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SUPERNOVAE 2005gk AND 2005gl

Further to *IAUC* 8610, T. Puckett reports the discovery of two apparent supernovae on unfiltered CCD frames taken with the 0.60-m automated supernova patrol telescope — 2005gk in collaboration with D. George and 2005gl with P. Ceravolo.

SN	2005 UT	α_{2000}	δ_{2000}	Mag.	$O\!f\!f\!set$
2005gk	Oct. 4.31	$3^{^{\mathrm{h}}}08^{^{\mathrm{m}}}16\overset{^{\mathrm{s}}}{.}05$	$-4^{\circ}12^{'}00^{''}_{.2}$	18.5	5".5 E, 3".5 N
2005gl	Oct. 5.18	$0.49\ 50.02$	$+32\ 16\ 56.8$	18.2	29".8 É, 16".7 N

S. Nakano, Sumoto, Japan, reports the indepedent discovery of 2005gl by Y. Sano (Nayoro, Hokkaido) on thirty unfiltered CCD frames taken around Oct. 12.57 UT with a 0.28-m f/6.1 Schmidt-Cassegrain reflector, providing position end figures 50°.11, 55″.9. Nakano adds that Y. Kushida (Yatsugatake South Base Observatory, 0.40-m f/10.0 Schmidt-Cassegrain reflector + unfiltered CCD) provides position end figures 50°.12, 56″.1 for 2005gl from an exposure taken by R. Kushida. Additional approximate CCD magnitudes: SN 2005gk, 2004 Oct. 13 and 27, [20.0 (Puckett); 2005 Oct. 9.19, 18.5 (Puckett). SN 2005gl in NGC 266, Sept. 3 and 10, [20.0 (Puckett); Oct. 5, [18 (Sano); 12.14, 16.8 (D. George, Ottawa, ON, 0.40-m reflector; via Puckett); 12.57, 16.7 (Sano); 12.632, 17.0 (Kushida).

M. Ganeshalingam, M. R. Moore, and A. V. Filippenko, University of California, Berkeley, report that inspection of CCD spectra (range 330–1000 nm), obtained on Oct. 11 UT with the Shane 3-m telescope at Lick Observatory, shows that SN 2005gk is of type II. The P-Cyg profile of the broad $H\alpha$ line is dominated by the emission component.

COMETS C/2005 P4, 2005 P5, 2005 P6, 2005 Q5 (SOHO)

The following four tailless Kreutz-sungrazing comets, found on SOHO website images (cf. IAUC 8604), were all stellar in appearance. C/2005 P4 reached mag 7.6 at $12.2R_{\odot}$ on Aug. 11.611 UT. C/2005 P5 reached mag ~ 8 at $\sim 11R_{\odot}$. C/2005 P6 reached mag 7.7 at $11.9R_{\odot}$ on Aug. 14.321. C/2005 Q5 reached mag 7.3 at $10.8R_{\odot}$ on Aug. 18.321.

Comet	2005 UT	α_{2000}	δ_{2000}	Inst.	F	MPEC
C/2005 P4	Aug. 11.071	$9^{^{\mathrm{h}}}01^{^{\mathrm{m}}}4$	$+13^{\circ}35^{'}$	C3	TH	2005 - T55
C'/2005 P5	12.638	909.7	$+13\ 49$	C3	$_{\mathrm{HS}}$	2005 - T55
C/2005 P6	14.029	$9\ 16.2$	+13~08	C3	$_{\mathrm{HS}}$	2005 - T55
C/2005 Q5	17.821	$9\ 27.6$	$+12\ 00$	C3	SF	2005-T55