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SUPERNOVAE 2005am AND 2005an

Further to *IAUC* 8484, K. Shimasaki and W. Li report the LOSS discovery of an apparent supernova on an unfiltered KAIT image taken on Mar. 3.35 UT (mag 17.3). SN 2005an is located at $\alpha = 12^{h}28^{m}27^{s}35$, $\delta = -24^{\circ}38'02''.4$ (equinox 2000.0), which is 0''.2 east and 10''.3 north of the nucleus of ESO 506-G11. A KAIT image taken on Jan. 20.36 showed nothing at this position (limiting mag 19.0).

M. Modjaz, R. Kirshner and P. Challis, Harvard-Smithsonian Center for Astrophysics, report that a spectrum (range 350–740 nm) of SN 2005an, obtained on Mar. 4.38 UT by H. Hao with the F. L. Whipple Observatory 1.5-m telescope (+ FAST), shows it to be most probably a young type-II supernova. The noisy spectrum consists of a featureless and blue continuum and is similar to an early spectrum of SN 1993J (Matheson *et al.* 2000, *A.J.* **120**, 1487). A spectrum of SN 2005am (cf. *IAUC* 8490), obtained on Mar. 3.29, shows it to be a type-Ia supernova, one or two weeks before maximum. The supernova expansion velocity, derived from the minimum of Si II (rest 635.5 nm) and adopting the NED recession velocity of 2368 km/s for the host galaxy, is ~ 12700 km/s.

COMET C/2005 E1 (TUBBIOLO)

A. F. Tubbiolo reports his discovery of a comet on images taken with the 0.9-m Spacewatch reflector at Kitt Peak (discovery observation given below), noting a tail $\approx 13''$ long to the northwest on the discovery images, with a tail and coma noted on CCD images taken on Mar. 4.41–4.45 UT. Following posting on the 'NEO Confirmation Page', co-added *R*-band images taken by A. Fitzsimmons, S. Lowry, and C. Snodgrass with the 2-m 'Faulkes Telescope North' at Haleakala on Mar. 4.4 show a faint tail 15'' long in p.a. 300°. CCD images taken by M. Tichý and J. Tichá with the 1.06-m telescope at Klet on Mar. 4.9 show the comet to be diffuse.

2005	UT	α_{2000}	δ_{2000}	Mag.
Mar. 3	3.25502	$11^{h}48^{m}54^{s}.36$	$+2^{\circ}34^{'}40^{''}_{5}$	20.9

The available astrometry, the following indeterminate parabolic orbital elements, an ephemeris appear on MPEC 2005-E35.

T = 2006 Nov. 15.867 TT	$ \begin{array}{rcl} \omega &=& 296\overset{\circ}{.}728\\ \Omega &=& 357.877\\ i &=& 17.439 \end{array} \} 2000.0 \label{eq:alpha}$
	$\Omega = 357.877 \{ 2000.0 \}$
q = 1.66913 AU	i = 17.439 J

2005 March 7

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