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COMET C/2004 X2 (LINEAR)

An apparently asteroidal object discovered by the LINEAR project (discovery observation below), and posted on the 'NEO Confirmation Page', has been found to be cometary in appearance. R-band observations taken by C. Hergenrother with the Catalina 1.54-m reflector on Dec. 9.55 UT show a coma 25″ in diameter and a slightly curved 50″ tail in p.a. 325°. CCD images taken by J. E. McGaha (Tucson, AZ, 0.36-m f/10 reflector) on Dec. 10.4 show a 3″ coma with a 12″ tail in p.a. 300°.

2004 UT	α_{2000}	δ_{2000}	Mag.
Dec. 8.46681	$9^h31^m07^s.95$	$+12°34'01''.7$	18.9

The available astrometry (including LONEOS observations from Nov. 19), the following parabolic orbital elements, and an ephemeris appear on *MPEC* 2004-X35.

$$T = 2004 \text{ Aug. } 25.890 \text{ TT} \qquad \left.\begin{array}{l}\omega = 162^\circ.526\\ \Omega = 307.353\\ i = 72.173\end{array}\right\}2000.0$$
$$q = 3.79930 \text{ AU}$$

SUPERNOVA 2004gp

A. Garg, M. Huber, P. Garnavich, P. Challis, C. Stubbs, and the SuperMACHO collaboration (cf. *IAUC* 8439) report the detection with the Cerro Tololo 4-m telescope (+ MOSAIC imager) on Oct. 19 of a supernova (magnitude 'VR' $\sim$ 21.0 at peak) located at $\alpha = 4^h53^m38^s.96$, $\delta = -68°47'02''.8$ (equinox 2000.0), which is 0″.28 east and 0″.12 north of a galaxy (whose magnitude is $I = 18.7$) situated behind the Large Magellanic Cloud. The new object was also detected in 4-m-telescope observations on Sept. 18, Oct. 5, 11, 17, 23, and Nov. 6. Spectroscopy obtained on the Magellan Clay telescope (+ LDSS-2 spectrograph) on Nov. 6 indicates that SN 2004gp is a type-II supernova at a redshift of 0.067.

SUPERNOVA 2004go IN IC 270

N. Morrell, M. Hamuy, G. Folatelli, and M. Phillips, Carnegie Supernova Project, report that a CCD spectrogram (range 380–923 nm) of SN 2004go (cf. *IAUC* 8448), obtained on Dec. 9.23 UT with the Las Campanas du Pont 2.5-m telescope (+ WFCCD spectrograph), shows it to be a type-Ia supernova, probably 3 to 4 weeks after maximum light.

2004 December 10 *Daniel W. E. Green*