

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

Absorption line intensity in $\text{cm}^{-1}/(\text{molecule} \times \text{cm}^{-2})$ at 296 Kelvin Degrees

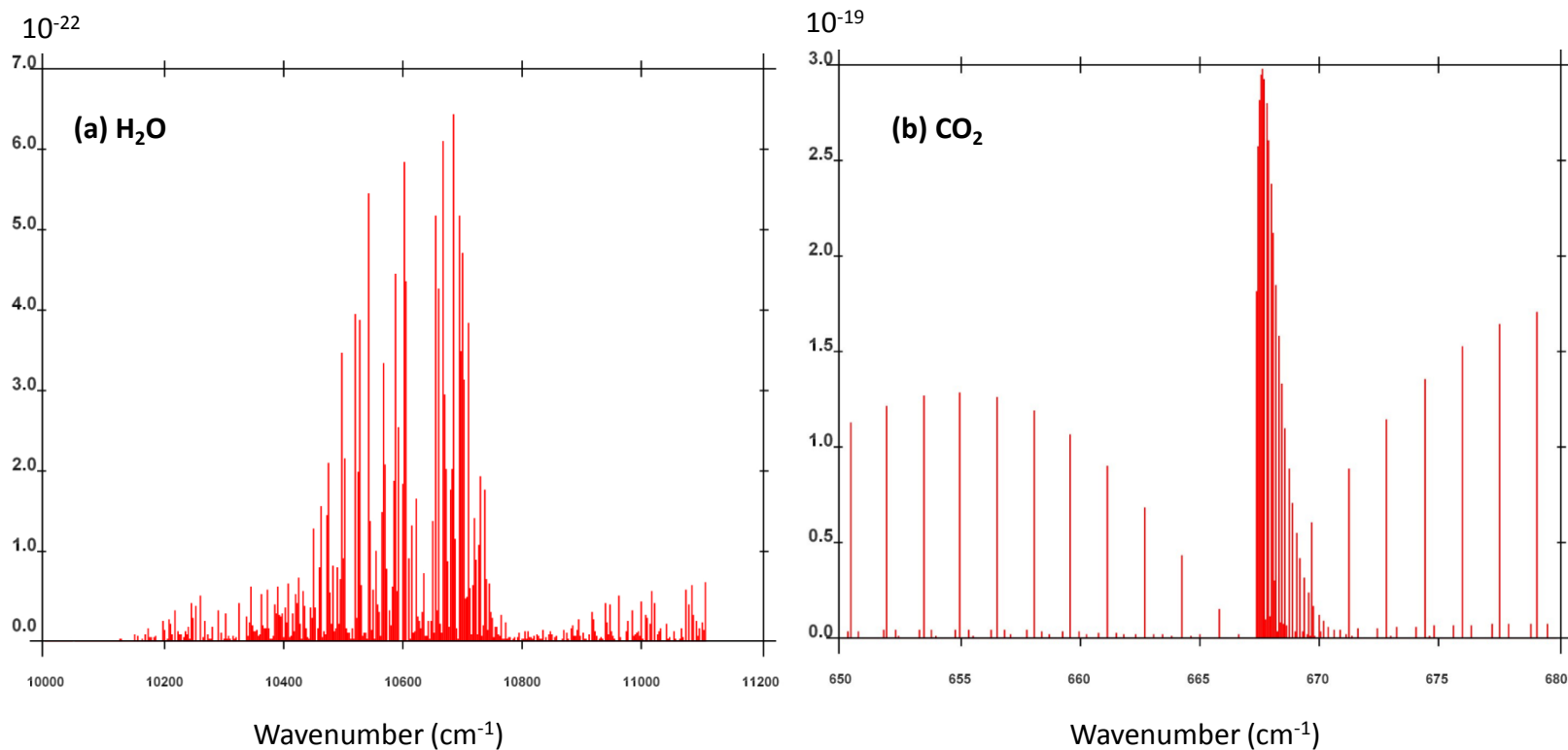


Figure 2. (a) Intensity of absorption of shortwave radiation by a water vapor molecule in the spectral range of 10000 cm^{-1} (1 micrometer) to 11200 cm^{-1} (0.89 micrometer). (b) Intensity of absorption of longwave radiation by a carbon dioxide molecule in the spectral range of 650 cm^{-1} (15.38 micrometer)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

