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BRIGHT SOUTHERN BV-STARS

On sky patrol plates of Bamberg Southern-Station 12 further stars were found whose variability seems to be real as can be seen from the material available till now.

BV 625 = CoD $-75^{\circ}26' (9^{\text{m}}8)$ = HD 1505(G₀) $A_{pg} = 0^{\text{m}}3$
 BV 626 = CoD $-78^{\circ}30' (10^{\text{m}})$ $A_{pg} = 0^{\text{m}}3$
 Max = JD 245 8297.700 + 0.^d61 . E
 (Cepheid)

Light-curve Fig. 1

BV 627 = 1900: $1^{\text{h}}57^{\text{m}}25^{\text{s}}.9 -50^{\circ}27'12''$ Ident. Chart. No. 1 $A_{pg} = 0^{\text{m}}4$
 (Cepheid)

BV 628 = CoD $-85^{\circ}58' (10^{\text{m}}1/4)$ EA $A_{pg} = 0^{\text{m}}4$

BV 629 = CoD $-80^{\circ}15' (10^{\text{m}}0)$ $A_{pg} = 0^{\text{m}}4$

BV 630 = CoD $-26^{\circ}24'19'' (8^{\text{m}}5)$ = HD 29053 (A₃) $A_{pg} = 0^{\text{m}}3$

BV 631 = 1900: $0^{\text{h}}39^{\text{m}}54^{\text{s}} -72^{\circ}20'3''$ HD 271 453 (F₀) $A_{pg} = 0^{\text{m}}3$
 Ident. Chart. No. 2

BV 632 = CoD $-78^{\circ}58' 9.6$ $A_{pg} = 0^{\text{m}}3$
 Min = JD 245 8455.400 + 2.^d642 . E EB

Light-curve Fig. 2

BV 633 = BD $-23^{\circ}22'22'' (9^{\text{m}}8)$ $A_{pg} = 0^{\text{m}}3$

BV 634 = EB $-20^{\circ}45'36'' (6^{\text{m}}8)$ = HD 71 581(A₀) $A_{pg} = 0^{\text{m}}3$

BV 635 = CoD $-87^{\circ}10' (6^{\text{m}}8)$ = HD 110 994(M₃) $A_{pg} = 0^{\text{m}}2$

BV 636 = BD $-17^{\circ}04'14'' (9^{\text{m}}1)$ = HD 210 215(M₀) $A_{pg} = 0^{\text{m}}3$

