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Detached eddy simulations of rising Taylor bubbles

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highlights

- Simulations of Taylor bubbles with turbulent wakes were performed using VOF and DES
- Void fraction, velocity and turbulence results were in agreement with experiments
- Temperature, pressure, and differential pressure fluctuations were also analysed
- Coherent structures in the far wake caused trailing bubble acceleration
- Recirculating vortex in the near wake accelerated trailing bubble coalescence

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