

L-001 Flexcompute

- Flow solver: Flow360
- Spatial discretization: node centered, 2nd order (Roe inviscid, central viscous + MUSCL extrapolation)
- Time integration or iteration method: Implicit pseudo-time stepping, BDF2
- Name of committee grids: ANSA grids
- Cases submitted: Case 1 and 2
- Initialization method: Cold-start
- Grid topology: Mixed-element, hexahedral dominant
- Typical DoF per eqn: (Case 2p4): 250M nodes
- HRLES model family: DDES with low-dissipation scheme
- Underlying RANS model: SA-neg
- Typical time step normalized by CTU: 0.002, 500 steps per CTU
- Target wall-normal grid spacing normalized by MAC or y^+ value: $2e-06$
- Aspect ratio range (tangential spacing/wall-normal):

Relevant publications related to solver and/or high-lift applications:

Thomas A. Fitzgibbon, Philippe Spalart, Qiqi Wang and Jim Bungener. "An Analysis of Modeling Sensitivity Effects for High Lift Predictions using the Flow 360 CFD Solver," AIAA 2022-3745. AIAA AVIATION 2022 Forum. June 2022.