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4. KG 11365.646

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Jan 19 1921

6

L.C 005 Continued from previous book

Ceres 1

	PA - B.				
12.24.20	102.2				
	177.4	75.2			
	286.2	68.4			
	3546	143.6	-0.70		
	106.2			-0.78	
	175.8	69.6		~~-0.88~~	
	286.4	66.4			
	352.8	136.0	-0.86		
	PA = A			mean =	-1.17
	200.8				
	253.3	52.5			
	22.0	52.4			
	74.4	104.9	-1.54		
	206.4				
	255.3	48.9		-1.56	
	22.4	54.0			
12.28.50	76.4	102.9	-1.59		

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2

Jan 19, 1921

7

	Ceres 1			
	PA = A			
12 42. 10	204. 8			
	255. 2	50. 4		
	21. 8	53. 4		
	75. 2	103. 8	-1. 56	
	202. 8			
	255. 0	52. 2	-1. 52	
	21. 4	55. 4		
	76. 8	107. 6	-1. 47	
	PA = B		mean = -	1. 12
	281. 2			
	357. 4	76. 2		
	104. 6	70. 2		
	174. 8	146. 4	-0. 65	
	283. 7			
	352. 8	69. 1	-0. 73	
	105. 8	68. 9		
12, 46. 30	174. 7	138. 0	-0. 81	

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8

Ceres 1

PA = B

12.55.10	284.9		
	353.4	68.5	
	107.8	68.0	
	175.8	136.5	-0.84
	280.7		
	351.4	70.7	-0.78
	106.2	72.1	
	178.3	142.8	-0.72

PA = A

Mean = -1.13

	20.8		
	77.0	56.2	
	202.7	50.7	
	253.4	106.9	-1.49
	21.2		-1.48
	75.2	54.0	
	199.8	54.2	
12.59.30	254.0	108.2	-1.46

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9

Ceres 1

PA = A

13. 6. 10	20.8		
	75.6	54.8	
	201.7	50.1	
	251.8	104.9	-1.54
	20.8		
	75.7	54.9	-1.51
	202.4	52.4	
	254.8	107.3	-1.48

PA = B

mean = -1.14

	103.4		
	173.8	70.4	
	286.0	68.0	
	354.0	138.4	-0.81
	102.2		
	172.6	70.4	-0.78
	283.4	71.4	
13. 10. 40	354.8	141.8	-0.74

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10

Ceres 1

	PA = B		
13.25.40	105.5		
	175.9	70.4	
	286.4	69.0	
	355.4	139.4	-0.79
	106.4		
	175.2	68.8	-0.81
	285.8	68.2	
	354.0	137.0	-0.83
	PA = A		mean = -1.15
	202.2		
	254.8	52.6	
	20.2	56.0	
	76.2	108.6	-1.45
	203.4		
	254.0	50.6	-1.49
	21.1	54.7	
13.30.20	75.8	105.3	-1.53

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11

Ceres I

	PA = A			
13.43.30	200.8			
	254.2	53.4		
	18.8	55.0		
	73.8	108.4	-1.45	
	201.7			
	252.8	51.1	-1.58	
	24.7	46.7		
	71.4	97.8	-1.71	
	PA = B		mean =	-1.14
	281.4			
	353.8	72.4		
	102.8	71.2		
	174.0	143.6	-0.70	
	283.2			
	356.6	73.4	-0.70	
	102.4	69.6		
13.48.20	172.0	143.0	-0.71	

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Jan. 19 1921

12.

Ceres 1

PA = B

13.59.40	286.2		
	353.8	67.6	
	105.2	68.8	
	174.0	136.4	-0.85
	287.8		
	356.8	69.0	-0.80
	104.2	72.4	
	176.6	141.4	-0.75

PA = A

Mean = -1.20

	24.4		
	75.2	50.8	
	204.0	50.9	
	254.9	101.7	1.61
	23.3		
	74.2	~~56.6~~	
	200.0	50.9	-1.60
14.4.30	252.0	52.0	
		102.9	-1.59

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Jan 19, 1921

13.

