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COMET P/2004 Y1 (CHRISTENSEN)

Eric J. Christensen, Lunar and Planetary Laboratory, reports his discovery of a comet in the course of the Catalina Sky Survey on images taken with the 0.68-m Schmidt telescope (discovery observation below), noting a coma of diameter $\sim 15''$ and a fan-shaped tail $20''$ long in p.a. 270°. Following posting on the 'NEO Confirmation Page', J. Young writes that his images taken at Table Mountain on Dec. 22.4 UT show the object with a round $8''$ coma and a broad fan-shaped tail spanning p.a. 210°–290° (the faint tail edge at p.a. 210° extends $20''$, while the brighter edge at p.a. 290° extends only $14''$).

2004 UT	α_{2000}	δ_{2000}	Mag.
Dec. 21.47360	$11^h02^m23^s.99$	$+22^\circ52'57''.8$	16.5

The available astrometry (including prediscovery observations by LINEAR back to Dec. 9), the following orbital elements, and an ephemeris appear on *MPEC* 2004-Y47.

$$\begin{array}{llll} T = 2004\ \text{June}\ 21.588\ \text{TT} & \omega = 325^\circ.364 & \\ e = 0.54459 & \Omega = 88.689 & \Big\}2000.0 \\ q = 1.64584\ \text{AU} & i = 16.242 & \end{array}$$

$$a = 3.61398\ \text{AU} \qquad n^\circ = 0.143458 \qquad P = 6.87\ \text{years}$$

COMETS C/2004 V14, V15, W1–W6

Further to *IAUC* 8455, following are the initial observations of additional Kreutz sungrazing comets found on SOHO website images (TS = T. Scarmato). K. Battams notes that C/2004 V15 was fairly bright with a short tail.

Comet	2004 UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2004 V14	Nov. 14.096	$15^h11^m.2$	$-20^\circ43'$	C3/2	MM	2004-Y37
C/2004 V15	15.904	15 20.6	−22 20	C3/2	TH	2004-Y37
C/2004 W1	16.254	15 24.9	−20 20	C2	TH	2004-Y37
C/2004 W2	18.513	15 31.9	−21 34	C3/2	TS	2004-Y37
C/2004 W3	19.513	15 35.6	−22 38	C3/2	RK	2004-Y38
C/2004 W4	21.785	15 49.0	−21 45	C2	BZ	2004-Y38
C/2004 W5	22.368	15 52.1	−21 51	C2	SH	2004-Y38
C/2004 W6	23.213	15 55.6	−22 05	C2	XL	2004-Y38

2004 December 22 *Daniel W. E. Green*