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PHOTOELECTRIC UBV MEASURES OF NOVA CEPHEI 1971

The early decline stage of Nova Cephei 1971 was observed by us in the UBV system on 14 nights in July, August, and September 1971. Our equipment consisted of a single-channel photometer with refrigerated 1P21 photomultiplier, a direct-current amplifier, and stript-chart recorder at the Cassegrain focus of the 132 cm telescope of The University of Michigan.

The values obtained are presented in Table I. An average of 9 standards was observed each night; about half of the standards each night were taken from among the brighter stars in NGC 7160 with values obtained from Hoag, et al.(1961). The mean standard deviations in the least squares fits for the standards are ±0.025, 0.016, 0.021 mag. in V, B-V, U-B, respectively. Extinction coefficients were determined on most of the nights; in the column labelled "Extinction" in Table I "n" indicates that a nightly extinction value was used and "m" that a mean value was applied. All observations of the nova were made between 1.019 and 1.088 air masses.

Table I

τ	1971 J.T.Date July	v	B-V	U-B	Ex- tinc- tion	1971 U.T.Da Aug.	te V	B-V		Ex- tinc- tion
	14.28			-0.44		05.29	9.31	0.62	-0.55	m
	.29	8.23		43		.37	9.43	.66	53	m
	• .38	8.33		42		06.22	9.55	.63	54	
	15.29	8.42	.60	46	m	.31	9.55	.64	58	
	16.25	8.46	.60	46	n	07.23	9.88		55	
,	.34	8.50	.61	45	n	12.25	10.25		59	
	20.26	8.65	.65	49	n		10.68		39	
	.34	8.63	.64	49	n		10.64	-	35	
	21.29	8.68	.67	50		Sep.	10.04	• 4 2	35	n
	.36	8.73		55		22.13	11 26	2.2	2.4	
	27.27	9.35		55		24.18			34	
	.35	9.37		54		24.10	11.4/	.28	26	n
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The light-curve in V would be classed as fast/moderately fast according to Payne-Gaposchkin (1957) and has similarities to that of XX Tauri. We are unaware of further photoelectric observations of Nova Cephei 1971 other than those reported here and in I.A.U. Circulars No. 2343, 2351, and 2353.

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