

L-015 & Numeric Systems GmbH (Germany)

- Flow solver: Pacefish
- Spatial discretization: LBM D3Q19, Cartesian Mesh, interpolated particle Reflection (BFL)
- Time integration or iteration method: LBM, explicit, finite-difference
- Name of committee grids (or “self-prepared”): self-prepared
- Cases submitted: Case 1, Case 2.2
- Initialization method: resting state (zero velocity, ambient pressure)
- Grid topology: octree based refinement over 10 refinement levels
- Typical DoF per eqn (cells) (Case #): 470 M Cells (Case 2.2)
- HRLES model family (e.g., DDES): SST-DDES
- Underlying RANS model (e.g., SA): k-Omega-SST
- Typical time step normalized by CTU: $1/7340 = 1.362e-4$
- Target wall-normal grid spacing normalized by MAC or y^+ value: $\sim 500 y^+$
- Aspect ratio range (tangential spacing/wall-normal): 1:1 (Cartesian mesh)
- Relevant publications related to solver and/or high-lift applications:
SAE 2024-01-2534, SAE 2024-01-2531

