Circular No. 8714

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 P/2006 K2 (McNAUGHT)

R. H. McNaught reports his discovery of another comet with a 20″ coma on Uppsala Schmidt images taken in poor seeing (discovery observation tabulated below). Better images obtained by McNaught in good seeing on May 23.6 UT show a strong central condensation and a weak coma with a diameter of 20″, extended slightly in p.a. 300°. Following posting on the 'NEO Confirmation Page', R. Trentman and R. Fredrick (Louisburg, KS, 0.75-m reflector) report that their CCD images obtained on May 23.2–23.3 show a diffuse coma several arcsec in diameter.

2006 UT	α_{2000}	δ_{2000}	Mag.
May 22.64208	$15^h33^m16^s.38$	$-28°22'37''.4$	17.7

The available astrometry, the following preliminary orbital elements, and an ephemeris appear on *MPEC* 2006-K32.

$$\begin{array}{llll} T = 2006\text{ Aug. } 3.842\text{ TT} & \omega = 256^\circ.183 & & \\ e = 0.49732 & \Omega = 13.158 & \Big\} 2000.0 & \\ q = 2.02900\text{ AU} & i = 6.468 & & \\ a = 4.03634\text{ AU} & n^\circ = 0.121541 & P = 8.11\text{ years} & \end{array}$$

COMETS C/2006 F5–F8 AND C/2006 G2 (SOHO)

Additional comets have been found on SOHO website images (cf. *IAUC* 8713; MA = M. Mazzucato), all Kreutz sungrazers except C/2006 F6 (Meyer group). C/2005 F5 was described by K. Battams as small, slightly diffuse, and too faint for photometry. C/2006 F6 was condensed and quite elongated, reaching mag 7.6 on Mar. 22.993 UT at $7.1R_\odot$. C/2006 F7 and C/2006 G2 were extremely faint and diffuse. C/2006 F8 reached mag 4.7 in C3 images on Mar. 30.571 at $12.0R_\odot$; in C2 images it showed a very faint, thin tail that reached a length of 21′ on Mar. 30.922 at $5.1R_\odot$, with a possible secondary component ('lump' on the side of the head).

Comet	2006 UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2006 F5	Mar. 21.321	$0^h18^m.4$	$-\ 0°33'$	C3	MA	2006-K10
C/2006 F6	22.963	0 12.2	+ 2 37	C2	TH	2006-K10
C/2006 F7	28.326	0 36.1	+ 2 34	C2	RM	2006-K10
C/2006 F8	29.654	1 00.3	+ 1 58	C3/2	HS	2006-K10
C/2006 G2	Apr. 11.246	1 27.0	+ 7 33	C2	TH	2006-K29

2006 May 23 *Daniel W. E. Green*