

**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 2006U, 2006V, 2006W, 2006X*

Four apparent supernovae have been discovered on CCD exposures: 2006U and 2006W by the Lick Observatory Supernova Search (by N. J. Ponicello, J. Burket, and W. Li via KAIT images; cf. *IAUC* 8664), 2006V by Y.-T. Chen, M. Yang, and C.-S. Lin in the course of the Taiwan Supernova Survey (cf. *IAUC* 8567), and 2006X independently by Shoji Suzuki (Ooami-Shirasato, Chiba, Japan, via twelve CCD frames taken on Feb. 4 with a 0.32-m *f*/9 telescope + SBIG infrared-cut filter; communicated via M. Soma, National Astronomical Observatory of Japan) and by M. Migliardi (Cortina, Italy, via the CROSS program; cf. *IAUC* 7373; source of the tabulated data below for 2006X; communicated by A. Dimai).

SN	2006 UT	$\alpha_{2000}$	$\delta_{2000}$	Mag.	Offset
2006U	Feb. 3.44	9 <sup>h</sup> 53 <sup>m</sup> 45 <sup>s</sup> .38	+23°20'35".1	18.8	—
2006V	Feb. 4.67	11 31 30.01	− 2 17 52.2	18.0	32".1 W, 40".4 N
2006W	Feb. 5.54	14 27 26.09	+25 31 09.8	16.6	1".2 E, 17".5 N
2006X	Feb. 7.10	12 22 53.99	+15 48 33.1	15.3	12" W, 48" S

Additional unfiltered KAIT magnitudes of 2006U (which is superimposed on a faint galaxy): 2005 Dec. 4.45 UT, [19.6; 14.43, [18.9; 2006 Jan. 5.45, [18.9; Feb. 4.36, 18.8. Additional approximate unfiltered magnitudes of 2006V in UGC 6510: 2005 Dec. 21.848, [18.8; 2006 Feb. 6.648, 18.2. Additional unfiltered KAIT magnitudes of 2006W in UGC 9265: 2005 July 14.22, [19.0; 2006 Feb. 6.48, 16.7. Additional approximate CCD magnitudes for 2006X in NGC 4321 (= M100): Jan. 3, [20 (Suzuki; magnitudes estimated by Soma); 13, [18.5 (CROSS; unfiltered images); Feb. 4.747, 17 (Suzuki). Dimai adds that 2006X does not appear on Palomar Sky Survey infrared, red, and blue plates. Soma provides his rough measurement of the position end figures for 2006X from Suzuki's discovery frame: 53<sup>s</sup>, 48'.5.

H. Navasardyan, S. Benetti, A. Harutyunyan, F. Bufano, N. Elias-Rosa, L. Zampieri, M. Turatto, and E. Cappellaro, Istituto Nazionale di Astrofisica and Osservatorio Astronomico di Padova, report that a spectrogram (range 370–780 nm) of SN 2006W, obtained on Feb. 7.167 UT with the Copernicus 1.82-m telescope (+ AFOSC), shows it to be a type-II supernova. The spectrum is very similar to that of the bright type-II-“linear” supernova 1980K (Barbon *et al.* 1982, *A.Ap.* **116**, 35), ~ 3 weeks after maximum light. The spectrum displays broad P-Cyg profiles from the Balmer series, but H $\alpha$  shows only a broad (FWHM ~ 7400 km/s) asymmetric emission component.