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INVESTIGATIONS OF LASER RADIATION
ATTENUATION IN ARTIFICIAL FOG

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Summary

The results of the investigations of the laser radiation attenuation carried out at the wavelength of 0.63, 0.69, 1.15 and 3.39μ in the chamber of artificial fog are discussed in this paper.

The microphysical characteristics of the fog in the chamber have been simultaneously investigated with the help of specially designed equipment.

The values of the laser radiation attenuation at the different wavelengths depending on the microphysical

properties of the fog (close by their characteristics to most of natural clouds and fog) and the dependence of the attenuation on its watercontent and concentration of drops have been determined. The conformity of the experimental results with the theory of the single scattering Mie has been also determined. The limits of Bouguer law application have been made clear.