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COMET C/2006 CK₁₀ (CATALINA)

C. W. Hergenrother, Lunar and Planetary Laboratory, reports that his CCD frames taken (with A. C. Smith) at the Catalina 1.54-m Kuiper telescope on Feb. 24 and 25 UT, and at the Vatican 1.8-m Lennon telescope on Feb. 28.5, show that 2006 CK₁₀ — reported as asteroidal when discovered by the Catalina Sky Survey (cf. *MPEC* 2006-C44; discovery observation tabulated below) — has a cometary appearance; a co-added 1440-s *R*-band exposure on Feb. 24.48 shows a condensed coma 14'' in diameter and a broad tail 20'' long in p.a. 210°. E. J. Christensen reports that four Catalina Sky Survey co-added 90-s CCD images obtained by A. R. Gibbs and himself with the 0.68-m Schmidt telescope on Mar. 2.35–2.36 show a faint coma \approx 20'' in diameter (mag 17.3), elongated toward p.a. 200°.

2006 UT	α_{2000}	δ_{2000}	Mag.
Feb. 4.43262	14 ^h 16 ^m 00 ^s .15	+35°00'10.5''	19.0

Additional astrometry, the following parabolic orbital elements, and an ephemeris appear on *MPEC* 2006-E04.

$$\left. \begin{array}{l} T = 2006 \text{ July } 2.6713 \text{ TT} \\ q = 1.757046 \text{ AU} \end{array} \right\} \begin{array}{l} \omega = 143.1050 \\ \Omega = 243.7873 \\ i = 144.2441 \end{array} \left. \vphantom{\begin{array}{l} T \\ q \end{array}} \right\} 2000.0$$

RS OPHIUCHI

A. Evans, Keele University; T. Kerr, Joint Astronomy Centre; Y. Matsuoka and Y. Tsuzuki, University of Tokyo; T. R. Geballe, Gemini Observatory; R. D. Gehrz and C. E. Woodward, University of Minnesota; M. F. Bode, Liverpool John Moores University; T. J. O'Brien and R. J. Davis, University of Manchester; J. P. Osborne and K. L. Page, University of Leicester; G. Schwarz, West Chester University; S. Starrfield and J.-U. Ness, Arizona State University; J. Krautter, University of Heidelberg; J. Drake, Smithsonian Astrophysical Observatory; and S. P. S. Eyres, University of Central Lancashire, report that a spectrum (range 880 nm–2.5 μ m) was obtained with the 3.8-m U.K. Infrared Telescope (+ UIST) on Feb. 24.64 UT. The spectra show strong Paschen lines from 4-3 to 12-3, Brackett lines from 7-4 to 20-4, Pfund lines from 17-5 to 23-5, He I at 1.083, 2.058, and 2.112 μ m, O I 3P-3D⁰ at 1.128 μ m (cf. *IAUC* 8673), and other lines that are tentatively identified with O I, O II and C I. The FWHM of the resolved P α line is 1130 \pm 50 km/s, but with wings extending to 3000 km/s.