

Central Bureau for Astronomical Telegrams

INTERNATIONAL ASTRONOMICAL UNION

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AG DRACONIS

U. Munari and A. Siviero, Istituto Nazionale di Astrofisica, Padova Astronomical Observatory; and F. Castellani, P. Valisa, G. Cherini, I. Bano, A. Englaro, and G. Cetrulo, Asiago Novae and Symbiotic stars (ANS) collaboration, write that the symbiotic star AG Dra is on the rise to a second bright maximum in the current outburst that began at the end of April 2006 (cf. CBETs 577, 620). Their last measurement in quiescence on Apr. 22.87 UT gave magnitudes/colors $B = 11.02$, $U-B = +0.11$, $B-V = +1.27$, $V-R_c = +0.90$, $V-I_c = +1.48$, while the closest measurements obtained with respect to maximum brightness was on Aug. 19.84 ($B = 9.06$, $U-B = -0.60$, $B-V = -0.08$, $V-R_c = +0.78$, $V-I_c = +1.51$). After the maximum, the decline proceeded smoothly until a minimum brightness was reached around 2007 July 7, at $B = 10.38$, $B-V = +1.02$, $V-R_c = +0.69$, and $V-I_c = +1.33$. Since then, AG Dra has been smoothly and monotonically re-brightening. Their last measurement on Sept. 30.80 gives $B = 9.69$, $B-V = +0.71$, $V-R_c = +0.70$, $V-I_c = +1.13$. Spectra for the same date display Balmer, He I, and He II sharp emission lines tracing high ionization conditions, on top of a hot and featureless continuum. The integrated flux of the He II 468.6-nm emission line amounts to $1.87 \times 10^{(-11)} \text{ erg cm}^{(-2)} \text{ s}^{(-1)}$, or 0.88 times the integrated flux of H_{beta}; 682.5- and 708.8-nm emission bands of O VI, Raman scattered by neutral hydrogen, stands out in emission, too. The integrated flux of the 682.5-nm band is $6.25 \times 10^{(-12)} \text{ erg cm}^{(-2)} \text{ s}^{(-1)}$, or twice larger than the flux of the nearby He I 667.8-nm emission line.

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