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INTERNATIONAL ASTRONOMICAL UNION**

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COMET P/2005 U1 (READ)

M. T. Read reports the discovery of a diffuse comet with a tail $\sim 20''$ long toward the southwest on CCD mosaic images taken with the Spacewatch 0.9-m $f/3$ reflector on Oct. 24.3 UT (discovery observation tabulated below). The cometary appearance has been confirmed on Spacewatch images taken with the 1.8-m $f/2.7$ reflector by T. H. Bressi on Oct. 25.35–25.36 ($20''$ tail extending westward), by T. Gehrels on Oct. 26.30–26.31 ($6''$ coma and tail at least $10''$ long in p.a. 260°) and 27.28–27.29 (small, elongated coma and tail $>$ long in p.a. 260°), and by J. V. Scotti on Oct. 28.4 (slightly diffuse, with $0'.37$ tail in p.a. 249°). E. J. Christensen reports that images taken with the Mt. Lemmon 1.5-m reflector on Oct. 28.3 show a $6''$ coma and a $10''$ tail in p.a. 240° – 250° .

2005 UT	α_{2000}	δ_{2000}	Mag.
Oct. 24.32776	$3^{\text{h}}21^{\text{m}}11^{\text{s}}.94$	$+18^\circ09'17''.8$	20.2

The available astrometry (including prediscovery Catalina observations on Oct. 23), the following preliminary orbital elements, and an ephemeris appear on *MPEC* 2005-U74.

$$\begin{array}{rcl}
 T = 2005 \text{ July } 7.146 \text{ TT} & \omega = 316.571 & \\
 e = 0.31063 & \Omega = 51.812 & \left. \vphantom{\begin{array}{l} T \\ e \\ q \end{array}} \right\} 2000.0 \\
 q = 2.25603 \text{ AU} & i = 1.188 & \\
 a = 3.27260 \text{ AU} & n^\circ = 0.166481 & P = 5.92 \text{ years}
 \end{array}$$

COMET C/2004 U1 (LINEAR)

J. Young, Table Mountain Observatory, reports the discovery of a very faint second component (of total mag ~ 20.0), moving at the same rate as the primary component of C/2004 U1 (total mag ~ 18.5), on stacked CCD images taken by D. Mayes with the 0.6-m $f/16$ Cassegrain reflector on Oct. 20.3 and 21.3 UT. The companion appears to be a well-defined spot along what may be a faint tail of the primary. The astrometry has been published on *MPEC* 2005-U66.

COMET C/2005 T4 (SWAN)

Magnitude estimates and coma diameters from sets of three co-added 3-min exposures by T. Lovejoy (Thornlands, Qld., 100-mm $f/2.8$ telephoto lens): Oct. 9.378 UT, 10.5, $2'$ – $3'$; 18.372, 12, $-$.