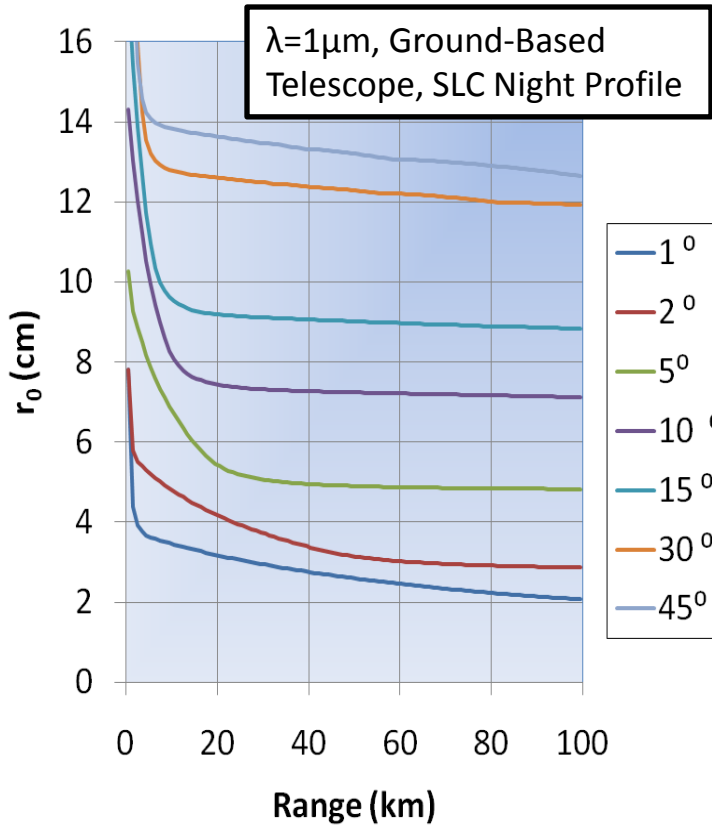
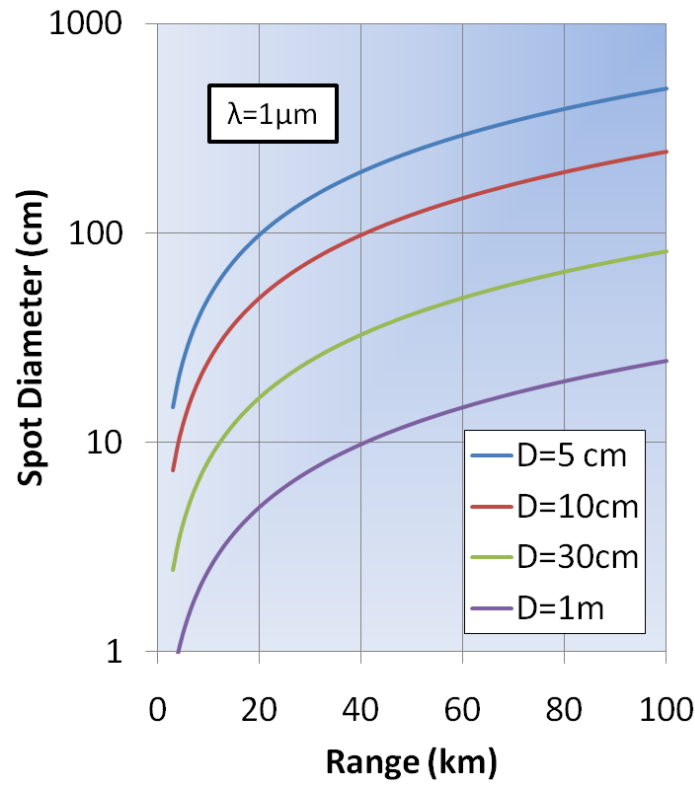


