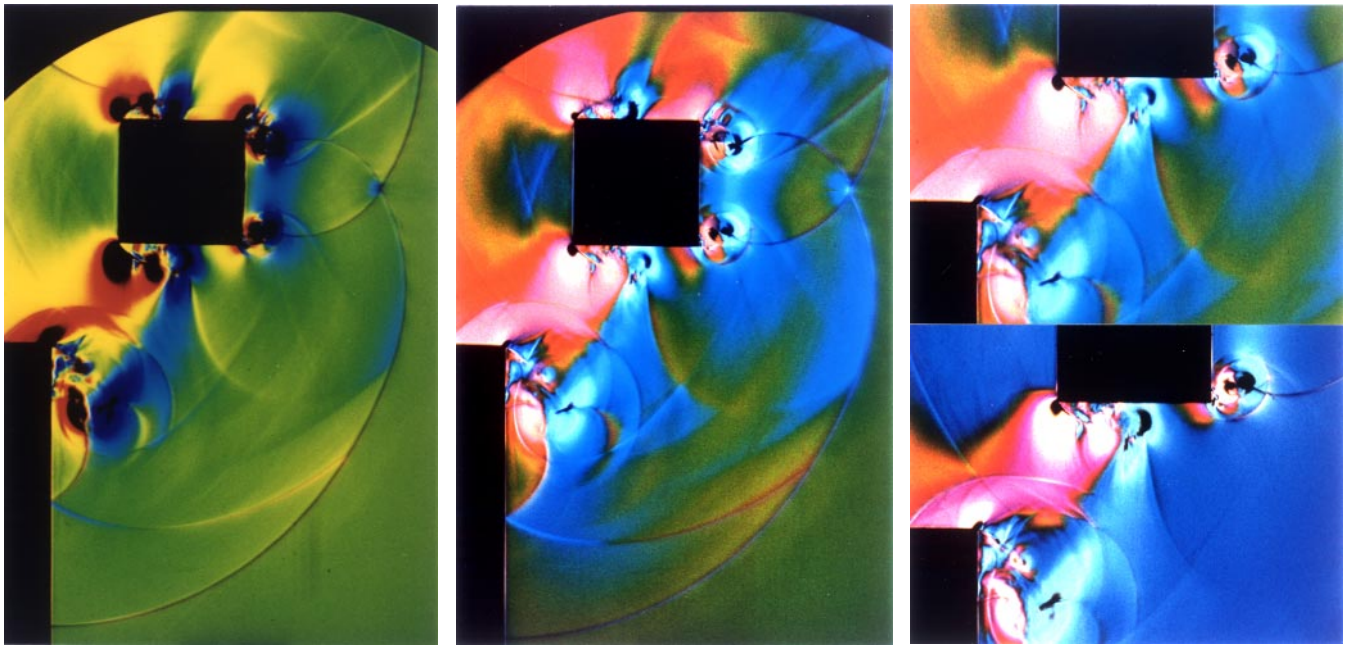
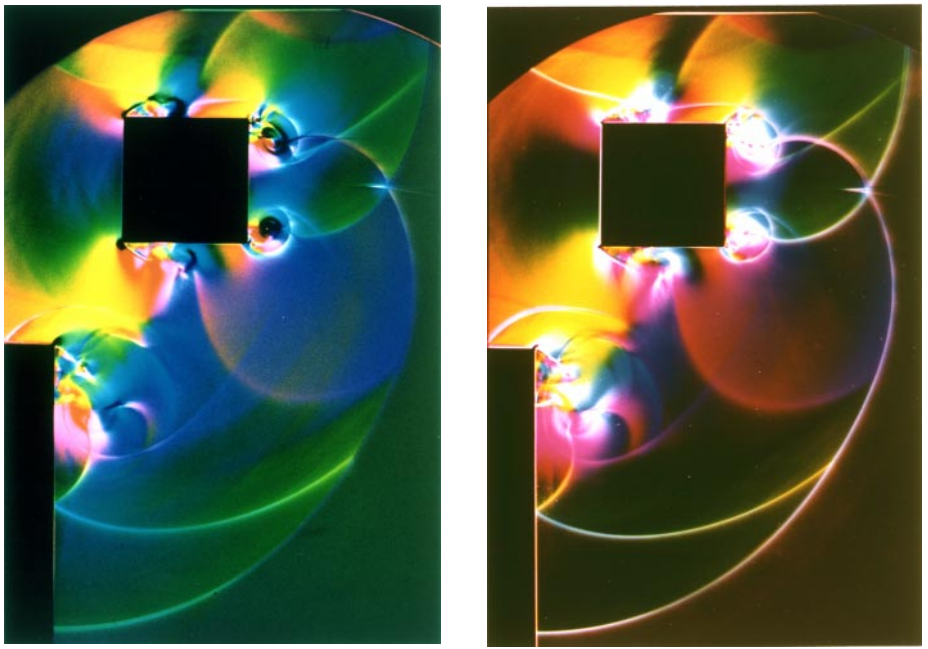


