ANALYSIS OF MULTIPLY SCATTERED LIDAR RETURNS

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ABSTRACT

Multiply scattered lidar returns have been computed by means
of Monte Carlo methods and by analytical approximations
which are valid   either at small or large penetration depths.
Results obtained by these different computational methods
are compared to establish the conditions under which they are
valid.

Effects of receiver field of view, extinction coefficient,
phase function and distance separating the scattering medium
from the lidar are considered. Results obtained from models
depicting lidar returns from haze, fogs and rain will be
presented.