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COMET C/2006 M2 (SPACEWATCH)

An apparently asteroidal object discovered in the course of the Spacewatch project (discovery observation tabulated below) has been found to be cometary following posting on the 'NEOCP'. J. Young reports that stacked Table Mountain exposures from June 21.23–21.28 UT show a circular 6″ coma with little if any condensation and no tail, while his images from June 20 showed only a stellar appearance; on June 22.2, in better seeing, Young's frames show what appears to be a varying degree of condensation, suggesting some rotation, with a 4″–6″ coma of mag 20.6. R. S. McMillan reports that CCD frames taken with the 1.8-m $f/2.7$ Spacewatch II reflector on June 22.35 show the object to be possibly more diffuse than surrounding stars, but seeing was described as 'soft'.

2006 UT	α_{2000}	δ_{2000}	Mag.
June 19.31525	$16^h03^m44^s.52$	$+2^\circ13'53''.0$	21.2

The available astrometry, the following preliminary parabolic orbital elements, and an ephemeris appear on *MPEC* 2006-M27.

$$T = 2005 \text{ Nov. } 20.441 \text{ TT} \qquad \left.\begin{aligned}\omega &= 115^\circ.255\\ \Omega &= 27.083\\ i &= 150.300\end{aligned}\right\}2000.0$$
$$q = 5.20585 \text{ AU}$$

SUPERNOVAE 2006de, 2006df, 2006dg, 2006dh

Four additional supernovae have been discovered on unfiltered CCD images: 2006df by the 'Nearby Supernova Factory' collaboration (cf. *CBET* 556), and the rest by N. Lee and W. Li (LOSS/KAIT; cf. *IAUC* 8723).

SN	2006 UT	α_{2000}	δ_{2000}	Mag.	*Offset*
2006de	June 2.49	$21^h35^m33^s.33$	$-19^\circ01'46''.5$	17.2	11″.2 W, 4″.6 N
2006df	June 16.5	21 49 57.67	+32 01 58.7	19.5	–
2006dg	June 17.47	23 45 54.38	+12 03 59.0	18.3	10″.7 W, 17″.1 N
2006dh	June 21.25	13 41 43.08	+40 52 36.8	18.4	9″.6 E, 8″.2 N

Additional KAIT magnitudes for 2006de in MCG –03-55-3: 2005 Oct. 22.19 UT, [19.0; 2006 June 11.47, 17.5. SN 2006df is a type-IIn supernova. Additional KAIT magnitudes for 2006dg in IC 1508: 2005 Nov. 21.19, [19.5; 2006 June 22.46, 18.5. Additional KAIT magnitudes for 2006dh in UGC 8670: May 18.34, [19.2; June 4.30, [18.2; 22.22, 18.3.

2006 June 22 *Daniel W. E. Green*