

NOTE

The simultaneous effect of the Rayleigh scattering absorption and of the O_2 and O_3 absorption on the atmospheric transmittance

$$\begin{aligned} T &= \exp [- \tau_{RS} + \tau_{O_2} + \tau_{O_3}] \\ &= \exp [- \sigma_{RS} N(M) + \sigma_{O_2} N(O_2) + \sigma_{O_3} N(O_3)] \end{aligned}$$

can be written (τ , optical depth, σ , absorption cross section and N , molecules cm^{-2})

$$T = \exp [(4.8 \sigma_{RS} + \sigma_{O_2}) N(O_2) + \sigma_{O_3} N(O_3)]$$

The "cross section (O_3)" in the last column of Table I and II correspond to $4.8 \sigma_{RS}$ and leads to a direct comparison (in the homosphere) of the scattering absorption and molecular oxygen absorption using $N(O_2)$ as the parameter.