Ceres 1

	PA = A			
14.14.20	22.2			
	75.3	53.1		
	203.3	48.9		
	252.2	102.0	-1.61	
	20.2			-1.60
	74.0	53.8		
	206.2	48.4		
	254.6	102.2	-1.60	
	PA = B			Mean = -1.30
	109.0			
	172.8	63.8		
	287.8	63.5		
	351.3	127.3	-1.04	
	107.4			
	173.2	65.8		-1.00
	287.8	64.6		
14.19.0	352.4	130.4	-0.97	

Radiation

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14

Ceres'

PA = B

14.27.30	107.4		
	179.2	71.8	
	284.2	70.8	
	355.0	142.6	-0.72
	105.2		
	174.8	69.6	-0.79
	287.4	66.0	
	353.4	135.6	-0.86

PA = A

mean = -1.223

	204.6		
	254.0	49.4	
	24.8	48.8	
	73.6	98.2	-1.70
	202.7		
	253.8	51.1	-1.67
	24.8	49.6	
14.32.10	74.4	100.7	-1.64

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Ceres 1

	PA = A		
14.43.40	204.6	Haze/in region.	
	253.4	48.8	
	21.8	51.4	
	73.2	100.2	-1.65
	208.4		
	257.4	49.0	-1.63
	24.0	53.0	
	77.0	102.0	-1.61
	PA = B		mean = -1.26
	286.6		
	355.5	68.9	
	103.4	65.5	
	168.9	134.4	-0.89
	283.8		-0.88
	355.5	71.7	
	108.0	64.0	
14.48.20	172.0	135.7	-0.86

Too much cloud + haze to continue with advantage.

Shr 3.2

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Mon Jan 24 - 1921

2 2 2 1

LCdb 12" Polar 1

11 28 SS Aurig 06 05 +47 < 12.0

11 30 SU Tauri 05 43 19 est 9.0

11 34 U Gem 07 19 22 est <11.5 - Near Moon Very hazy

11 32 SS Cyg 21 38 43 est 11.1 rising!?

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Jan 24, 1921

1

Ceres (1)

PA = A

12. 15. 0	318.2	Ceres dis.	Phot R
	355.5	37.3	Comp Stn = +28.910 (9.5)
	136.6	40.7	
	177.3	78.0	− 2.25
	318.4		−2.34
	351.4	33.0	
	137.8	39.2	
	177.0	72.2	−2.43

PA = B

mean = −2.37

	228.8		
	263.2	34.4	
	46.8	36.9	
	83.7	71.3	−2.46
	228.8		
	265.4	36.6	−2.40
	48.2	38.2	
12. 20. 30	86.4	74.8	−2.35

27 64 .512

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Jan. 24, 1921

2.

Ceres (1)

	P/A=B		
12.21.50	228.1		
	267.2	39.1	
	50.2	33.4	
	83.6	72.5	-2.43
	228.4		-2.30
	267.4	39.0	
	44.8	41.6	
	86.4	80.6	-2.18

	P/A=A		
	136.9		
	179.4	40.5	
	320.0	34.4	
	354.4	74.9	-2.35
	136.4		
	173.8	37.4	-2.40
	317.8	34.0	
12.26.15	351.8	71.4	-2.46

Mean = -2.35

-.517

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Jan, 28, 1921

3.

Ceres (1)

	PA = A			
12. 30. 0	133.3			
	178.2	44.9		
	320.2	33.6		
	353.8	78.5	−2.24	
	136.6			
	175.6	39.0	−2.38	
	321.7	31.0		
	352.7	70.0	−2.51	
				mean = −2,45
	PA = B			
	50.8			
	84.0	33.2		
	230.8	36.2		
	267.0	69.4	−2.53	
	50,0			
	83,8	33.8	−2.52	
	230.6	36.4		
12. 34. 0	267.0	70.2	−2.50	

.522

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Jan 28, 1921

A.

Ceres (1)

	PA = B		
12.46.20	47.1		
	84.1	37.0	
	228.7	36.8	
	265.5	73.8	−2.38
	49.4		
	87.2	37.8	−2.38
	227.7	36.3	
	264.0	74.1	−2.37
	PA = A		
	319.8		
	354.2	34.4	
	134.8	41.0	
	175.8	75.4	−2.33
	318.8		
	354.8	36.0	−2.41
	139.8	34.6	
12.40.45	174.4	70.6	−2.49

mean = −2.40

12 48 32

.532 At 4:8 Sid. Time HA = 1.36 E + Dec 27.5

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Jan 24, 1921

5

Ceres (1)

	PA – A		
14.29.20	317.3		
	357.1	39.8	
	135.3	39.5	
	174.8	79.3	-2.22
	319.2		
	356.2	37.0	-2.28
	135.8	38.4	
	174.2	75.4	-2.33
	PA – B		mean = -2.36
	230.6		
	266.6	36.0	
	50.4	34.8	
	85.2	70.8	-2.48
	228.3		-2.45
	266.6	38.3	
	48.3	34.5	
14.34.0	82.8	72.8	-2.42

27 | 14 .606

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Jan 24, 1921

6.

