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

COMET C/2008 Y3 (McNAUGHT)

R. H. McNaught reports his discovery of a comet on CCD images obtained with the 0.5-m Uppsala Schmidt telescope at Siding Spring (discovery observation tabulated below), describing the object as being strongly condensed with a 12″ coma and a broad 15″ tail in p.a. 300°; the magnitude was determined to be too bright by perhaps a magnitude due to involvement with a nearby bright star (when compared with images taken on 2009 Jan. 1.6 UT, when the comet had similar appearance). Following posting on the Minor Planet Center's 'NEOCP' webpage, several other CCD astrometrists have noted the object's cometary appearance. R. Ligustri (Udine, Italy) writes that exposures taken remotely with a 0.25-m *f*/3 reflector near Mayhill, NM, U.S.A., on Jan. 1.4 show a 20″ coma but no nuclear condensation; twelve 120-s co-added images obtained similarly by E. Guido, G. Sostero, and P. Camilleri on Jan. 1.3 show a compact coma of diameter $\sim$ 15″. J. E. McGaha (Tucson, AZ, U.S.A., 0.36-m *f*/10 reflector, Jan. 1.3) reports that ten stacked 60-s exposures show a stellar nuclear condensation with a 10″-wide, 74″-long tail in p.a. 309°.

2008 UT	α_{2000}	δ_{2000}	Mag.
Dec. 31.64373	$8^h51^m56^s.50$	$-21°59'43''.3$	16.3

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2009-A4.

$$T = \text{2009 Nov. 8.502 TT} \qquad \left.\begin{aligned} \omega &= 343^\circ.161 \\ \Omega &= 245.270 \\ i &= 33.146 \end{aligned}\right\} 2000.0$$
$$q = 1.90426 \text{ AU}$$

COMET P/2008 X1 = P/2003 F6 (HILL)

Additional astrometry of comet P/2008 X1 (cf. *IAUC* 9001) showed that this comet is of short period (*MPECs* 2008-Y19, 2008-Y57). M. Meyer, Limburg, Germany, has identified images of this comet with a coma diameter of 8″ and a 12″ tail in p.a. 240° on three NEAT frames from 2003 Mar. 24, and four LONEOS exposures on 2003 Apr. 1; these data are given the designation P/2003 F6 (see *CBET* 1637). Astrometry and revised orbital elements (T = 2002 Aug. 19.1; for epoch 2009 May 9.0 TT, T = 2009 May 7.771 TT, q = 2.36217 AU, e = 0.33760, $\omega = 4^\circ.393$, $\Omega = 117^\circ.296$, $i = 18^\circ.873$, equinox 2000.0) appear on *MPEC* 2008-Y60.

2009 January 1 *Daniel W. E. Green*