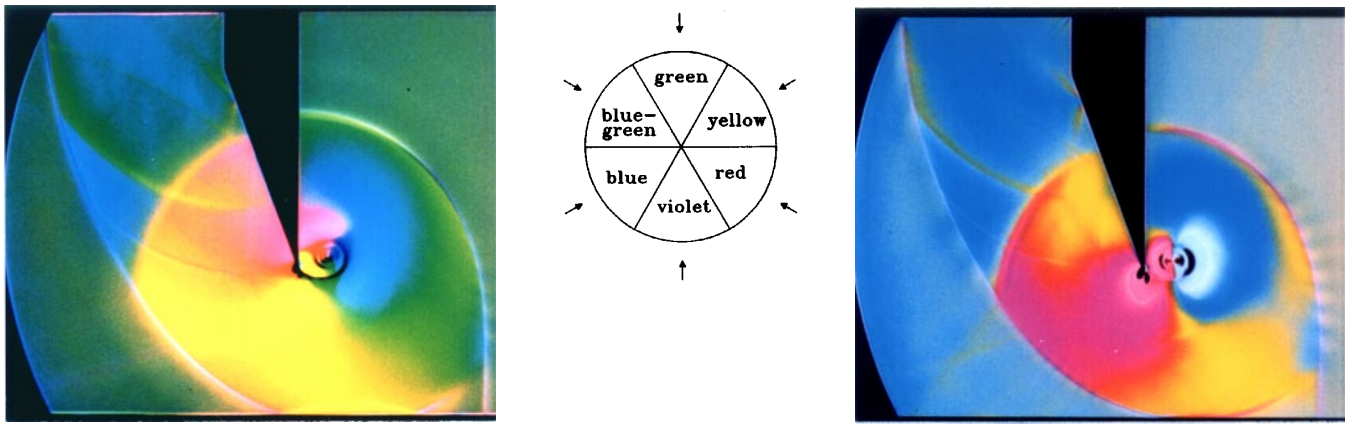
(d) (e) (f)

FIGURE 5.1.2 Visualization of the test problem (Fig. 5.1.1) (from Kleine, 1994). (a) Shadow method; (b) monochrome schlieren (vertical knife edge); (c) holographic interferometry; (d) classical color schlieren; (e) color schlieren, dissection technique, symmetrically placed vertical cutoff; (f) color schlieren, dissection technique; top: detail of (e); bottom: with shifted sensitivity range (asymmetrically placed cutoff); (g) direction-indicating color schlieren (cutoff device: pinhole); and (h) direction-indicating color schlieren (cutoff device: cylindrical plate).



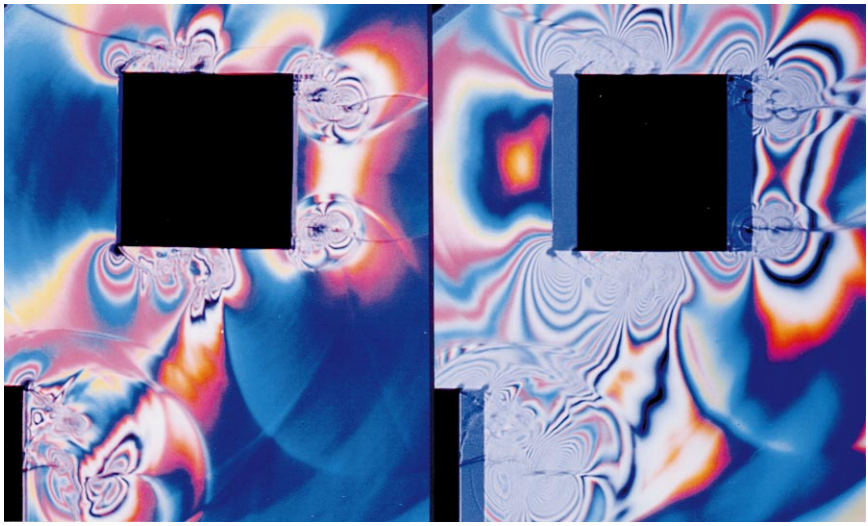
(g) (h)

FIGURE 5.1.2 (*Continued*)



(a) (b)

FIGURE 5.1.10 Visualization of the diffraction of a shock wave ($M_S = 1.32$ in N_2) at a vertical edge (from Kleine, 1994). (a) Direction-indicating color schlieren with diagram for correlation between color and gradient direction; (b) magnitude-indicating color schlieren (dissection technique); (c) reconstructed holographic interferogram; (d) detail of (c).



(a) (b)

FIGURE 5.1.13 Visualization of the test problem (detail) with shearing interferometry (from Kleine, 1994). (a) Low-beam separation (divergence angle $\varepsilon = 1'$); (b) high-beam separation (divergence angle $\varepsilon = 5'$).