Ceres (1)

	PA = B		
14.36.20	227.7		
	268.0	40.3	
	46.3	36.1	
	82.4	76.4	-2.30
	231.0		mean -2.50
	264.4	33.4	
	49.4	31.9	
	81.3	65.3	-2.67
	PA = A		mean = -2.46
	140.4		
	174.8	34.4	
	319.2	32.2	
	351.4	66.6	-2.62
	134.8		
	177.4	42.6	-2.43
	318.8	36.0	
14.41.0	354.8	78.6	-2.24
6ro	PA = B		
	51.0		
	85.8	34.8	
	232.2	32.0	
14.42.10	264.2	66.8	-2.61

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7

Ceres (1)

	PA = B		
14.44.10	46.2		
	83.3	37.1	
	230.8	32.8	
	263.6	69.9	-2.51
	50.2		
	84.7	34.5	-2.51
	229.8	35.4	
	265.2	69.9	-2.51
	PA = A		mean = -2.46
	319.8		
	356.1	36.3	
	138.4	38.2	
	176.6	74.5	-2.36
	~~324.0~~		
	~~353.8~~	~~29.8~~	
	320.4		-2.40
	354.8	34.4	
	137.2	38.1	
14.49.40	175.3	72.5	-2.43

616

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Jan 24, 1921

Ceres (1)

PA = A

14. 5 3.30	321.7		
	352.8	31.1	
	139.8	36.8	
	176.6	67.9	-2.58
	322.6		-2.66
	350.0	27.4	
	140.2	36.0	
	176.2	63.4	-2.73

PA = B

mean = -2.65

	229.1		
	263.1	34.0	
	51.0	30.0	
	81.0	64.0	-2.71
	230.4		
	263.3	32.9	-2.64
	51.2	35.4	
14.58.0	86.6	68.3	-2.56

14 56

622

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Jan 24, 1921 9

Ceres (1)

PA = B

14.59.0	228.3			
	268.3	40.0		
	48.0	37.5		
	85.5	77.5	~~-2.59~~	
			-2.27	
	232.2			-2.46
	264.7	32.5		
	50.4	33.2		
	83.6	65.7	-2.65	

PA = A mean = -2.43

	137.4		
	174.4	37.0	
	318.0	36.0	
	354.0	73.0	-2.41
	136.6		
	175.8	39.2	-2.40
	319.8	34.5	
15.3.30	354.3	73.7	-2.39

626

Not advisable to continue full moon very bright reflecting strongly in mirror.

Clock not carrying: probably due to cold.

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1921phae.proj..647C

Tuesday Jan 25, 1921

11 .26 S.S. Cygni 213843 Est 8.8

Ceres (1)

11.42.0 PA = B Phot T 1.

8.2	Ceres dis	
93.0	84.8	Comp Star = +29°.1005 (8.2)
190.3	77.1	
267.4	161.9	-0.34

10.6		
88.6	78.0	-0.46
191.6	71.7	
263.3	149.7	-0.58

P/A = A mean = -0.01

89.8		
184.8	95.0	
269.8	111.8	
11.6	206.8	
	360.0	
	153 2	+0.51

91.2		
188.8	97.6	
267.9	101.9	+0.44
9.8	199.5	
11.46.0	360.0	
11 4400	160.5	+0.37

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Jan 25, 1921

Ceres (1)

	PA = A			2,
11.48.10	95.2			
	187.6	92.4		
	273.8	92.4		
	6.2	184.8		
		360.0		
		175.2	+0.09	
	92.2			
	189.3	97.1		
	269.8	92.4	+0.14	
	2.2	189.5		
		360.0		
		170.5	+0.18	
	PA = B			mean = −0.29
	191.0			
	265.4	74.4		
	12.6	74.8		
	87.4	149.2	−0.59	
	193.8			
	259.8	66.0	−0.72	
11.52.10	14.9	70.9		
	85.8	136.9	−0.84	
11 50 10				

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Jan 25, 1921

Ceres 4)

	PA = B			3
11, 53. 20	187.2			
	266.3	89.1		
	13.0	74.3		
	87.3	143.4	-0,781	
	192.3			
	265.5	73.2	-0.67	
	12,2	74.2		
	86.4	147.4	-0,63	
	PA = A			mean = -0,18
	263,2			
	5.0	101.8		
	89.8	99.8		
	189.6	201.6		
		360.0		
		158.4	-0,41	
	268.2			
	11.8	103.6		
	91.3	98.7	-0,42	
11.57.50	190.0	202.3		
		360.0		
11 5 5 35		157.7	-0,43	

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Jan 25, 1921

Ceres (1)

4.

