

## THE SOLAR SYSTEM BODIES: FROM OPTICS TO GEOLOGY (2008)

**ABOUT ANTI-TAIL OF COMETS.** Kh. I. Ibadinov and A. G. Safarov. Institute of Astrophysics of the Academy of Sciences of Tajikistan Tajikistan, 734042 Dushanbe, Street Buhoro 22E-mail: ibadinov@mail.ru

The abnormal tail of a comet is directed to the Sun and, according to the mechanical theory comet forms, grows out synchronous emission of large meteoric particles from a nucleus of a comet aside the Sun. Such tail seldom meets at comets and is an obvious attribute of significant activity of comet nucleus. We have not a enough information about physical conditions of formation of this tail. On the basis of results of perspective designing we make the catalogue of comets with an abnormal tail. The catalogue includes data about conditions of supervision of an abnormal tail of 57 comets. Statistical researches of dependence of occurrence of an abnormal tail from geocentric  $\Delta$  and heliocentric  $r$  distances, from perihelion distances  $q$

orbits of a comet and an inclination of an orbit  $i$  to ecliptic have allowed to reveal a number of the general laws of formation of an abnormal tail. In particular, it is revealed, that the maximal number of abnormal tails of comets is necessary on area perihelion of orbits ( $r-q \approx 0$ ). For of some comets a velocity of eruption of substance of an abnormal tail from a nucleus is certain. In some cases of value of velocity of eruption (1 km/s and more) have appeared much more than thermal velocity of molecules of a water ice (the basic ice of a nucleus) and testify that eruption of substance of an abnormal tail has occurred owing to collision of a nucleus of these comets with other space body.