

TABLE III ცხრილი

Phase	Ph. Mg.	n	Phase	Ph. Mg.	n	Phase	Ph. Mg.	n
	m			m			m	
0.060	11.65	12	0.231	11.28	8	0.623	11.53	12
084	11.65	10	257	11.28	1	733	11.26	4
098	11.72	10	378	11.53	12	765	11.23	8
124	11.42	8	424	11.54	11	888	11.65	7
161	11.34	8	512	11.59	7	914	11.72	7
192	11.32	8	594	11.53	3	987	11.63	11

From the light-curve obtained the following maxima and minima of the star brightness are derived:

$$\text{Max} = 11^{\text{m}}25; \quad \text{Min}_I = 11^{\text{m}}70; \quad \text{Min}_{II} = 11^{\text{m}}60.$$

The photographic works were made with the assistance of K. G. Zakharin and M. J. Zarandia. The latter measured also the most part of the plates on the photoelectric microphotometer.

April, 1936.

Literature: ლიტერატურა:

1. A. N. 242, p. 129, 1931.

3. I. C. A. R. 1, p. 7, 1935.

2. W. Zessewitsch, per scriptum.

The additional observations carried out by the late V. M. Bodokia during the period from November 19, 1936, to January 7, 1937, showed a certain dispersion and they are not satisfied by the elements given above. It is, therefore, desirable to secure more observations with a view to make the problem clear.

The Editor.

WW ERIDANI

ფოტოგრაფიული სიკაშკაშის მრუდი და ელემენტები

ვ. ბოდოკია

(რეზუმე)

დამუშავებულია WW Eridani-ს 147 ფოტოგრაფიული გამონასახი. ცხრი. II ცვალეზადის ფოტოგრაფიული სიკაშკაშის მნიშვნელობებს შეიცავს. ნახ. 2-ზე მოყვანილი მრუდი ვარსკვლავის სიკაშკაშის ცვალეზადობას გამოხატავს.

მოცემულია შესწორებული ელემენტები.

$$\text{Min} = 2426586.462 + 0^{\text{d}}.924365 \cdot E$$

აპრილი, 1936.

AH VIRGINIS

PHOTOGRAPHIC LIGHT-CURVE AND ELEMENTS

V. M. BODOKIA

P. Guthnick and R. Prager discovered the variability of AH Virginis when examining the Babelsberg plates. They also established that the star is an eclipsing variable of β Lyrae type¹.

To determine the photographic light-curve of the variable we secured 210 star images at the Newtonian focus of the 13-inch reflector. The photographs were taken on Ilford Monarch plates (emulsion 6428A) with 4—6 minute exposures.

The star was being observed from February 16 to May 27, 1936.

We used four comparison stars, photographic magnitudes of which were determined from three plates with two photographs of the area of the variable and one photograph of KSA 26 each taken with 6 minute exposures.

To determine the brightness of the comparison stars we made use of the photographic magnitudes of the stars in KSA 26 taken from Parkhurst and Farnsworth.

We give in Table I the obtained magnitudes of the comparison stars and their probable errors.

TABLE I ცხრილი

Star	Mg	P. E.
a) BD+12°2436	9 ^m 19	±0 ^m 03
b) BD+12°2434	10.38	±0.04
c) Anonyma $\left\{ \begin{array}{l} \alpha_{1855} = 12^{\text{h}}05^{\text{m}}35^{\text{s}}.2 \\ \delta_{1855} = +12^{\circ}26'.7 \end{array} \right.$	11.51	±0.05
d) BD+13°2512	10.61	—

The plates were measured with a photoelectric microphotometer. Heliocentric Julian Dates of observations and the corresponding values of photographic brightness are listed in Table II together with normal points in which the given observation is entered.

