Circular No. 9098

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://www.cfa.harvard.edu/iau/cbat.html ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

KT ERIDANI = NOVA ERIDANI 2009

H. Yamaoka, Kyushu University, reports the discovery by K. Itagaki (Yamagata, Japan) of a possible nova (mag 8.1) on Nov. 25.536 UT with his 0.21-m patrol system; a confirming image by Itagaki on Nov. 25.545 (0.60-m reflector) yields position $\alpha = 4^{\mathrm{h}}47^{\mathrm{m}}54^{\mathrm{s}}.21$, $\delta = -10°10'43''.1$ (equinox 2000.0), who notes a faint (mag $\sim$ 15) object near this position on his archival patrol images (Yamaoka adds that this blue star has USNO-B1.0 position end figures $54^{\mathrm{s}}.19$, $42''.9$). E. Guido and G. Sostero measure CCD mag $\sim$ 8.2 and position end figures $54^{\mathrm{s}}.12$, $43''.1$ on Nov. 26.36 (remotely using a 0.25-m reflector near Mayhill, NM, U.S.A.). H. Maehara, Kwasan Observatory, Kyoto University, has reported several sets of spectroscopic observations made during Nov. 26.5–26.6 (by Maehara; M. Fujii, Okayama; by A. Arai and M. Isogai, Kyoto Sangyo University; and by K. Imamura, Okayama University of Science) that show broad Balmer emission (FWHM of Hα $\sim$ 3200–3400 km/s), together with He I, N II, N III, Na I D, O I, and Mg II emission, concluding that the variable appears to be a nova of the He/N class. R. J. Rudy, T. R. Prater, and R. W. Russell, The Aerospace Corporation; R. C. Puetter, University of California at San Diego; and R. B. Perry, NASA, report on 0.9- to 2.5-μm spectroscopy of the nova, obtained on Nov. 26.4 UT using the Lick Observatory 3-m Shane reflector, which shows very strong, broad emission lines (FWHM = 4000 km/s) with very rapid spectral development, suggesting that this object may be a nova of the He/N type. Additional details appear on *CBETs* 2050, 2053, and 2055. E. V. Kazarovets reports that the GCVS team has assigned the designation KT Eri to this nova.

Wide-angle-lens pre-discovery CCD magnitudes for KT Eri (Japanese data via Maehara; ASAS-3 *V* magnitudes via Yamaoka): Nov. 10.236 UT, [14.0: (ASAS); 14.572 UT, 5.7 (I. Ootsuki, Miyagi, Japan, Canon EOS 40D camera; measured by O. Ohshima, Okayama); 14.632, 5.4 (image by M. Watanabe and A. Miyashita, Tokyo, Nikon D90 camera; measured by K. Nagai, Kanagawa, Japan); 14.813, 5.6 (Ootsuki and Ohshima); 17.226, 6.9 (M. Hankey, Freeland, MD, U.S.A., Canon 20Da camera; measured by J. E. Bortle, Stormville, NY, U.S.A.); 17.758, 6.7 (T. Tanaka, Mie, Japan, Canon EOS 50D camera); 17.807, 6.6 (A. Kawamura, Gunma, Japan; measured by Ohshima); 18.760 and 18.809, 7.0 (M. Yamamoto, Aichi, Japan, Canon EOS Kis camera); 19.241, 7.34 (ASAS); 22.179, 7.98 (ASAS); 24.269, 8.12 (ASAS). Additional visual magnitude estimates: Nov. 27.229, 8.2 (C. Hergenrother, Tucson, AZ, U.S.A.); 27.427, 8.3 (P. Camilleri, Sydney, Australia); 28.851, 8.2 (W. Vollmann, Vienna, Austria).

2009 December 1 *Daniel W. E. Green*