

External flows

Flow around a sphere

Creeping flow ($Re < 2, C_D = \frac{24}{Re}$)

Non-creeping flow ($Re > 2$)

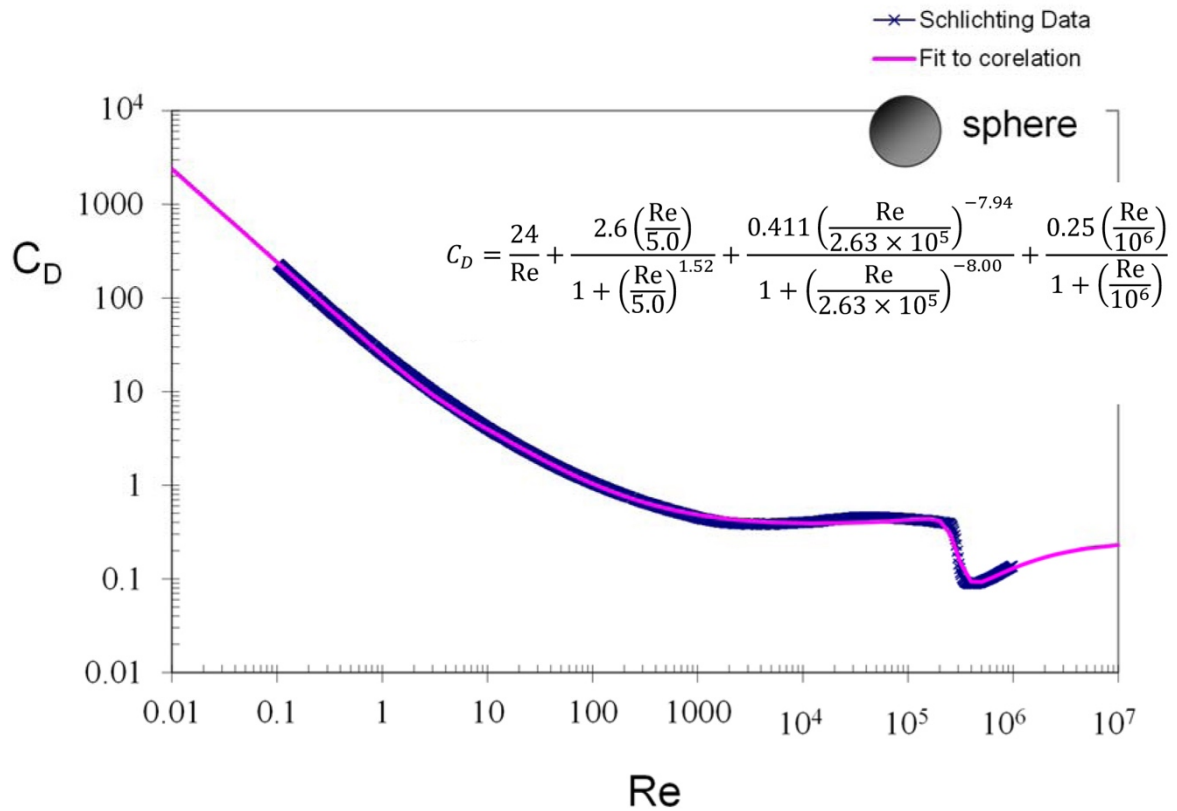


Figure 1: Equation 1 (Morrison, 2013) captures drag coefficient as a function of Reynolds number over the entire Reynolds-number range of the available experimental data. Also shown are data for uniform flow around a sphere (Schlichting, 1955). Use beyond $Re=10^6$ is not recommended; for $Re < 2$ equation 1 follows the creeping-flow result ($C_D=24/Re$).