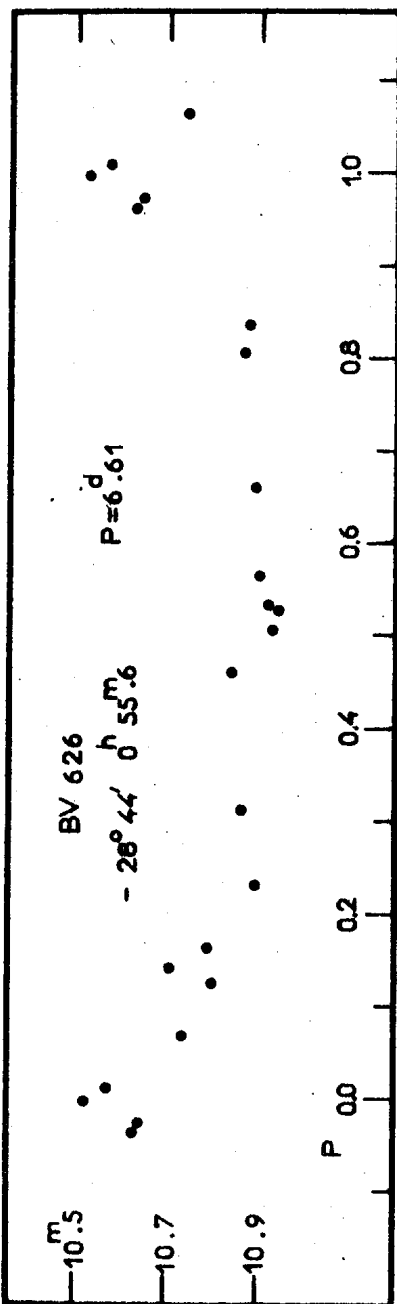


Fig.1

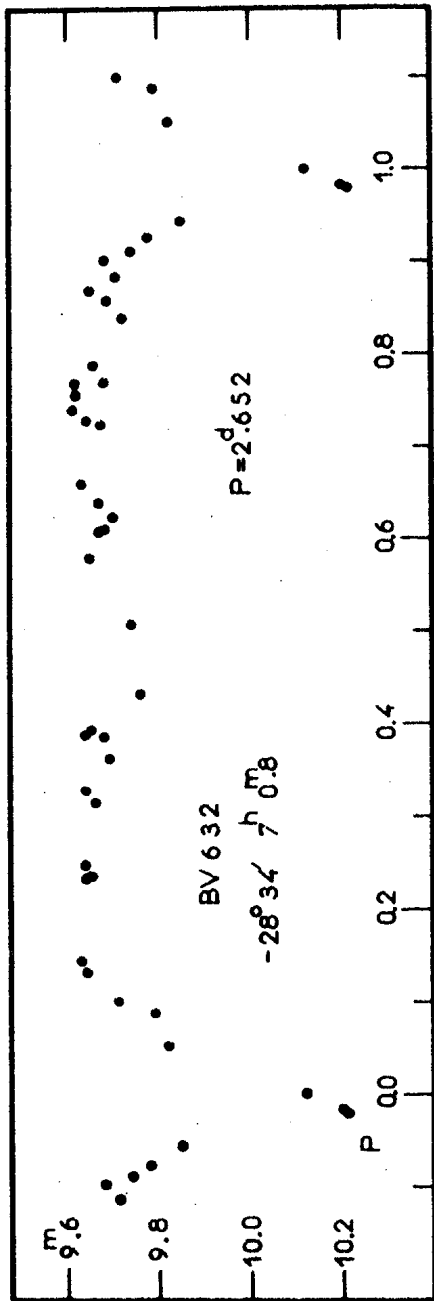
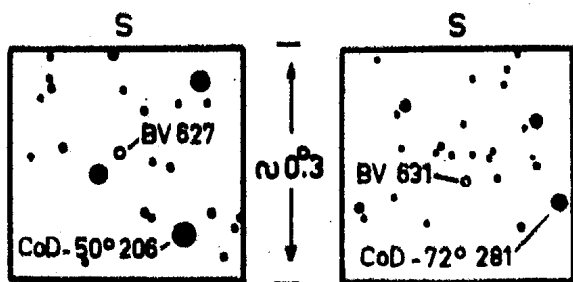


Fig.2



No. 1.

No. 2.

Bairberg, Reineis-Observatory
15 June 1965

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PHOTOMETRIC LIGHT-CURVES OF SOUTHERN BV-STARS

BV 480 = HD 149 573 (A2) (Fig. 1)

Comparison-stars:

HD 150 481 (A0) B^m .95

HD 150 009 (A0) B^m .95

Magnitudes of comparison-stars are mean values from Harvard and Cape catalogues. BV 480 has been already published in Inf. Bull. on Var. Stars, No. 66 (2).

Min = JD 243 8229.510 + $1^d.13857 \cdot E$, EB, Ampl. $0^m.2$

Individual minima (brighter than $B^m.75$)

Minima	E	O - C
JD 243 8229.517	0	+ 0.007
8255.273	21	+ 0.008
8262.262	21	+ 0.042
8261.225	18	+ 0.041
8494.559	255	- 0.011
8498.545	257.5	- 0.130
8502.529	240	+ 0.010
8585.540	311	+ 0.003
8587.500	314.5	- 0.057
8587.545	314.5	+ 0.018
8615.215	339	- 0.004
8619.215	342.5	+ 0.013
8619.259	342.5	+ 0.057

BV 554 = HD 140 809 (A0) (Fig. 2)

Comparison-stars:

