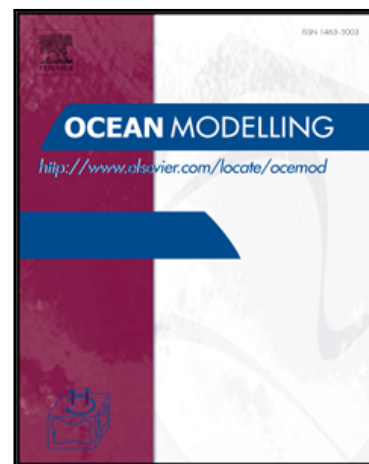


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Identifying Lagrangian Coherent Vortices in a Mesoscale Ocean Model

Nathaniel Tarshish, Ryan Abernathey, Ci Zhang, Carolina O. Dufour, Ivy Frenger, Stephen M. Griffies

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Highlights

- Lagrangian vortices are identified in a mesoscale eddy-permitting ocean model.
- Rigorous sensitivity analysis of the methods tuning parameters is conducted.
- The Coherency Index, a new Lagrangian diagnostic, is introduced to quantify the material coherency of a vortex.
- The spectrum of vortex coherency is explored by identifying leaky, moderately coherent, and strictly coherent vortices.

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