	PA = A		
11.58.40	274.2		
	368.6	94.4	
	90.8	98.8	
	189.6	193.2	
		360.0	
		166.8	+0.25
	270.6		
	9.8	99.2	
	93.6	98.0	+0.29
	191.6	197.2	
		360.0	
		162.8	+0.33
	PA = B		mean = -0.19
	12.0		
	84.8	72.8	
	196.8	68.7	
	265.5	141.5	-0.74
	12.2		
	88.3	76.1	-0.67
	192.2	72.8	
12.02.20	265.0	148.9	-0.60

12 00 30

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Jan 25, 1921

Ceres (1)

PA = B

5

12.4.30

8.8
87.1 78.3
193.1 70.9
264.0 149.2 −0.59

12.6
89.2 76.6 −0.59
192.2 72.6
264.8 149.2 −0.59

PA = A

mean = −0.08

90.6
189.2 98.6
272.2 100.4
12.6 199.0
360.0
161.0 +0.36

88.8
188.4 99.6
266.4 105.8 +0.42
12.2 205.4
12.7.50 360.0
154.6 +0.49

12 06 10

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1921phae.proj..647C

Jan 25, 1921

Geo (1)

	PA = A			6
12.14.30	95.2			
	185.2	90.0		
	269.8	97.8		
	7.6	187.8		
		360.0		
		172.2	+0.15	
	93.2			
	187.4	94.2		
	274.4	94.0	+0.16	
	8.4	188.2		
		360.0		
		171.8	+0.16	
	PA = B			mean = -0.24
	191.6			
	262.6	71.0		
	14.0	70.2		
	84.2	141.2	-0.75	
	192.4			
	267.6	75.2	-0.65	
	11.0	76.2		
12.18.10	87.2	151.4	-0.55	
12 16 20				

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1921phae.proj..647C

Jan 25, 1921

Ceres (1)

7

PA = B

12. 19. 30	195.5		
	258.7	63.2	
	13.3	70.0	
	83.3	133.2	−0.91
	196.2		
	261.2	65.0	−0.84
	11.6	75.5	
	87.1	140.5	−0.76

PA = A

Mean = −0.25

	267.5		
	9.8	102.3	
	90.8	99.6	
	190.4	201.9	
		360.0	
		158.1	+0.42
	272.7		
	10.2	97.5	
	90.0	96.9	+0.34
12. 23. 0	186.9	194.4	
		360.0	
12 21 11		165.6	+0.27

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1921phae.proj..647C

Jan 25, 1921

Ceres (1)

	PA = A			8
12.29.0	90.0			
	188.8	98.8		
	266.2	102.0		
	8.2	200.8		
		360.0		
		159.2	+0.40	
	93.8			
	192.4	98.6		
	269.2	98.6	+0.32	
	7.8	197.2		
		360.0		
	PA = B	162.8	+0.35	mean = −0.23
	192.2			
	261.4	69.2		
	13.6	69.2		
	82.8	138.4	−0.81	
	195.4		−0.78	
	263.8	68.4		
	13.1	72.7		
12.32.30	85.8	141.1	−0.75	
30				
12 30 GCT				

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1921phae.proj..647C

Jan 25, 1921

Cens (1)

	PA = B			9
12.35.40	191.2			
	269.6	78.4		
	12.8	76.0		
	88.8	154.4	-0.49	
	190.9			
	264.6	73.7	-0.54	
	12.8	76.0		
	88.8	149.7	-0.58	
	PA = A		mean = -0.11	
	267.8			
	9.2	101.4		
	89.8	97.6		
	187.4	199.0		
		360		
		161.0	+0.36	
	268.7			
	6.8	98.1		
	92.0	97.4	+0.32	
12.39.20	189.4	195.5		
		360.0		
12 37 30		164.5	+0.29	

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1921phae.proj..647C

Jan 25, 1921

Cross 1)

