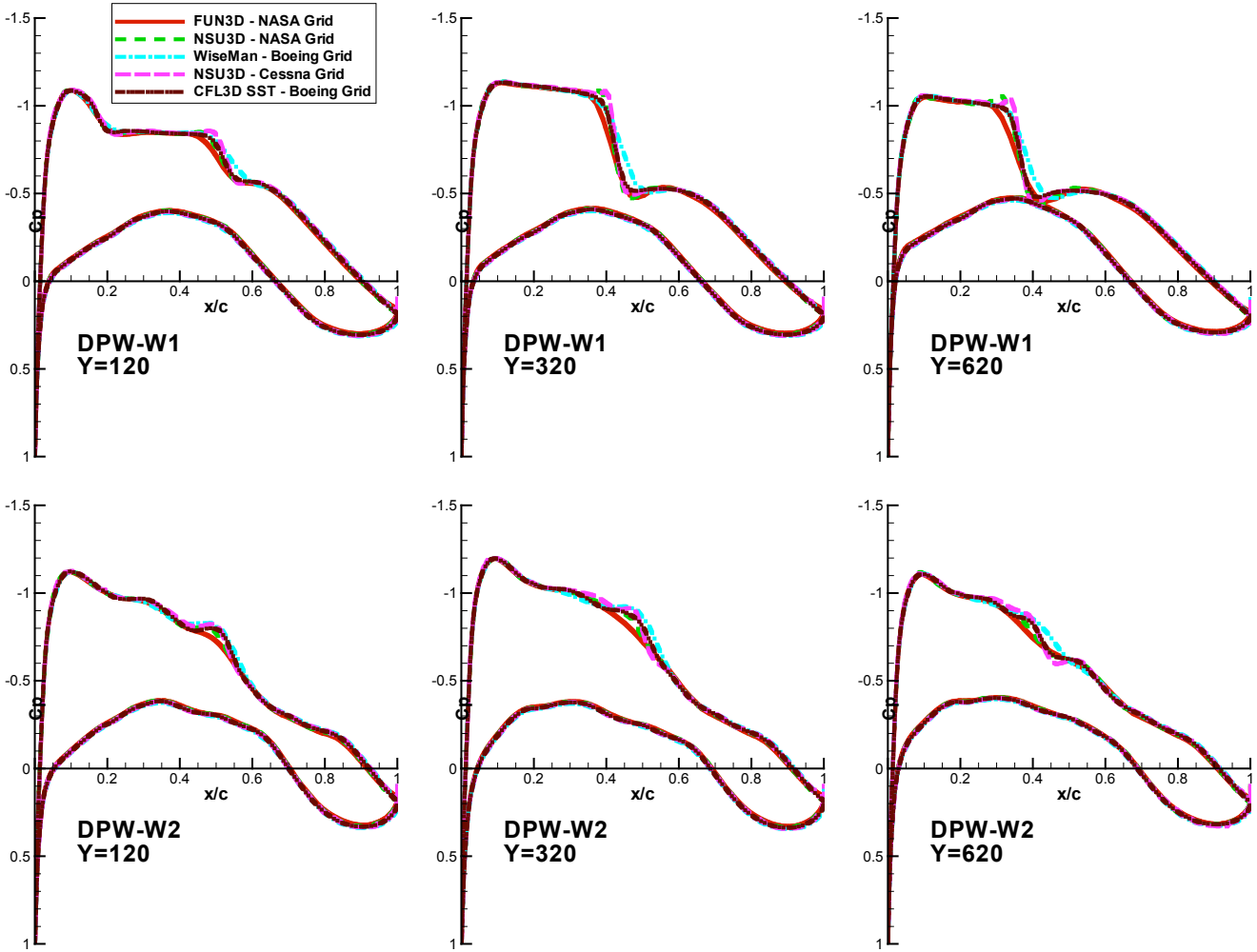
W2-W1 Delta Drag at C_L=0.5



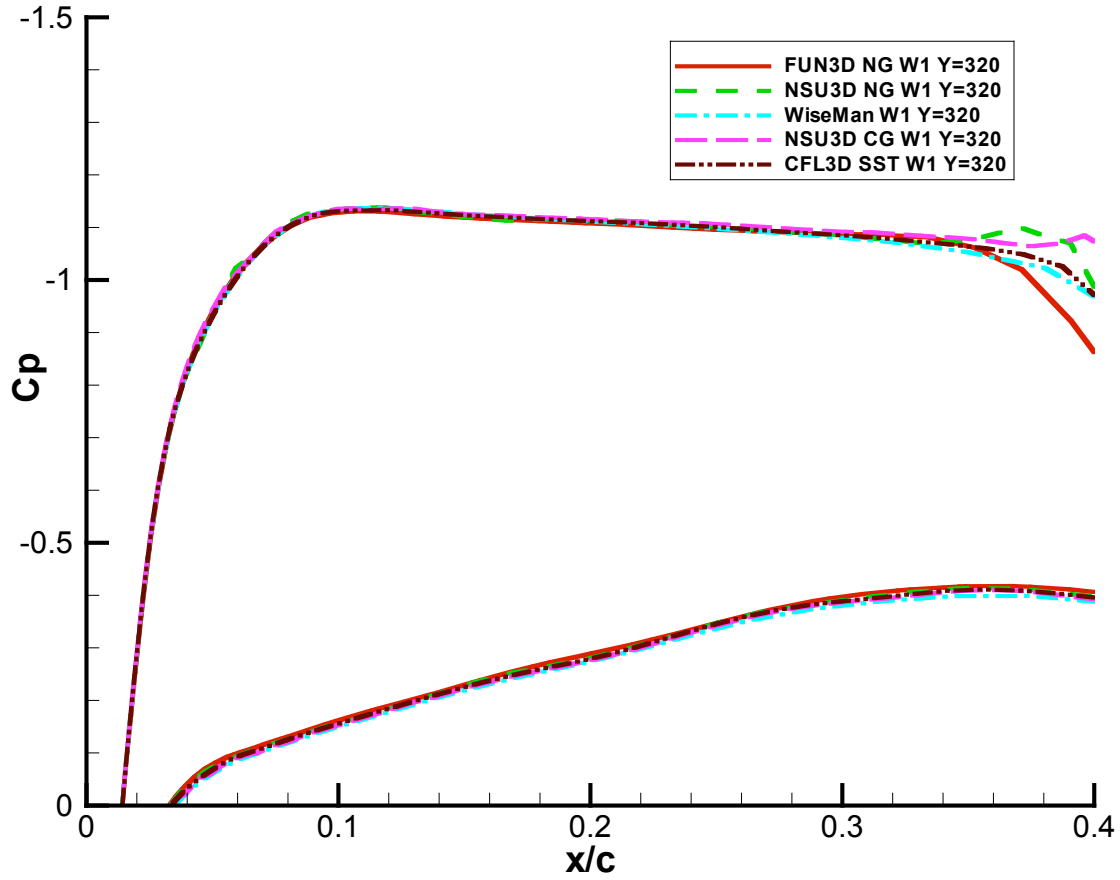
