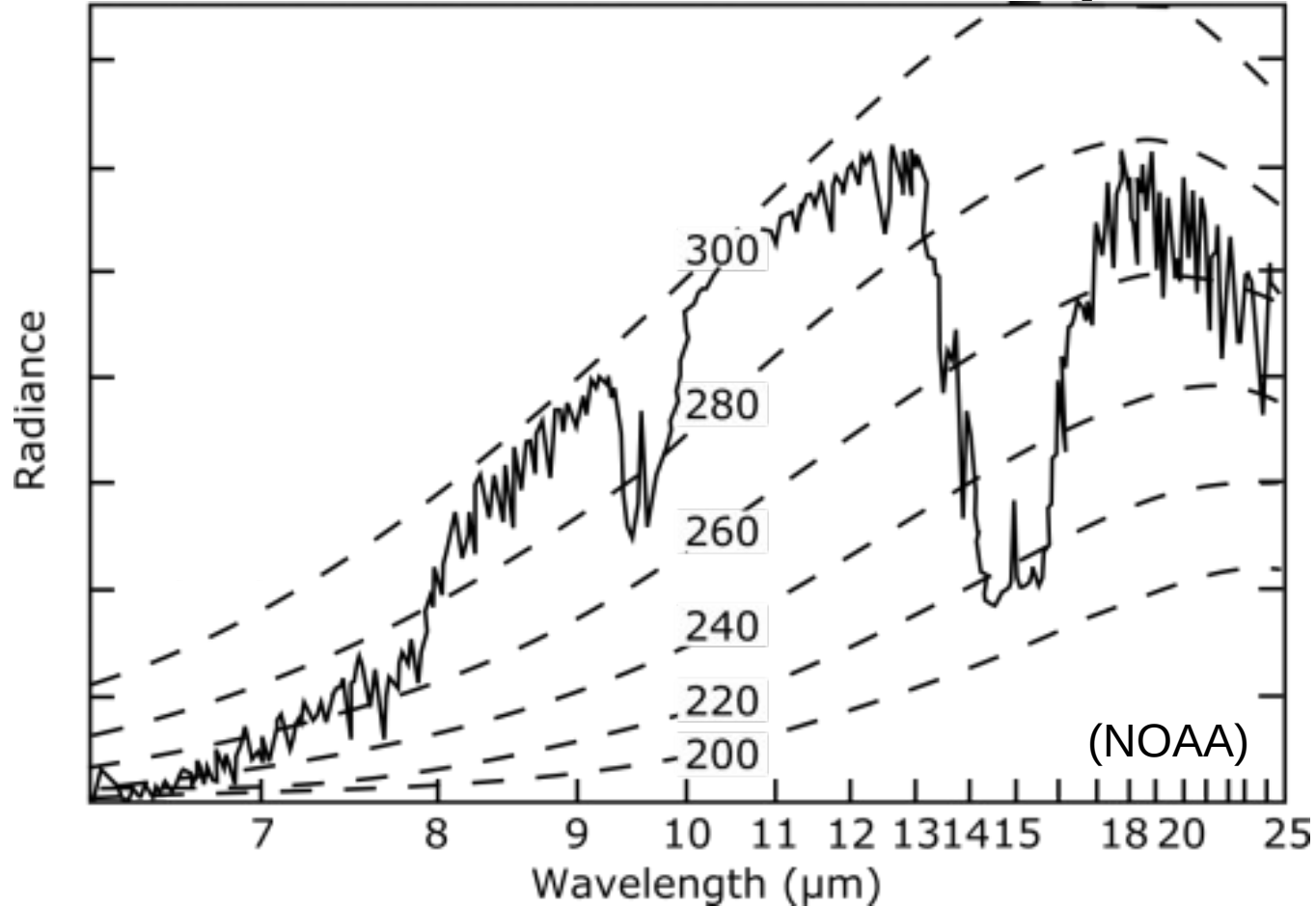


Planets & Temperatures

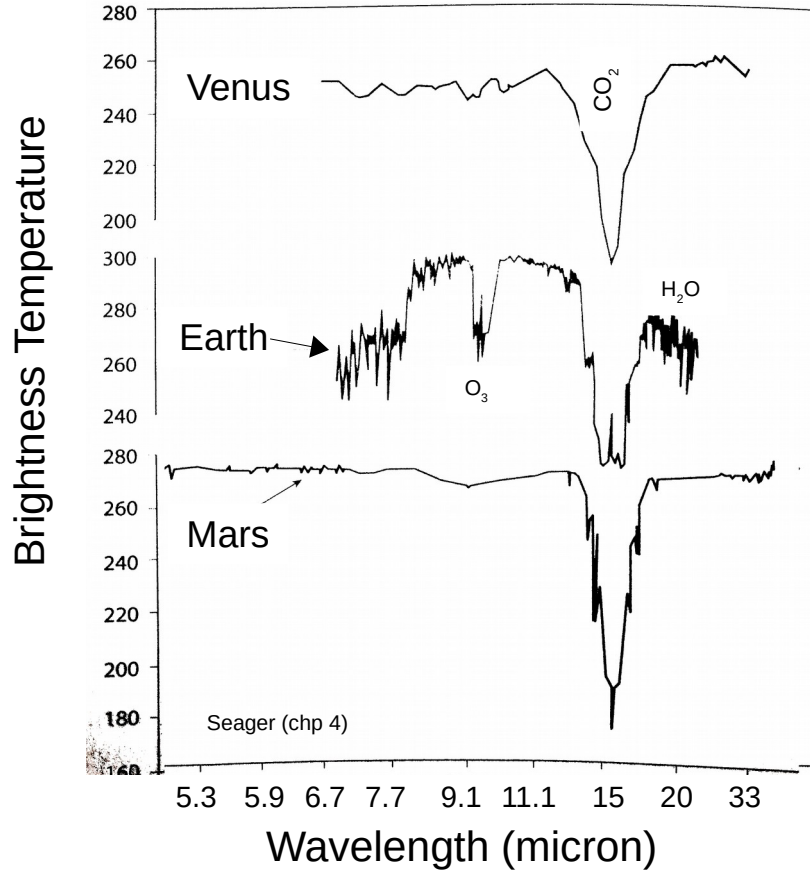
ASTR691
W11L1

Infrared Emission Spectrum of Earth



Emission Spectra of Terrestrial Planets:

Brightness Temperature:



Observed:

