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SUPERNOVAE 2006bq, 2006bu, 2006by, 2006bz, 2006ca

Three additional supernovae have been found in LOSS/KAIT images (cf. *IAUC* 8705) by E. Lee, R. Chornock, J. Burket, M. Baek, and W. Li:

SN	2006 UT	α_{2000}	δ_{2000}	Mag.	*Offset*
2006by	May 3.31	$13^h26^m09^s.12$	$+35^\circ55'58''.0$	18.2	$0''.1$ E, $5''.7$ S
2006bz	May 4.30	13 00 43.38	+27 57 41.8	17.5	$7''.0$ E, $5''.9$ S
2006ca	May 4.49	18 22 54.15	+12 26 03.2	16.4	$14''.0$ E, $17''.3$ N

Additional magnitudes for 2006by in NGC 5149: Feb. 9.50 UT, [19.0; May 4.31, 18.2. Additional magnitudes for 2006bz in PGC 44809 (in Abell Cluster 1656): Jan. 13.46, [18.5; Feb. 5.43, [18.0; May 5.37, 17.1. Additional magnitudes for 2006ca in UGC 11214: 2005 Oct. 5.19, [19.0; 2006 Apr. 14.53, [17.0; May 5.40, 16.1. Additional KAIT magnitudes for 2006bq (cf. *IAUC* 8705): 2005 Oct. 5.20, [19.5; 2006 May 4.52, 16.8; 5.40, 17.0.

R. J. Foley, J. M. Silverman, M. Moore, and A. V. Filippenko, University of California, Berkeley, report that inspection of CCD spectra (range 330–1040 nm), obtained on May 5 UT with the Lick 3-m telescope (+ Kast), shows that SNe 2006bq and 2006bu (cf. *IAUC* 8705) are of type Ia at ~ 20 and 0 days past maximum brightness, respectively. Spectra of SNe 2006by and 2006ca reveal they are both of type II. The spectrum of SN 2006ca shows a very blue continuum with weak Balmer absorption lines, indicating that it is a young object. After removing the recession velocity of 5680 and 2670 km/s determined from narrow emission lines, the minima of the Hα P-Cyg absorption is seen to have velocities of 7600 and 17200 km/s for SNe 2006by and 2006ca, respectively. A spectrum of SN 2006bz shows it to be of type Ia, resembling SN 1991bg (Filippenko *et al.* 1992, *A.J.* **104**, 1543) at maximum light; removing the host-galaxy recession velocity of 8366 km/s (Caldwell *et al.* 1992, *A.J.* **106**, 473), the minimum of the Si II 6150 absorption is measured to be 10800 km/s.

S. Blondin, M. Modjaz, R. Kirshner, and P. Challis, Harvard-Smithsonian Center for Astrophysics, report that a spectrum (range 350–740 nm) of SN 2006bu, obtained on May 5.19 UT by W. Peters with the Mt. Hopkins 1.5-m telescope (+ FAST), shows it to be a type-Ia supernova, with a spectral-feature age (Riess *et al.* 1997, *A.J.* **114**, 722) of 2 days past maximum light. Cross-correlation with a library of type-Ia supernova spectra indicates that SN 2006bw is at a redshift of $cz \approx 25000$ km/s. Adopting this recession velocity for the supernova, the maximum absorption in the Si II line (rest 635.5 nm) is blueshifted by 11500 km/s.

2006 May 5 *Daniel W. E. Green*