

Abstract Submitted
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Counter-gradient transport in the atmospheric boundary layer

CHERYL KLIPP, US Army Research Laboratory — Counter-gradient transport in turbulent flows, also called negative viscosity, has been theorized and observed over the past century at a variety of spatial scales. More than one mechanism may be responsible for the process of transferring momentum from slower moving fluid to faster moving fluid depending on the scale of the flow and other flow properties. Horizontal divergence is presented as a possible mechanism for counter-gradient momentum transport observed in the atmospheric boundary layer.

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