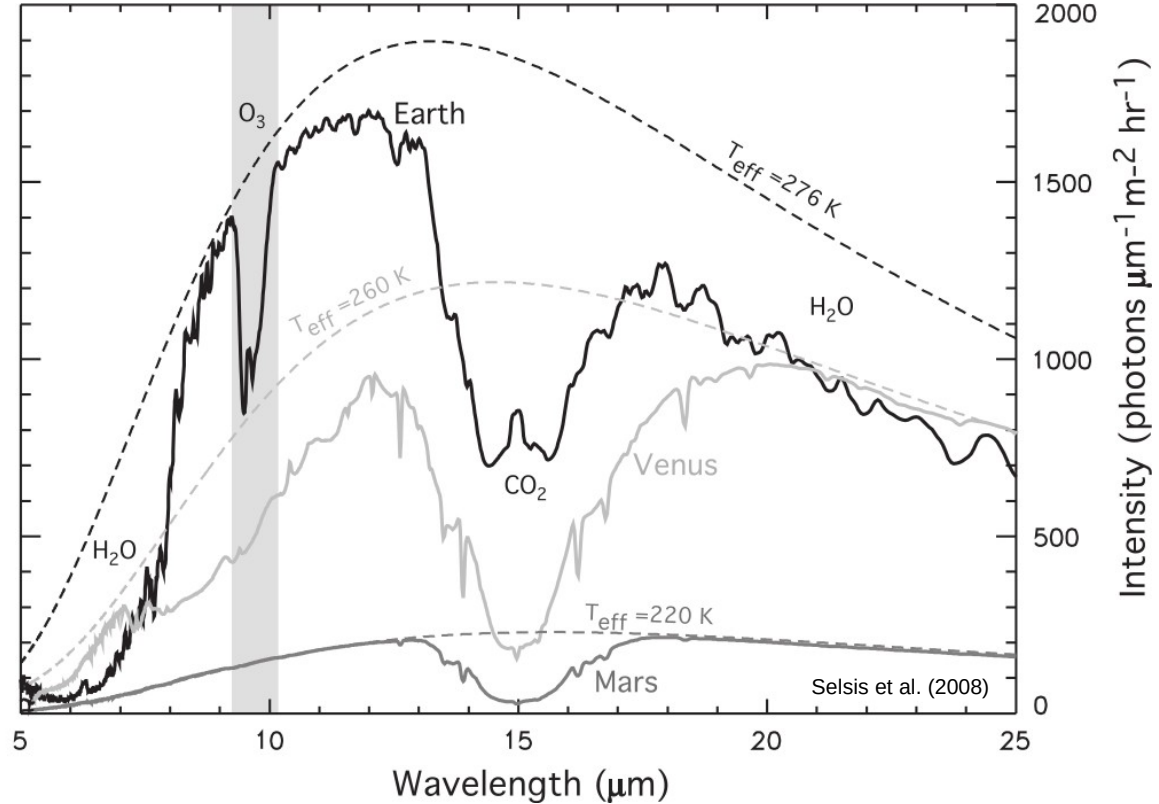


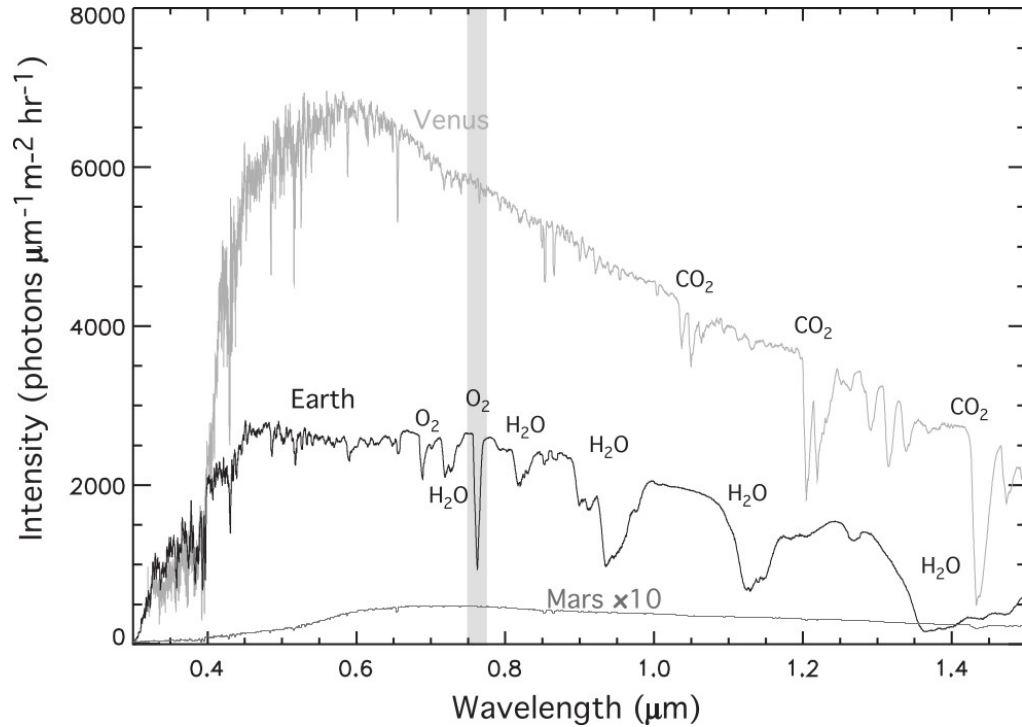
Table 3.1 Temperatures and albedos of solar system planets.

Planet	T_{eff}	T_{eq}	A_{g}	A_{B}
Mercury			0.106	0.119
Venus	~ 230	230	0.65	0.750
Earth	~ 255	253	0.367	0.306
Mars	~ 212	209	0.150	0.250
