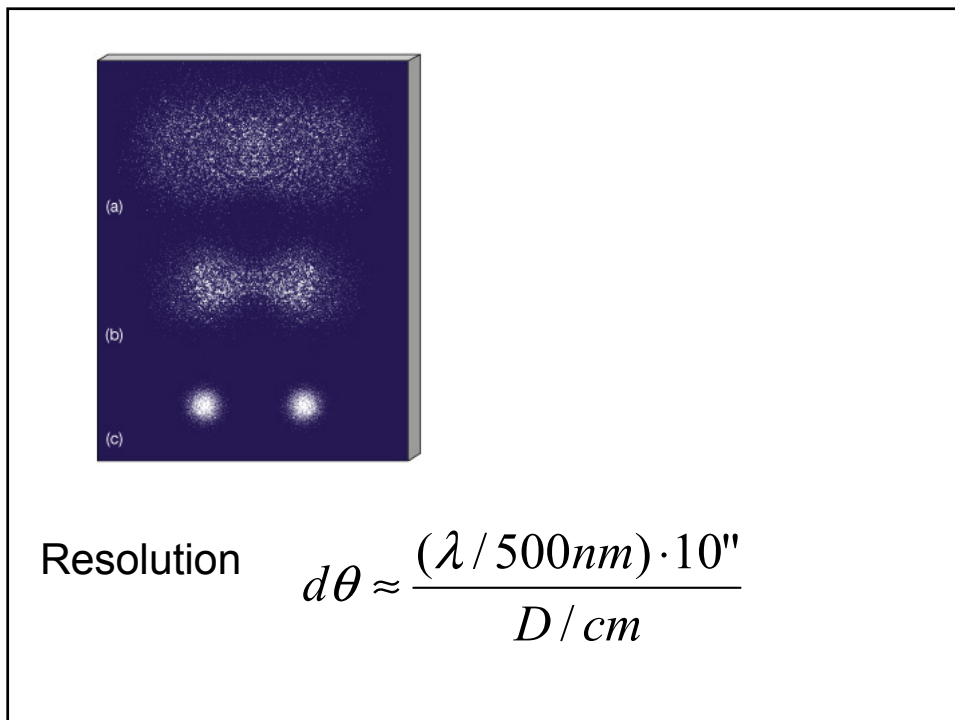
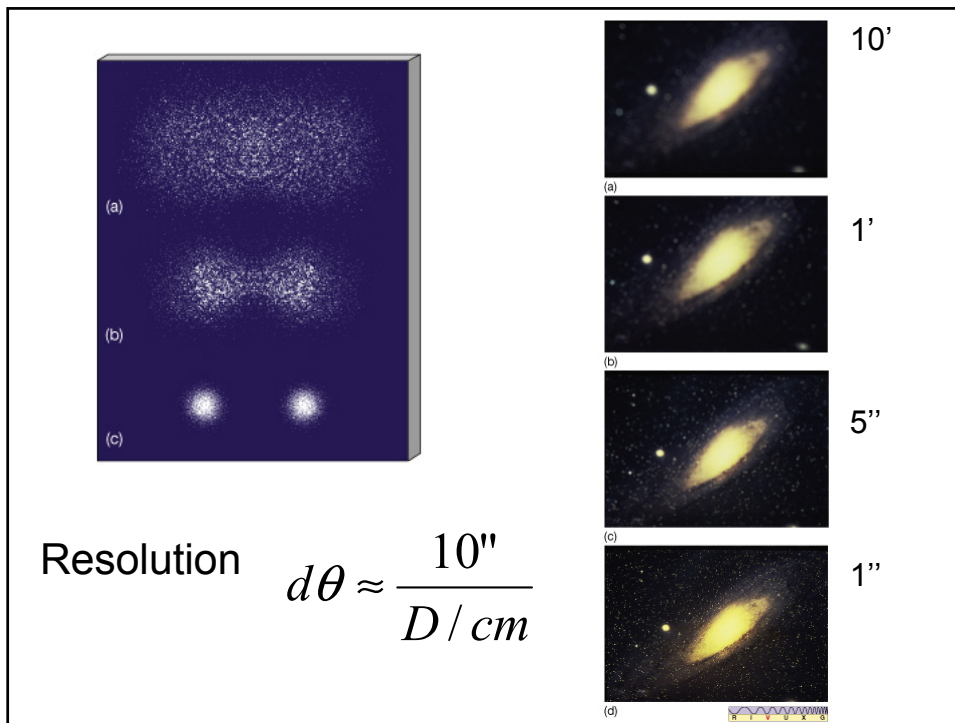


- Telescope
- Instrument
- Detector

What is a good telescope/instrument?