Lift Coefficient vs. Alpha



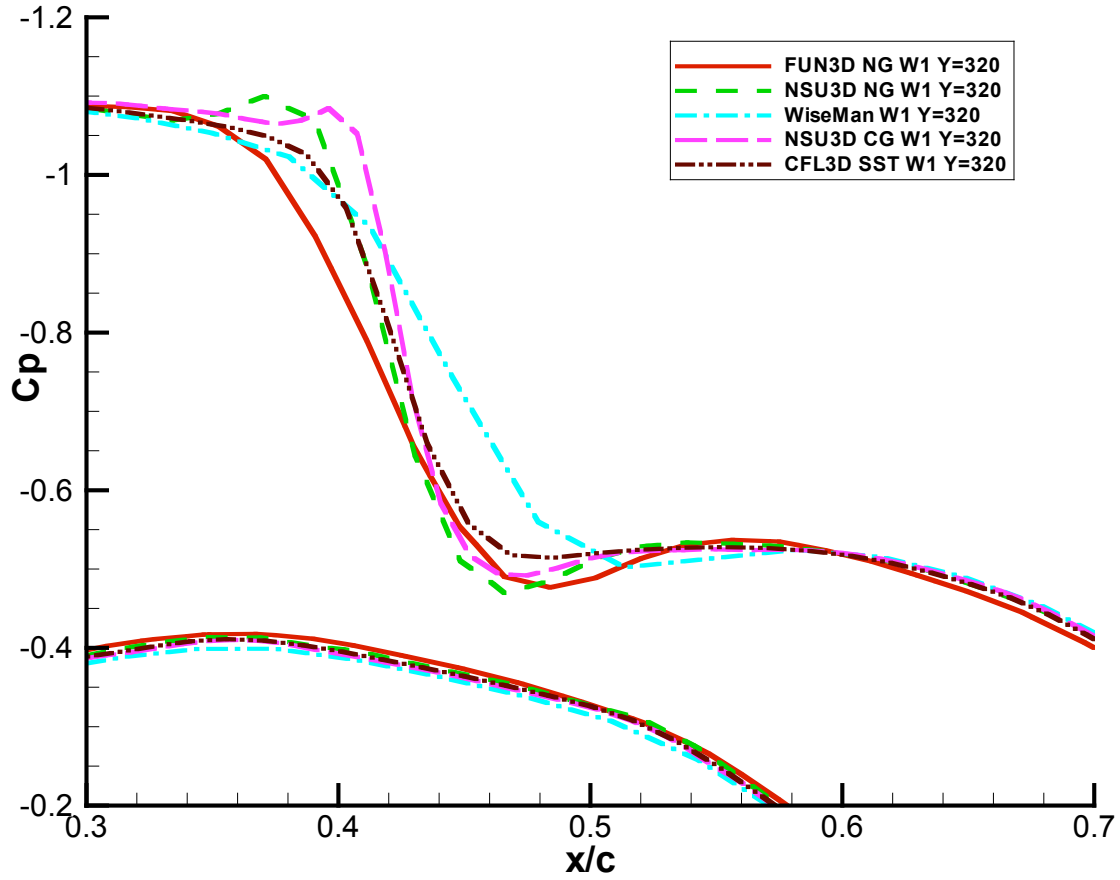
Pressure Coefficient Distribution



