Circular No. 8537

Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION
Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
CBAT@CFA.HARVARD.EDU (science)
URL `http://cfa-www.harvard.edu/iau/cbat.html` ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

COMET P/2005 JY_{126} (CATALINA)

Rik Hill reports his discovery of a comet on exposures taken on June 7.32 UT with the 0.68-m Schmidt telescope in the course of the Catalina Sky Survey, noting the object to be less distinct than surrounding stars and elongated along a northeast-southwest axis. C. W. Hergenrother, Lunar and Planetary Laboratory, writes that a co-added 1200-s R-band exposure with the University of Arizona 1.54-m Kuiper telescope shows the object to have a condensed, circular 15″ coma and a thin, faint tail 35″ long in p.a. 65°. The observations were linked by the Minor Planet Center to the apparently asteroidal object 2005 JY_{126}, a Catalina discovery published on *MPS* 134992 (discovery observation given below).

2005 UT	α_{2000}	δ_{2000}	Mag.
May 12.31877	$16^h13^m28^s.16$	$-4°55'13''.7$	17.4

Additional astrometry (including prediscovery observations), the following orbital elements, and an ephemeris appear on *MPEC* 2005-L36.

$$\begin{array}{lll} T = 2006 \text{ Feb. } 21.1195 \text{ TT} & \omega = 117^\circ.5648 & \\ e = 0.433597 & \Omega = 207.9705 & \Big\} 2000.0 \\ q = 2.125789 \text{ AU} & i = 20.2256 & \end{array}$$

$$a = 3.753138 \text{ AU} \quad n^\circ = 0.1355540 \quad P = 7.271 \text{ years}$$

SUPERNOVA 2005cg

E. S. Rykoff, University of Michigan, on behalf of the ROTSE collaboration, reports the discovery of a supernova in unfiltered CCD images taken on June 2.04 (at mag ~ 18.2) and 3.03 UT (mag ~ 17.7) with the 0.45-m ROTSE-IIIc telescope at the 'High-Energy Stereoscopic Systems' site in Namibia. SN 2005cg is located at $\alpha = 21^h10^m50^s.42$, $\delta = +0°12'07''.4$ (equinox 2000.0), which is 0″.7 north and 0″.4 west of the core of the apparent host galaxy (which the Sloan Digital Sky Survey gives as mag $g' =$ 19.7); nothing is visible at this location on ROTSE-IIIc images taken on May 7.14 (limiting mag ~ 18.4). R. Quimby, University of Texas, adds that a spectrum (range 420–890 nm), obtained on June 3.40 with the 9.2-m Hobby-Eberly Telescope (+ Marcario Low-Resolution Spectrograph) under very poor conditions by M. Shetrone and S. Rostopchin, shows SN 2005cg to be a type-Ia supernova. Taking narrow emission lines at 677 and 501 nm to be Hα and Hβ from the host galaxy gives a redshift of 9290 km/s (yielding an absolute magnitude of −15.9 for the host galaxy).

2005 June 7 *Daniel W. E. Green*