

of radiation, that they usually arise from the influence, which air cooled by radiation, exerts on warmer air. While clouds probably depend altogether on *convection*; and result from the intermixture of strata of air of different temperatures, and in different states of saturation, in the higher regions of the atmosphere.

Such is the general opinion of the formation of clouds: but it must be confessed that there are considerable difficulties about the subject; and that the mere assumption of strata of different temperatures, more or less saturated with vapour, and having the motions supposed to depend upon such different temperatures and degrees of saturation, seems quite inadequate to account for all the phenomena connected with the formation and appearance of clouds.

From the principles formerly stated when we described the phenomena and properties of a mixed atmosphere of air and vapour, it appears, that clouds in general must be formed at that elevation in the atmosphere, in which the mean temperature of the air becomes equal to, or falls below the point of saturation of such air. This elevation, which may be said to constitute the *region of clouds*, must of course be highest under the Equator—an inference supported by fact; for it has been observed that within the tropics, the clouds are most frequently higher than in the temperate zones; and in the temperate