COMMON USES FOR FITTING AND REGRESSION

1. Represent some variable in terms of other measurements
2. PCors as functions of Mach number, angle of attack, etc.
   (a) Angle of attack as a function of ADIFR, QCF, etc.
   (b) Nusselt number as a function of Reynolds number for King Probe
   (c) Recovery factor as a function of Mach number
3. Relationship between measurements (e.g., intercomparison)
4. Determining the best use of overconstrained measurements (e.g., 4-beam LAMS)
5. Finding best-fit smoothed distributions, e.g., for drop or particle size measurements.
6. Fitting to CCN measurements to find $\{C, k\}$ in $N = C S^k$.
7. Fitting circles to 2D images (best estimate of raindrop sizes).