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Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION
Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
CBAT@CFA.HARVARD.EDU (science)
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COMET C/2006 U5 (CHRISTENSEN)

E. J. Christensen, Lunar and Planetary Laboratory, University of Arizona, reports his discovery of a comet with a 15″ coma and a short, fan-shaped tail spanning p.a. 260°–290° on four co-added 60-s images taken with the 0.68-m Schmidt telescope in the course of the Catalina Sky Survey (discovery observation tabulated below). Following posting on the Minor Planet Center's NEOCP webpage, numerous other observers have commented that their CCD astrometric observations also show this object to be cometary in appearance. G. Hug (Eskridge, KS, 0.7-m reflector) found a faint, broad tail centered at p.a. ~ 260° on his images from Oct. 28.4 UT. G. Sostero and E. Guido (Remanzacco, Italy, 0.45-m f/4.4 reflector) write that their frames from Oct. 29.1 show a diffuse coma 20″ in diameter with total mag 17.8 and a broad tail 30″ long toward p.a. 315°. B. L. Stevens (Las Cruces, NM, 0.3-m Schmidt-Cassegrain reflector) reports that his images from Oct. 29.4 show a 7″ coma and a 27″-long tail spanning 36° of p.a., centered at p.a. 267°. J. Young (Table Mountain Observatory, 0.61-m f/16 Cassegrain reflector) notes that his images from Oct. 29.4 show a diffuse coma of diameter 6″ with little central condensation and a very broad, poorly defined, fan-shaped tail directed toward a central p.a. of 265°.

2006 UT	α_{2000}	δ_{2000}	Mag.
Oct. 27.39343	$6^h42^m08^s.03$	$+27°25'28''.4$	18.0

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2006-U69.

$$
\begin{array}{lll}
T = 2006\ \text{Aug. } 31.906\ \text{TT} & \omega = 43^\circ.150 & \\
 & \Omega = 17.276 & \}\ 2000.0 \\
q = 2.56243\ \text{AU} & i = 3.840 &
\end{array}
$$

COMET P/2006 S4 (CHRISTENSEN)

Elliptical orbital elements (cf. *IAUC* 8753) from *MPEC* 2006-U29:

$$
\begin{array}{lll}
T = 2006\ \text{June } 1.593\ \text{TT} & \omega = 305^\circ.689 & \\
e = 0.50816 & \Omega = 36.142 & \}\ 2000.0 \\
q = 3.06767\ \text{AU} & i = 39.622 &
\end{array}
$$

$$a = 6.23713\ \text{AU} \quad n^\circ = 0.063274 \quad P = 15.58\ \text{years}$$

2006 October 29 *Daniel W. E. Green*