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η CARINAE

K. Davidson, University of Minnesota; J. C. Martin, University of Illinois at Springfield; and R. M. Humphreys and A. Mehner, University of Minnesota, on behalf of a collaboration using the Gemini telescope (+ GMOS) and the Hubble Space Telescope (+ WFPC2), report that the current spectroscopic event of η Car has evolved faster than the observations of previous events were able to show. Ultraviolet HST/WFPC2 data are especially noteworthy. STMAG magnitudes in a $0''.3$ virtual aperture with the F250W filter (250 nm) were: 2008 Nov. 12, 6.27; Dec. 7, 6.30; 2009 Jan. 2, 6.21; 7, 6.44; 10, 6.63; 14, 6.96. Similar data on the 2003 event (Martin *et al.* 2006, *A.J.* **132**, 2717) were too sparse to reveal the high rate of decline (0.06 magnitude/day for almost two weeks); caused by ultraviolet absorption lines, this rate is impressive because the opaque stellar wind has a large photospheric size scale of 1–10 AU in the ultraviolet. Recent WFPC2 data near 330 and 631 nm show rapid changes with a different pattern. Gemini/GMOS spectra show that the equivalent width of the [Ne III] 387-nm line, a classic event indicator, declined almost linearly from 0.18 nm on 2008 July 17 to near-zero on 2009 Jan. 8. The exotic He II 468-nm emission peaked on Jan. 6 $\pm$ 1 and then declined steadily until it was nearly undetectable on Jan. 15. The peak equivalent width of this feature was 0.28 nm, somewhat brighter than the highest value seen in 2003. (This result depends strongly on the measurement protocol, defined in Martin *et al.* 2006, *Ap.J.* **640**, 474.) The rapid stage of the event probably ended about Jan. 15, and the first stage of recovery should occur during the next six weeks. Observations with other instruments are highly recommended.

QY MUSCAE

Further to *IAUC* 8990, W. Liller writes that spectra were obtained by F. M. Walter (Stony Brook University) with the SMART 1.5-m telescope at Cerro Tololo, showing that QY Mus is a typical "Fe II"-type nova. On 2008 Dec. 24.3 UT, the Hα emission line (FWHM = 3.2 nm) was seen to peak at $\sim$ 8.5 times the intensity of the underlying continuum with a clearly defined wind absorption feature at -1650 km/s (652.7 nm), and the [O I] lines at 630.0 and 636.4 nm were present. On Dec. 28.3, in addition to strong Balmer emission lines (most showing deep wind absorption features), the Fe II lines of multiplets 42, 48, 49, 57, and 58 were prominent, some with blueshifted P-Cyg absorption features. Tech Pan magnitudes by Liller for QY Mus: 2008 Dec. 18.346, 9.3 (V); 2009 Jan. 7.34, 9.5 (orange filter).

2009 January 20 *Daniel W. E. Green*