	PA = A			10
12.42.20	272.2			
	3.2	91.0		
	90.8	97.2		
	188.0	188.2		
		360.0		
		171.8	+0.16	
	271.2			
	5.8	94.6		
	91.0	93.2	+0.16	
	184.8	187.8		
		360.0		
		172.2	+0.15	
	PA = B			
	194.0			mean = -0.32
	263.6	69.6		
	12.4	71.6		
	84.0	141.2	-0.75	
	195.4			
	259.6	64.2	-0.79	
	16.8	73.0		
12.47.0	89.8	137.2	-0.83	
9:20				
12 44 40				

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1921phae.proj..647C

Jan 25, 1921

Ceres (1)

PA = B

12.5 0.0	194.8		
	261.8	67.0	
	13.3	70.0	
	83.3	137.0	−0.83
	196.4		
	260.8	64.4	−0.83
	12.0	72.8	
	84.8	137.2	−0.83

PA = A

Mean = −0.30

	269.4		
	363.6	94.2	
	92.8	97.6	
	190.4	191.8	
		360.0	
		168.2	+0.22
	269.8		
	369.8	100.0	
	93.6	93.6	
12.53.40	187.2	193.6	+0.24
		360.0	
12 51 50		166.4	+0.26

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1921phae.proj..647C

Jan 25, 1921

Ceres (1)

	PA = A			12
12.55.10	266.4			
	364.8	98.4		
	90.2	100.6		
	190.8	199.0		
		360.0		
		161.0	+0.36	
	268.8			
	366.2	97.4		
	91.2	98.6	+0.33	
	189.8	196.0		
		360.0		
		164.0	+0.30	
	PA = B			mean = −0.22
	10.2			
	84.8	74.6		
	195.8	65.4		
	261.2	140.0	−0.77	
	12.2			
	86.6	74.4	−0.76	
	192.8	66.6		
12.59.20	269.4	141.0	−0.75	

(12 57) 10

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1921phae.proj..647C

Jan 25, 1921

Ceres (1)

	PA = B			
13.5.40	12.6			13
	84.4	71.8		
	195.8	66.4		
	262.2	138.2	-0.81	
	18.6			
	77.8	59.2	-1.00	
	196.2	60.6		
	256.8	119.8	-1.20	

Eq. Images reversed between sets not in middle of set.

13.7.30	PA = A			mean = -
	99.2			
	182.8	83.6		
	266.2	98.6		
	364.8	182.2		
		360.0		
		177.8	+0.04	
	88.8			
	186.4	97.6		
	272.2	94.1	+0.13	
13.9.20	366.3	191.7		
		360.0		
		168.3	+0.22	mean = -0.26
	PA = B			
	261.2			-0.65
	372.8	111.6		265.5 / 370.8 / 105.3
	89.3	103.9		85.8 / 107.0
mean		215.5		192.8 / 212.3
13 09 21	193.2	360.0	13.11.20	360
		145.5	-0.68	147.7 -0.62

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Jan. 25, 1921

Ceres (1)

	PA = ~~A~~ B			14
13, 20, 30	192.4			
	264.2	71.8		
	12.1	74.1		
	86.2	145.9	-0.66	
	193.6			
	262.4	68.8	-0.68	
	12.3	74.5		
	86.8	143.3	-0.71	
	PA = ~~B~~ A			Mean = -0.20
	270.7			
	365.2	94.5		
	90.8	98.6		
	189.4	193.1		
		360.0		
		166.9	+0.25	
	270.6			
	365.2	94.6		
	90.6	100.6	+0.27	
13.24.0	191.2	195.2		
13 22 15		360.0		
		164.8	+0.29	

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1921phae.proj..6476

Jan 25. 1921

Ceres (1)

	PA = A			15
13. 30. 50	272, 4			
	363, 4	91, 0		
	92, 2	96. 5		
	188.7	187, 5		
		360, 0		
		172. 5	+0, 14	
	268. 9			
	370, 4	101. 5	+0. 26	
	90, 8	99, 0		
	189, 8	200, 5		
		360. 0		
		159. 5	+0, 39	
	PA = B			mean = −0, 21
	11, 2			
	85. 8	74 6		
	198, 4	66. 5		
	264, 9	141. 1	−0, 75	
	12, 4			
	89, 4	77, 0	−0. 68	
	192, 3	71, 3		
13. 34, 30	263. 6	148, 3	−0, 61	
13 32. 40				

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1921phae.proj..647C

Jan 25, 1921

Ceres (1)

