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SUPERNOVA 2009gj IN NGC 134

C. J. Stockdale, B. Rentz, and C. M. Vandrevala, Marquette University; K. W. Weiler, Naval Research Laboratory; S. Immler, Goddard Space Flight Center; S. D. Van Dyk, Spitzer Science Center, California Institute of Technology; N. Panagia, Space Telescope Science Institute and Observatory of Catania; J. M. Marcaide, University of Valencia; D. Pooley, University of Wisconsin at Madison; R. A. Sramek, National Radio Astronomy Observatory; and S. Ryder, Anglo-Australian Observatory, report the detection of radio emission near the position of the type-IIb supernova 2009gj (*CBETs* 1856, 1858) with the Very Large Array radio telescope. Flux density measurements were made at 8.46 GHz (3.5 cm) of 0.33 +/- 0.04 mJy on June 27.43 UT, 0.59 +/- 0.04 mJy on July 2.56, and 1.02 +/- 0.04 on July 11.51. The measured position of the radio emission of $\alpha = 0^{h}30^{m}28^{s}.54$, $\delta = -33^{\circ}12'56''.2$ (equinox 2000.0) is in good agreement with the measured optical position end figures $28^{s}.56$, $56''.0$ (*CBET* 1856). The following 3σ upper limits were measured: at 22.46 GHz (1.3 cm), 1.9 mJy on June 28.45 and 1.5 mJy on July 5.51; at 4.86 GHz (6.0 cm), 0.19 mJy on June 29.44 and 0.38 mJy on July 2.60; and at 1.43 GHz (20 cm), 2.32 mJy on July 2.64. The radio emission has likely been caught on the rise at 3.6 cm. If the object behaves like other known type-IIb supernovae, it should soon start increasing rapidly at longer radio wavelengths. Further study in all wavelength bands, especially radio and x-ray, is warranted. Radio observations at the Very Large Array are continuing.

COMETS C/2009 C5 AND C/2009 D2–D4 (SOHO)

Additional Kreutz sungrazers have been found on SOHO website images (cf. *IAUC* 9055; ML = M. Kaluzny). C/2009 C5 was faint and slightly diffuse, peaking at mag ~ 7. C/2009 D2 and C/2009 D3 were small and stellar in appearance, peaking at mag ~ 7 and 7–7.5, respectively. C/2009 D4 showed a long, thin tail that was visible in C3 images (which showed a small head that peaked at mag $\sim$ 2–3 and a tail length of $\sim 1^{\circ}$) as well as in C2 SOHO images and in SECCHI COR2-A and COR2-B images.

Comet	2009 UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2009 C5	Feb. 11.529	$21^{h}54^{m}.9$	$-14^{\circ}33'$	C3	ML	2009-M54
C/2009 D2	19.179	22 27.5	−12 11	C3	JR	2009-M54
C/2009 D3	19.321	22 26.9	−11 52	C3	BZ	2009-M54
C/2009 D4	21.943	22 53.8	−11 59	C3/2*	TH	2009-M55

2009 July 14 *Daniel W. E. Green*