

Aerodynamic Flow Visualization

Model-Scale to Full-Scale

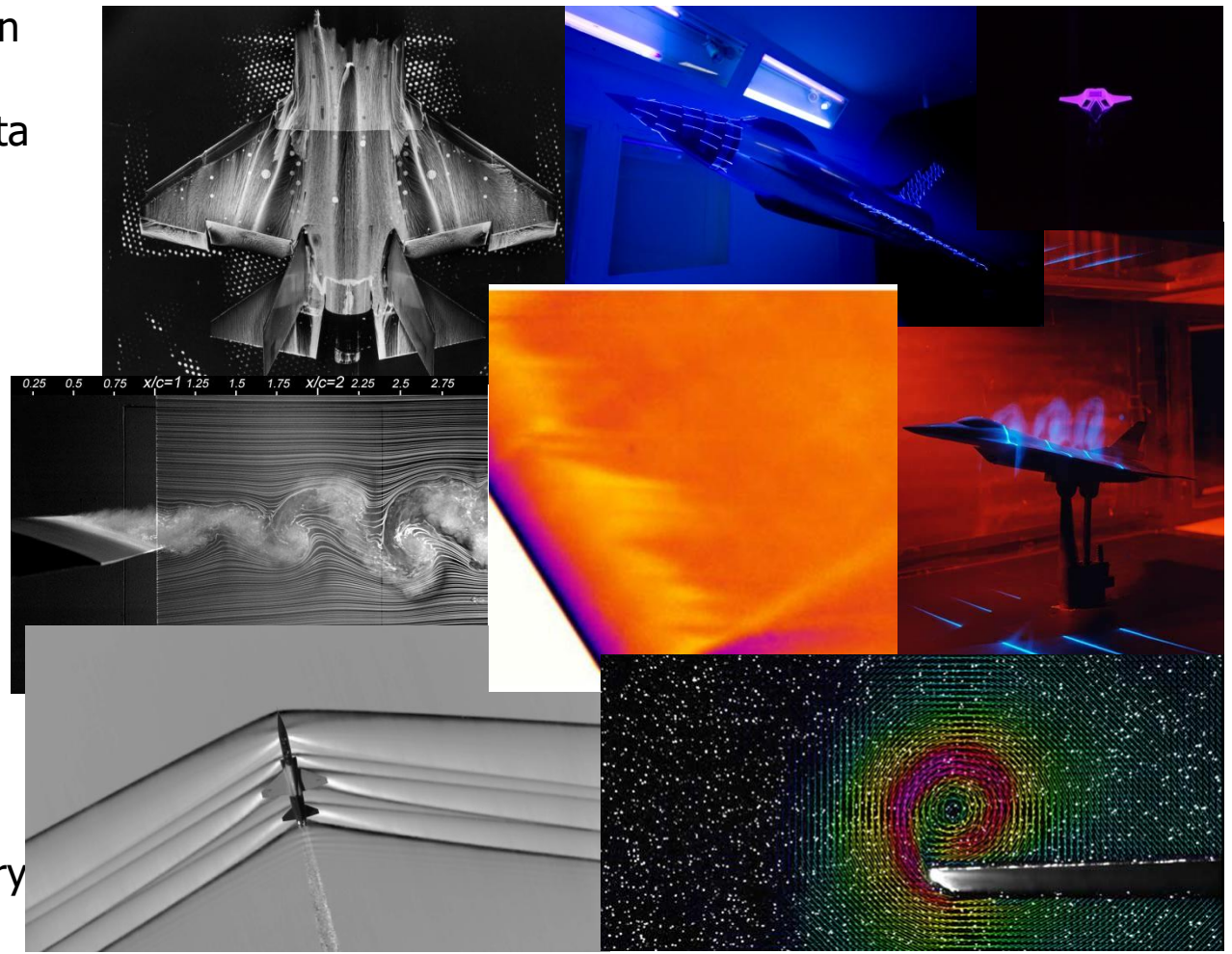
Why Do It?

Diagnose flow phenomenon on and off the aircraft.

Need more than "discrete" data

What kinds are there?

- On Body
 - Oil / Chalk Flow
 - Tufts
 - Liquid Crystal
 - Infrared Surface
 - Pressure Sensitive Paint
- Off Body
 - Smoke Flow
 - Bubble/Dye Flow
 - Schlieren / Shadowgraph
 - Laser Vapor Sheet
 - Particle Image Velocimetry



- [Dye Flow \(2:59\)](#)
- [Oil Flow \(0:00\)](#)
- [Schlieren \(2:10\)](#)
- [“Smoke” Flow \(6:25, 9:47\)](#)
- [Chapter Video](#)