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SUPERNOVA 2006ap IN NGC 6378

T. Boles, Coddenham, England, reports the discovery of an apparent supernova (mag 17.2) on unfiltered CCD images taken on Mar. 2.194 and 3.159 UT with a 0.35-m reflector. The new object is located at $\alpha = 17^{\mathrm{h}}30^{\mathrm{m}}41^{\mathrm{s}}.19$, $\delta = +6^{\circ}16'33''.1$ (equinox 2000.0), which is $\approx 11''.9$ west and $23''.0$ south of the center of NGC 6378. Nothing is visible at this location on Boles' images from 2005 July 16 and Aug. 29 (limiting mag 19.5) or on Digital Sky Survey plates from 1997 Apr. 12 (limiting red mag 20.5) and 1990 June 17 (limiting blue mag 21.0).

RS OPHIUCHI

J.-U. Ness and S. Starrfield, Arizona State University; J. J. Drake, Smithsonian Astrophysical Observatory; M. Orio, Istituto Nazionale di Astrofisica and University of Wisconsin; M. F. Bode, Liverpool John Moores University; T. J. O'Brien and R. J. Davis, University of Manchester; J. Osborne and K. L. Page, University of Leicester; G. Schwarz, West Chester University; J. Krautter, University of Heidelberg; A. Evans, Keele University; S. P. S. Eyres, University of Central Lancashire; and R. Gehrz and C. Woodward, University of Minnesota, report on the first high-resolution x-ray spectra of the outburst of the recurrent nova RS Oph (cf. *IAUC* 8671), obtained on Feb. 26 (two weeks after the beginning of the outburst). The Chandra X-ray Observatory High Energy Transmission Grating and ACIS-S detector observed RS Oph for 10000 s in the wavelength range 0.15–2.5 nm, revealing a rich emission-line spectrum dominated by resonance lines of He-like and H-like ions of Fe, S, Si, Mg, and Ne superimposed on a strong continuum. The lines seen indicate that a wide range of plasma temperatures have been observed: the coolest transition detected is the O VIII Lyα doublet at 1.897 nm (emissivity peak at T = 3 MK), while the hottest is the Fe XXV $1s2p - 1s2$ resonance line (emissivity peak at T = 60 MK). Lines show broadening corresponding to $\approx$ 2000 km/s at half maximum, with systematic blueshifts amounting to $\approx$ 500 km/s (Si XIV, Mg XII, and Ne X) and 1000 km/s (O VIII).

J. D. West, Mulvane, KS, reports the following infrared magnitudes of RS Oph obtained with a 0.25-m reflector (+ Optec SSP-4 Photometer): Feb. 13.4715 UT, $J = 2.71 \pm 0.02$; 13.4715, $H = 2.36 \pm 0.01$; 14.4715, $J = 3.06 \pm 0.01$; 14.4715, $H = 2.67 \pm 0.01$; 23.4729, $J = 4.80 \pm 0.22$; 23.4729, $H = 4.34 \pm 0.06$; 27.5306, $H = 4.74 \pm 0.12$.

2006 March 3 *Daniel W. E. Green*