Magnitudes and filter systems

spectrum of the sky

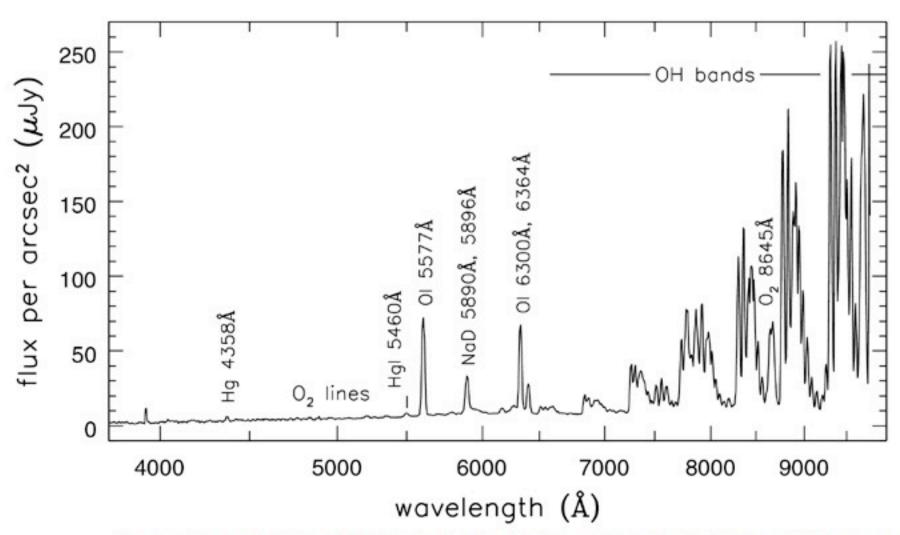


Fig 1.6 (Benn & Ellison) 'Galaxies in the Universe' Sparke/Gallagher CUP 2007

atmospheric transmission

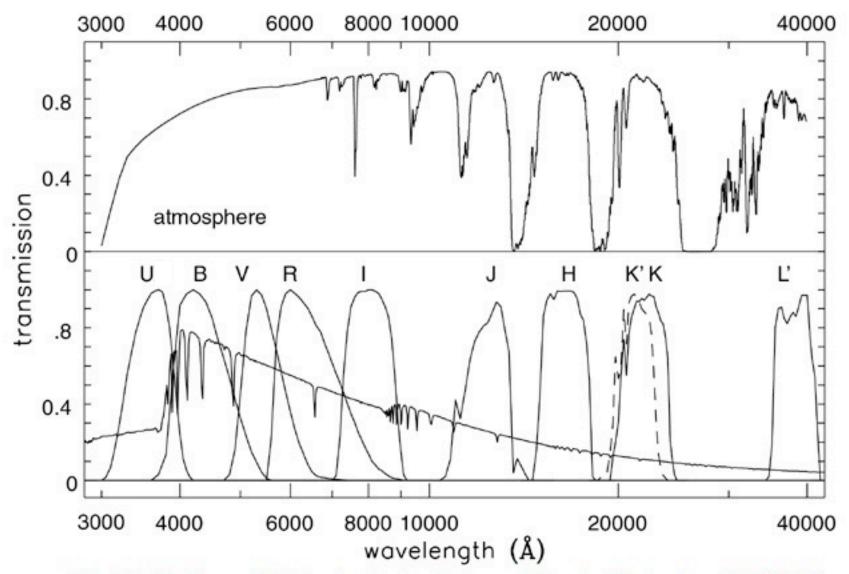
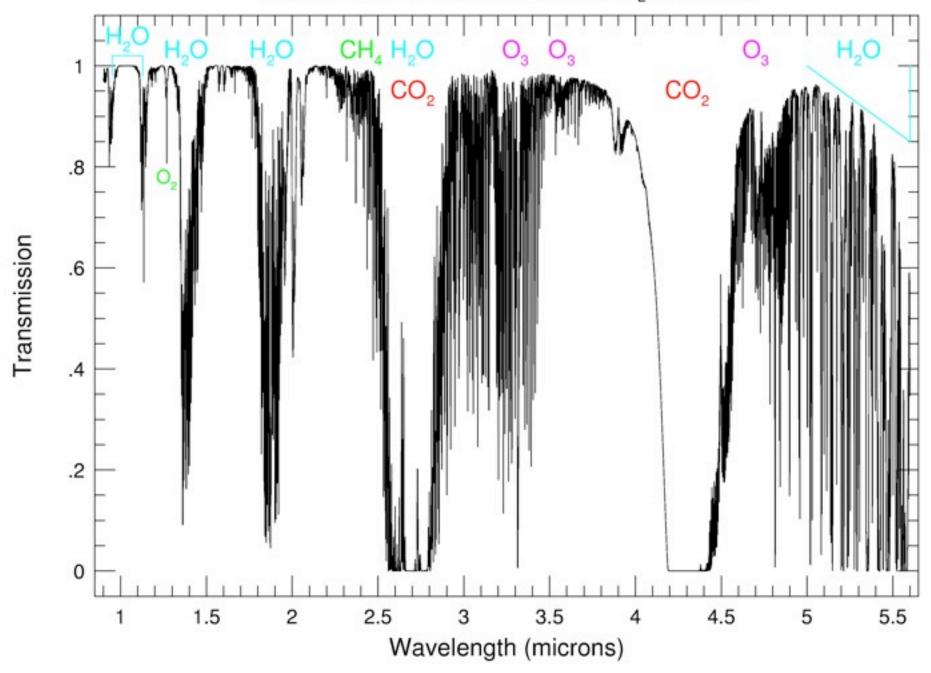
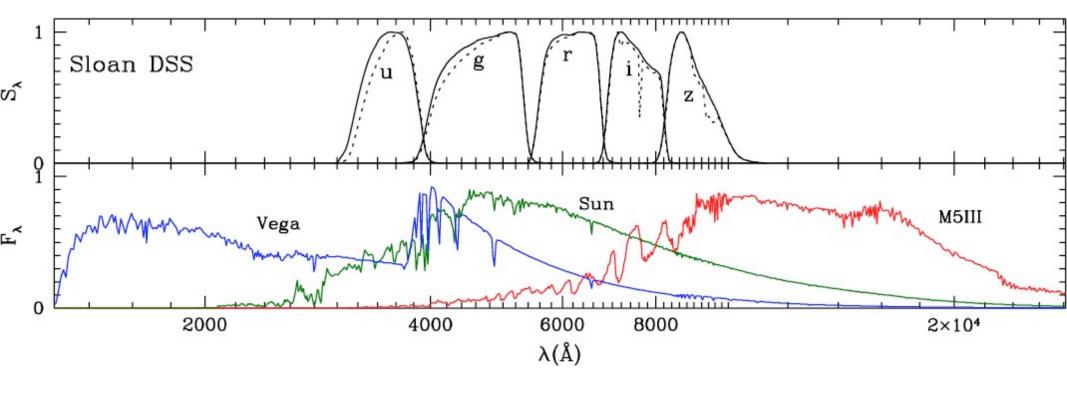


