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COMET P/2006 M3 (BARNARD)

An apparently asteroidal object discovered by LINEAR (discovery observation tabulated below) has been found to be cometary following posting on the 'NEO Confirmation Page'. L. Buzzi (Varese, Italy; 0.60-m reflector) reports that images taken in good seeing during June 23.97–23.99 UT showed a 6″ circular coma with a strong central condensation. Images from R. Salvo (Los Molinos, Uruguay) on June 24.2 and from J. Broughton (Reedy Creek, Queensland) on June 24.6 also suggest that the object is a comet. From a preliminary orbit computation, the undersigned suggested that the comet is a return of P/1889 M1 = 1889 III = 1889c (Barnard), for which A. Berberich (1889, *A.N.* **123**, 77) was the first to compute an orbit of intermediate period (~ 128 years). The orbital elements below are by B. G. Marsden, from observations 1889–2006 (mean residual 0″.9), with astrometry also given on *MPECs* 2006-M38 and 2006-M42.

2006 UT	α_{2000}	δ_{2000}	Mag.
June 23.25870	$17^h43^m38^s.68$	$-27^\circ26'53''.5$	17.1

Epoch = 1889 June 7.0 TT

$$\begin{array}{lll} T = 1889\text{ June } 21.2418\text{ TT} & \omega = 60^\circ.1479 & \\ e = 0.953988 & \Omega = 272.5450 & \Big\}\, 2000.0 \\ q = 1.102918\text{ AU} & i = 31.2189 & \end{array}$$

$$a = 23.970332\text{ AU} \qquad n^\circ = 0.0083983 \qquad P = 117.36\text{ years}$$

Epoch = 2006 Aug. 13.0 TT

$$\begin{array}{lll} T = 2006\text{ Aug. } 28.6903\text{ TT} & \omega = 60^\circ.4661 & \\ e = 0.954400 & \Omega = 272.0666 & \Big\}\, 2000.0 \\ q = 1.107142\text{ AU} & i = 31.2161 & \end{array}$$

$$a = 24.279424\text{ AU} \qquad n^\circ = 0.0082385 \qquad P = 119.64\text{ years}$$

SUPERNOVA 2006di IN NGC 439

Further to *IAUC* 8723, L. A. G. Monard reports the discovery of an apparent supernova (mag ~ 16.1) on unfiltered CCD images taken on June 24.154 UT. The new object is located at $\alpha = 1^h13^m46^s.85$, $\delta = -31^\circ44'30''.2$ (equinox 2000.0), which is 6″ west and 19″ north of the nucleus of NGC 439. Nothing is visible at this location on the Digitized Sky Survey (limiting red mag 20.5). Additional magnitudes from Monard for 2006di: June 1.137, [18.5; 25.134, 16.2; 26.137, 16.1.

2006 June 26 *Daniel W. E. Green*