

# Northern Taurids in the IAU MDC Database

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The method of indices was used to study the northern branch of the autumn (night) part of the Taurid complex. The procedure based only on mathematical statistics was applied to select the Northern Taurid meteor records from IAU Meteor Data Center Database. Because we wanted to study especially the fine structure of the inner part of the Northern Taurids, we were focused on the interval of the higher activity of the stream – from the end of the Perseids activity and the beginning of the Geminids activity. We did not take into account outlying parts of the complex, which is active, according to some authors, until January. 84 orbits of the Northern Taurids were selected. 63 of 84 Northern Taurids orbits (75%) were sorted into 11 associations found in the stream.

One of the associations consisting of three orbits was identified as a previously unknown northern branch of  $\tau$  Arietids shower. We also found association with orbital characteristics equal to characteristics of showers  $\delta$  Psc N and  $\chi$  Ori N. Meteors in these associations were observed up to three weeks earlier compared to currently cataloged data of the showers. The orientation of the mean orbit of 5-member association of  $\delta$  Psc N, different from the general trend, indicates that this stream may not be genetically related to other members of the Taurid complex.

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