Cape -61⁰ 5266 B^m .59

Cape -63⁰ 5676 B^m .65

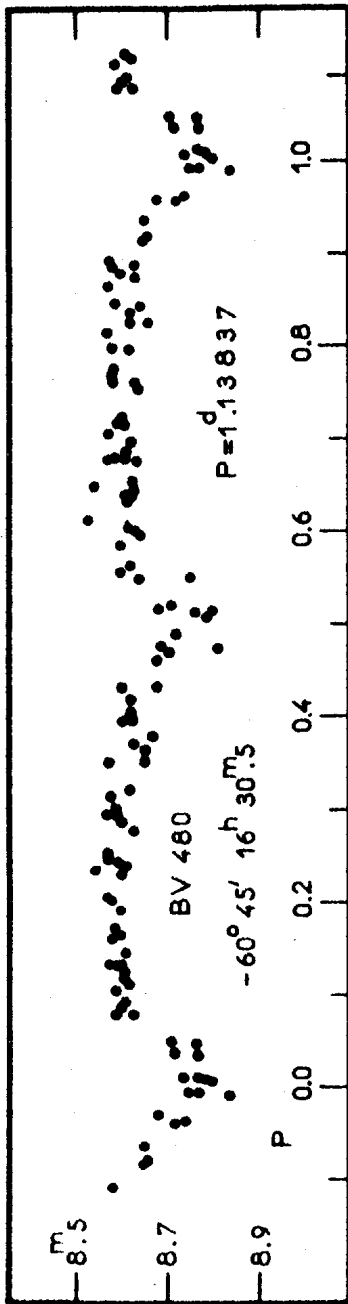


Fig.1

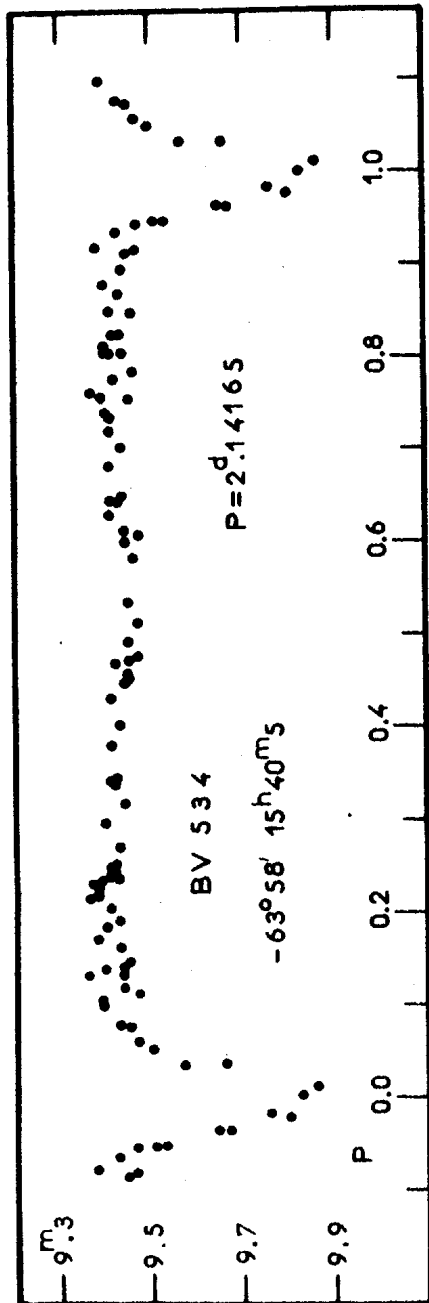


Fig. 2

Magnitudes of comparison-stars have been derived by photometric connexion to stars (HD 135 337 B9; HD 143 039 A2) from the catalogue of COUSINS and STOY ¹⁾.

BV 554 has been already published in Inf. Bull. on Var. Stars, No. 74 ²⁾.

$$\text{Min} = \text{JD } 243\ 8204.360 + 2^{\text{d}}.14165 \cdot E, \text{ EA, Ampl. } 0^{\text{m}}.4$$

Individual minima (fainter than $9^{\text{m}}.65$)

Minima	E	O - C
JD 243 8204.331	0	- 0 ^d .029
8234.269	14	- 0.074
8551.337	162	+ 0.030
.381	162	+ 0.074
8553.379	163	- 0.074
8581.249	176	- 0.041
.296	176	+ 0.006

BV 540 = CoD -31^o 12 834 (Fig. 5)

Comparison-stars:

CoD -31^o 12 833 $10^{\text{m}}.25$

CoD -31^o 12 834 $10^{\text{m}}.90$

Magnitudes of comparison-stars have been derived by photometric connexion to stars (HD 149 062 G5; HD 146 499 F8) from the catalogue of COUSINS and STOY ¹⁾.

BV 540 has been already communicated in Inf. Bull. on Var. Stars, No. 74 ²⁾.

$$\text{Min} = \text{JD } 243\ 8204.520 + 10^{\text{d}}.78 \cdot E, \text{ EA, Ampl. } 0^{\text{m}}.5$$

Individual minima (fainter than $10^{\text{m}}.9$)

Minima	E	O - C
JD 243 8204.332	0	- 0 ^d .188
8549.380	32	- 0.100 *
8560.381	33	+ 0.121 *
8614.213	38	+ 0.053

* These minima are twofold because BV 540 is to be found on sky patrol plates of two different declinations and therefore it has been photographed by two cameras simultaneously.

