NORMALIZING OF RAYLEIGH RETURNS WITH THE RAMAN ROTATIONAL BACKSCATTER

J. Cooney
Department of Physics and Atmospheric Science, Drexel University
Philadelphia, Pa. 19104, U. S. A.

ABSTRACT

Raman Rotational Returns have been obtained from the 20km altitude. The Rotational backscatter is due to the presence of the N_2 & O_2 molecules in their normal atmospheric proportions.

The technique of normalizing the elastic backscatter with such profiles will be discussed along with some preliminary experimental results. This technique provides a measured aerosol backscatter with the unknown atmospheric transmission normalized out.

Tropopause characteristics can be routinely observed.