

Turbulent Flows

Stephen B. Pope

Cambridge University Press, 2000

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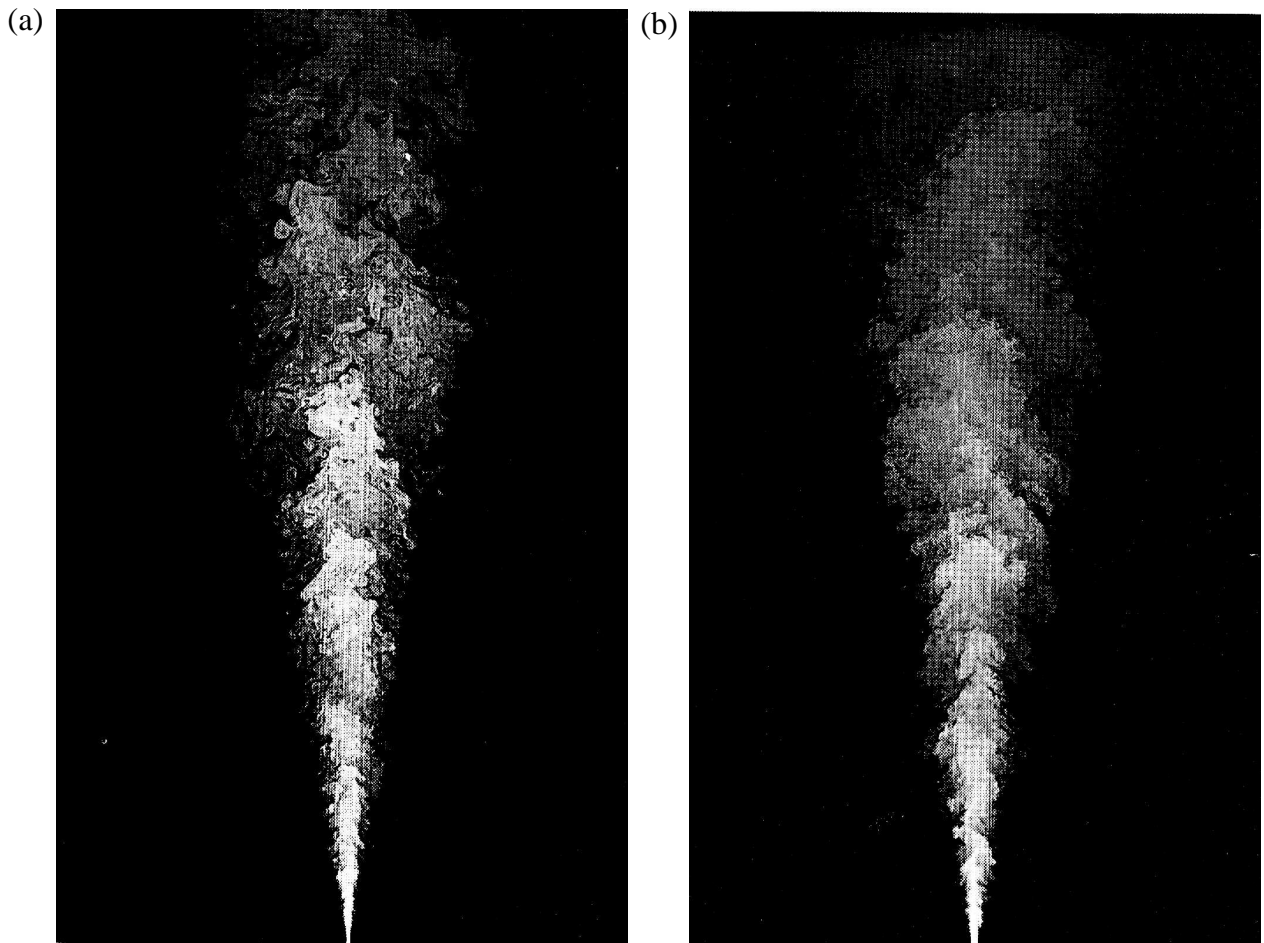


Figure 1.2: Planar images of concentration in a turbulent jet: (a) $Re = 5,000$ (b) $Re = 20,000$. From Dahm and Dimotakis (1990).