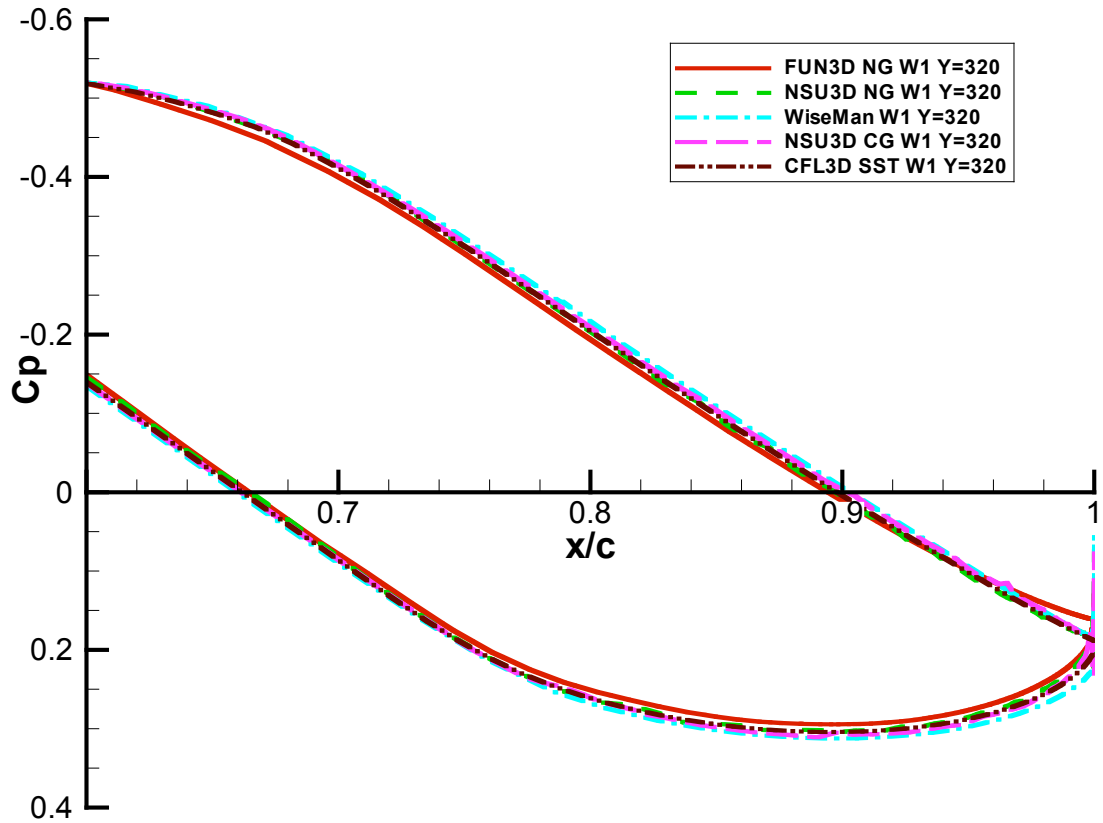
W1 Pressure Coefficient Detail 1



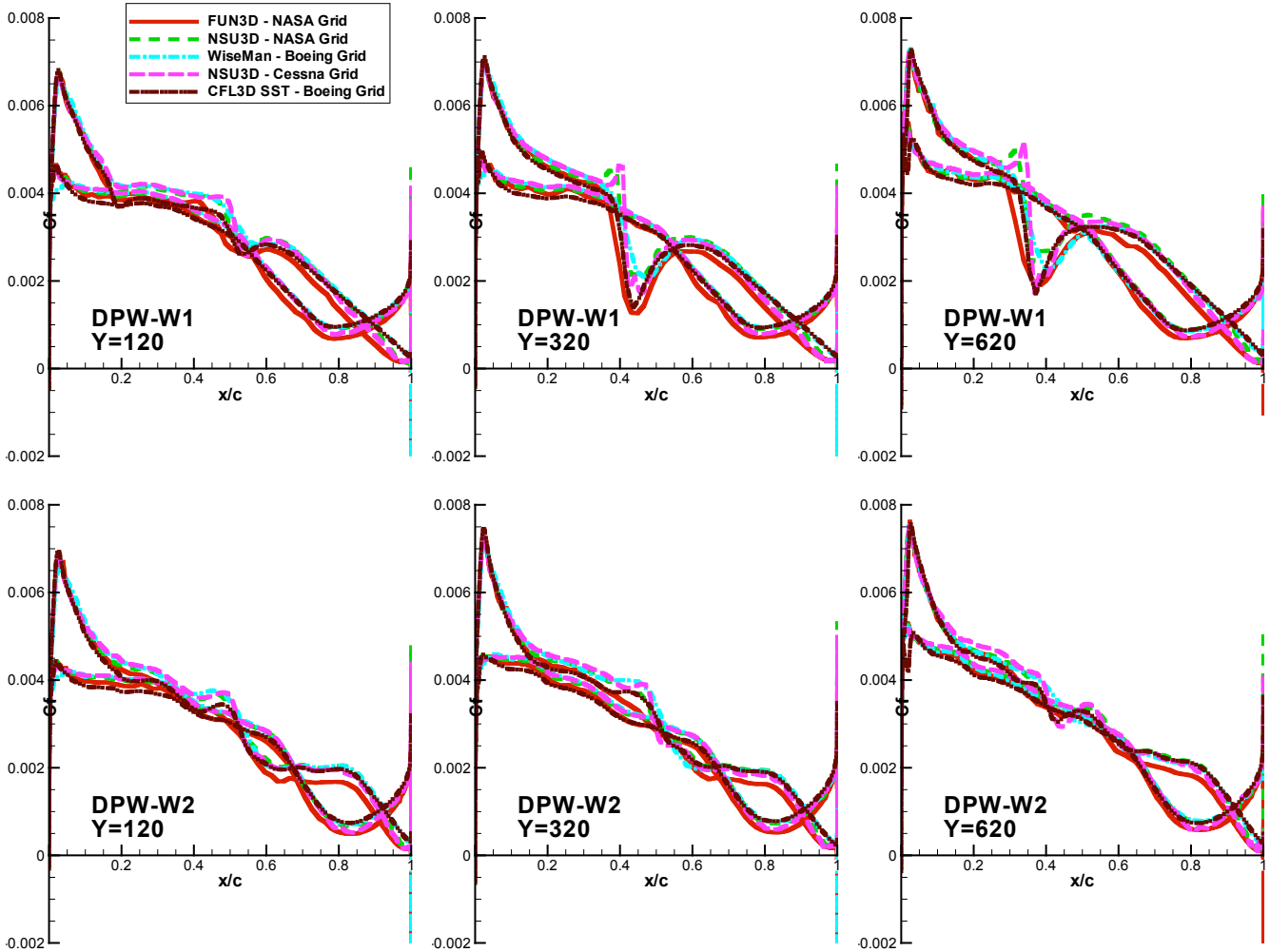