Atmospheric Adaptive Optics

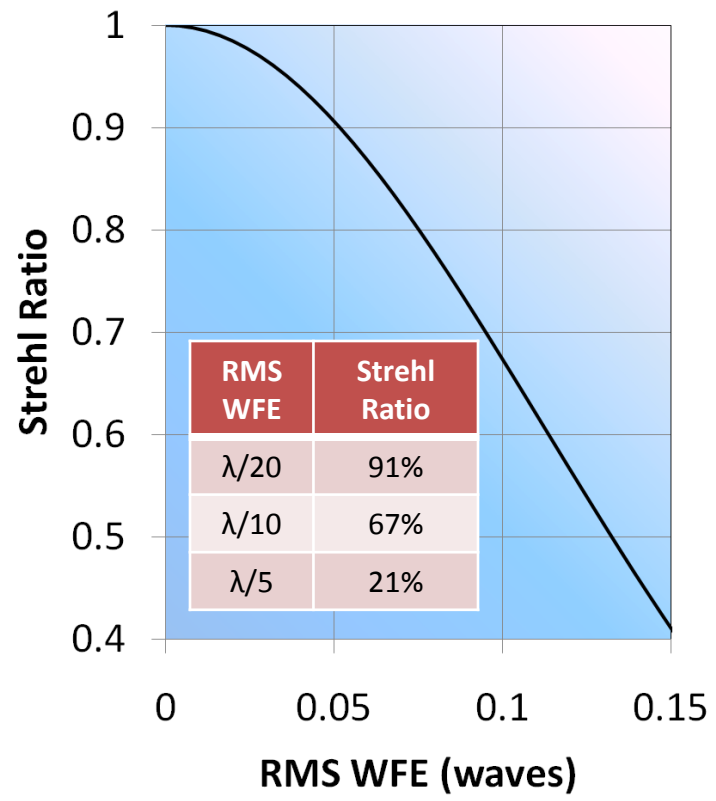
Fried Coherence Length



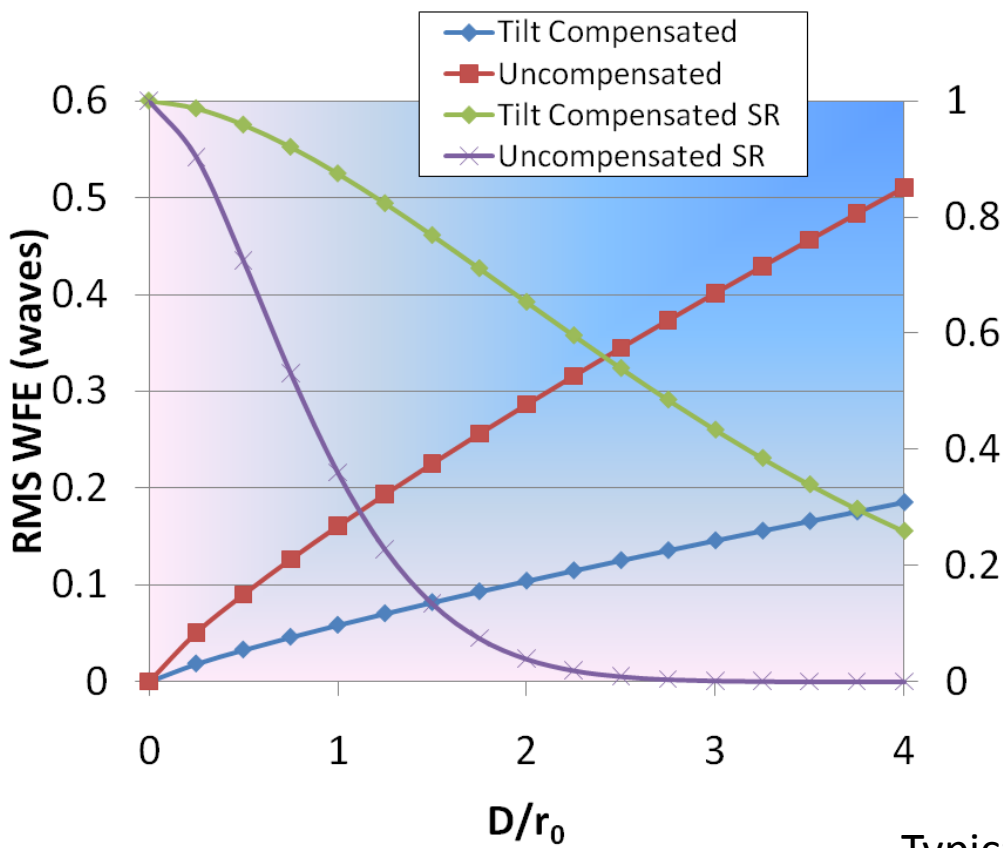
Diffraction Limit



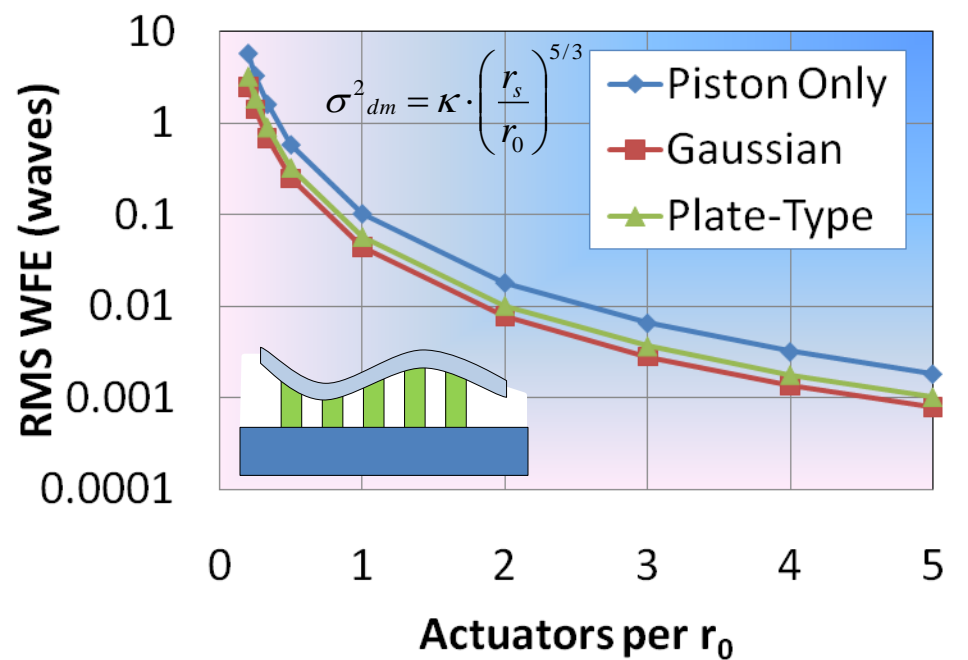
Marechal Approximation



Atmospheric Aberrations



Atmospheric Aberration Compensation

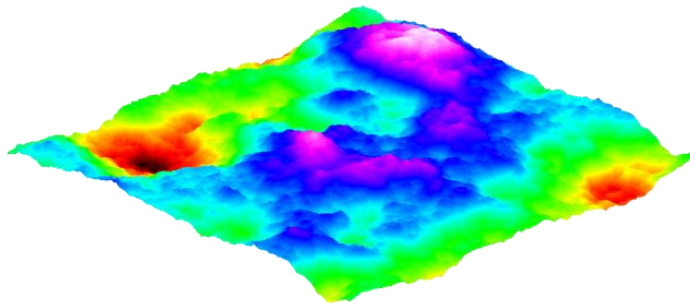


IF Shape	κ
Gaussian	0.23 to .35
