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temperature lapse rate

in atmospheric chemistry

The rate of change of temperature with altitude ($\frac{dT}{dz}$). The rate of temperature decrease with increase in altitude which is expected to occur in an unperturbed dry air mass is 9.8×10^3 °C min^{-1}. This is called the dry adiabatic lapse rate. The lapse rate is taken as positive when temperature decreases with increasing height. For air saturated with H_2O, the lapse rate is less because of the release of the latent heat of water as it condenses. The average tropospheric lapse rate is about 6.5×10^3 °C min^{-1}. The lapse rate has a negative value within an inversion layer.

Source:

PAC, 1990, *62*, 2167 *(Glossary of atmospheric chemistry terms (Recommendations 1990))* on page 2199

