Components of the 3-D Lagrangian Diffusivity Tensor in a Periodic Channel Featuring Zonal Jets

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A) Eulerian transports in the eddy buoyancy flux. The black thick solid lines describe the depth of zero zonal Lagrangian particle velocity fields. The thin lines are positive (solid) and negative (dashed) Eulerian zonal particle velocity fields in the limit of large time.

B) Eulerian and Lagrangian mean velocity: Zonal Component

Note that the Eulerian mean velocity in Fig. 2c can be well approximated by a Lagrangian estimate (not shown), i.e. the line average of particle velocities at 100-day intervals. The Lagrangian mean velocity in Fig. 2d can be well approximated by a line average velocity at 500-km intervals (e.g. batch-averaged 200-day pseudo-trajectories). The line average velocity at 500-km intervals (e.g. batch-averaged 200-day pseudo-trajectories). The line average velocity at 500-km intervals lines (e.g. batch-averaged 200-day pseudo-trajectories). The line average velocity at 500-km intervals (e.g. batch-averaged 200-day pseudo-trajectories). The line average velocity at 500-km intervals (e.g. batch-averaged 200-day pseudo-trajectories). The line average velocity at 500-km intervals (e.g. batch-averaged 200-day pseudo-trajectories).