## Central Bureau for Astronomical Telegrams INTERNATIONAL ASTRONOMICAL UNION

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## NOVA SAGITTARII 2005 No. 2

W. Liller, Viña del Mar, Chile, reports his discovery of an apparent nova (mag  $\approx 8.0$ ) on two red photographs taken on July 4.049 UT (85-mm camera lens + Technical Pan film + deep orange filter), the new object appearing at  $\alpha = 18^{h}17^{m}$ ,  $\delta = -30^{\circ}27'$  (equinox 2000.0); nothing was visible at this location on films taken by Liller on June 12 (limiting mag ~ 11.0). Liller adds that an unfiltered CCD image taken on July 5.085 shows the nova at mag 7.2, and that a spectrum taken at July 5.099 shows H $\alpha$ peaking at ~ 2.1 times the brightness of the nearby continuum; its FWHM is  $\approx 970$  km/s, while the expansion velocity derived from the sharp P-Cyg line is  $\approx 1300$  km/s.

A. C. Gilmore and P. M. Kilmartin report the following precise position for the nova from an unfiltered 0.4-s CCD exposure taken on July 5.380 UT with the 1-m f/3.8 reflector at the University of Canterbury's Mt. John Observatory (measured by Gilmore using 'Astrometrica' with UCAC2 stars):  $\alpha = 18^{h}17^{m}50^{s}.77$ ,  $\delta = -30^{\circ}26'31''.2$  (equinox 2000.0). Photoelectric photometry by Kilmartin and Gilmore with the 0.6-m f/16 reflector in marginal conditions (occasional fog and low cloud crossing) yields: July 5.408, V = 8.15, U-B = -0.04, B-V = +0.48, V-R = +0.38, V-I = +0.75, air mass 1.167; 5.456, 8.17, +0.03, +0.46, +0.33, +0.67, 1.064 (comparison star Cousins' E749). Attempts to identify a precursor star on the Digitized Sky Survey were unsuccessful; a 15th-mag star that is near the nova position, but too far off to be a likely precursor, hides fainter stars.

C. Jacques, Belo Horizonte, Brazil, reports the following position end figures for the nova (whose unfiltered magnitude was 7.9) from CCD astrometry obtained on July 5.1 UT with a 0.30-m reflector: 50<sup>s</sup>.79, 32".4.

Visual magnitude estimates, in part via E. Waagen, AAVSO: July 5.014 UT, 7.6 (R. Shida, São Paulo, Brazil); 5.271, 8.0 (M. Linnolt, Wood-side, CA); 5.359, 8.0 (J. Bedient, Hololulu, HI); 5.438, 8.1 (A. Pearce, Nedlands, W. Australia).

## COMET C/2005 A1 (LINEAR)

M. Kidger, Instituto de Astrofísica de Canarias, reports that CCD frames taken by S. Pastor and A. Reyes since June 25 show an apparent splitting of this comet's nucleus, the companion being 0.7 mag fainter than the primary in a 10'' aperture; the absolute astrometry appear on *MPEC* 2005-N21. The offsets of the secondary (B) from the primary (A) are: June 25.1 UT, 4'' west, 7'' south; July 3.1, 4'', 10''; July 4.1, 4'', 12''.

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