

# The activity of autumn meteor showers in 2006-2008

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**Abstract.** The purpose of meteor observations in INASAN is the study of meteor showers, as the elements of the migrant substance of the Solar System, and estimation of risk of hazardous collisions of spacecrafts with the particles of streams. Therefore we need to analyze the meteor events with brightness of up to 8 m, which stay in meteoroid streams for a long time and can be a hazardous for the spacecraft. The results of our single station TV observations of autumn meteor showers for the period from 2006 to 2008 are presented. The high-sensitive hybrid camera (the system with coupled of the Image Intensifier) FAVOR with limiting magnitude for meteors about 9m...10m in the field of view  $20 \times 18$  was used for observations. In 2006-2008 from October to November more than 3 thousand of meteors were detected, 65% from them have the brightness from 6m to 9m. The identification with autumn meteor showers (Orionids, Taurids, Draconids, Leonids) was carried out. In order to estimate the density of the influx of meteor matter to the Earth for these meteor showers the Index of meteor activity (IMA) was calculated. The IMA distribution for the period 2006 - 2008 is given. The distributions of autumn meteor showers (the meteors with brightness of up to 8 m) by stellar magnitude from 2006 to 2008 are also presented.

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