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COMET C/2007 K6 (McNAUGHT)

R. H. McNaught reports his discovery of another comet on 0.5-m Uppsala Schmidt telescope images obtained in the course of the Siding Spring Survey (discovery observation tabulated below), the object displaying a marginal coma of diameter $\sim 6''$. Additional images by McNaught on May 30.8 UT show an almost, but-not-quite-asteroidal appearance in excellent seeing, the coma diameter given as $4''$ (FWHM).

2007 UT	α_{2000}	δ_{2000}	Mag.
May 27.79676	$22^h50^m33^s.10$	$-42°40'59''.9$	18.9

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2007-K82.

$$T = 2007 \text{ June } 21.950 \text{ TT} \qquad \left.\begin{array}{l}\omega = 334°.978\\ \Omega = 298.186\\ i = 105.095\end{array}\right\}2000.0$$
$$q = 3.46556 \text{ AU}$$

COMET C/2007 K5 (LOVEJOY)

Additional precise astrometry of this comet (cf. *IAUC* 8840) has been published on *MPEC* 2007-K80, where the following preliminary parabolic orbital elements also appear:

$$T = 2007 \text{ Apr. } 26.977 \text{ TT} \qquad \left.\begin{array}{l}\omega = 250°.115\\ \Omega = 191.798\\ i = 65.141\end{array}\right\}2000.0$$
$$q = 1.12113 \text{ AU}$$

COMET C/2007 JA_{21} (LINEAR)

Further to *IAUC* 8837, J. Young reports that his CCD images taken on May 14.29–14.36 UT with the Table Mountain 0.61-m $f/16$ Cassegrain reflector show a coma of diameter $5''$–$6''$ that was slightly elongated along the comet's path of motion, with a faint fan-shaped tail extending $20''$ spanning p.a. 315°–25°. Improved orbital elements from *MPEC* 2007-K78:

$$T = 2006 \text{ Nov. } 10.980 \text{ TT} \qquad \left.\begin{array}{l}\omega = 93°.308\\ \Omega = 65.556\\ i = 89.825\end{array}\right\}2000.0$$
$$q = 5.35972 \text{ AU}$$

2007 May 31 *Daniel W. E. Green*