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**INTERNATIONAL ASTRONOMICAL UNION**

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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.  $270^\circ$ . 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.  $210^\circ$ – $290^\circ$  (the faint tail edge at p.a.  $210^\circ$  extends  $20''$ , while the brighter edge at p.a.  $290^\circ$  extends only  $14''$ ).

2004 UT	$\alpha_{2000}$	$\delta_{2000}$	Mag.
Dec. 21.47360	$11^{\text{h}}02^{\text{m}}23.99^{\text{s}}$	$+22^\circ52'57.8''$	16.5

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

$$\left. \begin{array}{ll}
 T = 2004 \text{ June } 21.588 \text{ TT} & \omega = 325.364 \\
 e = 0.54459 & \Omega = 88.689 \\
 q = 1.64584 \text{ AU} & i = 16.242
 \end{array} \right\} 2000.0$$

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

*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	$\alpha_{2000}$	$\delta_{2000}$	Inst.	F	<i>MPEC</i>
C/2004 V14	Nov. 14.096	$15^{\text{h}}11.2^{\text{m}}$	$-20^\circ43'$	C3/2	MM	2004-Y37
C/2004 V15	15.904	15 20.6	$-22^\circ20'$	C3/2	TH	2004-Y37
C/2004 W1	16.254	15 24.9	$-20^\circ20'$	C2	TH	2004-Y37
C/2004 W2	18.513	15 31.9	$-21^\circ34'$	C3/2	TS	2004-Y37
C/2004 W3	19.513	15 35.6	$-22^\circ38'$	C3/2	RK	2004-Y38
C/2004 W4	21.785	15 49.0	$-21^\circ45'$	C2	BZ	2004-Y38
C/2004 W5	22.368	15 52.1	$-21^\circ51'$	C2	SH	2004-Y38
C/2004 W6	23.213	15 55.6	$-22^\circ05'$	C2	XL	2004-Y38