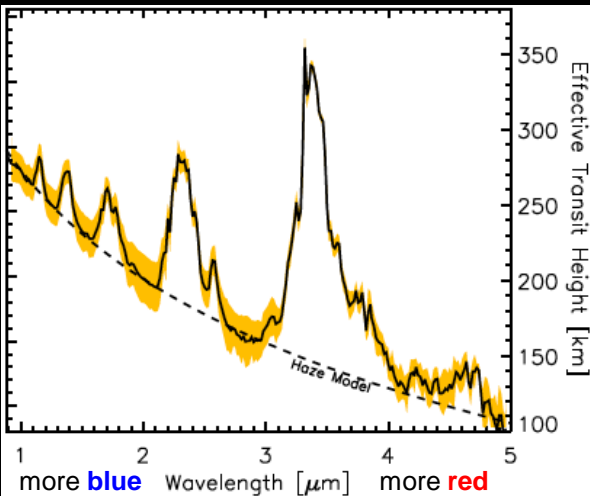
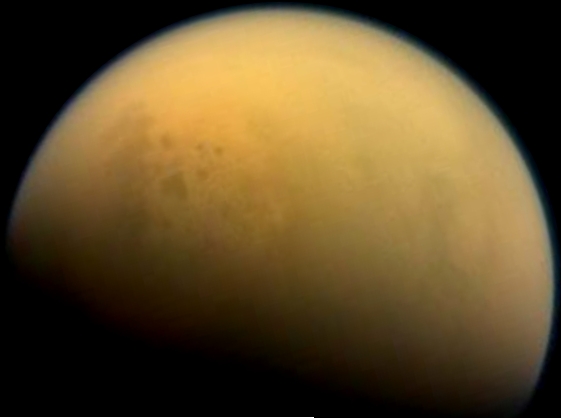


# Titan's Hazy Sunsets



Characteristic transit spectrum for Titan showing the effective transit height, assembled as an average of spectra collected by Cassini during four occultation events.

- Using data from Cassini, astronomers are trying to better understand the atmospheres of exoplanets.
- During a sunset on Titan, just like on Earth, the gas and dust in the atmosphere refract light, affecting the wavelengths that are observed. In exoplanet observation, the atmosphere can be measured using transit spectroscopy, observing the change in light as the planet moves in front of its host star.
- Titan is a well-studied world with high-altitude haze, but observations of its transit spectrum show features that were unexpected. Although the

study indicated that refractions in the haze could reveal information about the upper layers, while preventing observations of the deeper layers, this feature was highly wavelength dependent, affecting blue light more than red.