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The basic thermodynamics of Earth's radiation budget

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The microscopic bonds that hold matter together oscillate about a potential energy minimum between attractive and repulsive electrostatic forces, giving rise to macroscopic temperature. When a body of matter reaches thermal equilibrium, the spectrum of frequencies and associated amplitudes of oscillation on the body's surface are described by Planck's empirical law, which shows that heating matter increases the amplitude of these oscillations at all frequencies and shifts the peak frequency to a higher value. The oscillating motion of charge on the surface of matter induces an electromagnetic field in air or space containing the same frequencies (colors) and amplitudes (brightness) flowing away from the surface just as a radio station transmits its frequency and amplitude. Numerous frequencies coexist in an electromagnetic field over a broad spectral range, but each frequency does not interact with any other frequencies and does not change as it propagates over galactic distances except for Doppler effects. Amplitudes (intensities, brightness), on the other hand, decrease by one over the square of the distance traveled as they spread out over the surface of an expanding sphere.

Planck (1900) showed that in air and space radiant (thermal) energy at each frequency is equal to the frequency times a constant ($E=h\nu$), an expression used widely in photochemistry to designate the thermal energy required to cause a photochemical reaction. High-frequency ultraviolet radiation causes sunburn; lower frequency visible radiation powers photosynthesis; much lower frequency infrared radiation cannot cause either, no matter how large the amplitude or the amount. While many frequencies coexist in air or space, neither frequencies nor energies interact or are additive until in the presence of matter. According to $E=h\nu$, the solar, ultraviolet thermal energy that reaches Earth when ozone is depleted is at least 48 times more energetic (hotter) than infrared energy absorbed by greenhouse gases. There simply is not enough thermal energy absorbed by greenhouse gases to have a major effect on global warming.

Computer programs used to quantify greenhouse-gas theory overestimate infrared energies because they assume that thermal energy travels in space as waves, for which energy is a function of amplitude squared, and that energies are additive over bandwidth, both properties that are very different from the observed behavior of radiation in the atmosphere. Heat only flows from hot to cold; it cannot flow from a colder layer in the atmosphere to a warmer Earth, as assumed in many radiation budgets (e.g. Wild et al., 2013); you cannot get warmer by standing next to a cold stove. According to Planck's Law, radiation from a body of matter does not have high enough frequencies or amplitudes to warm the same body, as is assumed by greenhouse-gas theory. Warming radiation must come from a warmer body.

Detailed observations of global warming, including the recent hiatus, are explained much more directly and clearly by ozone depletion theory, where less ozone in the stratosphere allows more high-energy, solar ultraviolet radiation to reach Earth, cooling the stratosphere, warming the oceans. More details at ozonedepletiontheory.info plus a video at tinyurl.com/ozone-depletion-theory.