- resolution / image scale
- weather: seeing, extinction, scintillation
- photometry / spectroscopy / astrometry



## Image scale

$$S = \frac{180^0}{f \cdot \pi}$$

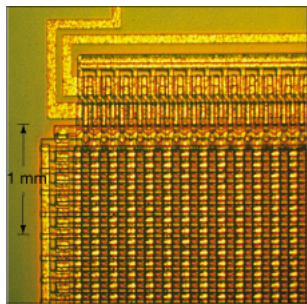
Focal length

$$S = \frac{206265''}{f}$$

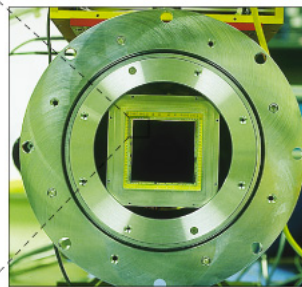
$$f = 10\text{m}$$

$$S = 20.6''/\text{mm}$$
$$= 0.0206''/\mu\text{m}$$

$$0.3''/\text{CCD-pix}$$



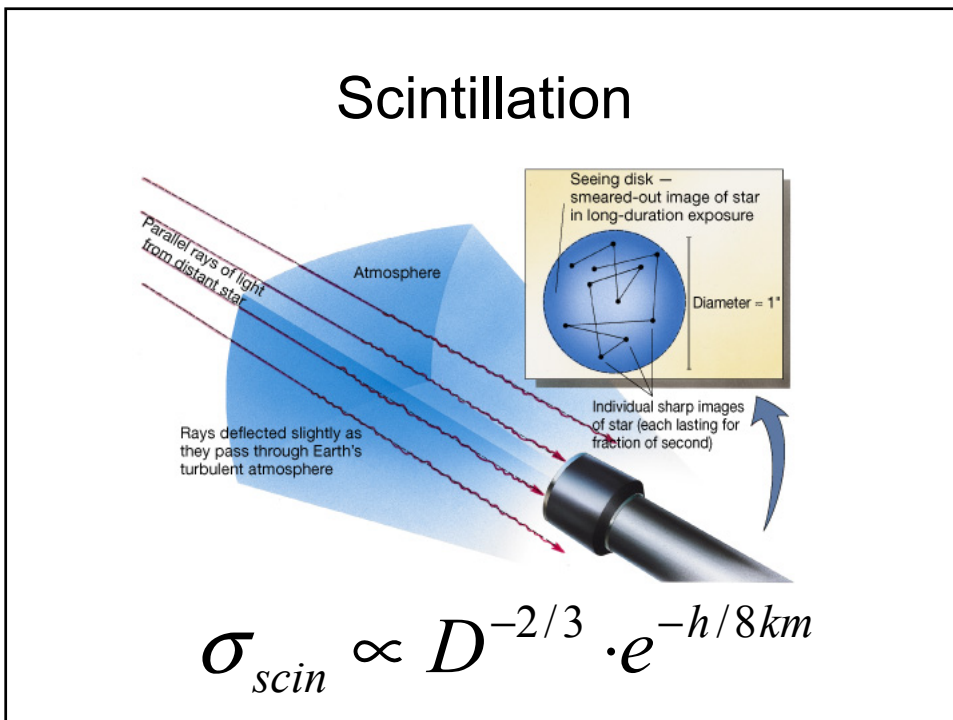
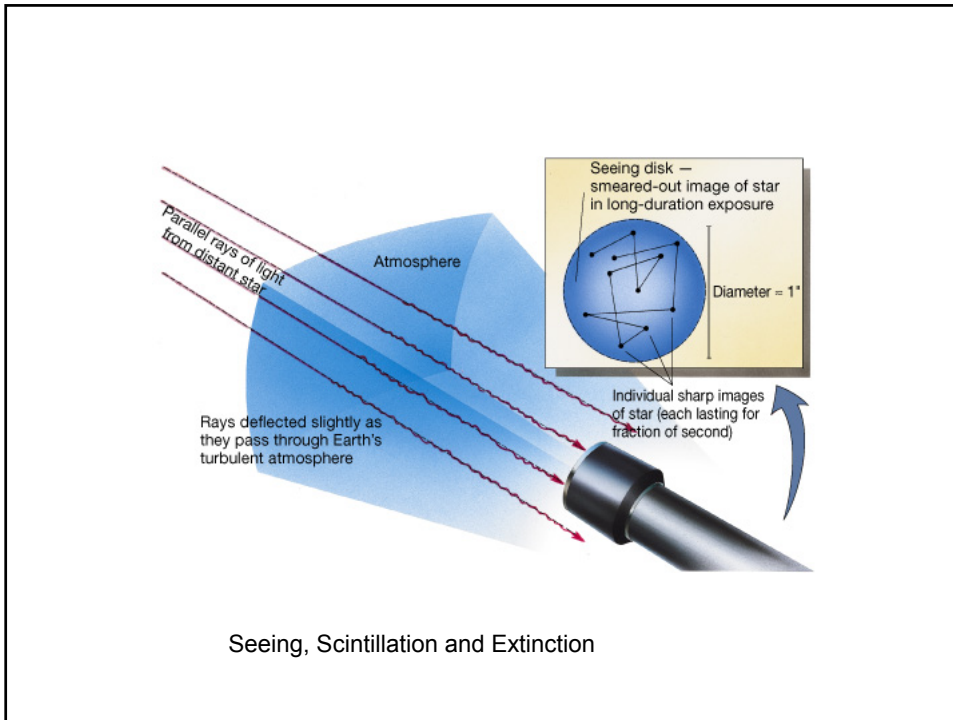
(a)



