-0267 ± 3.2 +003 ± 2.8
-0275 +005

127821 14 29.6 +63 24 6.0 dF4 -3.28

19595

8474 34.570 1884.7 +63 24 22.22 1882.7

1.744

36.314

58.79

34.232

35.022

35

.05.10

.067

51.8

34.681

29

.710

9771

34.888

-1.426

-.20

22.02

60.4 1928.2

38.92

21.48

42

90

21.10

21.80

72.91

36.5

53.8

22.99 1944.71

-.14

22.85

22.32

+.30

ρ Boo

127665 14 29.7 +30 35 3.8 g1V3 -13.7a

19597
8475

-0079 96 +119 96 N30 -13.7 (1)

-0079 ±0.5 +119 ±0.9 GC 7030 -13.4 (9)

ADS9296

25 ±4

12m 50s

127486 14 30.0 -54 47 F8V -0.4 YC

FD961

5.86 +0.48 (1.61)

-094-012

-

5478 14 30.0 -30 24 +76

+0032 -053 Eling

+00342 -0486

00295 -048

00287

0430

043 -041

+10+ 415 F85

127486 14 30.0 -54 47

HR 8526

-0096 -004 Cu

-0093 +019

-095 +005

-0.4

5.87 +0.48 +0.04 2 Sgg

.314 .158 .534 2.623 ③ 8,15,4

[m] 214 +19

[c] 471 138

+157

+205

1.50 +6.3 -5.9 +2.3 -094

-0.4

-1302 -311 +116 -012

48

AD59300

γ Boo

HR5435 127762

W8477 15607

8477

14±5

-609 -793 623 783 -114 +147 -35.5 092 -22.1 054.5

-071 056 092 -073 009 70.1 -27.5 22.0 17.0

+22.4 +47.5 +1.6 023

+51.2 +1.7 -19.7

036

+22.3 40.4 -3.9 03

f(I)		.136
67.52	160.0	0.130 (2)
66.49	164	0.130 (2)
65.49	165.5	0.136 (2)
64.51	165.7	0.139 (8)
63.52	163	0.130 (1)
62.49	162.3	0.131 (4)

$$a = \frac{y_1}{1+e}$$

Sp.		
81.47	180.5	0.099 (2)
80.15	150	0.084 (2)
78.15	148	0.058 1
83.25	151.5	0.114 (2)
84.85	153	0.115 (1)
84.34	154	0.128 (3)
85.49	154	0.138 (2)

L ~ 0°

P ~ 25μ

+0008 ± 4.3 -022 ± 3.4
+0008 -024

128000 14 30.9 +55 37 6.0 9185 +2.86
19627
8485

56.938 1896.3 +55 37 3.12 1901.1
-043
.895

1.08
4.20

9.97
46.945
56.915
+6
924

89

930
+035 43.4

56.933
2
935

56.914
10
930

40.7 1926.8
37.35
2.35
54
2.89
-13
2.76

988
3.29
-.91

3.87 1944.97
-20
3.67

3.66 1947.29
-21
3.45

119.06
39.7
38.6

— Bov 448 73 13.✓ 14.5 14.5 +5.5 ①

127986 14 313 +37 11 F5

HP5441 -0004 -075 40 ±3

GC19436 -0026 -045 GL

6.4 -0047 -07 10 +31 +13.5

-0039 -0811 W 350 -0047 -0068 +1.8 b

172

222 +28

418 +128 +158

·340 ·170 ·486 ② SPL 2.643 ③

350 150 480 2 Ring

345 160 483

356

482 094

+20

2643

020

-002-078 +1.8

176

-0005 ±40 -065 ±3.3

17.646 1895.5 -0003 -085

027 45.48 1890.4

.673 3.87

49.35

-0004 -075

17.645 ~~+0002~~ 44.30 1951.75

+ 9 $\boxed{-0002 \quad -071}$ -20

654 -005 44.10

-019 - 5.25

5441.000*

14.000*
31.300*
37.000*
11.000*
-0.001*
-0.068*
4.400*
92.7 75.958
1.800

-0.236
-0.176

-12 -13.195

-0.216
3.360

-15 -13.763

0.040
0.916

49

4.656

128093 14 82.1 +32 45 F2

HR5445

GC15650

14.5

+62.75

B5

000

.800 .131 .476 ② SPL2657

③

Cr+

65

87

[m] 185 +42

3.4

-5.1

[L] 416

457 pm. -14.1 +13.7 -17.1 +114

-8.1

-35 +356 -209 000

.+114 ~~000~~ →

5445 17 32.1 +32 45 -8.16

45.7

| #3451 -16.0 +1.9 | -14.1

R.A.	:	14.500
DEC.	:	32.750
PM. R.A.	:	135.000
PM. DEC.	:	0.000
DISTANCE	:	3.400
MODULUS	:	48
AD. VEL.	:	-8.100
q1 (U)	:	-0.652
q2 (U)	:	0.723
q3 (U)	:	-0.230
dU	:	-350.693
U	:	-14.923
q1 (V)	:	0.657
q2 (V)	:	0.689
q3 (V)	:	0.305
dV	:	353.711
V	:	14.462
q1 (W)	:	-0.379
q2 (W)	:	-0.047
q3 (W)	:	0.924
dW	:	-203.814
W	:	-17.242

