

Friday, February 28, 2025

Example: Angular resolution of the Gemini telescope

Diameter = 8.1 m

Optical wavelength = 500 nm (green)

↑
~~at~~ center of the
visible

formula. $\theta_{\text{min, arcseconds}} = 0.000252 \frac{\lambda_{\text{nm}}}{D_{\text{m}}}$

$$= 0.000252 \frac{500}{8.1}$$

$$= 0.016 \text{ arcseconds}$$

$$\Rightarrow \theta_{\text{min, arcseconds}} = 16 \text{ mas}$$

Gemini