Circular No. 8629

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)

SUPERNOVAE 2005ir–2005kc

Three apparent supernovae brighter than mag 20 have recently been reported. SN 2005ir was discovered independently by the Sloan Digital Sky Survey (SDSS) II collaboration (via multiple g, r, and i images taken with the SDSS 2.5-m telescope; communicated by J. Frieman, Fermilab and University of Chicago) and by R. Quimby, M. Sellers, and F. Castro (University of Texas; via unfiltered CCD images with the 0.45-m ROTSE-IIIb telescope at the McDonald Observatory); the tabulated data below are from Quimby *et al.* (position uncertainty $\pm$ 0″.6). SN 2005kb was also found by the SDSS II group. SN 2005kc was reported by T. Puckett and G. Sostero (cf. *IAUC* 8615) via unfiltered CCD images with the 0.35-m automated supernova patrol telescope.

SN	2005 UT	α_{2000}	δ_{2000}	Mag.	*Offset*
2005ir	Nov. 3.11	$1^h16^m43^s.76$	$+\ 0^\circ47'40''.4$	18.5	1″.7 W, 3″.4 N
2005kb	Nov. 5	0 50 50.68	+ 0 51 13.0	18.1	13″.7 W, 8″.4 N
2005kc	Nov. 9.04	22 34 07.34	+ 5 34 06.3	18.2	7″.6 E, 7″.4 S

Frieman *et al.* provide position end figures $43^s.80$, 40″.6 for 2005ir; additional approximate magnitudes: Aug. 22 and 28, [18.9 (Quimby *et al.*); Oct. 28 UT, g = 21.1 (SDSS II); Nov. 6.14, 17.8 (Quimby *et al.*). Spectroscopy by both groups indicate that 2005ir is a type-Ia supernova with redshift z = 0.08, with peak brightness around now. Additional information on SN 2005ir can be found on *CBET* 277. SDSS magnitudes of 2005kb: Nov. 5, g = 18.1, r = 18.3, i = 18.5; Nov. 7, 18.0, 18.0, 18.3. A spectrum taken on Nov. 8 with the ARC 3.5-m telescope (+ DIS) shows SN 2005kb to be of type II; an earlier SDSS spectrum shows the host galaxy to be at redshift z = 0.0153 (cf. *CBET* 281). Additional approximate magnitudes for SN 2005kc in NGC 7311: Sept. 6 and 9, [20.0; Nov. 11.02, 18.0 (0.60-m reflector).

Frieman also reports the discovery of 35 additional supernovae found by the SDSS II collaboration and designated 2005is–2005ka on *CBET* 280. All were fainter than magnitude g = 20.5 upon discovery in October, and all are type-Ia or probable type-Ia supernovae except for 2005jq and 2005jr (which are of type IIn).

COMET 173P/MUELLER

Comet P/1993 W1 = 2005 T1 (cf. *IAUC* 8613) has been given the permanent number 173P (cf. *MPC* 54939).