Plate-Type	0.39
Piston	1.26
Membrane	0.30

$$\sigma_{uncompensated}^2 = 1.02 \cdot \left(\frac{D}{r_0}\right)^{5/3}$$

$$\sigma_{tilt\ comp}^2 = 0.134 \cdot \left(\frac{D}{r_0}\right)^{5/3}$$

Typical Kolmogorov Turbulence Shape



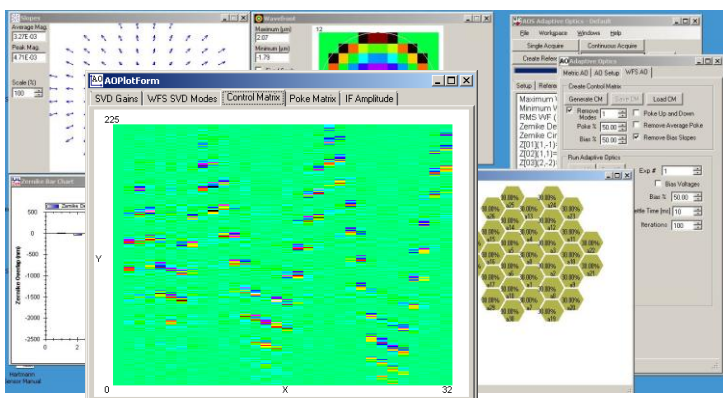
Drive Electronics



Hartmann Sensors



Deformable Mirrors



Adaptive Optics Control Software