50

50

-12c

5448

14 326 +36 51 6.4 grs

-031 -062 GL
-1 +4
-032 -058

-0021 -045 [illegible]

-025 -045

8474 -6125
-5309 -7905

5448.000*

14.000*
32.600*
36.000*
51.000*
-0.032*
-0.058*
6.500*
199.526
-12.000

-0.106
-0.184

-18.971

-0.282
0.359

-60.517

0.089
0.915

6.828

5

GC19728
14B128620
Xlen

Bul 51 $\overset{s}{=}.4886 + ''.716$ $\rho = -22.5a$

14 32.8 −60 25 1900

	R	B−I		V−R	V	M_V
A	−0.30	+0.22	Kron	+24	−0.06	+4.34
B	+0.91	+0.24		+26	+1.17	+5.57
C	9.17	+1.56	(2) ~~Kron~~		u	v w
					+29	+2 +13
	11.22	+1.50	+1.43 (1)			

$\rho = 80.089$
$a = 17.5933$
} Finsen W.S. M.O.C. 68, 343, 1926; Hertzsprung E. 1936 BAN 7, 329

$m_1 + m_2 = 2.06$
$m_1 = 1.05$ log +.02
$m_2 = 0.91$ −.04
$m_2/(m_1+m_2) = 0.441$

A0 0.743
C 0.764
} Kostyev C. MN 66 A571, 1017 Estimate dimmer

+0264 ± 4.2 −240 ± 3.4

+0264 −244

128332 14 32.8 +57 17 6.2 F5 −21.88

1966.4

8497 45.159 1897.6 +57 17 11.70 1894.1

−1.383

43.776

59.86

44.642

44.522

9

513

8

521

14.623

44.876

45.007

4

011

+1.100

41.7

45.075

12

09

+13.42

25.12

51.9

34.90

17.00

52

17.52

12

17.40

1925.6

234

14.11

−11.01

12.95

−23

12.72

1945.06

11795

39.3

1947.29

45.2

12.43

−21

12.22

331 167 345 2625

377

BV bil 14 33.0 -17 49 48 9 10.72

12/17/1 -170422 8 SCAN

-027 ± 14 -032 ± 10 4

+4 -10

-023 -032

0 +3

-023 -029 fky

-022 -026)4km

52

14.550
17.800

-0041 ± 4.7 +012 ± 3.5 -88.8 (4)

-0034 +009

128068 14 33.0 -46 02 5.4 125 -60.0a

19669

8500

5.54 +1.53 +2.52 224 -58.6 1.8

5.54 +1.48 +1.73 785

1.934 1910.4 -46 1 41.84 1903.7

162

2,096

-0.56

42,40

2.005

4

009 3,939

1.970

1.946

-16

930 -126

37.3

42.02 1939.69 9545

-28

42.30

402

47.7

41.44

-28

41.72

1955.76

44.0

42.01

+.39

-58 c -033 +022 MC
-3 0
-036 +022

R Boo 14 37.0 +26 57 M3-M6

HD 128619 Ag. Sup. 181 6.7-12.5 Vis
GC 19706 b=+66°.5
W 8511 K 223.46d

V	R	R-I	Phase	JD 2440000				
9.71	7.39	+2.05	0.83	241.9				
7.62	6.15 ~~7.02~~	+1.45	0.92	262.8				
7.33	5.88	+1.32	0.94	267.9				
6.95	5.66	+1.19	1.05	285.9				
7.36	5.87	+1.32	1.05	303.7				
8.32	6.44	+1.63	1.195	323.7				

?
-0.0018 +0.010 (N30)

Lalande
+52 -17 -38

m-M
7.50
3.50 pc.

