



## Structure of the Tunguska body

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Based on the investigation of the organics of the Tunguska comet (TM), the following model of the TM's structure is suggested: dust particles, the next layer is ice, which consists of H<sub>2</sub>O mainly, and organic layer, the fragments of which were found in peat sediments. Under the reducing temperature of the initial protoplanetary nebula, the water vapour started condensing onto the dust particles. During the subsequent temperature decrease, the surface of these that were covered by ice grains became the place for precipitating organic molecules, which existed in the initial nebula and froze such gases as NH<sub>3</sub>, CO<sub>2</sub>, H<sub>2</sub>S, and so on. The influence of radiation and thermal processes as well as irradiation by fast neutrons on the transformation of organics on astrophysical ices led to the polymerisation of a simple species. Using this model we can explain the grouping of separate granules in gigantic bodies (comets), along with the explosive injection of particles and gases as a result of the heating of a space body, as well as the considerable strength of a sufficiently brittle object.