Meteorite-producing fireball stream of the Glanerbrug meteorite

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The bright fireball of $-12.5^\circ$, that produced the Glanerbrug meteorite, was observed over Netherlands on April 7, 1990, at 18h 32m 38s UT, has produced the Glanerbrug meteorite. The first orbit determinations were very approximate and naturally required revision. M. Langbroek (2004), having analyzed basic data, obtained new revised orbital elements of the Glanerbrug meteorite. We apply this system of elements in our research.

Having analyzed catalogues of fireball and meteoroid streams, we found fireball stream of the eta-Ursa-Majorids (No. 26, Terentjeva, 1990). Its orbital elements are consistent with those of the Glanerbrug meteorite. The eta-Ursa-Majorid fireball stream belongs to the 11 meteorite-producing fireball streams, found by us. The orbital elements of those streams are presented.

We consider a possible relationship of the Glanerbrug meteorite and its fireball stream of the eta-Ursa-Majorids to an asteroid stream. This leads to a possible existence of an asteroid-meteoroid system of minor bodies.