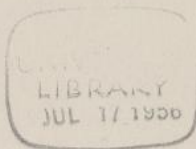


KG
11365
743

L. A. Bingham

1CG11365743

KG 11365.743



L. A. Bingham.

April 20, 1922.

Meaning for Magnitudes of

Comparison Stars for R.U. Cephei B.D. 84° 19'

Sc. AC. 87⁹/₁₆ 0

Polar Seq.	A C 12 2 58		Revised Mag. N.P. Seq.	Diff.
	Sc 1	Sc 2 corr. -0.3		
1	> B		4.40 ~~2.55~~	
2	1.2		5.24	4.04
3	2.1		5.78	3.68
4	2.2		5.91	3.71
5	2.7		6.46	3.76
6	3.5		7.12	3.62
7	3.9		7.38	3.48
8	5.0		8.32	3.32
9	5.2 mistake	6.0 6.3	8.93	
10	6.2	6.3 6.4	9.11	2.81
11	6.3	6.4 6.5	9.77	3.37
12		7.2 7.5	10.08	2.88
13		7.4 7.7	10.52	3.12
14		8.0 8.3	10.92	2.92
15		8.3 8.6	11.27	2.97
16		9.4 9.7	11.58	2.18
17		9.4 9.7	11.88	2.48

R U Ceph. identified on plate I 24232
also var. seq. on this plate

	sc 1	sc 2	Curves	mag
Var. Seq. a	4.1		3.44	7.54
b	6.8	6.7 6.6 6.9	3.14	9.94
c	2.1	^{wrong} rejected measure	3.83	5.93
d	6.1		3.20	9.30
e		9.1 10.2	2.50	11.60
f	6.8	6.8 7.1	3.14	9.94
g	5.4		3.27	8.67
h		6.9 7.2	3.12	10.02
i		8.5 8.8	2.81	11.31
j	6.3	6.2 6.1 6.4	3.18	9.38
k		7.1 7.4	3.09	10.19
l		9.5 9.8		
m		9.9 10.2		

Measure for Magnitudes

April 27, 1922

Companion Stars for R. U. Cephei

Sc AC 87⁹ 60

	AC 18596	
	Sc. 1	Sc. 2
1	1.2	
2	2.2	
3	~~2.2~~ 2.8	
4	~~2.6~~ 3.2	
5	3.5	
6	4.1	
7	4.5	
8	5.2	6.4
	mistake	6.7
9	6.3	6.2 6.1
		6.4
10	6.3	6.45 6.6
		6.9 6.3
11	~~7.2~~	6.9 7.2
12	~~7.1~~	6.8 7.1
13	~~8.1~~	7.8 8.1
14		8.0 8.3
15		8.5 8.8
16		9.1 9.4
17		9.8 10.1

Diff 3.20

3.04

2.98

2.71

2.96

3.02

2.88

2.73

2.66

2.56

2.87

3.28

2.72

2.92

2.77

2.48

2.08

	lc.1	lc.2	Curve	mag.
a	4.2		2.89	7.09
b	6.8		2.86	9.66
c	8.9	6.5	2.59	11.49
d	6.6	6.7 ~~6.8~~	2.81	9.56
e		F		
f	6.9	6.9 7.2	2.87	9.77
g	5.4	7.1	2.87	8.27
h		7.4	2.87	~~10.27~~ 9.97
i		9.3		
j		9.6	2.38	11.68
k	6.8	6.7 6.6	2.86	9.46
l		7.4 7.7	2.87	10.27
m		10.0 10.3		
		9.6 9.9	2.28	11.88

Measure for Magnitudes

May 2, 1922.