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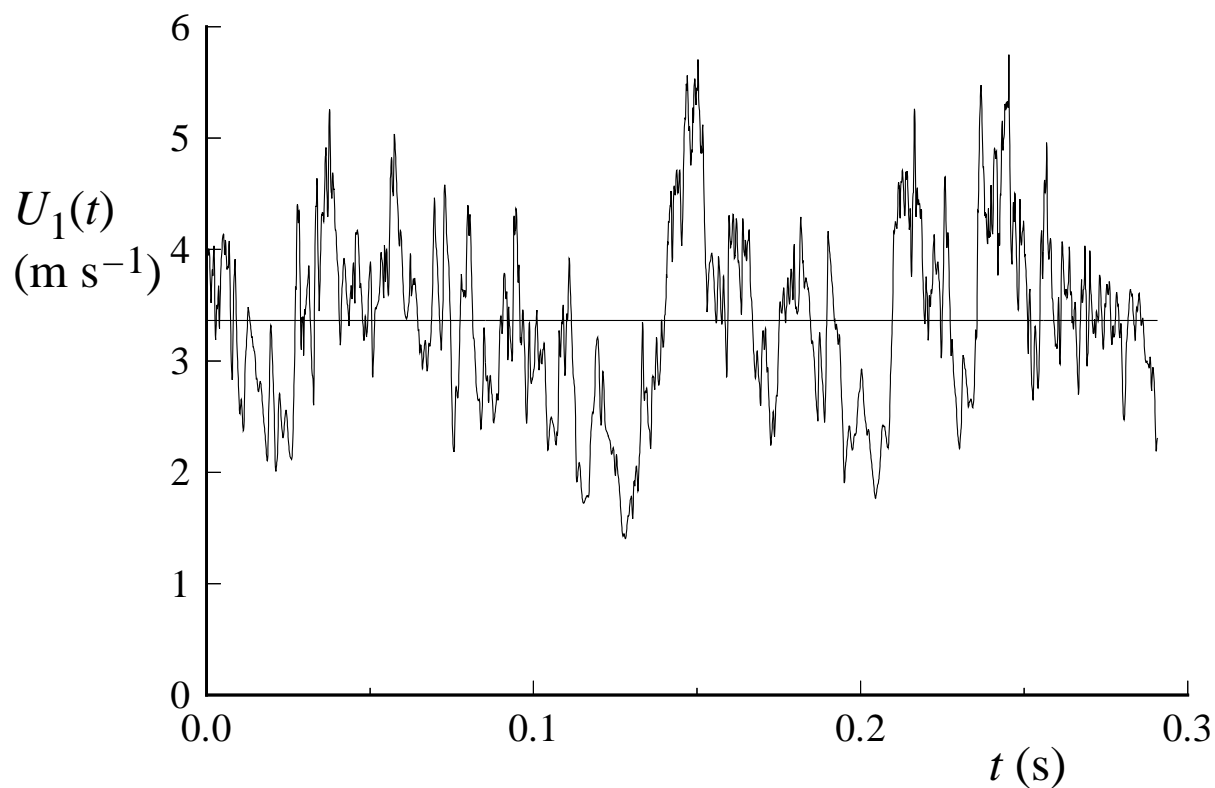


Figure 1.3: Time history of the axial component of velocity $U_1(t)$ on the centerline of a turbulent jet. From the experiment of Tong and Warhaft (1995).

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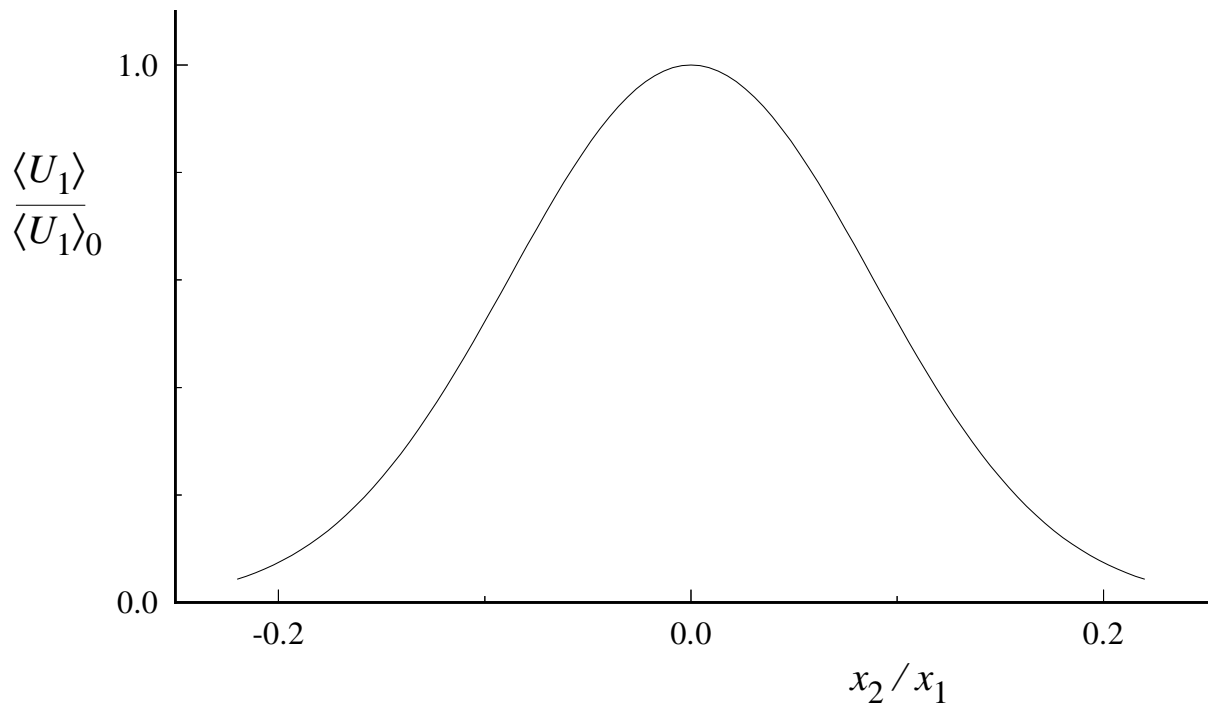


Figure 1.4: Mean axial velocity profile in a turbulent jet. The mean velocity $\langle U_1 \rangle$ is normalized by its value on the centerline, $\langle U_1 \rangle_0$; and the cross-stream (radial) coordinate x_2 is normalized by the distance from the nozzle x_1 . The Reynolds number is 95,500. Adapted from Hussein, Capp, and George (1994).