Circular No. 8893

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COMET P/2007 V1 (LARSON)

S. M. Larson reports his discovery of a comet (discovery observation tabulated below) on CCD images obtained with the 0.68-m Schmidt reflector in the course of the Catalina Sky Survey; he reported a 40″ tail in p.a. 230°. Following posting on the Minor Planet Center's NEOCP webpage, several other CCD astrometrists have commented on the comet's physical appearance. P. Birtwhistle (Great Shefford, Berkshire, England, 0.40-m *f*/6 Schmidt-Cassegrain reflector, Nov. 9.0 UT) found a concentrated coma of diameter 6″ with a 30″ tail in p.a. 235°. J. Lacruz (Madrid, Spain, 0.40-m Ritchey-Chrétien reflector, Nov. 9.0) measured a 30″ tail in p.a. 240°. G. Hug (Eskridge, KS, U.S.A., 0.7-m reflector, Nov. 9.4) reports detecting "a short defined tail" in p.a. ~ 250°. E. Guido and G. Sostero (Castellammare di Stabia, Italy, remotely using a 0.25-m *f*/3.4 reflector located near Mayhill, NM, U.S.A., Nov. 9.4) write that a co-addition of forty 60-s unfiltered exposures on Nov. 9.4 reveals the presence of a diffuse coma nearly 12″ in diameter with total mag ~ 18.3. J. G. Ries (McDonald Observatory, 0.76-m reflector + prime-focus corrector, Nov. 9.3) finds a very clear tail ≈ 64″ long pointing almost exactly southwest. R. E. Hill (Mt. Lemmon 1.5-m reflector, Nov. 9.4) adds that a co-addition of four 60-s exposures shows a broad 7′ tail in p.a. 240° and a well-defined nuclear condensation 5″–6″ across; the total mag was given as 17.7.

2007	UT	α_{2000}	δ_{2000}	Mag.
Nov.	8.31007	$3^h14^m10^s.71$	$+30^\circ01'12''.8$	17.3

The available astrometry, the following elliptical orbital elements, and an ephemeris appear on *MPEC* 2007-V72.

$$\left.\begin{array}{lll} T = 2007\ \text{Dec. } 8.5940\ \text{TT} & \omega = 51^\circ.4714 \\ e = 0.461170 & \Omega = 8.1899 \\ q = 2.676678\ \text{AU} & i = 10.7903 \end{array}\right\} 2000.0$$

$$a = 4.967569\ \text{AU} \qquad n^\circ = 0.0890201 \qquad P = 11.07\ \text{years}$$

COMETS C/2004 E5 (SOHO)

Further to *IAUC* 8892, another slightly diffuse Kreutz-sungrazing comet of mag ~ 7.5 has been found on archival SOHO website images.

Comet	2004	UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2004 E5	Mar.	1.321	$23^h03^m.3$	$-8^\circ08'$	C3	BZ	2007-U23

2007 November 9 *Daniel W. E. Green*