Comparison Stars for R. U. Cepheus

Sc. A.C. 87960	A.C. 18779	Diff.
1 ^{6.1} 1.3	Sc 2	3.10
2 2.1		3.14
3 2.4 mistake		3.38
4 3.1		2.81
5 3.8		2.66
6 4.4		2.72
7 4.7		2.68
8 5.5		2.82
9 ^{6.3} 6.2	^{6.4} 6.7	2.63
10 ^{6.3} 6.2	^{6.4} 6.7	2.81
11 ^{6.9} 6.8	^{7.0} 7.3	2.87
12	^{7.5} 7.8	2.58
13 ~~7.8~~	^{7.8} 8.1	2.72
14	^{8.1} 8.4	2.82
15	^{8.3} 8.6	2.97
16 ~~8~~	^{9.1} 9.4	2.48
17	^{9.9} 10.2	1.98

	dc. 1	dc. 2	Curve	mag.
a	4.3	6.9	2.70	7.00
b		7.2	2.77	9.67
		8.5		
c		8.8	2.64	11.14
d	6.4		2.76	9.16
e		F 6.8	~~2.77~~	
f		7.1	2.77	9.57
g	5.4	7.2	2.69	8.09
h		7.5	2.76	9.96
		9.8		
i		10.1	2.14	11.94
j		6.5		
k	6.8	6.8	2.77	9.27
		7.5		
l		7.8	2.75	10.25
		9.9		
		10.2	2.05	11.95
m		10.3		
		10.6		

Measures for Magnitudes of Companion Stars
for R U Cephei
May 4, 1922.

Lc. 8796 0		G.C. 18464		diff	
		Lc. 1	Lc. 2		
1	B				
2	1.3			3.94	
3	2.2			3.58	
4	2.4			3.51	
5	2.8			3.66	
6	3.6			3.52	
7	3.8			3.58	
8	4.9			3.42	
9	5.3 5.3			3.63	
10	5.4 5.7			3.41	
11	5.8 6.3	6.35	6.4	3.42	
12	6.4	6.45	6.5	3.63	
13	7 F		6.8	3.72	
14			7.1	3.67	
15			7.2	3.48	
16			7.5	3.68	
17			7.6		
			7.9		
			8.1		
			8.4		
			8.2		
			8.5		

				4 AC 18464	1	2	B.	a.c.	Mean
	de.1	de.2	Curve	Mag.	u.c. 12258	G.C. 18596	G.C. 18779		
a	3.2	6.0	5.9	3.52	6.72	7.54	7.09	7.00	
b	6.1	7.8	6.2	3.58	9.58	9.94	9.66	9.67	
c		8.1		3.64	11.44	~~5.93~~	11.49	11.14	
d	5.8	10.0	B	3.56	9.36	9.30	9.56	9.16	
e		10.3				11.60			
f	6.0	5.95	5.9	3.58	9.53	9.94	9.77	9.57	
g	4.7	1.7	6.6	3.49	8.19	8.67	8.27	8.09	
h	6.8	6.9		3.71	10.41	10.02	9.97	9.96	
i		7.8		3.64	11.44	11.31	11.68	11.94	
j	5.9	5.85	5.8	3.56	9.41	9.38	9.46	9.27	
k	6.8	6.75	6.7	3.66	10.41	10.19	10.27	10.25	
l		8.6						11.95	
m		8.7							
		9.0				11.88			

Measures for Magnitudes of Comparison of R U Cephei

Images a little hazy

May 11, 1922.

Plate A.C. 12258 remeasured

~~Sc. 87960~~		Changed to Scale N		Diff.
Polaris		~~Sc. A~~	~~Sc. B~~ Sc. C	
1	~~1.0~~	~~1.0~~		3.40
2	~~1.4~~	~~1.9~~		3.34
3	~~2.2~~	~~2.5~~		3.28
4	~~2.4~~	~~2.8~~		3.11
5	~~3.1~~	~~3.1~~		3.36
6	~~4.0~~	~~3.9~~		3.22
7	~~4.0~~			3.38
8	~~5.8~~	5.8		2.52
9	~~6.2~~	6.2		2.73
10	~~6.7~~	6.7		2.41
11		7.3		2.47
12		7.9		2.18
13		8.2		2.32
14		8.8		2.12
15		8.9		2.37
16		9.3		2.28
17		9.6		2.28

