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V2362 CYGNI

J. Rayner, Institute for Astronomy, Univeristy of Hawaii; R. J. Rudy, D. K. Lynch, R. W. Russell, and C. C. Venturini, Aerospace Corporation; and C. E. Woodward, University of Minnesota, report that 0.8- to 5-μm spectroscopy of V2362 Cyg was obtained from Nov. 30 and Dec. 20 UT using the SPEX instrument on the 3-m reflector of the Infrared Telescope Facility. The Nov. 30 data were obtained at the visual peak of the nova's second outburst. That outburst rejuvenated its spectrum, erasing the higher excitation lines and most of the He I emission features — and replacing them with strong lines of neutral carbon, nitrogen, and oxygen and singly ionized iron. There were no signs of dust local to the nova. In contrast, the Dec. 20 measurement revealed a spectrum completely transformed through the formation of hot dust. Beyond 2 μm, the spectrum is well fitted by a Planck function with the single temperature of 1410 K. In retrospect, it is clear that the precipitous drop in the visible light curve beginning in early December was due to dust formation, and that emission from this hot dust accounted for the unexpectedly bright fluxes between 3 and 13 μm measured on Dec. 12 and reported on *IAUC* 8785. The failure to recognize the dust at that time was a consequence of its high temperature, which placed the characteristic turnover of the Planck function outside of the measurement range. The underlying emission-line spectrum also changed significantly since Nov. 30, showing both a narrowing of the lines and an increase in excitation marked by the appearance of He II emission.

COMET C/2003 G5 (SOHO)

Another Kreutz sungrazing comet (cf. *IAUC* 8786) found on archival SOHO website images, being very faint and diffuse with no tail:

Comet	2003	UT	α_{2000}	δ_{2000}	Inst.	F	*MPEC*
C/2003 G5	Apr.	6.518	$1^h07^m.8$	$+ 5°46'$	C2	HS	2006-X25

COMET C/2006 W3 (CHRISTENSEN)

Improved orbital elements (cf. *IAUC* 8780) from *MPEC* 2006-Y63:

$$T = \text{2009 July 6.6610 TT} \qquad \left.\begin{aligned}\omega &= 133^\circ.4836\\ \Omega &= 113.5485\\ i &= 127.0481\end{aligned}\right\}2000.0$$

$$q = 3.126610\ \text{AU}$$

2006 December 30 *Daniel W. E. Green*