

Abstract Submitted
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Coherent Structures in Decaying Two-Dimensional Turbulence

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ROBERT ECKE — We revisit the matter of coherent structures, such as vortices,
and their role in decaying two-dimensional turbulence. These experiments take place
in an electromagnetically forced stratified layer within a square container with no
slip boundaries and a linear dissipation with the container bottom. Results relating
the energy and enstrophy of the bulk flow with the number and strength of coherent
vortices are compared with earlier numerical and experimental work.

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