W1 Pressure Coefficient Detail 2



W1 Pressure Coefficient Detail 3



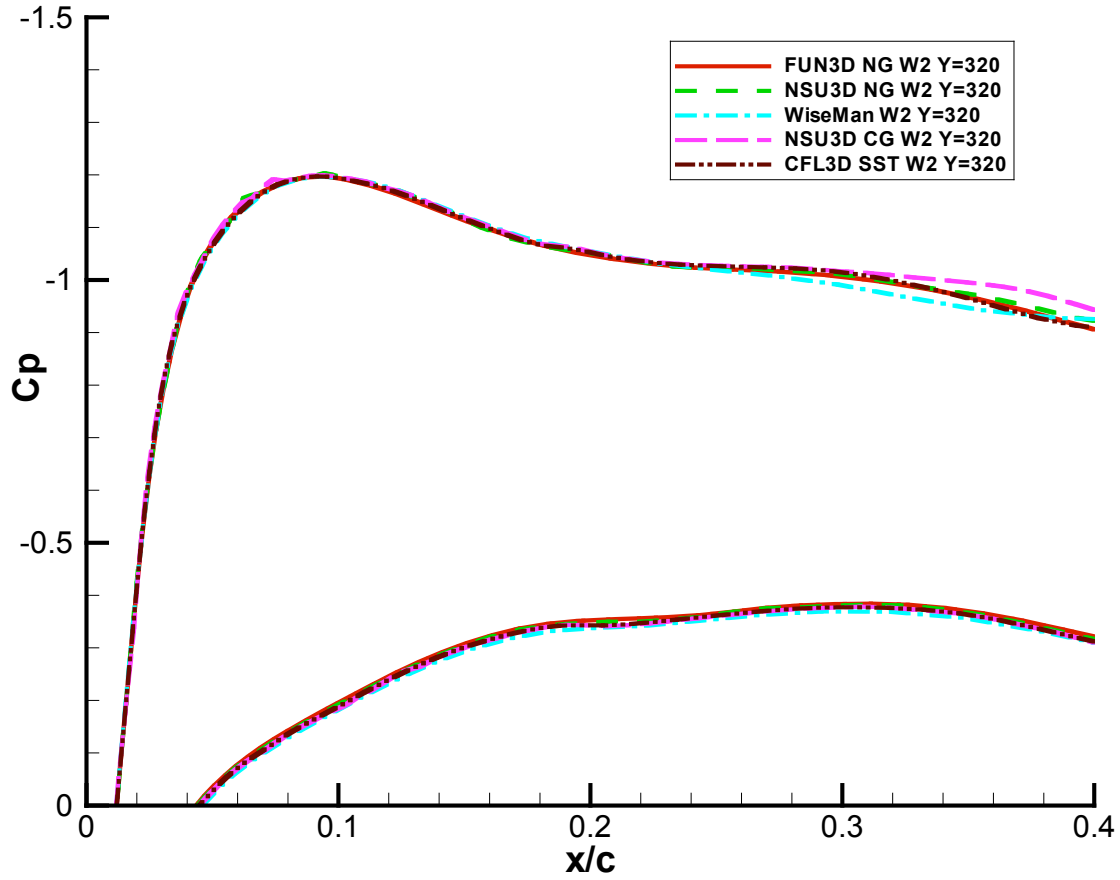