(b)

CCD

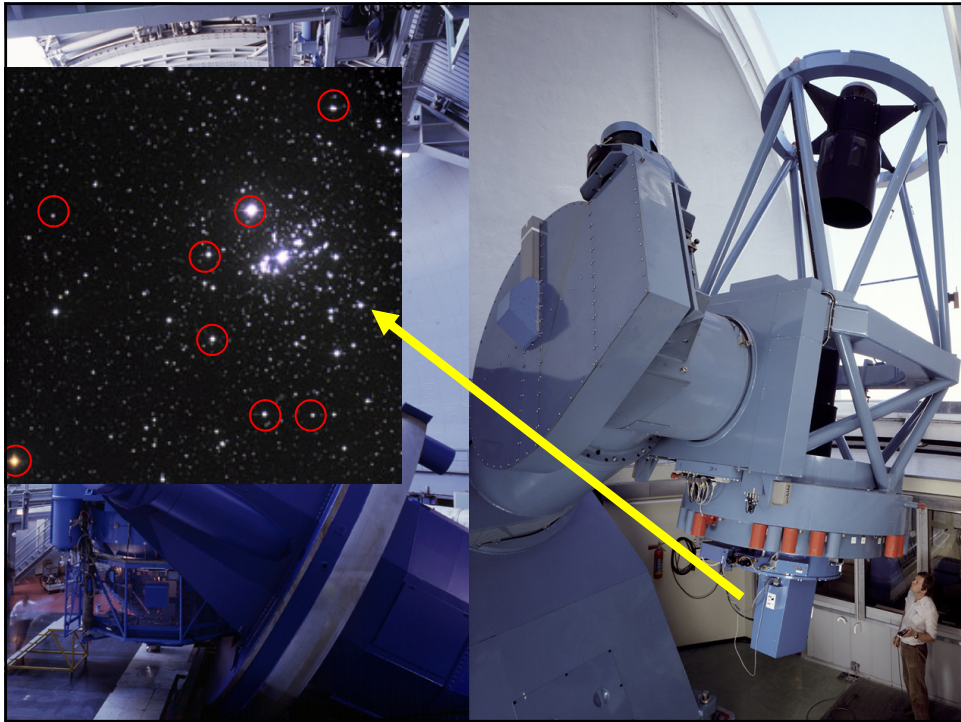
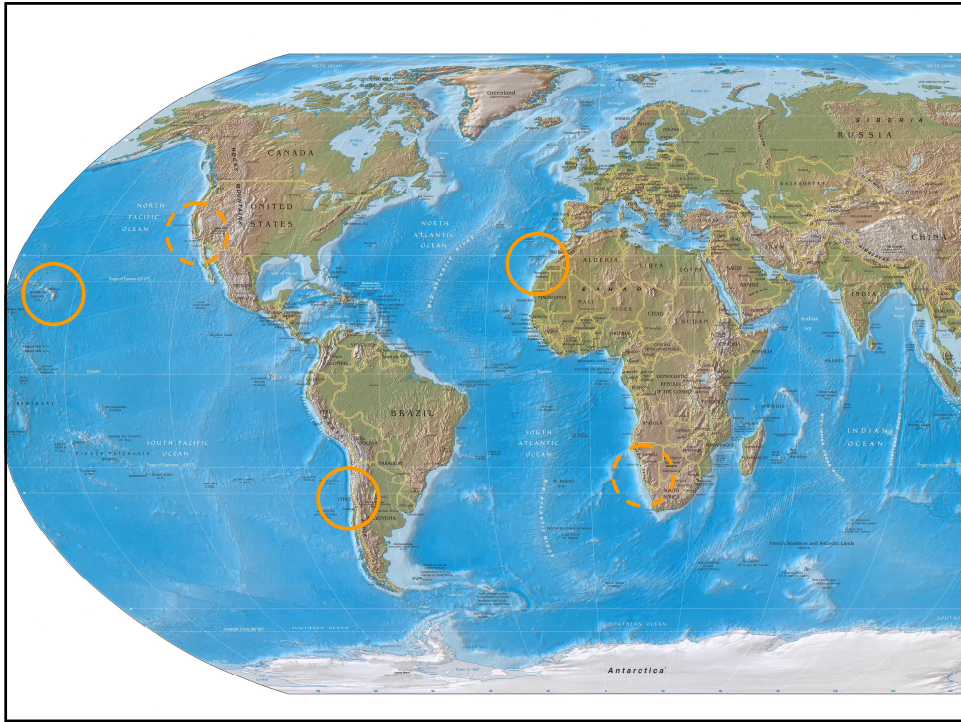
```
34 22 10 11 13 23 45 67 99 86
33 24 35 46 12 34 56 ..
..
```