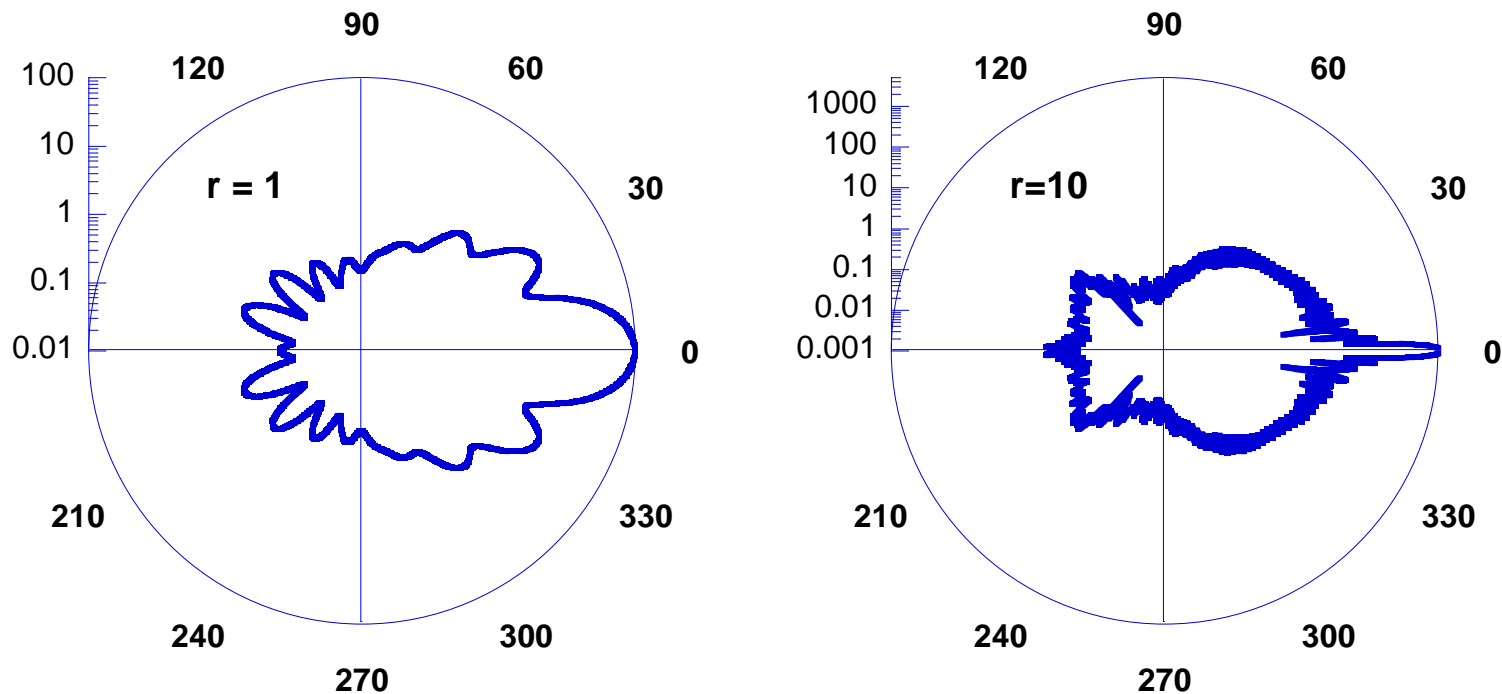


Figure 3. Angular distribution of scattered radiation of an incident visible light at 0.7 micrometer wavelength from the left by a liquid water particle of radius (a) 1 micrometers, (b) 10 micrometers.

