Circular No. 8568

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 N4 (CATALINA)

An apparently asteroidal object discovered by the Catalina Sky Survey, and posted on the 'NEOCP', has been found to show cometary features by J. Young (Table Mountain, 0.6-m reflector), who notes that his CCD frames taken on July 14.24–14.27 UT show a very diffuse 5″ coma with an extremely small starlike nuclear condensation and no tail, adding that the object showed a "soft appearance" on his observations from July 7–13. P. Birtwhistle (Great Shefford, England, 0.40-m *f*/6 reflector) reports that his CCD frames taken on July 8.9 and 11.0 show the comet's image (FWHM) to be slightly larger than those of nearby stars of similar brightness.

2005 UT	α_{2000}	δ_{2000}	Mag.
July 6.27588	$16^h56^m42^s.46$	$+33°40'50''.2$	19.1

The available astrometry, the following parabolic orbital elements, and an ephemeris appear on *MPEC* 2005-N73.

$$T = \text{2005 July 2.622 TT} \qquad \omega = 136^\circ.426$$
$$\Omega = 63.847 \quad \text{2000.0}$$
$$q = 2.31107 \text{ AU} \qquad i = 116.715$$

COMET C/2005 N5 (CATALINA)

Another apparently asteroidal object discovered by the Catalina Sky Survey has been found to show cometary features by the above observers. CCD images by Birtwhistle on July 13.1 (in twilight and poor seeing, at altitude 25°) and 14.1 UT show a straight, thin tail of length 75″ in p.a. 345° and a concentrated coma of diameter 10″. Young adds that his frames taken through thin cirrus clouds on July 14.4 show what appears to be a 6″ coma.

2005 UT	α_{2000}	δ_{2000}	Mag.
July 12.43721	$0^h52^m02^s.90$	$+4°49'40''.2$	17.2

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2005-N74.

$$T = \text{2005 Aug. 20.959 TT} \qquad \omega = 206^\circ.667$$
$$\Omega = 156.745 \quad \text{2000.0}$$
$$q = 1.64525 \text{ AU} \qquad i = 21.431$$

2005 July 14 *Daniel W. E. Green*