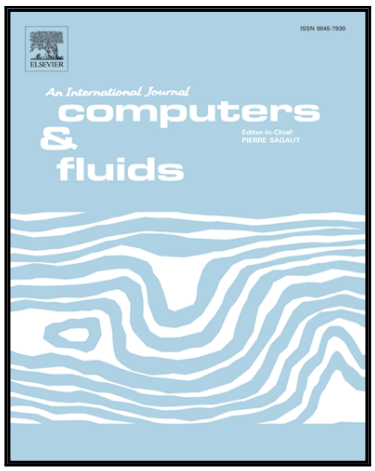

Aerodynamic and aeroacoustic analyses of a submerged air inlet in a low-Mach-number flow

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Highlights

- Aerodynamic and aeroacoustic studies of a generic NACA inlet are presented
- The flow is solved through RANS and DES, for various velocity ratios
- The flow results show good agreement with experimental data
- A transition from a quasi-laminar to a turbulent state is observed
- These two states exhibit two types of acoustic spectra in the far-field