R Boo 6.9 +1.45 +1.00 -3.2 +55 -17 -37 -23 -58.0 223
HD 128609 5.6 +1.18 7.75 +10 -4 +5 +10 +66° E=+03

11.29 +0.47 -0.04 w

11.20 +0.44 -0.06

775

3.45

R300 .841 -0009±4.0 +006±3.0

128609 14 35.0 +26 57 5.94 gM4e -58e

19706

8511 59.275 1990.4 +26 57 9.14 1904.7

+2702400

5.22

153

3.70

9.25

9.95

.004

275

-0017 +006

+4

+010

-0019

-025

-0044 +010

+10

-0023

-27

+61

-32

-34

8.0

7.0

400

250

-639 703 -34

660 710 247

-396 049 917

+0445 +0333

-0460 +0336

+0276 +0023

+699

-720

+432

+1090

+0778

-0724

+0200

+31.2 +19.4 +18.2

-6.0 -3.1 -14.3

+12.0 +7.5 -53.2

+55 +38

-17 -17

-37 -45

59.261

8.6 1940.37

-0.5

8.55

-0024017 -0006 ±5.1 +004 ±4.0
+006
-0012
51
306

59.281 18550 9.11 189211

030
.321

23
9.88

-0009 +005

-3 0

-0012 +005

-016

35.2

5-9.245
.275

59.24
-06
59.18
+013
59.193

59.264
-.042
342

8.6 154037 ?
-05
8.55

9.3 15344
+2
9.55
-25
9.22

.62

1179

9.54 1973.4
-36
9.18

59.3 1530.1
-20
50.2

1930.3
47.2

9.18
+.26

9.93
+013
.94

59.25
013
5.263

0.000*

14.000*
34.000*
26.000*
57.000*
-0.016*
0.005*
8.000*
398.107
-50.000

0.065
-0.312

44.067

-0.033
0.244

-27.319

53

0.031
0.918

-40.944

-131

12 8640 14 35.0 +43 03 F8 -20

14707 6V

W8512

-0094 ±42 -066 ±3.1

1.580 19043 -0040 -048

430

2.010

-0092 -067 53.31 1900.3

-1 +4 3.26

56.59

1.574 -0093 -063 53.44 1952.30

+ 3 -.102 -41

1.577 53.03

-433 3.56

-639 762 -108	+3089 -2275	0814
440 614 433	-3191 -1834	-5025
-396 205 895	+1915 +0612	2527

+0.2

-0.9

-1.8

Tab Orbit

BW BW 14 35.1 + 36 09 −16

−010

12664 −0044 ±5.0 −020 ±2.3

−0030

5.787 91 −0026 44.88 54 −018

180

+26.2509

88

−00311 −0072 850 90

4576

5.760 52.72 4544

−48

771 44.96

5.710 71.30 4542

−80

707 45.12

3 Lib

128756

19738

8522

+0020±3.4 −031±2.9

+0018 −036

14 36.5 −24 49 8.1 g120 +11.86

28.409 1904.9 −24 48 48.34 1899.9

−90

.319

28.375

−10

368

375

056

31.2

28.377

5 +

392

+1.55

46.79

47.86 1938.80

−22

48.08

48.03 1933.40

−4

4807

48.08

−1.29

220

36.1

36.2

RV Boo 14 37.2 +32 45 -3.3

+0012 c -0.006 b

+0 0 +4

+.015 -0.10 -0.010

1.000

-632	736	-245	-0449	-0349	-0258	-79	+0.8
641	674	326	+0470	-0320	+0150	+14	-1.1
-405	-645	913	-0288	+0021	-0267	-30	-3.0

339 54
237

~~15 56 4 50 52 114 12 4.8~~

+640.007 -0227±73 -008±10.0

129333 14 37.90214 +64 -0444 30 7.4 dG0 -30.56

-0205 -0222

19757

8529 56.376 1903.6 +64 30 2439 1907.7

1.053 46 (64.66) -16 34

57.429 56.074 22.75 24.73

750 62

-0216-042 56.83 23.9 1930.3

-02238-041 57 -16

-1445 881 56.197 (5731) 22.81 74

-141-038 46 -16 23.

8146 65

7097 4184 23 +44.1

-2045 3954 -328

-38

6206 -8357 26

-7841 -5499 -30.5

84

	:	14.600
R.A.	:	64.500
DEC.	:	-328.000
R.A.	:	-38.000
DEC.	:	2.600
DISTANCE	:	33
PARALLAX	:	-30.500
VEL.	:	
		-0.636
i1 (U)	:	0.751
i2 (U)	:	0.178
i3 (U)	:	290.508
du	:	4.204
U	:	
		0.660
q1 (V)	:	0.410
q2 (V)	:	0.629
q3 (V)	:	214

