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## **About the nature of Silvery clouds**

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*The dynamics of the temperature of particles with a characteristic size of  $10^{-7}$ – $10^{-6}$  m at the boundary of the Earth's atmosphere and outer space is considered. Using graphite as an example, it is shown that at an altitude of 80–90 km from the earth's surface, particles with a size of  $\sim 5 \times 10^{-7}$  m or less can be heated above the temperature of the beginning of the glow ( $\sim 900$  K), reaching temperatures of more than 2000 K with a light turquoise glow. Based on the results obtained, it is concluded that the silvery clouds observed in the false dawn and after sunset from the Earth's surface are a cluster of white-hot nanoparticles.*

*Keywords:* Kirchhoff's law, radiation coefficient, absorption coefficient, spatial spectral mode, sublimation, interplanetary dust, silvery (mesospheric) clouds.

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