

TROPOSPHERIC TRANSMISSIVITY MEASUREMENTS USING THE
RAMAN NITROGEN LIDAR TECHNIQUE

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ABSTRACT

LIDAR measurements in Azusa, California, during October 1972, were made in which the backscattered Raman-shifted nitrogen return was ratioed at different altitudes in order to obtain transmissivity. Rawinsonde data from nearby El Monte were used to determine the temperature and nitrogen number density altitude profiles.

These data and other meteorological data are compared to the vertical aerosol and transmissivity structure determined by LIDAR. Also data analysis techniques are shown for obtaining q^2 (transmissivity) and β (attenuation coefficient) as a function of altitude.