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中文关键词： adaptively refined Cartesian grid viscous flow CCST(curvature corrected symmetry technique) boundary condition

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中文摘要:

Quadtree-based Cartesian grid was automatically generated from specified geometry.Adaptive refinements were performed according to geometric parameters and solution of flow field.An altered CCST (curvature corrected symmetry technique) approach was proposed to apply solid wall boundary conditions.Driven flows in a square cavity and flows around NACA0012 airfoil were simulated and compared with the result of published structured grid and stretched Cartesian grid.The results show that solid wall boundary condition are accurately applied by current altered CCST approach,while incompressible/compressible subsonic,transonic and supersonic viscous flows are adequately simulated with adaptively refined Cartesian grid.

英文摘要:

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