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INTERNATIONAL ASTRONOMICAL UNION**

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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 ^h 33 ^m 16 ^s .38	−28°22'37".4	17.7

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

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

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 7.1 R_\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 12.0 R_\odot ; in C2 images it showed a very faint, thin tail that reached a length of 21' on Mar. 30.922 at 5.1 R_\odot , with a possible secondary component ('lump' on the side of the head).

Comet	2006 UT	α_{2000}	δ_{2000}	Inst.	F	<i>MPEC</i>
C/2006 F5	Mar. 21.321	0 ^h 18 ^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