Figure 1. Wavelength dependence of normalized blackbody radiation at 6000 Kelvin degrees (Sun) and 285 Kelvin degrees (Earth).

Figure 2. (a) Intensity of absorption of shortwave radiation by a water vapor molecule in the spectral range of 10000 cm-1 (1 micrometer) to 11200 cm-1 (0.89 micrometer). (b) Intensity of absorption of longwave radiation by a carbon dioxide molecule in the spectral range of 650 cm-1 (15.38 micrometer) to 680 cm-1 (14.71 micrometer).

Figure 3. Angular distribution of scattered radiation of an incident visible light at 0.7 micrometer wavelength from the left by a liquid water particle of radius (a) 1 micrometers, (b) 10 micrometers.

Figure 4. Schematics of some of the cloud and precipitation microphysical processes.

Figure 5. Annual mean sea surface temperature: (a) Simulation by the Community Earth System Model Version 1; (b) observation.

Figure 6. Height-latitude cross section of eastward atmospheric wind averaged over all longitudes: (a) Simulation by the Community Earth System Model Version 1; (b) observational estimates.

Figure 7. Annual mean precipitation: (a) Simulation by the Community Earth System Model Version 1; (b) observation.