TABLE II 366000

J. D. _☉	Ph. Mg.	n	J. D. _☉	Ph. Mg.	n	J. D. _☉	Ph. Mg.	n
2428215.396	m	16	2428250.364	m	12	2428252.424	10.20	14
403	9.87	17	373	10.05	13	452	10.32	15
411	9.96	18	376	10.14	13	455	10.09	15
435	10.00	19	379	10.24	13	459	10.12	15
450	9.92	20	2428251.333	9.46	21	461	10.09	15
457	9.80	21	356	9.78	23	464	10.09	15
464	9.87	21	374	9.97	23	469	10.02	16
476	9.65	22	376	10.11	23	472	9.96	16
486	9.57	22	378	10.10	23	474	10.03	16
2428225.425	9.51	22	380	10.15	24	480	10.07	16
425	9.53	8	382	9.93	23	488	9.83	17
430	9.56	9	384	10.15	24	491	9.94	17
437	9.60	10	384	10.07	24	493	9.92	17
442	9.59	10	386	10.00	24	500	9.92	18
452	9.79	11	390	10.13	24	502	9.90	18
456	9.76	11	392	9.93	24	505	9.97	18
472	9.76	12	394	10.23	24	508	9.95	19
477	9.85	13	399	10.18	25	513	9.85	19
485	9.86	13	401	10.33	25	515	9.94	19
490	9.96	13	403	10.35	25	518	9.81	19
497	9.98	14	405	10.42	25	2428276.297	10.20	1
503	10.24	14	407	10.32	25	299	10.11	1
2428227.403	9.85	2	410	10.42	1	302	10.32	1
408	9.87	2	412	10.32	1	305	10.18	1
414	9.87	3	414	10.36	1	308	10.12	2
422	9.75	3	416	10.42	1	311	10.02	2
427	9.66	4	418	10.36	1	314	10.00	2
455	9.72	5	2428252.335	9.69	6	317	10.04	3
461	9.76	6	355	9.90	8	320	10.05	3
465	9.64	6	358	9.74	8	323	9.91	3
472	9.77	6	361	9.83	9	333	9.74	4
479	9.71	7	364	9.87	9	341	9.75	4
485	9.73	7	367	9.86	9	345	9.78	5
2428240.391	9.94	24	370	9.81	9	348	9.72	5
396	9.99	25	372	9.58	10	350	9.60	5
404	9.98	25	375	9.96	10	353	9.62	5
409	9.92	1	378	9.98	10	356	9.72	5
2428244.344	9.72	18	381	9.85	10	359	9.62	5
348	9.73	18	392	9.92	11	375	9.74	6
353	9.77	18	395	9.85	12	377	9.69	6
371	9.48	19	398	10.10	12	380	9.68	7
375	9.68	19	403	9.94	12	383	9.75	7
2428250.348	9.89	11	406	10.10	12	386	9.71	7
351	9.88	11	409	9.98	12	389	9.75	8
356	9.91	11	414	10.15	13	392	9.81	8
359	9.92	12	417	10.14	13	395	9.75	8
361	9.99	12	420	10.39	14			

TABLE II 366000

J. D. _☉	Ph. Mg.	n	J. D. _☉	Ph. Mg.	n	J. D. _☉	Ph. Mg.	n
2428276.398	m	8	2428280.260	m	21	2428280.469	m	8
401	9.80	8	268	9.64	21	472	9.74	8
411	9.70	8	271	9.90	22	474	9.76	8
414	9.86	9	274	9.95	22	477	9.83	8
417	9.81	10	277	9.92	22	481	9.73	8
420	9.76	10	280	9.88	22	483	9.80	9
423	9.84	10	400	9.77	22	486	9.77	9
426	10.00	10	403	9.98	4	489	9.90	9
429	10.04	11	406	9.88	4	2428286.237	10.26	13
431	10.13	11	408	9.81	4	251	10.28	14
434	10.08	11	411	9.84	4	254	10.17	14
438	10.00	11	415	9.86	4	257	10.41	14
458	9.80	12	417	9.80	4	260	10.08	14
463	10.10	13	420	9.87	4	263	10.36	14
466	10.13	13	422	9.73	5	275	10.36	15
2428280.234	9.70	19	424	10.00	5	278	10.28	15
237	9.70	20	426	9.74	5	281	10.30	15
240	9.60	20	440	9.70	6	284	10.13	15
243	9.70	20	443	9.80	6	287	10.11	15
246	9.60	20	446	9.82	6	290	10.06	16
249	9.80	20	452	9.70	6	303	9.92	16
252	9.59	20	455	9.85	7	306	9.85	17
254	9.83	20	458	9.85	7	309	9.91	17
257	9.57	21	461	9.82	7	312	9.88	17
			463	9.73	7			

When plotting the normal light-curve we proceeded from the elements obtained by Lause²:

$$\text{Min} = 2425003.495 + 0^d.4075191 \cdot E$$

The curve drawn showed that these elements did not require any correction.

The normal curve and its normal points are given in Fig. 1 and Table III, respectively.