				AC 12 258	Q.C. 18 596	Q.C. 18 779	Q.C. 18 464	Mean
A = a	sc. A 3.9	sc. C	Curve	mag. $+1.14$	$+1.0$	$+0.1$	-0.27	6.99
○ b	~~5.7~~	~~6.957~~	2.51	7.13 -0.17	7.09 $+0.08$	7.00 $+0.09$	6.72 $+0.00$	9.58
F = c		8.3	2.24	(-0.61 10.54 -0.07)	$+0.34$ 11.49 $+0.22$	-0.01 11.14 -0.18	$+0.29$ 11.44 $+0.02$	~~10.85~~ 11.15
○ d		6.7	2.57	9.27	9.56	9.16	9.36	9.34
e		9.5	2.27	11.77 -0.06	$+0.17$	-0.03	-0.07	
D = f		7.1	2.44	9.54 $+0.25$	9.77 $+0.01$	9.57 -0.17	9.53 -0.07	9.60
B = g		5.6	2.91	8.51 -0.02	8.27 -0.14	8.09 -0.15	8.19 $+0.30$	8.26
○ h		7.8	2.29	10.09 -0.18	9.97 $+0.05$	9.96 $+0.31$	10.41 -0.19	10.11
G = i		9.2	2.25	11.45 -0.09	11.68 $+0.11$	11.94 -0.08	11.44 $+0.06$	11.63
C = j		6.7	~~2.22~~ 2.56	9.26 -0.10	9.46 -0.01	9.27 -0.03	9.41 $+0.13$	9.35
E = k		7.9	2.28	10.18	10.27	10.25	10.41	10.28
l		9.3	2.26	11.56		11.95		
m		9.1	2.24	11.34	11.88			
			av. resid	-0.091	+0.093	-0.024	+0.020	

average all residual (abs. value) .135

See Page 17

Measure for α U. Cephei

May 13, 1922.

Plate	Estimated Mag.	
A.C. 11424	10.0	
A.C. 10927	10.4	
A.C. 9172	10.8	
A.C. 10697	11.0	foggy plate
A.C. 7144	10.8	
A.C. 6286	10.0	faint plate
A.C. 7020	10.5	
A.C. 5081	11.0	

May 16, 1922.

A.C. 18670	10.6	
A.C. 18507	10.8	
A.C. 18505	11.0	
A.C. 18704	10.8	
A.C. 18555	11.1	
A.C. 13685	11.0	
A.C. 14482	11.1	
A.C. 16487	10.9	
A.C. 16797	10.9	
A.C. 13514	11.1	
A.C. 21617	—	too faint plate
A.C. 21748	11.1	
A.C. 21778	10.9	
A.C. 16944	10.7	
A.C. 210	11.1	
A.C. 15330	10.6	
A.C. 21109	10.9	plate too
A.C. 13217		plate too faint

Plate	Est. Mag.	
A.C. 202	10.5	images very long
A.C. 14503	11.1	
A.C. 21009	11.0	
A.C. 12970	10.5	
A.C. 198		mult. exposure
A.C. 14305	11.1	
A.C. 20775	10.7	

Left off and put in more comparison stars

Measures for additional comparison stars for
R. U. Cephei

March I 10677
AC 18464

May 18, 1922.

Plate A.C. 18779 Scale O

	Sc. 1	Sc. 2
D	6.9	6.9 7.2
E		7.4 7.7
G		9.9 10.2

Diff.

2.7

2.9

1.7

Curve

Mag.

Plate A.C. 18779

F ₁	8.1	8.4 8.2
F ₂	8.4	8.7
F ₃	8.8	9.1

2.56

10.66

2.60

11.00

2.47

11.27

Plate A.C. 7144

Scale O changed to Scale N
images hazy

D ~~8.2 8.1~~

E ~~8.4 8.3~~

G ~~10.7~~

Too hazy — plate discarded

F₁

F₂

Q.C.	18596	Scale 0		Previously determ.	Difference	Curve	Mag.
		Sc. 1	Sc. 2	Mag.			
D	6.9	6.9	7.2	9.6	2.7		
E	X	7.6	7.9	10.3	2.7		
G		9.5	9.8	11.6	2.1		
F ₁		8.1	8.4			2.65	10.75
F ₂		8.4	8.7			2.58	10.98
F ₃		8.9	9.2			2.41	11.31

Q.C. 18464		Scale 0		Diff.			
	Sc. 1	Sc. 2					
D	6.0	6.0 6.3		3.6			
E		6.6 6.9		3.7			
G		7.9 8.2		3.7			
F ₁		6.9 7.2			3.72		10.62
F ₃		7.5 7.8			3.72		11.22

Q.C. 14305		Sc. 1	Sc. 3	Sc. 2	Diff.			
D	6.8		7.3	7.3	2.3			
E			8.1	8.4	2.2			
G				F				
F ₁			8.6	8.9				
F ₃			9.3					

(not used)

Measures for additional comparison stars
for R. U Cephei
May 27, 1922.

