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URL `http://cfa-www.harvard.edu/iau/cbat.html` ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

COMET P/2002 EX_{12} (NEAT)

An apparently asteroidal object reported by NEAT, and designated 2002 EX_{12} (discovery observation given below; cf. *MPS* 52825), has been reported as showing a cometary appearance by observers at two different sites. B. D. Warner, Colorado Springs, CO, writes that his CCD frames taken with a 0.35-m Schmidt-Cassegrain reflector on 2005 July 28.26 UT show a 77″ tail in p.a. 144°, while frames taken on July 29.26 show a 90″ tail in p.a. 145°. A. Fitzsimmons, Queen's University, Belfast, reports that the object showed no coma but a faint, straight tail extending 30″ in p.a. 145° on *R*-band images taken on July 29.5 with the 2.0-m 'Faulkes Telescope North' at Haleakala; he adds that observations with that telescope on 2005 May 10.5 and with the 3.5-m New Technology Telescope on May 14.3 did not obviously show a tail.

2002 UT	α_{2000}	δ_{2000}	Mag.
Mar. 15.26990	$12^h19^m20^s.62$	$-0°28'06''.9$	19.8

The following orbital elements are taken from *MPEC* 2005-P01:

$$\text{Epoch} = \text{2005 Aug. 18.0 TT}$$

$$\begin{array}{lll} T = \text{2005 Sept.17.8587 TT} & \omega = 217^\circ.9272 & \\ e = 0.767520 & \Omega = 176.2462 & \Big\}2000.0 \\ q = 0.605325 \text{ AU} & i = 11.3189 & \end{array}$$

$$a = 2.603775 \text{ AU} \qquad n^\circ = 0.2345843 \qquad P = 4.202 \text{ years}$$

COMET C/2005 O1 (NEAT)

Another apparently asteroidal object found by NEAT (discovery observation below) has also been found to show cometary activity by Fitzsimmons, his *R*-band CCD frames taken with the 2.0-m reflector on July 31.5 UT showing a roughly symmetrical coma extending to 3″.5 from the object's condensation.

2005 UT	α_{2000}	δ_{2000}	Mag.
July 27.39588	$22^h31^m49^s.38$	$-21°25'10''.7$	19.1

The available astrometry, preliminary parabolic orbital elements (T = 2005 May 23.987 TT, q = 3.61757 AU, $\omega = 325^\circ.726$, $\Omega = 304^\circ.594$, $i = 156^\circ.196$, equinox 2000.0), and an ephemeris appear on *MPEC* 2005-P09.

2005 August 1 *Daniel W. E. Green*