



Tunable Diode Laser Absorption

- Sensitive, quantitative, spatially and temporally resolved
- Spatial resolution accomplished through scanning laser beam across off-axis paraboloid
 - Sensitivity through frequency modulation of laser
- Rugged (suitable for drop tower use) and low power
- Determination of species number density and gas temperature
- Number density from magnitude of absorption feature
 - Temperature from ratio of two features through Boltzmann distribution
- Different species accessible with different diode lasers (e.g. H₂O, CH₄, CO₂)