Plate	A.C. 21009	Scale	0	Diff.	Curve	Mag.
D	^{de.1} 6.2 ^{de.3} 6.3 ^{de.2} 6.6			3.3		
E	7.0 7.3			3.3		
G	9.3			2.3		
F ₁	7.7				3.21	10.91
F ₃	8.6				2.87	11.47

Summary

Plate	AC 21009	AC 18464	AC 18596	AC 18779	Average
	^{+0.17}	^{-0.12}	^{+0.01}	^{-0.08}	
F ₁	10.91	10.62	10.75	10.66	10.74
	^{+0.13}	^{-0.10}	^{-0.01}	^{-0.05}	
F ₃	11.47	11.22	11.31	11.27	11.32

Final List of Comparison Stars and magnitudes adopted

A	7.0
B	8.3
C	9.3
D	9.6
E	10.3
F ₁	10.7
F ₃	11.3
G	11.6

The extinction correction to the above magnitudes
as determined from Müller's "Photometrie der Sterne"

Correction for center of N. Polar sequence - 0.11^m
 " " " " RR Cephei Comp. " - 0.05

✓ Hence reduction of above magnitudes is $+0.06$ visual
 or $+0.12$ pg.

This was applied to the magnitudes of the adopted
 range, changing it from 10.4 - 11.4
 to 10.5 - 11.5

Measures of R. U Cephei for magnitude

June 5, 1922

Plate	Jul. Day	Estim. mag.	Second meas. from p. 24 at seq.	Mean of two mag. measures
A.C. 18464	21248.580	10.8	11.1	10.95
A.C. 14305	(24)20010.547	11.3	11.2	11.25
A.C. 18779	21333.628	10.4	10.5	10.45
A.C. ~~18596~~ 7144	21282.803	11.2	11.1	11.15
A.C. 21009	2417215.697	10.6	10.8	10.7
A.C. 21009	21985.702	10.8	11.0	10.9
A.C. 14503	2420076.501	11.3	11.5	11.4
A.C. 202	2414700.823	10.9	11.1	11.0
A.C. 13217	2419593.044	10.8	too hazy	no lower comp. star faint plate
A.C. 21109	~~22000.560~~ 20333.667	10.5	10.5	10.5
A.C. 15330	20,333.667	10.8	11.0	10.9
A.C. 210	14,706.604	10.9	10.8	10.85
A.C. 16944	20808.831	10.8	11.0	10.9
A.C. 21778	22206.793	11.2	11.1 11.1	11.1
A.C. 21748	22197.667	11.2	11.0 11.2	11.1
A.C. 10927	18596.565	10.5	10.4	10.45
A.C. 16487	20641.730	10.8	10.8	10.8
A.C. 14482	20072.575	11.4	11.2	11.3
A.C. 21617	& ———	———	———	Too faint
A.C. 11424	18734.680	10.6	10.6	10.6
A.C. 13685	19795.614	10.8	11.1	10.95 a bit hazy

