Circular No. 8642

Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION
Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
CBAT@CFA.HARVARD.EDU (science)
URL `http://cfa-www.harvard.edu/iau/cbat.html` ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

COMET C/2005 X1 (BESHORE)

Edward C. Beshore has discovered a diffuse comet with slight central condensation (diameter $\sim 15''$; possible broad, faint tail $\sim 5''$ long in p.a. $\sim$ 300°) on Catalina Sky Survey images (0.68-m Schmidt telescope; discovery observation tabulated below). Following posting on the 'NEO Confirmation Page', Š. Gajdoš and J. Vilagi confirm the diffuse nature of the object (coma diameter $\sim 8''$) on CCD images taken on Dec. 9.1 UT with the 0.6-m $f/5.5$ reflector at Modra; G. Hug (Eskridge, Kansas, 0.7-m reflector) writes that his images taken on Dec. 9.4 also show the object to be diffuse.

2005 UT	α_{2000}	δ_{2000}	Mag.
Dec. 7.41028	$10^h13^m15^s.52$	$+38°35'32''.9$	19.6

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2005-X51.

$$\begin{array}{lll} T = 2005\ \text{Sept.}30.861\ \text{TT} & \omega = 142^\circ.571 & \\ & \Omega = 301.419 & \} 2000.0 \\ q = 3.27707\ \text{AU} & i = 96.463 & \end{array}$$

V445 PUPPIS

D. K. Lynch, R. J. Rudy, C. C. Venturini, and S. Mazuk, Aerospace Corporation; R. C. Puetter, University of California at San Diego; R. B. Perry, Langley Research Center, NASA; and B. Walp, Lick Observatory, report 1.0- to 2.5-μm spectroscopy of V445 Pup (cf. *IAUC* 7559, 7580) with the Lick 3.0-m telescope (+ VNIRIS) at Nov. 16.535 UT. The object has faded and the thermal dust emission (Lynch *et al.* 2004, *A.J.* **128**, 2962) has virtually disappeared. No visible counterpart has appeared, so it is likely that the dust has cooled significantly. Structured He I emission at 1.0830 μm remains strong.

COMET C/2005 W2 (CHRISTENSEN)

Improved elliptical orbital elements from *MPEC* 2005-X23:

$$\begin{array}{lll} T = 2006\ \text{Mar.}\ 28.0034\ \text{TT} & \omega = 111^\circ.8212 & \\ e = 0.825331 & \Omega = 336.5983 & \} 2000.0 \\ q = 3.330897\ \text{AU} & i = 11.2651 & \end{array}$$

$$a = 19.069727\ \text{AU} \quad n^\circ = 0.0118355 \quad P = 83.3\ \text{years}$$

2005 December 9 *Daniel W. E. Green*