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UBV OBSERVATIONS OF NOVA SERPENTIS 1970

Finding charts for Nova Serpentis 1970 have been given by Burkhead and Seeds (1970) and in the May, 1970 issue of Sky and Telescope, page 334. The UBV photoelectric observations reported herein were obtained on seven nights in May, 1970 at the No. 2 36-inch telescope of Kitt Peak National Observatory. Standard observational and reduction procedures were used (Landolt 1967). The observations were thoroughly tied into the UBV system each night via observations of some 16 UBV standards taken from the list of Johnson and Harris (1954). The external probable errors averaged $\pm$ 0.013 for V, $\pm$0.007 for (B-V), and $\pm$0.012 for (U-B), as determined from the UBV standard stars. May 9th U.T. was a poor photometric night as indicated by the colons in Table 1.

Table 1.

J.D.⊙ 2440700.+	V	B-V	U-B
14.9037	11.00	+1.01	-0.46
15.9450	11.09:	+0.92:	-0.47:
16.9201	11.13	+0.99	-0.55
17.9576	11.27	+1.01	-0.56
18.9635	11.31	+1.01	-0.55
19.9494	11.37	+0,96	-0.49
20.9275	11.42	+0.98	-0.49

The heliocentric times of observation are given in column one. As the data indicates, 85 days after its outburst, the nova has declined 6.6 magnitudes from its maximum of V = 4.4 (Sky and Telescope, page 224, April, 1970), i.e. at a rate of 0.08 mag. per day. At the time the present observations were made, the nova was continuing to decline in brightness at nearly the same rate, a rate which is approximately twice as rapid as that for the recurrent nova T Pyxidis (Landolt 1970). The

color indices remained effectively constant, although they are perhaps a few tenths of a magnitude more red than is usual for novae (Mumford 1967). This may be explained by the fact that the nova is near obscuring material as shown on the Palomar Sky Survey Prints.

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References

1. Burkhead, M.S., and Seeds, M.A. 1970, Astrophys. J. Letters, 160, L51.
2. Johnson, H.L., and Harris, D.L., III 1954, Astrophys. J. 120, 196.
3. Landolt, A.U. 1967, Astron. J. 72, 1012.
4. Landolt, A.U. 1970. Publ. Astr. Soc. Pacific 82, 86.
5. Mumford, G.S. 1967, Publ. Astr. Soc. Pacific 79, 283.

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Corrections to Inf. Bull. No. 443 (TW Her)

Elements (III) and (IV) in Table 3 should be read:

$$\text{Min} = 2433\,310.238 \pm .0026 + 2^{d}.8068742 \pm .0000043\ E \quad ; \quad \overline{E} = 7020 \qquad \text{(III)}$$

$$\text{Min} = 2438\,539.4457 \pm .0018 + 2^{d}.8068352 \pm .0000040\ E \quad ; \quad \overline{E} = 8750 \qquad \text{(IV)}$$