q = condensed water mass
 N = drop number concentration

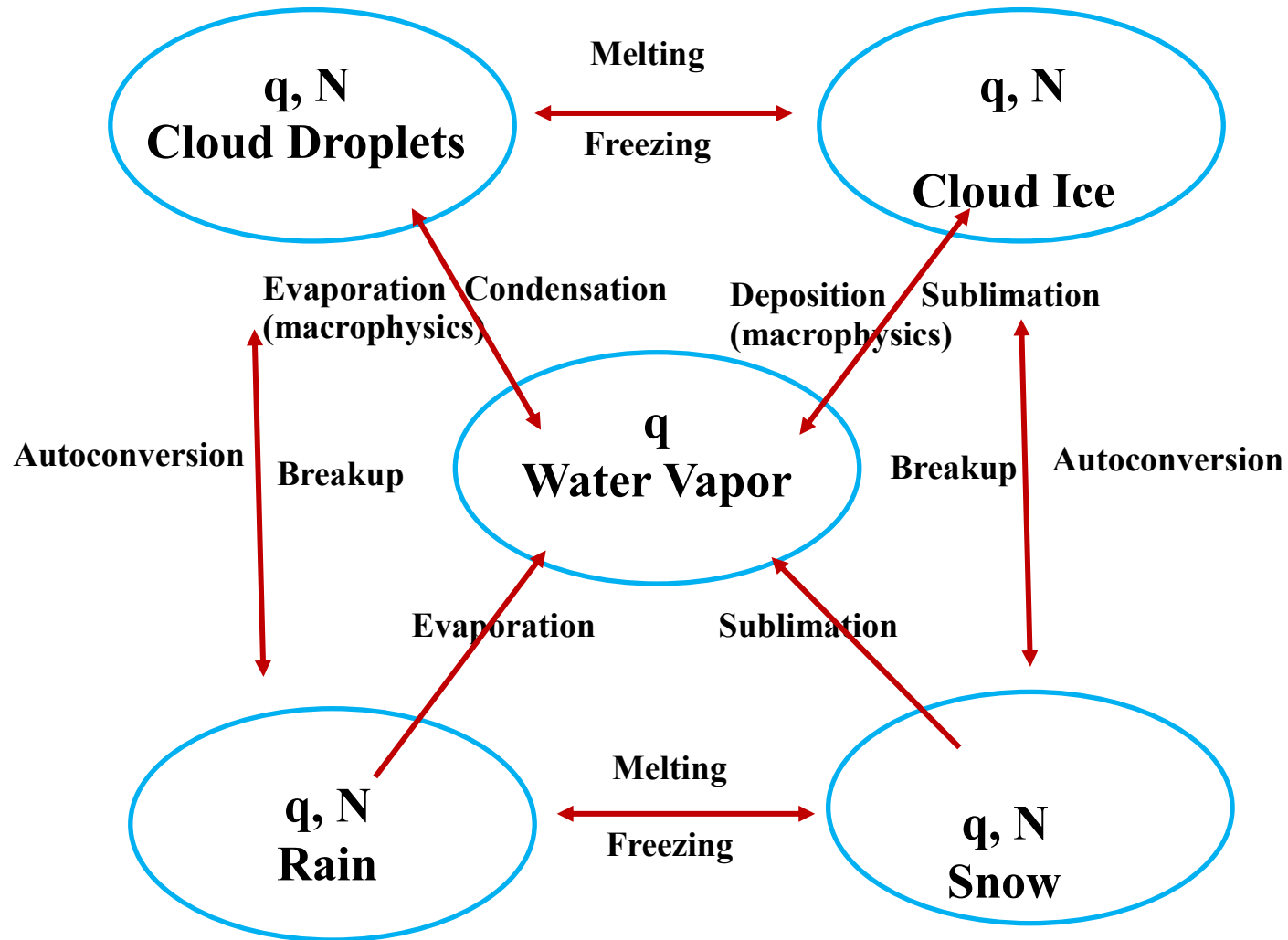


Figure 4. Schematics of some of the cloud and precipitation microphysical processes.

