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Visualization of Plane Free Jet Impinging on the Edge

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This picture shows the interaction of the plane free jet and the edge, which is visualized by the dye injection technique with a dilute Rhodamine B solution. The experiment is carried out in a water tunnel at Re (=Ud/v)=430, which is defined by the jet flow velocity U and the height d of the jet nozzle. The edge apex is located at x/d=8 from the nozzle exit. The flow field around the edge indicates the appearance of frequency jump in flow oscillation in front of the edge and further amplification of the vortices in the downstream.