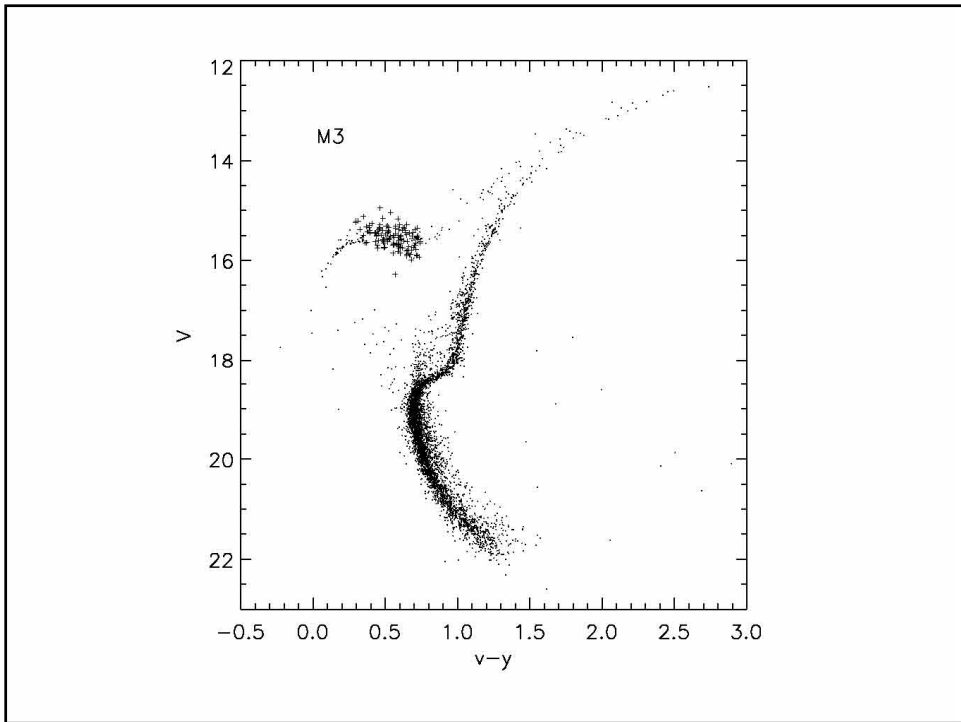


A good site



Inversion in the atmosphere





# Spectroscopy