R.A. :	14.600	
DEC. :	64.500	
R.A. :	-328.000	
DEC. :	-38.000	
TANCE :	2.600	0183
DULUS :	33	4.38
VEL. :	-30.500	
	-0.636	
11 (U) :	0.751	
q2 (U) :	0.178	
q3 (U) :	290.508	
dU :	4.204	+16.4
U :		
	0.660	
q1 (V) :	0.410	
q2 (V) :	0.629	
q3 (V) :	715.714	

-0075 ± 8.7 -040 ± 8.0

G(4)

128931 14 37.0' -29 05' F-8 V +27.2 ± 0.9

19754

7.82 +0.44

27.926 1898.3 -29 5 13.62 1896.1

388

28.3 14

2.16

11.46

12 8787 14 35.2 -24 30

-76 1044.5

224

444 308 144 387 2447

256 225

+41

7.14

108
30

+0014 ± 9.5 −133 ± 9.5
+0044 −110
+50

33.0 914)

129178 14 39.0 −29 09 FeII +33 ± 1.5

19783 8.13 +47

57.326 1900.4 −29 8 43.54 1899.7
−069 6.69
.257 36.85

4 ↑

123

21.586 1941.76 7.23 1941.2
35.47 −34.46
57.459 +12 +0036 −125 +0040 −115 41.69 +17
−30 −14
439 → +048 41.60

57.419 15.412 1933.40
5 −1
424 411

-626	124	-770	-1424	-0705	-2129	-51.6	-25.4
662	609	-438	+1506	-3406	-1900	-37.8	-14.4
-413	783	464	-0940	-4379	-5319	-50.0	+15.3

57

+140277 1 39.1 +13 49 -18.3±0.9 R(4)

8.40 +0.59 +0.0662 V R

δ=.06

+44	-61	+12	.025
+53	-85	+18	.020
+70	-102	+29	.015
+4			

-.382 -087 V

-0262±7 -095±5 V

31800 -0004 ± 2.4 -004 ± 2.0 -21.9 (19)

129312 14 39.2 +08 22 5.0 965 -22.2 a

-006 -002

19789 -20.5 (8)

-21.7 (5)

8541 11.295 1897.7 +8 22 28.38 1897.8

021 +.21

.316 28.59

11.276 28.51 1934.4

27 -24

.303 581 28.27

11.259 290 39.9 28.64 1940.70

19 +5 96 >510

.278 -026 28.69 37.4

28.48 40.5

-.11

6937 7.81 +0.635 +0.115 G2V −33.9

129357

+29°2568

+.033	−.160
−.005	−.004
+.028	−.164
−.002	+.004
+.026	−.160

$14^h 39^m 12.642$	+29° 16′ 30.93	1928.38
+.012	−.17	
12.654	30.76	
$14^h 39$ 12.630	+29° 16′ 30.50	1930.2
.004	−.31	
.634	.19	

+0171 ± 5.1 −196 ± 3.2 −12.1 ⑤
+0178 −172
129580 14 39.6 +58 10 (7.4 d110 −9.0 ↓
19799 8" (8.4 d67 −11.1 ↓
−12.6
85-44

A059346 35.215 1902.7 +58 10 21.27 1894.9

−.809
34.406
52.52
42.272
34.79 16
.808 15199
.16 35.066
35.171 +.660
4
175
(37.1)
35192
14
208

10.80
32.07
51.6 1926.4
25.45
26.11
52
6.3
26 .11/26.52
23.57 1945.86
−23
23.34
23.41 1947.29
.21
23.20

31.06 11.955
24.35 39.85
−7.76
(44.9)

5483 14 39.6 +21 20 6.32 G5

-013 -061 GC
-015 -056
-11.08

65

55

```
5483.000*

  14.000*
  39.600*
  21.000*
  20.000*
  -0.015*
  -0.056*
   5.500*
 125.893
 -11.000

  -0.134
  -0.393

 -12.546

  -0.240
   0.188

 -32.248

  -0.009
   0.900

 -10.976
```

(Eph)

		40.3	+19 43		ρ = -26.5
9352	14	38.0	+19 55	-0.″255	-0.″150

Eggen Am Rev. Sci Astrp 5, 105, 1967

		C	A	B	F	G	a	L	a^3/P^2
I	52.04	1929.45	0.09	+579	-103	-193	-296	061	121	83.23
II	51.33	1929.69	0.10	+604	-076	-116	-293	0615	119	88.50
III	52.20	1929.54	0.10	+550	-093	-184	-290	058	122	71.50

Δm = 0.28

25M(6)
50S(14)
44

ΔΩ 9.12 +1.29 +1.27 (2) -2.54 (1)

8.35 +0.57 (2) π_{pt} 0.48

	m_1	m_2	u	v	w
0.44	0.49		+15	-37	-16
0.48	0.46		+15	-34	-16

C 10.08 +1.34 +1.28 (2)

6.68 9.26 +0.585 (2) π_{pt} = 0.415 (.046)

129456 14 40.6 -34 58 4.1 g 125 -38.5a

19820 -34 25h.