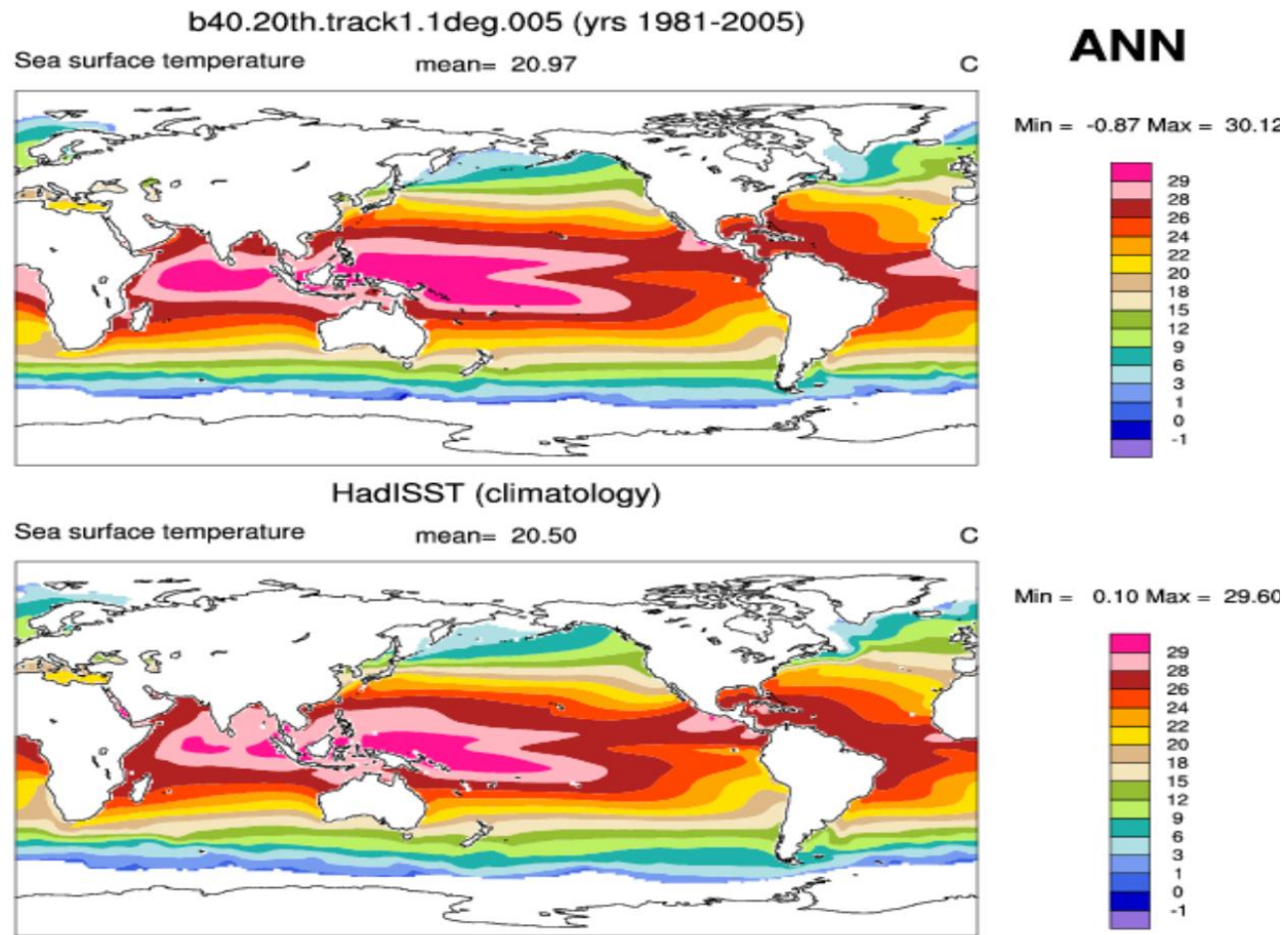


Figure 5. Annual mean sea surface temperature: (a) Simulation by the Community Earth System Model Version 1; (b) observation.

