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NOVA IN THE LARGE MAGELLANIC CLOUD 2009

W. Liller, Viña del Mar, Chile, reports the discovery of a possible recurrent nova in the Large Magellanic Cloud on two unfiltered Kodak Technical Pan films taken on Feb. 5; at mag $\approx$ 10.6 on Feb. 5.067 UT, the star is located at $\alpha = 5^{\rm h}40^{\rm m}.7$, $\delta = -66^{\rm o}40'$ (equinox 2000.0). Nothing brighter than mag 14.0 was visible at this position on Jan. 31.065, but it was confirmed to have faded to mag $\approx$ 11.8 on Feb. 7.092. This position is close to that given for the second 1971 LMC nova ($\alpha = 5^{\rm h}40^{\rm m}.6$, $\delta = -66^{\rm o}40'$, equinox 2000.0; cf. *IAUC* 2353) and may be a recurrence of that nova; however, only one observation was reported for the earlier nova, and its V magnitude was given as 13.0, suggesting that it was well past maximum.

H. E. Bond, Space Telescope Science Institute; F. M. Walter, Stony Brook University; and E. Cosgrove and J. Espinoza, Cerro Tololo Interamerican Observatory (CTIO), report observations of Liller's nova with the SMARTS 1.3- and 1.5-m telescopes at CTIO. A shallow I-band frame obtained with the 1.3-m telescope on Feb. 7.1 UT yields position $\alpha = 5^{\rm h}40^{\rm m}44^{\rm s}.20$, $\delta = -66^{\rm o}40'11''.6$ (equinox 2000.0; $\pm$ 0$''$.1 in each coordinate, measured relative to five nearby USNO-NOMAD-catalogue stars). A spectrum (range 385–455 nm; resolution 0.16 nm) obtained with the 1.5-m telescope on Feb. 8.1 shows broad, flat-topped emission at Hγ and Hδ with FWHM $\sim$ 3900 km/s, with P-Cyg wind absorption features at ~ -3800 km/s. A similar, weaker feature due to He I 447.1-nm is also present.

COMET C/2007 N3 (LULIN)

M. D. Hicks and K. J. Lawrence, Jet Propulsion Laboratory; and J. M. Somers, Moorpark College, report that Bessel-R observations of C/2007 N3, obtained at the Palomar Hale 5-m telescope on Feb. 2.58 UT, yield magnitude $R = 7.27 \pm 0.02$ in a 4$'$-diameter photometric aperture. This corresponds to an $Af\rho$ value (cf. *IAUC* 7342) of 16.6 $\pm$ 0.9 m, which is $\approx$ 0.1 that of post-perihelion measurements of comet 1P/Halley obtained at a similar heliocentric distance (Schleicher *et al.* 1998, *Icarus* **132**, 397). Long-slit CCD spectrograms of C/2007 N3 were also obtained, and analysis is ongoing.

Visual total-magnitude and coma-diameter estimates: Jan. 4.25 UT, 7.1, 5$'$ (J. J. Gonzalez, Leon, Spain, 10×50 binoculars); 24.21, 6.9, 6$'$.5 (W. Hasubick, Buchloe, Germany, 10×50 binoculars); Feb. 4.50, 6.3, 10$'$ (C. S. Morris, Fillmore, CA, U.S.A., 10×50 binoculars); 7.86, 6.1, 11$'$ (K. Yoshimoto, Yamaguchi, Japan, 7×35 binoculars).