8552

-0055.27 -180.27 N30

-0052 ±2.5 -182 ±2.4 bc → a2 0

HR 5485

3.65

(over) +5.6 a

W Boo 14 41.2 +26 44.5 M3 III

34 Boo b=+65°

AR 5490 Dul # 51 113 5.0-5.4 vis

HD 129712 356 905

318 919

GC 19831 R-I R m-M = 5.50

Dual +0.95 3.58 320 40 Yoyo blue -3 -10 +5

m-M = 5.60

2439123 3.67 +0.93 3.14 old dark -4 -13 +9

9205 4.75 +1.46 +2.02

9209 3.63 +0.92

9212 4.66 +1.64 +1.90

9214 3.61 +0.96

9217 4.80 +1.65 +1.82

9221 3.64 +0.94

9236 4.05 +0.94

9247 4.79 +1.64 +1.90

9248 4.07 +0.98

9286 3.59 +0.94

320

1037

1.9

3552

5

2439173	[illegible]	3.67 +0.93	
205	4.75 +1.66 +2.02	/	
209		3.61 +0.91	
212	4.66 +1.64 +1.90		Also
214		3.59 +0.94	menlyze
217	4.80 +1.65 +1.82		
251		3.63 +0.93	
266		4.06 +0.96	
267	4.79 +1.64 +1.90		
268		4.07 +0.98	
286		3.59 +0.94	

W Boo 4.65 +1.65 +1.90
HRS490 3.6 +0.93

34B00

129712 14 41.2 +26 44 gM3 +5.6 G

1+R5480

129712

19831

8555

4.65 +1.57

-30

51 49 N30

-0016 -021

-0011 ±1.8 -016 ±1.6 GC 7N30

-012 -020 GC

-021 -021 N30

-017 -020

+16 237 3.27 116

+11 122

205

40

6.05 FR4

-00105 -0204

+36

-0176

+27

-0 -8 +8 -012

-0 -16 +10 -007

6.0

-00105 -0204 FR4

-26

-021

-00130

-017

290

263

5.52

-015 -017

-647 -763 449 893 -017 -020 +5.6 -009 +3 -085

-011 -006 013 007 -085 033 +5.0 -4 -3 -012

-11 0 -4

-3 -8 +8

-14 +2 -9 -007

-3 -16 +10

25

56

```
5490.000+

  14.000*
  41.200*
  26.000*
  44.000*
  -0.017*
  -0.021*
   6.000*
 158.489
   5.600

  -0.020
  -0.332

  -5.095

  -0.123
   0.259

 -18.094

   0.020
   0.907

   9.48
```

129078 14 41.6 -78 50 3.8 R5 -0.1a
19034
8554 -1 1st

-0002 12 -026 12 N30

-0002 ±2.0 -024 ±2.1 GC → N30

5416 14 41.7 -58 19 (2)

12446 -236

-17.8

-0103 53 -0636.7

11446 26 -0112 -046 58.57 980

NO 188 -0110 -053 +328

11.434 55.24

20.153 27.70 33.04 9201

51.280 -3520 -4554

11.433 -0108 -054 -34.10

243 -0105 -048 57.84

+6.26 -0828 + 1.82 0953

1.54 -084 -045 56.52 6019

-13 +0.75

56.65 0108

4.84

11.460 46.5 57.10

-11 -78

449 57.88

5425.000*

14.000*
33.000*
-54.000*
-47.000*
-3.095*
3.005*
3.800*

34< 58.9 57.544
-3.400

3.289
-3.732

+17 15.907

-3.288
-3.676

-17 -15.305

3.192
3.087

46

11.035

AD5930

γ Boo 14 30.1 +38 32 dA5n -35.5 b

-35.1 (1)

HR5435 127762 3.03 +0.69 +0.12 SM -115 +146 GL

W8477 69607 A7 IIIV -107 +147 N

8477 65 -115 +149 P

-0100 +147 61 N30 -114 +147

-0099±1.0 +150±0.8 PL 7N30

14±5

-609 -793 623 783 -114 +147 -35.5 092 -22.1 [illegible]

-071 056 092 -073 009 [illegible] -27.5 22.0 17.0

+22.4 +47.5 +1.6 023

+51.2 +1.7 -19.7

036

+22.3 40.4 -3.9 03