



Once more mystery of the Tunguska event?

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Among some mysteries of the Tunguska event an important role plays the cause of the accelerated tree growth after 1908 in the catastrophe area (about 2000-2500 km²). The main explanation was that an accelerated growth of old trees was a result of decrease of the level of competition due to falling of considerable part of neighbour trees. We analyzed all available tree ring records (more than 100) including our own ones collected in the Taymir region of Northern Siberia (72N; 105E) at a distance of about 1500 km to the North from the Tunguska catastrophe epicenter (61N; 102E). It was found that there a considerable increase of tree ring growth in 1908 over a vast area of Siberia (60N-75N; 80E-110E) that at much more vast area (10³ times more) than had been earlier considered. The similar effect was detected after the Chulyum bolide explosion in 1984 (57.7N; 85.1E). Of course, the Chulyum forest response area was some smaller taking into account incomparable powers of Tunguska and Chulyum events). It is obvious that the above mentioned interpretation of tree growth observed too far from epicenter could hardly be accepted. More likely the tree growth was stimulated by the cometary matter spreaded over a large territory of Eurasia and introduced into soil. It is generally believed that meteorites and comets delivered large amounts of organic to the early Earth. Another hypothesis is connected to NO produced during the event analyzed. We discuss as well the role of 'small signals' in simulation of biological object response.

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