Measures of R. U. Cephei for Magnitude

June 8, 1922

Plate	Jul. Day	second meas. p. 24 at reg. Estim. Mag.	Mag.	Mean of two Mag. measures
- A.C. 18555	~~21272.802~~ ~~19734.475~~	11.2	11.1	11.15
- A.C. 13514	19734.475	11.2	11.2	11.2
- A.C. 18704	21312.—	10.8	11.1	10.95 10.75 R.U. hazy
- P.C. 16797	20771.625	10.9	10.6	10.95
- A.C. 18505	21262.553	10.9	11.0	10.95
- A.C. ~~18~~ 5081	16682.618	11.2	11.0	11.1
- A.C. 18507	21262.599	11.0	11.0	11.0
- A.C. 7020	17170.506	10.6	10.5	10.55
- A.C. 18670	21304.667	10.9	10.8	10.85
o A.C. 6286	16952.743	—	10.6 too faint	plate —
o A.C. 10697	18526.801	—	11.4 too faint	—
- A.C. 9172	17955.640	10.9	11.0	10.95
- A.C. 20775	21929.752	11.2	10.8	11.0 ~~10.8~~ 11.0 third measure p. 27
- A.C. 12970	19462.779	10.9	10.8	10.85
- A.C. 3938	16372.785	10.9	10.9	10.9
- A.C. 18078	21165.657	10.7	10.6	10.65
- A.C. 22327	22354.786	10.4	10.4	10.4
- A.C. 18357	21226.823	10.3	10.3	10.3
o A.C. 23030	—	plate scratched		—
- A.C. 3981	16382.691	10.6	10.7	10.65
- A.C. 18227	21190.791	10.9	11.0	10.95
- A.C. 22418	22374.644	10.6	10.6	10.6
- A.C. 4916	16621.—	10.6	10.4	10.5
o A.C. 11766	18861.679	plate too faint		—
- A.C. 23883	22897.569	10.7	10.8	10.75
- A.C. 18836	21364.703	10.8	10.8	10.8

Measures for Mag. R-U Cephei

June 8, 1922 (continued)

Plate	Jul. Day	Second meas. p. 24 to seg	Estim. Mag	Mean of two mag. measures
- A.C. 23805	22857.637	10.6	10.8 0	10.8
- A.C. 4709	16,545.	10.9	10.9 0	10.9
- A.C. 19307	21,522.610	11.4	11.2 2	11.3
- A.C. 23140	22675.779	10.5	10.6	10.55
- A.C. 4004	16,386.786	10.4	10.6	10.5
- A.C. 12522	19,270.821	10.8	10.8	10.8
- A.C. 167	14,674.	10.4	10.5	10.45
- A.C. 13498	19726.587	10.8	10.8	10.8 R.U. hazy?
- A.C. 20674	21908.763	10.6	10.7	10.65
- A.C. 19966	21676.620	10.6	10.4	10.5
o A.C. 12367	19170.584	—	9.5 too faint	very faint plate
- A.C. 19675	21607.823	11.2	10.9	11.05
- A.C. 5008	16655.645	10.7	10.7	10.7
- A.C. 13646	19782.470	10.6	10.8	10.7
- A.C. 24323	22990.798	10.5	10.5	10.5
A.C. 3626				

June 12, 1922

Plate	Jul. Day	second meas. p. 24 +	Estim. mag.	mean of two mag. meas.
- A.C. 3626	(24) 16248.603	10.7	10.6	10.65
- A.C. 17515	20966.750	11.5	11.4	11.45
- A.C. 22225	22334.672	10.4	10.4	10.4
- A.C. 2914	16043.846	11.0	10.7	10.85
- A.C. 17460	20953.534	11.1	11.3	11.2
- A.C. 22107	22307.825	11.1	10.9	11.0
- A.C. 2519	15873.678	10.6	10.5	10.55
- A.C. 16576	20689.721	10.6	10.7	10.65
- A.C. 22062	22296.729	11.2	11.2	11.2
- A.C. 1889	15679.474	10.9	10.6	10.75
- A.C. 1242	15427.573	10.4	10.5	10.45
- A.C. 21934	22254.541	10.5	10.6	10.55
- A.C. 1764	15649.813	10.7	10.7	10.7
- A.C. 16390	20600.674	10.6	10.6	10.6
- A.C. 21889	22240.629	10.6	10.5	10.55
o A		#2		two sets images too faint for comp
- A.C. 1081	15376.537	10.7	10.6	10.65
- A.C. 16305	20577.836	10.7	10.9	10.8
o A.C. 21483	22109.612	faint		plate too faint
o A.C. 889	15191	faint	10.5	
- A.C. 16167	20556.753	10.6	10.5	10.55
- A.C. 21457	22098.728	10.6	10.6	10.6
- A.C. 545	14979	10.7	10.9	10.8
- A.C. 15497	20393.573	11.2	11.1	11.15
- A.C. 21310	22044.755	10.8	10.9	10.85

