

2.2: Scattering and Absorption

The reduction in radiance when a beam passes through a given medium by any process in which the radiation is converted to heat or excitation energy is called *absorption*. A process by which the radiance is reduced by redirection of part of the radiation (by reflection, refraction or diffraction, or by being absorbed and immediately re-radiated in all directions) is called *scattering*, for which *reflectance* is often used as a synonym. The total effect of absorption and scattering is called *extinction*, although the author prefers the less often used alternative, *attenuation*.

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