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COMET C/2007 H2 (SKIFF)

B. A. Skiff, Lowell Observatory, reports his discovery of a comet on CCD images taken by himself with the 0.59-m LONEOS Schmidt telescope (discovery observation tabulated below), a 10″ coma noted as being moderately condensed with a narrow tail extending 30″ in p.a. 250°. Following posting on the Minor Planet Center's 'NEOCP' webpage, numerous other CCD astrometric observers have remarked on the objects cometary appearance, including L. Bittesini, G. Lombardi, E. Pettarin, F. Piani, and G. Cralli (Farra d'Isonzo, Italy, 0.40-m *f*/4.5 reflector, Apr. 19.84 UT; diffuse coma of diameter $\sim$ 10″ and a tail $\sim$ 50″ long in p.a. 230°); A. Knöfel (Schoenbrunn, Germany, 0.5-m *f*/5 reflector, Apr. 19.9; short tail visible); L. Donato, M. Gonano, V. Gonano, E. Guido, and G. Sostero (Remanzacco, Italy, 0.45-m *f*/4.4 reflector, Apr. 19.83–19.91; co-adding of sixty unfiltered 60-s exposures reveals the presence of a coma nearly 20″ in diameter and a narrow tail extending almost 2′ toward p.a. 235°); J. J. Müller (Irmtraut, Germany, 0.31-m *f*/4.8 reflector, Apr. 19.9; coma diameter 5″); P. Birtwhistle (Great Shefford, Berkshire, England, 0.40-m *f*/6.0 Schmidt-Cassegrain reflector, Apr. 19.9; diffuse coma of diameter 9″ with central condensation and a tail 20″ long — possibly up to 30″ long — in p.a. 230°); J. Lacruz, Madrid, Spain, 0.30-m Schmidt-Cassegrain reflector, Apr. 19.96–19.98; condensed, elongated coma of diameter 8″ with a fan-shaped tail 28″–30″ long spanning p.a. 223°–235°); M. Pietschnig (Vienna, 0.35-m *f*/7 Schmidt-Cassegrain reflector, Apr. 19.96-19.98; 20″ tail in p.a. 239°); G. Hug (Scranton, KS, 0.30-m Schmidt-Cassegrain reflector, Apr. 20.26; narrow tail extending $\sim$ 1′ in p.a. $\sim$ 220°); and R. E. Hill (Mount Lemmon 1.5-m reflector, Apr. 20.3; four 30-s stacked images in 2″-3″ seeing show a well-condensed nuclear condensation of diameter $\sim$ 10″ and a broad, fan-shaped tail $\sim$ 1′ long toward p.a. $\sim$ 225°).

2007 UT	α_{2000}	δ_{2000}	Mag.
Apr. 19.25649	$13^h40^m08^s.95$	$-0°26'15''.3$	18.1

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2007-H33.

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\begin{array}{lll}
T = 2007\ \text{Feb.}\ 17.409\ \text{TT} & \omega = 319^\circ.448 & \\
 & \Omega = 203.789 & \Big\}\ 2000.0 \\
q = 1.41383\ \text{AU} & i = 52.638 &
\end{array}
$$

2007 April 20 *Daniel W. E. Green*