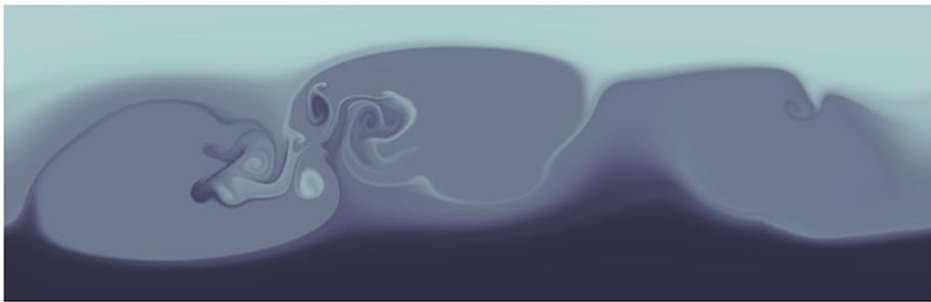


UK Fluids Network photo competition #10: 'Computed flows'

RUNNER-UP

'Shear-driven Mixing'

Tom Eaves (University of Dundee)



Click on image to see high quality version

A snapshot of a three-layer, stably-stratified density field undergoing mixing in a shear flow. An instability in three-layer stratified shear flow arises when interfacial gravity waves are doppler-shifted by the shear, and resonate. At this wavelength, the resulting nonlinear dynamics show regions of intense mixing alongside more quiescent dynamics.