Skin Friction Distribution



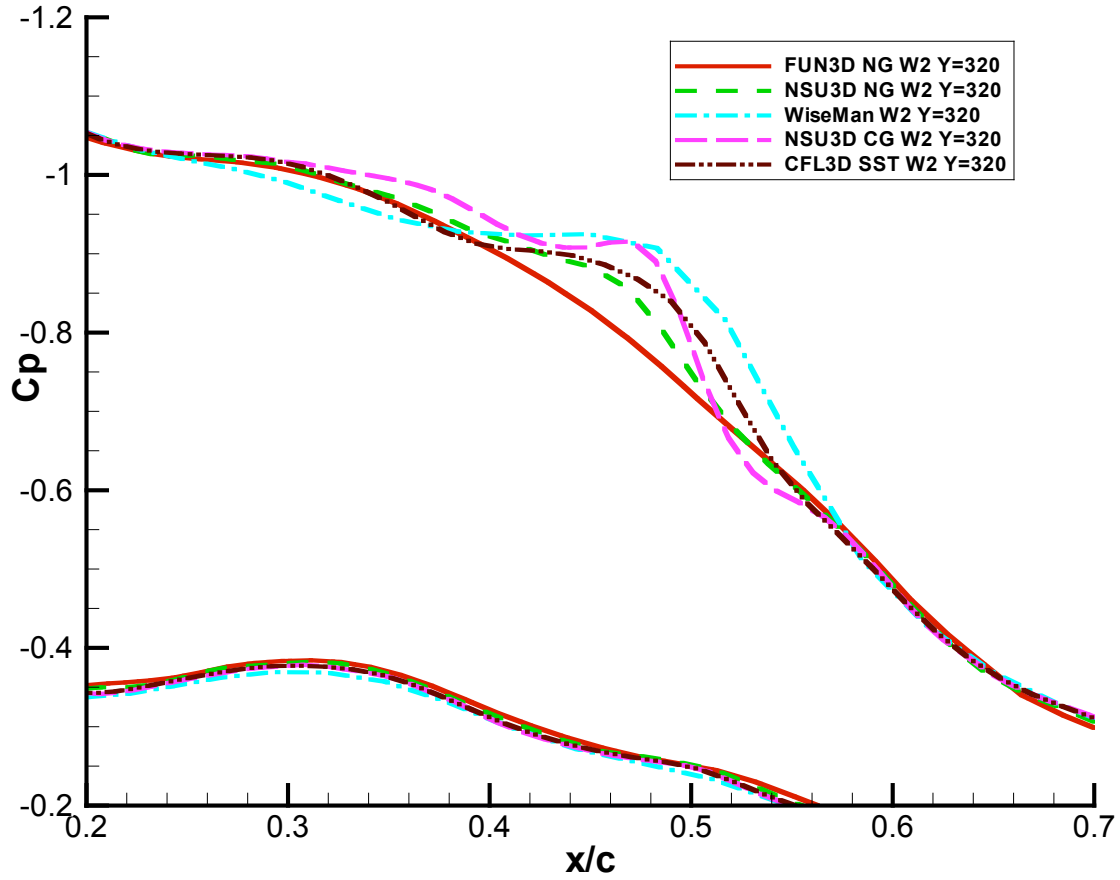
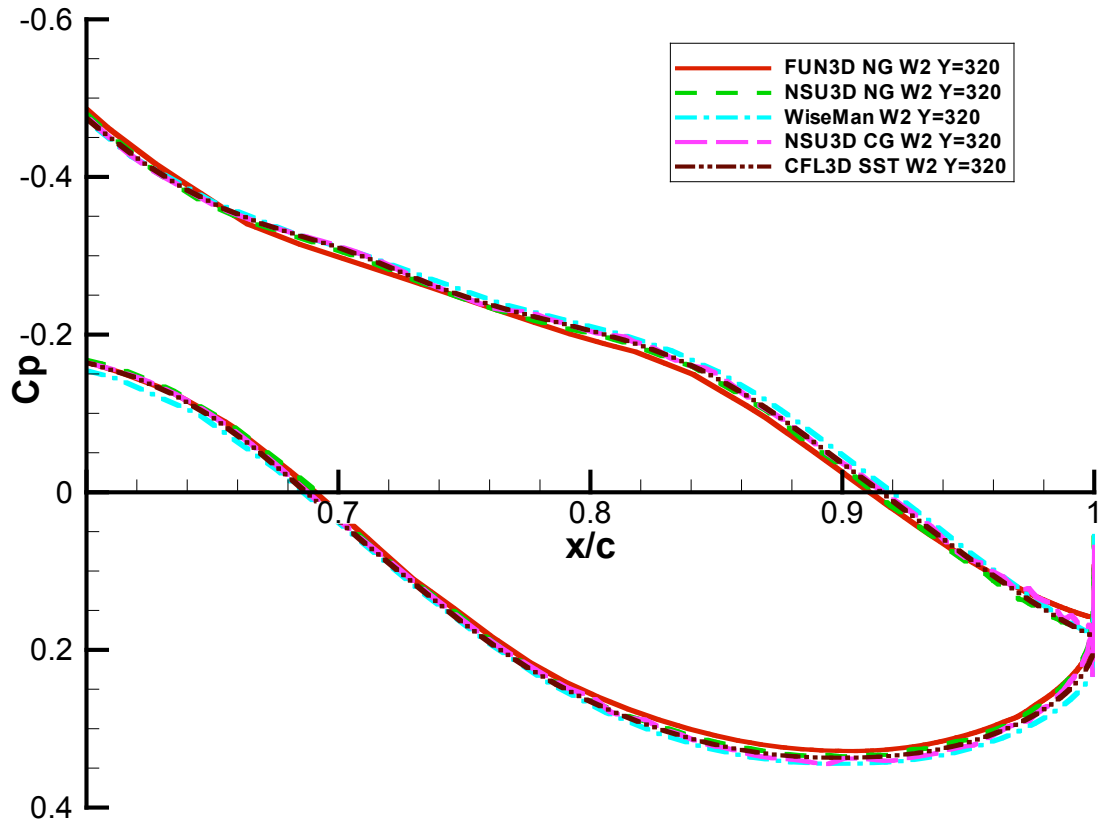
Summary

- If you want to look at delta C_D, used fixed C_L
- Why don't we match shocks better?

W2 Pressure Coefficient Detail 1



W2 Pressure Coefficient Detail 2



W2 Pressure Coefficient Detail 3