Monte Carlo modelling of radiation angular distributions generated by laser beam in clouds

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This paper, being a continuation of the research presented in [1-3], deals with studying time-stationary 3D distributions for a laser pulse multiply scattered in a comparatively dense medium. By Monte Carlo method for the scattered photons of a laser beam, we compute the concentration in space, order of scattering, fields of the preferable direction, angular distributions, and angular radiance distributions. We present numerical results for the laser sensing of water-drop clouds and water media, which show peculiarities of the 3D distributions of photons in space depending on geometrical and optical properties of the media.

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**References**

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