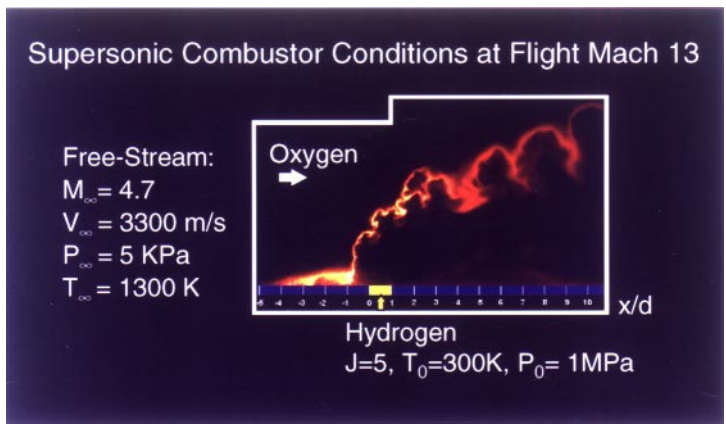


FIGURE 5.2.9 OH PLIF concentration imaging. For details see text.

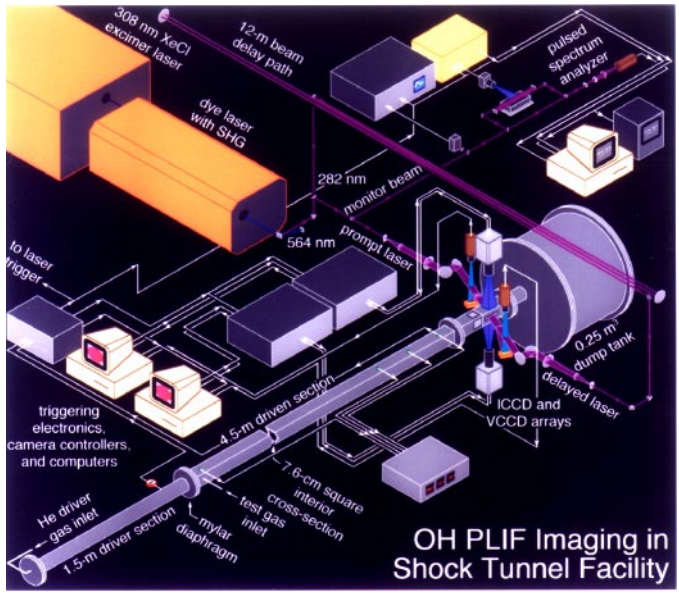


FIGURE 5.2.10 PLIF experimental setup for two-wavelength OH temperature measurement in a shock tunnel facility. For details see text.

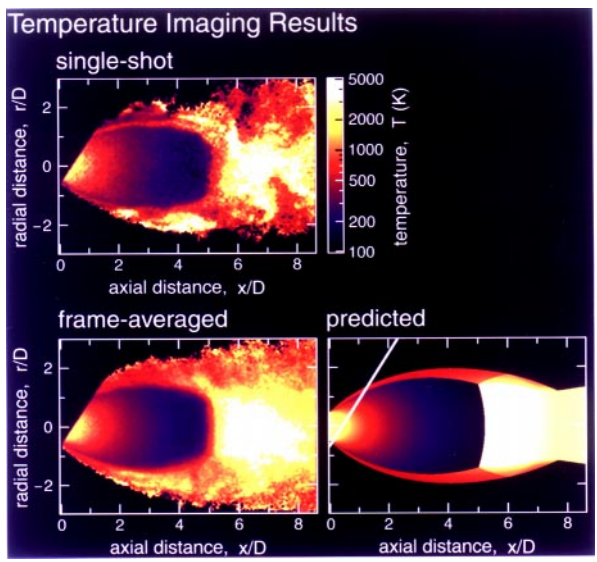


FIGURE 5.2.11 OH PLIF temperature imaging. For details see text.

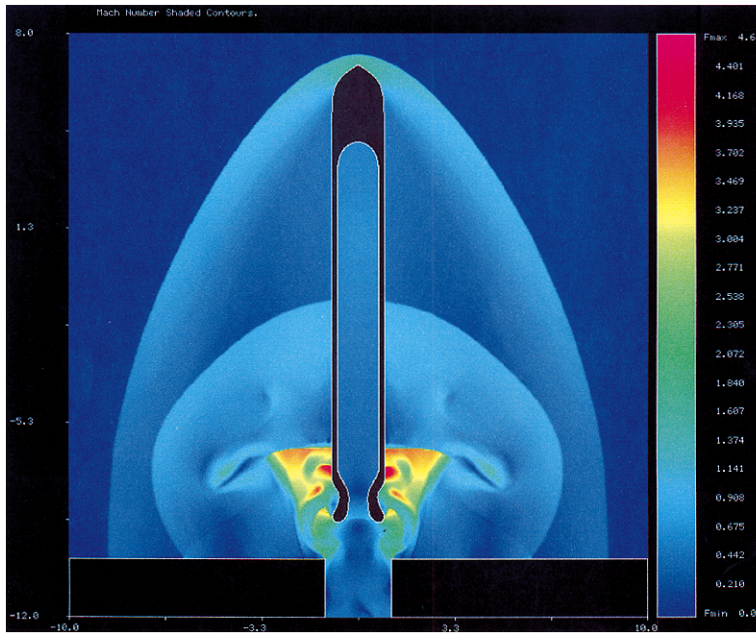


FIG. 6.28 Shaded contours of Mach number in the flow around a missile leaving its silo. The flow features are explained in the text.