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COMET P/2007 C2 (CATALINA)

An apparent asteroidal object discovered by the Catalina Sky Survey (discovery observation tabulated below), and posted on the Minor Planet Center's 'NEOCP' webpage, has been reported by other observers to show cometary appearance. CCD images taken by H.-C. Lin, C.-S. Lin, and Q.-z. Ye (Lulin Observatory 0.41-m *f*/8.8 Ritchey-Chrétien telescope) on Feb. 10.55 UT show a small 3″ coma with an apparent tail around 5″–6″ long in p.a. 70°. G. Sostero and E. Guido (Remanzacco, Italy, 0.45-m f/4.4 reflector) report that a co-addition of ten unfiltered 180-s CCD exposures on Feb. 11.8 reveals the possible presence of a broad and faint tail almost 12″ toward p.a. 340°. D. T. Durig and W. R. O'Farrell (Sewanee, TN, 0.30-m *f*/4 Schmidt-Cassegrain telescope) write that their CCD images from Feb. 12.09–12.16 show a possible coma of diameter 1″.5-3″, asymmetric to the north, with a possible tail 7″-9″ long in p.a. 255°.

2007 UT	α_{2000}	δ_{2000}	Mag.
Feb. 9.13925	$3^{h}00^{m}14^{s}.90$	$+22^{\circ}06'59''.9$	18.7

The available astrometry (including numerous prediscovery observations, the oldest being made at Catalina back to 2006 Oct. 19), the following elliptical orbital elements, and an ephemeris appear on *MPEC* 2007-C54.

$$\text{Epoch} = 2007 \text{ Sept. } 17.0 \text{ TT}$$

$$\begin{array}{ll} T = 2007 \text{ Sept. } 4.5278 \text{ TT} & \left.\begin{array}{l}\omega = 179^{\circ}.4398 \\ \Omega = 276.1167 \\ i = 8.6748\end{array}\right\} 2000.0 \\ e = 0.462035 & \\ q = 3.780116 \text{ AU} & \end{array}$$

$$a = 7.026700 \text{ AU} \qquad n^{\circ} = 0.0529148 \qquad P = 18.626 \text{ years}$$

COMET P/2007 B3 (GARRADD)

Additional observations show that this comet (cf. *IAUC* 8801) is of short period; orbital elements from *MPEC* 2007-C37:

$$\begin{array}{ll} T = 2008 \text{ Apr. } 8.305 \text{ TT} & \left.\begin{array}{l}\omega = 281^{\circ}.119 \\ \Omega = 327.829 \\ i = 28.825\end{array}\right\} 2000.0 \\ e = 0.11751 & \\ q = 4.24543 \text{ AU} & \end{array}$$

$$a = 4.81071 \text{ AU} \qquad n^{\circ} = 0.093409 \qquad P = 10.55 \text{ years}$$

2007 February 12 *Daniel W. E. Green*