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COMET C/2004 T3

An object discovered at Siding Spring on 0.5-m Uppsala Schmidt telescope CCD images by R. H. McNaught (discovery observation below) has been found (after posting on the 'NEO Confirmation Page') to be diffuse on CCD images taken at Las Campanas with the 0.36-m 'SoTIE' reflector by G. Masi, F. Mallia, and R. Wilcox on Oct. 13, 17, and 21. Ten combined 1-min exposures taken on Oct. 13.1 UT show a slightly diffuse object with diameter $\sim 15''$ (slightly elongated northwest-southeast) with an apparent condensation in the northwest part of the coma; images taken on Oct. 17.3 show a possible $5''$ tail in p.a. 10°.

2004 UT	α_{2000}	δ_{2000}	Mag.
Oct. 12.69016	$3^h16^m05^s.77$	$-59^\circ40'24''.5$	18.7

The available astrometry, the following preliminary orbital elements, and an ephemeris appear on *MPEC* 2004-U24.

$$\begin{array}{lll} T = 2004 \text{ Nov. } 11.633 \text{ TT} & \omega = 289^\circ.478 & \\ & \Omega = 47.909 & \text{2000.0} \\ q = 9.55852 \text{ AU} & i = 72.760 & \end{array}$$

COMET C/2004 U1 (LINEAR)

An apparently asteroidal object discovered by LINEAR (discovery observation below) has been found to show a faint coma on CCD images taken on Oct. 20.1 UT by A. Knöfel (Schoenbrunn, Germany; 0.5-m $f/5$ reflector). CCD images taken by P. Birtwhistle (Great Shefford, U.K.; 0.30-m $f/6.3$ reflector) on Oct. 21.2 show the object to be possibly diffuse with diameter $9''$ and a possible broad tail $12''$ long in p.a. 320°.

2004 UT	α_{2000}	δ_{2000}	Mag.
Oct. 19.41854	$8^h56^m12^s.68$	$+20^\circ30'21''.8$	19.4

The available astrometry (including LONEOS prediscovery observations from Oct. 16), the following preliminary orbital elements, and an ephemeris appear on *MPEC* 2004-U25.

$$\begin{array}{lll} T = 2004 \text{ Dec. } 4.319 \text{ TT} & \omega = 18^\circ.566 & \\ & \Omega = 112.608 & \text{2000.0} \\ q = 2.68042 \text{ AU} & i = 130.288 & \end{array}$$

2004 October 21 *Daniel W. E. Green*