Central Bureau for Astronomical Telegrams INTERNATIONAL ASTRONOMICAL UNION

Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A. IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions) CBAT@CFA.HARVARD.EDU (science) URL http://cfa-www.harvard.edu/iau/cbat.html ISSN 0081-0304

Phone 617-495-7440/7244/7444 (for emergency use only)

SUPERNOVA 2006cf IN UGC 6015

N. Ponticello and J. Burket report the LOSS discovery (cf. IAUC 8709), on KAIT images taken on May 11.26 and 12.25 UT, of an apparent supernova (mag ~ 18) located at $\alpha = 10^{\rm h}54^{\rm m}02^{\rm s}58$, $\delta = +46^{\circ}01'36''_{\rm 3}$ (equinox 2000.0), which is 0''.2 east and 4''.5 south of the nucleus of UGC 6015. An independent discovery of 2006cf at mag 17.3 has been reported by T. Puckett and D. Toth on CCD images taken with a 0.60-m reflector at Ellijay, GA, on May 13.12 (cf. *IAUC* 8709). Additional unfiltered CCD magnitudes: Jan. 26, [19.5 (Puckett); Apr. 30.27, [19.0 (KAIT); May 14.19, 17.2 (A. Sehgal, 0.50-m reflector, Osoyoos, BC). Puckett provides position end figures 02^s.65, 36''.7 for 2006cf.

V2575 OPHIUCHI, V2576 OPHIUCHI, AND V2362 CYGNI

R. W. Russell, R. J. Rudy, and D. K. Lynch, The Aerospace Corporation; and C. E. Woodward, University of Minnesota, report 0.8- to 5.4- μ m spectroscopy of these three novae on April 30 UT using SpeX on the Infrared Telescope Facility (IRTF). All three objects are similar Fe II-type CO novae, with very low excitation. They showed strong C I, NI, O I, and Fe II emission lines. V2575 Oph showed self-absorption in the He I lines at 1.0830 and 2.0581 μ m, and the other two objects showed P-Cyg structure in the same lines. No CO emission was detected, and there was no discernable thermal emission from dust. E(B-V) values: V2576 Oph, 0.62; V2575 Oph, 1.42; V2362 Cyg, 0.59. Infrared magnitudes (\pm 0.1) for V2576 Oph: J = 9.3, H = 9.3, K(short) = 9.2. Infrared magnitudes for V2575 Oph: J = 9.8, H = 9.9, K(short) = 9.0. Infrared magnitudes for V2362 Cyg: J = 8.4, H = 8.5, K(short) = 8.2.

RS OPHIUCHI

Rudy, Lynch, Russell, and Woodward also report 0.8- to 5.4- μ m spectroscopy of RS Oph on May 1 UT using SpeX on the IRTF. The infrared spectrum of RS Oph is a peculiar blend of very low and very-high-excitation emission lines. Features of N I, O I, and Fe II exist together with some of the highest excitation coronal features seen in the infrared spectra of novae. Coronal lines of [Fe XIII], [Si VI], [Si VII], [Si X], [S VIII], [Si IX], and [S XI] are present in the near-infrared; [Mg VIII] and [Si IX] are prominent in the mid-wavelength infrared. The hydrogen line spectrum is very rich, displaying many features from the Pashcen, Brackett, Pfund, and Humphreys series. There is no evidence of thermal emission from dust.

2006 May 14

© Copyright 2006 CBAT Daniel W

Daniel W. E. Green