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COMET C/2009 O4 (HILL)

R. E. Hill reports his discovery of another comet on CCD images taken with the Catalina 0.68-m Schmidt telescope (discovery observation tabulated below); he notes that four stacked 20-s exposures in 2″ seeing show the object to have a bright, nuclear condensation of size 15″ × 20″ that is elongated northwest-southeast, with no coma and a broad, diffuse tail ~ 2′ long in p.a. 300°. After posting on the Minor Planet Center's 'NEOCP' webpage, other cometary astrometrists have noted the object's cometary appearance. Y. Ikari (Moriyama, Shiga-Ken, Japan, 0.26-m reflector, July 30.7 UT) reports coma diameter 0′.3 and a tail 0′.6 long in p.a. 315°. F. Fratev (Zvezdno Obshtestvo Observatory, Plana, Bulgaria, 0.35-m reflector, July 31.0) writes that sixty stacked 40-s unfiltered exposures reveal a coma nearly 28″ in diameter and a tail ~ 1′.5 long in p.a. 320°. J. A. Henriquez (Tenerife, Spain, 0.2-m reflector, July 31.1; poor weather conditions) measures an 11″ coma and a 14″.5 tail in p.a. 317°. J. E. McGaha (Tucson, AZ, U.S.A., 0.36-m reflector, July 31.3) notes that six stacked 60-s images show an 8″ bright round coma with a fan-shaped tail 35″ long at p.a. 315°. W. H. Ryan (Magdalena Ridge 2.4-m reflector, July 31.35–31.38) notes a tail at p.a. ~ 290°. G. Hug (Scranton, KS, U.S.A., 0.56-m reflector, July 31.4) reports a short, broad tail in p.a. ~ 310°.

2009 UT	α_{2000}	δ_{2000}	Mag.	*Observer*
July 30.37424	$0^h33^m09^s.91$	$+7°38'01''.8$	16.3	Hill

The available astrometry, the following preliminary parabolic orbital elements by B. G. Marsden, and an ephemeris appear on *MPEC* 2009-O56.

$$T = 2009\ \text{Dec.}\ 1.451\ \text{TT} \qquad q = 2.86118\ \text{AU}$$

$$\left.\begin{array}{l}\omega = 210^\circ.640\\ \Omega = 173.459\\ i = 94.583\end{array}\right\}2000.0$$

COMETS C/2009 D5 AND C/2009 D6 (SOHO)

Further to *IAUC* 9058, starlike apparent comets have been found on SOHO website images: C/2009 D5 was a Kreutz object (mag ~ 6.5–7), while Meyer-group member C/2009 D6 was slightly elongated (mag ~ 7).

Comet	2009 UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2009 D5	Feb. 23.679	$22^h48^m.1$	$-10°41'$	C3	MK	2009-M55
C/2009 D6	24.814	22 37.2	− 7 26	C2	RK	2009-M55

2009 July 31 *Daniel W. E. Green*