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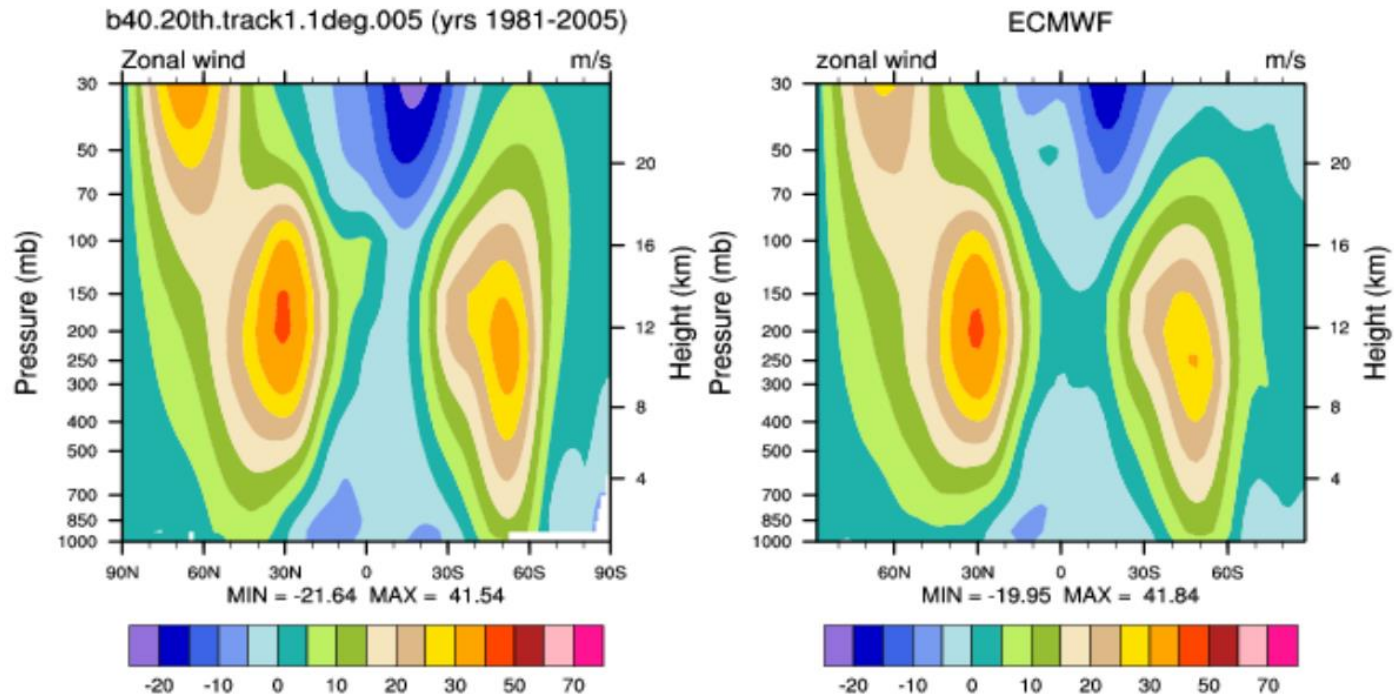


Figure 6. Height-latitude cross section of eastward atmospheric wind averaged over all longitudes: (a) Simulation by the Community Earth System Model Version 1; (b) observational estimates.