TABLE III 366000

Phase	Ph. Mg.	n	Phase	Ph. Mg.	n	Phase	Ph. Mg.	n
	m			m			m	
0.060	10.26	10	0.338	9.80	10	0.643	9.86	7
072	9.97	5	370	9.94	10	675	9.79	8
095	9.93	5	400	9.95	10	726	9.70	7
139	9.81	10	437	10.10	11	764	9.70	7
172	9.73	10	477	10.21	10	803	9.77	6
222	9.73	10	541	10.19	10	878	9.98	5
253	9.76	10	568	9.99	7	914	10.06	7
287	9.75	11	614	9.90	7	953	10.22	7
315	9.81	10						

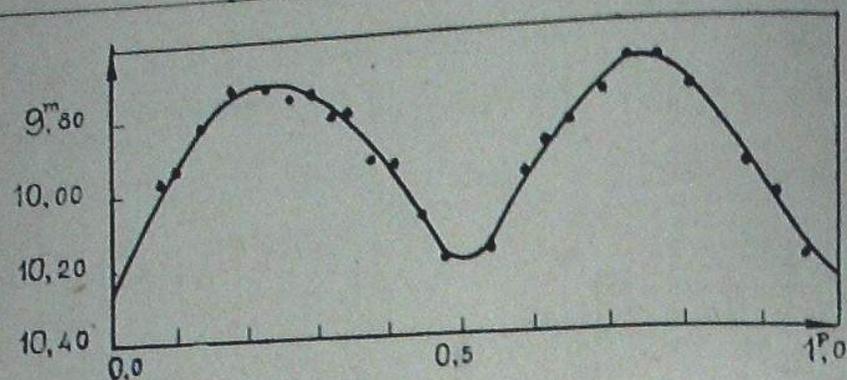


Fig. 1 ნახ.

The examination of the light-curve obtained shows that the maxima as well as minima are symmetrical.

The brightness of the star at maxima and minima has following values:

$$\text{Max} = 9^{\text{m}}71; \quad \text{Min}_I = 10^{\text{m}}26; \quad \text{Min}_{II} = 10^{\text{m}}21.$$

The plates were measured by E. Dolidse and M. J. Zarandia May, 1937.

Literature: ლიტერატურა:

1. B. Z. 13, 1929; K. V. BB. 6, 1929.
2. A. N. 254, p. 373, 1935; Ibid. 257, p. 211, 1935.

AH VIRGINIS

ფოტოგრაფიული სიკაშკაშის მრუდი და ელემენტები

ვ. მ. ბოდოკია

(რეზუმე)

AH Aurigae-ს 210 ფოტოგრაფიული გამოწასახის საფუძველზე აგებული სიკაშკაშის საშუალო მრუდი (ნახ. 1). მრუდის განხილვა გვიჩვენებს, რომ როგორც მაქსიმუმები ისე მინიმუმები სიმეტრულად არიან განლაგებულნი.

Lause-ს მიერ მოცემული ვარსკვლავის სიკაშკაშის ცვალებადობის ელემენტები შესწორებას არ მოითხოვენ.

მაისი, 1937.

YY ERIDANI PHOTOGRAPHIC LIGHT-CURVE AND ELEMENTS

V. M. BODOKIA

The eclipsing variable YY Eridani (169.1932; BD—10° 858) was discovered by C. Hoffmeister on Sonneberg plates¹.

On the basis of photometric observations made at Strassburg Observatory R. Tremblot² established that the star belongs to the W Ursae Majoris type. Later on the star was observed visually by A. Jensch³ and F. Lause⁴.

At Abastumani Observatory YY Eridani was being observed photographically at the Newtonian focus of the 13—inch reflector from February 2 to March 18, 1937 and, moreover, in December of the same year.

In all 181 images fit for measurement were obtained. The photographs were taken on Ilford Monarch plates (emulsion 8474A) with 2 minute exposures.

The variable being very bright and the reflector field too small we were obliged to content ourselves with the following three comparison stars:

- a) BD—10° 860 8^m30
- b) BD—11° 825 9.30
- c) BD—10° 862 10.49.

To determine their magnitudes we used the stars in KSA 26, the brightness of which was taken from Parkhurst and Farnsworth.

When working out the observations we proceeded from the elements given by Jensch³:

$$\text{Min} = 2427364.440 + 0^{\text{d}} 321496 \cdot E$$

The measurements obtained enabled us to determine the following correction of the period:

$$\Delta P = -0^{\text{d}}.000002$$