



## **Dust particles in the Tunguska body substance**

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Due to interaction with the Earth's atmosphere, the Tunguska cosmic body (TM) disintegrated into fragments from  $10^{-7}$  to  $10^{-3}$  m in size, with the majority of the material being ejected to the upper atmospheric layers. Based on the peculiarities of the location of the fused dust particles at the Tunguska catastrophe region, it is affirmed that these particles (silicate and magnetic micron size spheres) are remnants of the TM. Silicate spherules are formed by an amorphous and crystalline glassy substance, which is enriched by  $\text{Na}_2\text{O}$  (up to 14%) or  $\text{CaO}$  (up to 28%). Magnetic spherules were found to contain a magnetite including smectite-group mineral and metals (Ni, Fe, Co... ). The following composition of dust particles in the TM matter is suggested: silicate particles ( $10 \div 1400 \mu\text{m}$ ), enriched by Na and Ca, and including carbonates and organics; phyllosilicates ( $10\text{-}350 \mu\text{m}$ ), probably in the form of the Fe-rich nontronite and metal particles ( $20\text{-}50 \mu\text{m}$ ).