Measures for Mag. RU Cephei

June 12, 1922

Multiple Image Plates	Plate	Jul. Day	Second meas. in ink	Estim. Mag.	Mean
	A.C. 10155	—			Too faint
	A.C. 824	—			too faint
	A.C. 844	—			too faint
	A.C. 966	15 251.702 ~~14884.702~~	10.6	10.4 throughout	10.5
	A.C. 198?	—	10.9	11.0 throughout	
June 14, 1922	A.C. 198	14 700.519	10.7	11.0 throughout	10.85
	A.C. 10155	—			too faint
	A.C. 18348	21 224.658	10.4	10.4 throughout	10.4 E images; plate scratched at small image too faint
	A.C. 24650	23 109.197	10.6	—	positive
	A.C. 24657	—			images
	A.C. 24613	23 084.703	#1 10.6	—	overlap
		23 084.844	#2 10.7	—	
	A.C. 24651	23 109.814	#1 10.5	10.5	10.5
		.856	#2 10.6	10.5	
	A.C. 24612	23 082.513	#1 11.1	10.9	
		.543	#2 10.5	10.3	
	A.C. 24652	23 110.499	#1 10.6	10.5	
		.541	#2 10.7	10.6	

Two images
RU hazy #2
10.6

Meas. for mag. PU Cephei

June 15, 1922

Plate	Jul. Day ^{middle}	Estim. Mag. ^{Second Meas. in ink}	Mean of two meas.
A.C. 24616	23085.733	10.6	10.7
A.		10.6 throughout all 9 sets	

A.C. 24668	23119.839	10.7 ~~#2~~ ~~10.6~~	10.4 all ~~#2~~ sets 10.5
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A.C. 24594	23077.885	11.0	11.0 all 3 sets 11.0
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Second meas. of previous plates
for mag RU Cephei June 16, 1922

Plate	Estim Mag	
A.C. 13514	11.2	.
A.C. 23140	10.5	.
A.C. 18704	10.8	.
A.C. 4004	10.4	.
A.C. 13685	11.1	.
A.C. 23805	10.8	. RU image ^{peculiar} along.
A.C. 18555	11.2	.
A.C. 4709	10.9	.
A.C. 19307	11.4	.
A.C. 18779	10.5	.
A.C. 9172	10.9	.
A.C. 14305	11.2	.
A.C. 7144	10.8	. RU ^{pecul.} along
A.C. 14503	11.5	.
A.C. 18596	11.1	.
A.C. 21109	10.5	.
A.C. 10927	10.4	.
A.C. 20775	11.2	.
A.C. 16487	10.8	.
A.C. 12970	10.9	.
A.C. 21778	11.1	.
A.C. 16944	11.0	.
A.C. 210	10.8	.
A.C. 15330	11.0	.
A.C. 3938	10.9	.
A.C. 18078	10.6	.
A.C. 13217		. too faint & messy

June 16, 1922

Plate	Estim. Mag.	
A.C. 22327	10.4	.
A.C. 202	11.1	.
A.C. 18357	10.3	.
A.C. 21009	11.0	.
A.C. 3981	10.7	.
A.C. 21748	11.2	.
A.C. 18227	11.0	.
A.C. 22418	10.6	.
A.C. 14482	11.2	.
A.C. 4916	10.4	.
A.C. 21617	—	. plate too faint
A.C. 11766	—	. plate too faint
A.C. 23883	10.8	.
A.C. 11424	10.6	.
A.C. 18836	10.8	.
A.C. 16797	10.9	. RU hazy
A.C. 12522	10.8	.
A.C. 19966	10.6	.
A.C. 13498	10.8	. RU hazy
A.C. 167	10.4	.
A.C. 18505	10.9	. plate faint
A.C. 20674	10.6	.
A.C. 18507	11.0	.
A.C. 5081	11.2	.
A.C. 12367	—	. plate too faint
A.C. 19675	11.2	.
A.C. 7020	10.6	.
A.C. 5008	10.7	.

