



Contribution ID: 37

Type: **not specified**

Observation of the Perseid meteor shower at the period 2017-2020

Friday, 30 April 2021 10:45 (15 minutes)

In this work, the results and analysis of my observations of the Perseid meteor shower at the maximum of its activity on 12-13 August in 2017 - 2020 are presented. They were the one-sided visual observations, that were carried out in Kyiv by the astronomical group of gymnasium № 59. Observations and processing of data observations were carried out using the methodology of the International Meteorological Organization (IMO).

At the beginning of visual observations, the following data are recorded:

the exact time of observations start, the equatorial coordinate of the center of the field, the presence or absence of the clouds.

The main parameters of the visual focusing of an individual meteor is its magnitude in maximum brightness is estimated in comparison with stars that are in the field of view; the exact hour to flight; meteor direction motion across the celestial sphere, that allows to evaluate approximately whether the meteor is streaming or sporadic; the existence of intensiveness and time of existence the tail from the meteor; meteor color.

According to the observation of meteors for a certain period of time, it is possible to calculate such an important parameter as the zenithal hourly rate ZHR of meteors, which in its turn allows us to estimate the spatial density of the meteor swarm.

After the conducted observations, these data were entered into the table and were submitted online to the IMO website. The results were counted, brought to a table, and built the dependency schedule of ZHR from time for analysis of the data. The results learned were compared with average IMO data.

Primary author: Ms DIMITRIIEVA, Polina (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)

Presenter: Ms DIMITRIIEVA, Polina (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)

Session Classification: Solar System & Exoplanets