COMMISSION 27 OF THE I. A. U.
INFORMATION BULLETIN ON VARIABLE STARS

NUMBER 652

Konkoly Observatory
Budapest
1972 April 5

A SEARCH FOR ECLIPSES OF HD 27149.

HD 27149 ($7^m.5$,G5) is a double-lined spectroscopic binary in the Hyades cluster.In the "Second Report of the Joint Working Group of I.A.U. Commissions 30 and 42" Batten and Wallerstein suggest a search for eclipses based on the ephemerides J.D.2440 916.56 + $75^d.665$E and 2440 944.82 + $75^d.665$E.

The binary was observed regularly during a photometric ubvy program of field stars. The observations were made with a simultaneous four-channel photometer attached to the Danish 50 cm reflector at the European Southern Observatory in Chile. The four-colour standard HR1373 ($3^m.76$,KOIII) was used as comparison star. The results are given in the table. The differences - HD 27149-HR 1373 - are given in the instrumental system, which is close to the standard system. Differential extinction corrections have been applied using mean extinction coefficients.

No evidence of eclipses was found. However, any eclipse could easily have been overlooked, because the expected duration of a total eclipse for two solar-type stars with this period is only about 12 hours.

Four-colour indices on the standard system will be published elsewhere.

1972, March 13

B.G.JØRGENSEN and E.H.OLSEN
Copenhagen University Observatory
Brorfelde, Denmark.

		Δ u	Δ v	Δ b	Δ y	Notes
1971 Dec.	23.122	2.863	3.259	3.623	3.788	
1972 Jan.	4.099	2.842	3.246	3.612	3.777	
	5.090	2.839	3.245	3.614	3.776	
	6.087	2.841	3.247	3.617	3.773	
	6.150	2.848	3.248	3.619	3.779	
	7.085	2.843	3.251	3.605	3.777	
	8.085	2.857	3.243	3.608	3.779	1
	9.076	2.840	3.232	3.606	3.769	
	11.066	2.861	3.255	3.614	3.780	1
	12.067	2.863	3.257	3.621	3.783	1
	13.064	2.854	3.231	3.600	3.766	
	15.048	2.834	3.237	3.611	3.779	
	17.044	2.837	3.241	3.607	3.776	
	19.041	2.812	3.214	3.584	3.754	1
	20.044	2.827	3.230	3.600	3.772	
	21.054	2.859	3.248	3.616	3.781	1
	22.047	2.858	3.253	3.620	3.788	1
	23.055	2.848	3.243	3.609	3.772	
	24.051	2.834	3.234	3.601	3.773	
	25.045	2.832	3.245	3.615	3.774	1
	26.047	2.858	3.273	3.645	3.810	1,2
	27.039	2.850	3.247	3.625	3.787	
	28.040	2.821	3.231	3.606	3.779	
	29.040	2.825	3.225	3.602	3.761	
	30.031	2.837	3.240	3.610	3.777	
Jan.	31.035	2.856	3.256	3.616	3.778	1
Feb.	1.038	2.857	3.253	3.621	3.786	
	2.042	2.845	3.243	3.605	3.771	
	3.049	2.844	3.228	3.595	3.760	1
	4.031	2.826	3.230	3.605	3.770	1
	5.035	2.867	3.244	3.610	3.780	1
	6.031	2.856	3.249	3.615	3.778	1
	7.031	2.837	3.238	3.608	3.782	1
	8.031	2.864	3.238	3.608	3.774	1
	10.029	2.848	3.236	3.605	3.761	1
	12.031	2.854	3.244	3.608	3.769	
	13.035	2.839	3.239	3.611	3.776	
	14.038	2.832	3.234	3.610	3.776	
	16.024	2.840	3.239	3.604	3.781	
	17.031	2.846	3.245	3.615	3.797	
	18.026	2.855	3.250	3.618	3.787	
	19.032	2.856	3.254	3.622	3.788	1
	20.025	2.866	3.245	3.610	3.784	
	21.024	2.853	3.243	3.609	3.776	
	22.026	2.853	3.245	3.610	3.776	2
	23.018	2.838	3.229	3.604	3.761	1
	24.024	2.848	3.238	3.601	3.775	
	24.063	2.859	3.246	3.616	3.787	
	25.027	2.863	3.255	3.619	3.785	
	26.026	2.853	3.239	3.605	3.774	
	27.024	2.843	3.242	3.605	3.771	
	28.022	2.840	3.238	3.600	3.766	
Feb.	29.024	2.859	3.236	3.606	3.761	1
Mar.	1.025	2.846	3.235	3.604	3.774	
	mean	2.847	3.242	3.610	3.777	
	scatter	0.012	0.010	0.009	0.010	

Notes: 1 Extinction larger than mean

.2 About 8° from the moon