Jupiter	124.4 ± 0.3	109	0.52	0.343
Saturn	95.0 ± 0.4	80	0.47	0.342
Uranus	59.1 ± 0.3	58	0.51	0.300
Neptune	59.3 ± 0.8	46	0.42	0.290

(Seager,
chp. 3)

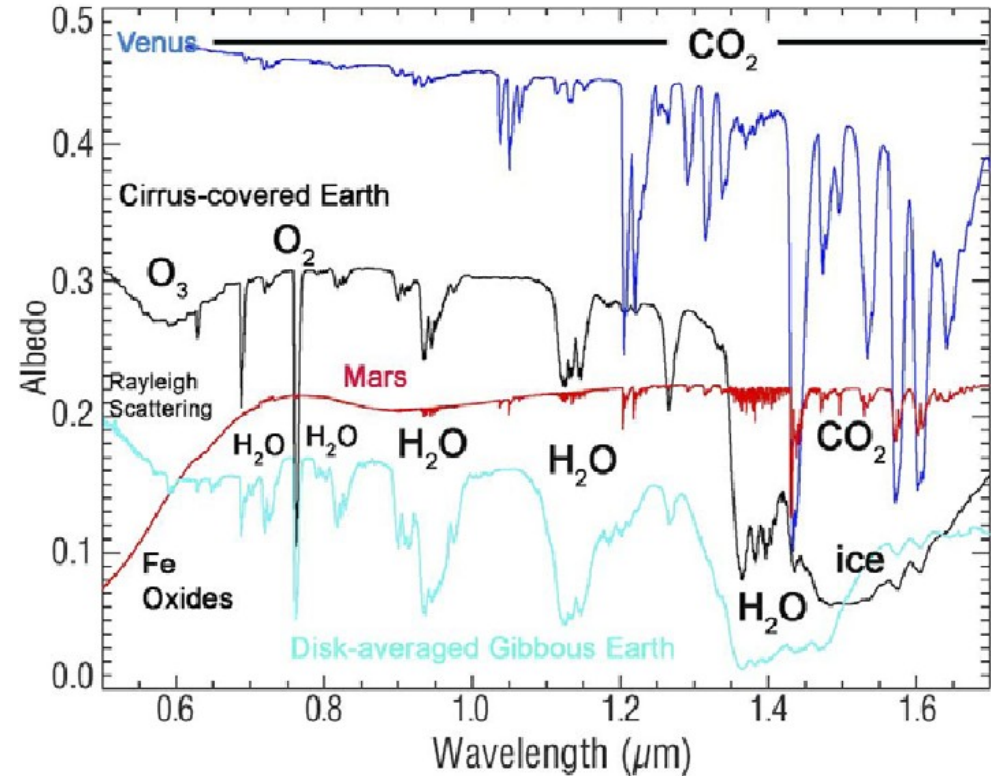
Reflected Spectra of Terrestrial Planets

Observed:



Selsis et al. (2008)

Albedo:



Meadows et al. (2005)