Overview of the Solar System
What determines the surface temperature of planets?
Why do planets (and moons) have atmospheres?
Don’t forget the Planck function
The Earth’s atmosphere and the global temperature

(a) Spectral distribution of long-wave emission from 6000 K and 255 K, corresponding to the mean temperatures of the Sun and Earth, respectively, and (b) the top of the atmosphere to the surface. Notice the comparatively weak absorption of the solar spectrum and the region of weak absorption from 8 to 12 μm in the long-wave spectrum [from MacCracken and Luther, 1985].