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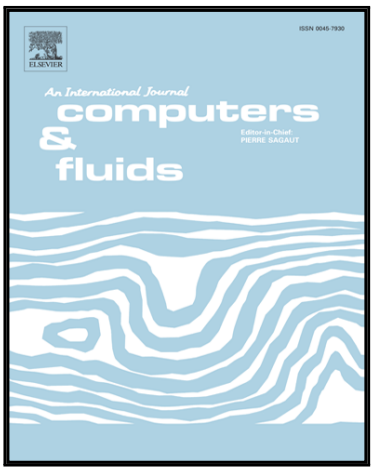

An Improved Non-linear Weights for Seventh-Order Weighted Essentially Non-Oscillatory Scheme

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Highlights

- The article presents a new seventh-order weighted essentially non-oscillatory scheme.
- The local and global smoothness indicators are constructed based on L_1-norm.
- A global smoothness indicator is of $O(\Delta x^8)$ constructed.
- The resulted scheme attains the desired order of accuracy in presence of critical points.
- Numerical examples are presented with one and two-dimensional system of Euler equations.

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