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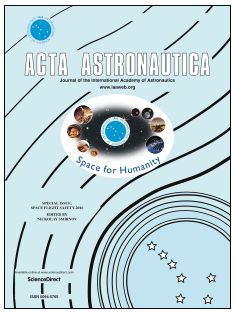

Numerical simulation of wavy surface effect on the stability of a hypersonic boundary layer

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Highlights

1. High-order scheme is used to simulate hypersonic wavy-wall boundary layer stability.
2. The accuracy and efficiency of two unsteady time integration schemes are compared.
3. The wavy wall can suppress the high-frequency second-mode instability.
4. The wavy-wall geometric parameters significantly affect the boundary layer stability.