Fig 1.7 (M. Bessell) 'Galaxies in the Universe' Sparke/Gallagher CUP 2007

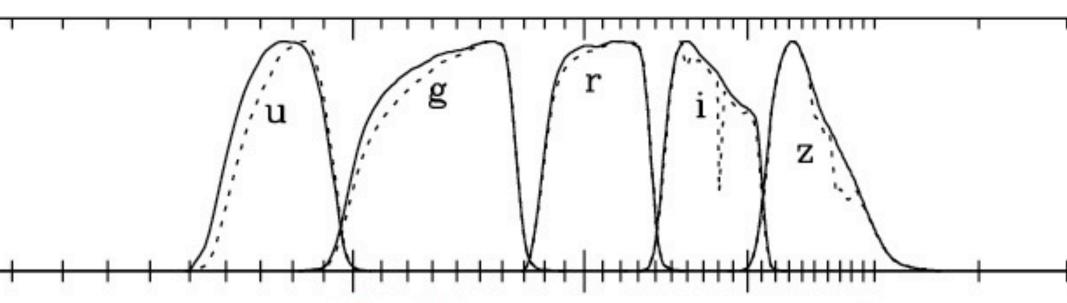
standard astronomical filters

Atmospheric Transmission (1mm H₂O, Zenith)





SDSS filters try to miss brightest sky lines



Standard filters:

Johnson:

optical: UBVRI

near-IR: JHK or K'

SDSS:

optical: ugriz

magnitude systems (web) messy details (board)