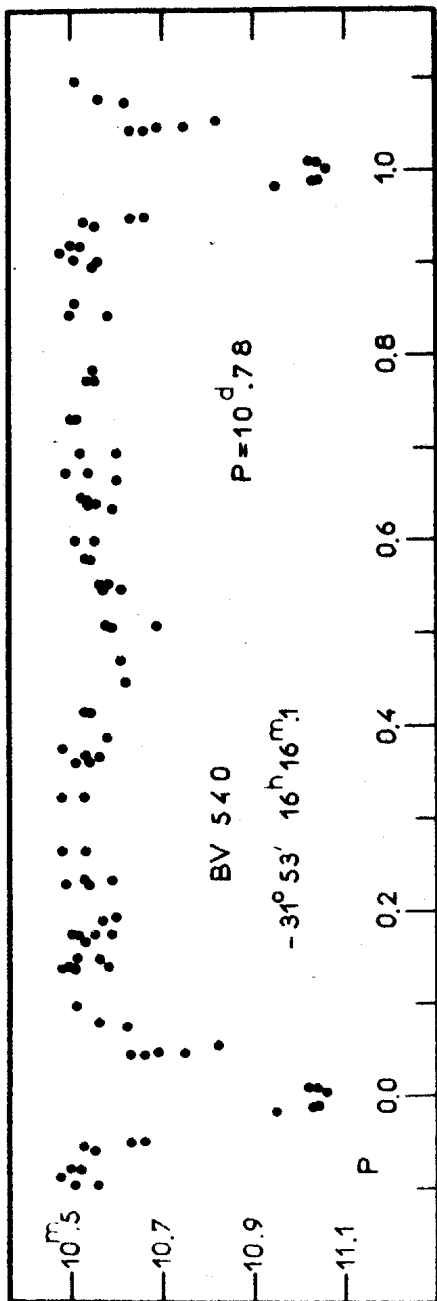


Fig.3

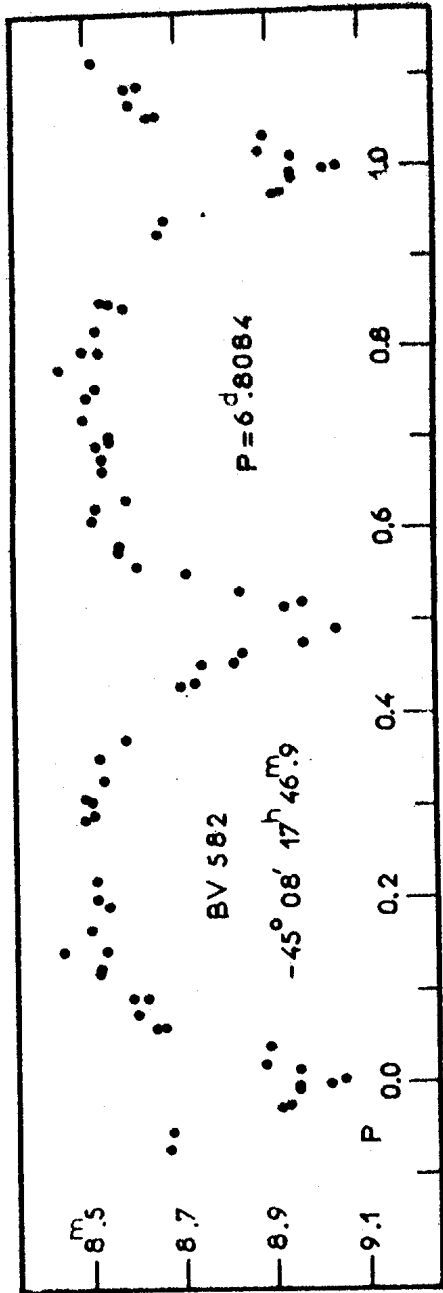


Fig.4

BV 582 = HD 162 985 (A2) (Fig.4)

Comparison-stars:

HD 163 358 (F8) $8^m.40$

HD 162 617 (F5) $9^m.05$

Magnitudes of comparison-stars are mean values from Harvard and Cape catalogues.

BV 582 has been already published in Inf. Bull. on Var. Stars, No.81²⁾. The period given there is wrong.

Min = JD 243 8233.210 + $6^d.8084$. E, EB, Ampl. $0^m.5$

Individual minima (fainter than $8^m.9$)

Minima	E	O - C
JD 243 8233.515	0	+ $0^d.105$
8260.273	4	- 0.171
8267.223	5	- 0.029
8505.577	40	+ 0.029
8529.518	43.5	+ 0.141
8556.468	47.5	- 0.143
8580.588	51	- 0.052
8614.505	56	- 0.178
8621.295	57	+ 0.004
8638.218	59.5	- 0.094
8645.224	60.5	+ 0.103

BV 585 (Fig.5)

Comparison-stars:

a = HD 314 010 (A5) $10^m.5$ estimated

b = see fig. $11^m.1$ estimated

BV 585 has been published together with an identification-chart in Inf. Bull. on Var. Stars, No.81²⁾.