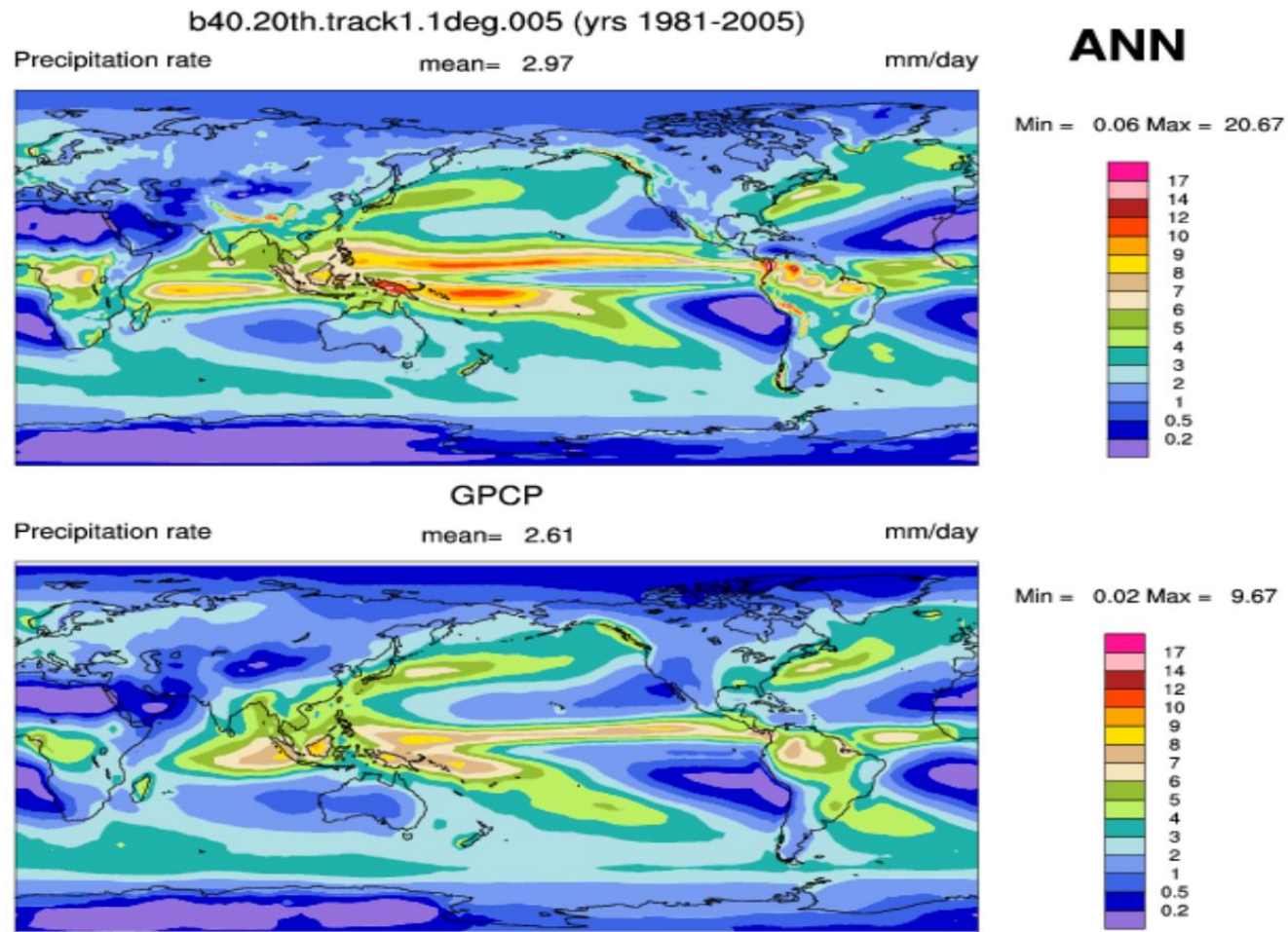


Figure 7. Annual mean precipitation: (a) Simulation by the Community Earth System Model Version 1; (b) observation.