June 16, 1922

Plate	Estim. Mag.	
A.C. 18670	10.9	.
A.C. 13646	10.6	.
A.C. 6286	—	. plate too faint
A.C. 24323	10.5	.
A.C. 3626	10.7	.
A.C. 22225	10.4	.
A.C. 10697	—	. plate too faint
A.C. 17515	11.5	.
A.C. 2519	10.6	.
A.C. 21934	10.5	.
A.C. 2914	11.0	.
A.C. 21889	10.6	.
A.C. 17460	11.1	.
A.C. 1081	10.7	.
A.C. 16305	10.7	.
A.C. 22107	11.1	.
A.C. 16576	10.6	.
A.C. 21483	—	. plate too faint
QC 22062	11.2	.
QC 1889	10.9	.
QC 889	—	. plate too faint
QC 161 ¹⁶⁷ ~~16~~	10.6	.
QC 1242	10.4	⊙
QC 15497	11.2	.
QC 21457	10.6	.
QC 1764	10.7	.
QC 545	10.7	.
QC 16390	10.6	.

June 16, 1927

Plate

Q.C. 21310

Estim Mag

10.8 ✓

11.1

June 19, 1922 Q.C. 18464

Q.C. 20775 remeasured

~~10.8~~ 11.0

wrong plate first

Second Measures of Mult. Image plates

July 11, 1922.

Plate	Estim. Mag.	
A.C. 24668	#1 10.4	
	#2 10.4	wider space #2-#3
	#3 10.5	
A.C. 24594	#1 ~~10.8~~ 10.9	
	#2 11.0	
	#3 11.1	
A.C. 24616	#1 ~~10.6~~ 10.8	
	#2 10.8	
	#3 same all mine	
A.C. 24652	#1 ~~10.2~~ 10.6	
	#2 ~~10.2~~ 10.5	
A.C. 24612	#1 10.9	
	#2 10.3	Two images combined P. U. elong.
A.C. 24651	#1 10.5	
	#2 10.5	
A.C. 24613		images overlap
A.C. 18348	all 10.4	E series scratched
A.C. 966	10.4 throughout	
A.C. 198	11.0 throughout	

Additional measures for Magnitude of R U Cephei

July 12, 1922

Plates	Jul. Day	Estim. Mag.	Second Meas. in ink	Mean of 2 Meas.
A.C. 19907	21661.717 ~~21482.532~~	10.6	10.6	10.6
A.C. 20094	21718.716	10.5	10.6	10.55
A.C. 20260	21787.624	10.9	10.8	10.85
A.C. 23029	22632.523	10.7	10.8	10.75
A.C. 20364	21820.818	10.9	11.0	10.95
A.C. 23027	22630.620	10.8	10.8	10.8
A.C. 20465	21844.672	too faint		
A.C. 23026	22630.541	10.9	10.8	10.85
A.C. 19794	21633.741	11.2	11.5	11.35
A.C. 21645	22169.746	10.6	10.7	10.65
A.C. ~~19543~~ 19453	21545.762	10.6	10.6	10.6
A.C. 22988	22613.696	10.8	10.9	10.85
A.C. 21551	22132.692	10.5	10.7	10.6
A.C. 19412	21540.558	10.7	10.7	10.7
A.C. 19314	21522.901	11.5	11.4	11.45
A.C. 19106	21482.722	10.8	10.7	10.75
A.C. 22535	22408.667	11.5	11.4	11.45

July 13, 1922.

Second Measures of plates
for Mag. RU Cephei

July 12, 1922

Plate	Estim. Mag.
QC 19794	11.5
QC 21645	10.7
QC 23026	10.8
QC 19453	10.6
QC 23027	10.8
QC 22988	10.9
QC 20364	11.0
QC 21551	10.7
QC 23029	10.8
QC 19412	10.7
QC 20260	10.8
QC 19314	11.4
QC 20094	10.6
QC 19106	10.7
QC 19907	10.6
QC 22535	11.4

✓

Additional Measures for Mag. PU Cephei July 13, 1922

Date of Plate	Plate	Estim Mag.
May 12, 1907	AC 8493	10.3
May 24, 1907	AC 8520	10.5
Aug 29, 1907	AC 8734	10.4

to test reported unusual brighteners on May 17 ^{Sept 11} ~~July~~ 1907
 Impossible to find plates on these dates



