

Poster 2

Kraft & Andrews

Visualization of Rayleigh-Taylor instability

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Rayleigh-Taylor instability (R-T) occurs when a density gradient is accelerated by a pressure gradient such that when a heavy fluid rests above a light fluid under the influence of gravity. As a result the density interface is unstable to infinitesimal perturbations. This poster presents a visualization overview of our statistically steady R-T mixing experiment. Photographs from dye visualization, PIV, PIV-S, and PLIF are shown. Apart from the intrinsic scientific and engineering interest, the images reveal the beauty and art of buoyancy driven fluid mixing.