Max = JD 243 8257.625 + $6^d.195$. E, G6, Ampl. $0^m.4$

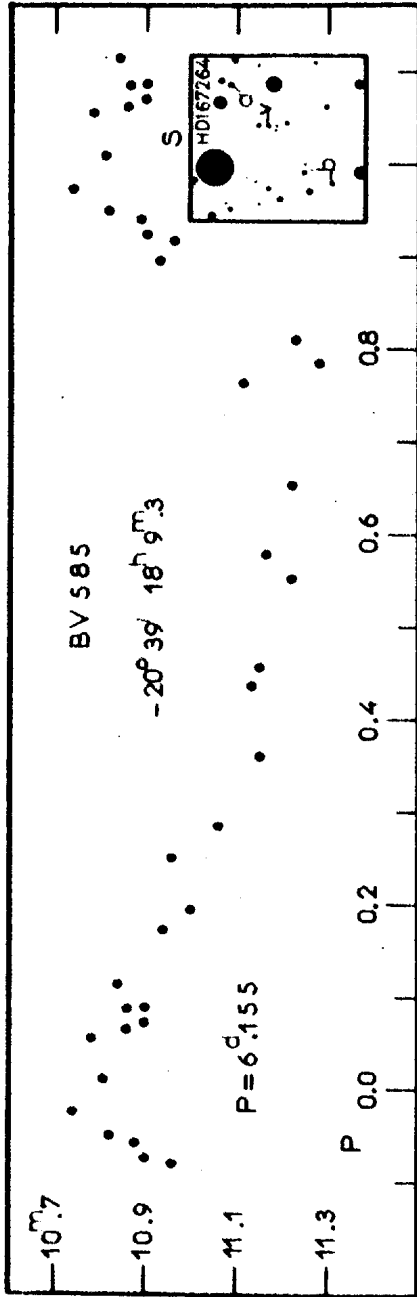


Fig.5

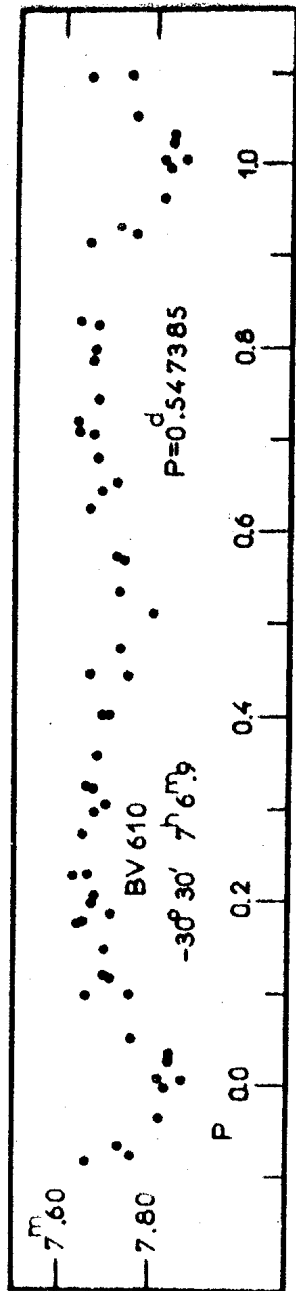


Fig.6

Individual maxima (brighter than $10^m.9$)

	Maxima	E	O - C
JD 243	8257.269	0	- 0 ^d .356
	8528.511	44	+ 0.066
	8553.461	48	+ 0.396
	8578.378	52	+ 0.693
	8590.341	54	+ 0.346
	8608.300	57	- 0.160
	8614.303	58	- 0.312
	8621.295	59	+ 0.525

BV 610 = HD 55 173 (B3) (Fig.6)

Comparison-stars:

HD 56 554 (B5) $7^m.5$
 HD 56 998 (A0) $8^m.0$

The elements of BV 610 have been already communicated in Inf. Bull. on Var. Stars, No.86²,

Min = JD 243 8400.400 + 0^d.547385 . E, EB, Ampl. 0^m.2

Individual minima (fainter than $7^m.8$)

	Minima	E	O - C
JD 243	8400.416	0	+ 0 ^d .016
	8406.417	11	- 0.004
	8428.327	51	+ 0.010
	8462.253	113	- 0.002
	8708.575	563	- 0.003
	8798.326	727	- 0.023

1) Royal Observatory Bulletins, No. 64, A.W.J. COUSINS and R.H. STÖY, Photoelectric Magnitudes and Colours of Southern Stars.

2) Publications of W. STROHMEIER, R. KNIGGE and H. OTT.

Bamberg, 19 June 1965

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