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## PRE-OUTBURST LIGHT CURVE OF NOVA CYGNI 1975 (V1500 Cyg)

Renewed interest in the very faint <u>magnetic</u> nova Cygni 1975 (Chlebowski & Kaluzny 1987; Schmidt, Smith & Elston 1987) prompts me to report findings from my recent inspection of two plates taken with the Palomar 1.2m Schmidt telescope in 1969 and 1970. These are the only Palomar Schmidt plates taken of the region of Nova Cygni between 1953 and August 1975.

Plate PS14992 by J. Kristian is a two-color 103a0 plate, exposed 1969 August 17 for 5 min behind a GG13 filter and 50 min behind UG1, as part of a (B,UV) survey. The nova image is not seen. I have estimated B > 18.0 using the comparison sequence of Kaluzny and Semeniuk (1987). A scratch directly across the position of the nova B image precludes obtaining a reliable fainter limit, although comparison star C3 (B  $\simeq$  19.9) is clearly seen. Probably the nova was fainter than 19.

Plate PS15900 by M. V. Penston is a IIIaJ plate exposed 1970 July 31 for 60 min behind a Wratten 4 filter (the "g" passband). There is a slight clumping of plate grain at the nova position; other similar clumpings visible under high magnification correspond to faint images on the finding chart of Kaluzny and Semeniuk. These images are at least 1 mag fainter than star C3. The nova was therefore at least as faint as 20.5 mag.

Kukarkin and Kholopov (1975) have reported some pre-discovery images of Nova V1500 Cyg during the weeks just before the eruption in 1975 August. They also report upper limits of 19 mag in 1972 and 17.9 in 1974 December. The limits reported here are slightly more remote in time from the outburst than those of Kukarkin and Kholopov, but the limit for PS15900 is substantially fainter. These limits are closer in time to the outburst than the 1967 Oct-

ober limit of 19.5 from Asiago plates (Rosino & Tempesti 1977). Thus they provide additional useful constraints for evaluating whether Nova Cygni 1975 followed the "hibernation" scenario that has been put forward by Shara et al. (1986). More generally, they bear on the question whether novae have the same brightness before and after eruption (cf. Robinson 1975). The present brightness of V1500 Cyg varies about V = 17. (Kaluzny & Semeniuk 1987).

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