ASTEROID 2005 UW6 - A 'NEW' OBJECT IN THE TAURID COMPLEX? R. Rudawska<sup>1</sup>, Jeremie Vaubaillon<sup>1</sup> and Peter Jenniskens<sup>2</sup>, <sup>1</sup>IMCCE (77 avenue Denfert-Rochereau, 75014 Paris, France, rrudawska@imcce.fr), <sup>2</sup>SETI Institute (189 Bernardo Ave, Mountain View, CA 94043, USA, Petrus.M.Jenniskens@nasa.gov).

Out of the 369 known meteoroid streams only 64 are associated to a parent body. For the rest of them a parent body is still unknown. Recently, Rudawska et al. [1] noticed a possible connection between several meteors from Armagh Observatory meteor database and the asteroid 2005 UW6.

2005 UW6 has not been considered as an object belonging to the Taurid complex yet. The asteroid was discovered on 29 October 2005 with the Spacewatch. Its orbital elements are: q=0.5296, e=0.7409,  $\omega=180.3292$ ,  $\Omega=334.9360$  and i=0.9192, while the Tisserand invariant for the orbit has a value of 3.39 with respect to the Jupiter.

To establish the relationship of a meteoroid stream with the asteroid we used D-criterion introduced by Jopek at al. [2], defined in heliocentric vectorial elements space. Additionally, to confirm the reality of relation between the asteroid and meteoroid stream it is necessary to investigate the evolution of their orbits we used. The model of generation and evolution of meteoroid stream in the solar system is taken from Vaubaillon et al. [3].

In this talk, we will present a survey of results dealing with investigating the association of asteroid 2005 UW6 with the Taurid meteoroid stream.

**References:** [1] Rudawska, R., Vaubaillon, J., Atreya, P. (2012) *A&A (in press)*. [2] Jopek, T. J., Rudawska, R., Bartczak, P. J. (2007) *EM&P*, *102*, 73 [3] Vaubaillon, J., Colas, F., Jorda, L. (2005) *A&A*, 439, 751.