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A large electric discharge as an important part of the Tunguska catastrophe

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Collected by the first investigators of the Tunguska catastrophe, the observations by the eye-witnesses of this phenomenon were analyzed. Every third eye-witness proved to have mentioned a flameout following the meteorite's explosion and every second one turned out to have seen puffs of smoke rising over the place where the space object had fallen down. The flash of fire was observed by people in 8 settlements at a distance of 65 - 500 kilometers from the epicenter. To be seen so far, the fire and smoke had to reach a height of at least 80 kilometers above the earth surface. The main characteristics of the radiation source of the Tunguska catastrophe were calculated. It was supposed that the burns of vegetation and distribution of geomagnetic field had been caused by the radiation from an ionosphere - to - ground discharge.