	P A = B			16
13.41.10	15.6			
	89.8	74.2		
	193.8	71.0		
	264.8	145.2	-0.67	
	13.6		-0.67	
	86.6	73.0		
	192.6	72.4		
	265.0	145.4	-0.67	
	PA = A		mean = -0.28	
	91.8	96.0		
	187.8	93.1		
	271.8	189.1		
	364.9	360.0		
		170.9	+0.17	
		0h 30m E at 5.12 S.T.		
	94.8			
	182.6	87.8		
	270.8	94.2	+0.10	
13.45.10	365.0	182.0		1
		360.0		
13.43.10		178.0	+0.04	1

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Jan 25, 1921

Ceres (1)

	P/A = B			17
13.56.20	193.6			
	262.1	68.5		
	12.6	748		
	87.4	143.3	−0.71	
	193.6			
	261.0	67.4	−0.78	
	15.0	68.2		
	83.2	135.6	−0.86	
	PA = BA			mean = −0.27
	270.4			
	367.7	97.3		
	88.7	100.7		
	189.4	198.0		
		360.0		
		162.0	+0.34	
	267.7			
	358.6	90.9		
	93.0	95.8		
14.0.0	188.8	186.7	+0.24	
		360.0		
13.58.10		173.3	+0.13	

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Jan 25, 1921

Ceres (1)

	PA = A			
14. 6. 10	271.0			18
	368.4	97.4		
	93.2	95.6		
	188.8	193.0		
		360.0		
		167.0	-0.25	
	270.7			
	369.8	99.1	+0.32	
	89.2	102.0		
	191.2	201.1		
		360.0		
		158.9	+0.40	
	PA = B			mean = -0.16
	12.4			
	85.4	73.0		
	193.6	71.4		
	265.0	144.4	-0.69	
	11.8			
	89.2	77.4	0.64	
	192.2	71.6		
14. 9. 30	263.8	149.0	-0.59	
14. 7. 50				

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Jan 25, 1921

Ceres (1)

	PA = B		
14. 14. 40	12.2		
	82.4	70.2	
	193.4	72.5	
	265.9	142.7	-0.72
	15.2		
	84.8	69.6	-0.75
	194.1	70.3	
	264.4	139.9	-0.78
	PA = A		Mean = -0.20
	88.8		
	190.6	101.8	
	272.0	97.8	
	369.8	199.6	
		360.0	
		160.4	+0.37
	90.7		
	189.7	99.0	
	268.4	99.8	+0.36
14. 18. 30	368.2	198.8	
14. 16. 35		360.0	
		161.2	+0.36

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Jan 25, 1920

Ceres (1)

	PA = A			20
14.29.40	89.8			
	185.5	95.7		
	269.4	98.4		
	367.8	194.1		
		360.0		
		165.9	+0.27	
	90.2			
	188.4	98.2		
	269.8	97.4	+0.28	
	367.2	195.6		
		360.0		
		164.4	+0.30	
	PA = B			Mean = -0.17
	192.2			
	265.0	72.8		
	16.6	68.4		
	85.0	141.2	-0.75	
	190.2			
	268.2	78.0	-0.62	
	12.1	75.8		
14.33.40	87.9	153.8	-0.50	
14 31.40				

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Jan 25, 1921

Ceres (1)

21.

	PA = B		
14.48.30	192.0		
	262.4	70.4	
	11.8	76.0	
	87.8	146.4	−0.65
	198.2		
	263.3	65.1	−0.72
	12.6	74.6	
	87.2	139.7	−0.78
	PA = A		mean = −0.25
	266.6		
	367.2	100.6	
	86.8	103.0	
	189.8	203.6	
		360.0	
		156.4	+0.45
	266.3		
	366.7	100.4	
	87.8	100.4	+0.22
14.52.50	188.2	200.8	
		360.0	
14.50.40		159.2	+0.40

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1921phae.proj..647C

Jan 25, 1921

Cores (1)

	PA = A			22
14.5 4.30	270.0			
	370.0	100.0		
	90.4	101.0		
	191.4	201.0		
		360.0		
		159.0	+0.40	
	263.1			
	366.6	103.5		
	87.4	104.0	+0.46	
	191.4	207.5		
		360.0		
	PA = B	152.5	+0.53	mean = -0.02
	5.0			
	88.2	83.2		
	189.8	77.0		
	266.8	160.2	-0.38	
	10.2			
	85.9	75.7	-0.51	
	191.8	708		
14.5 8.10	262.6	146.5	-0.64	
14.5 6.20				

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1921phae.proj..647C

Jan 25, 1921

Ceres (1)

	PA = B			23
15.0.10	12.0			
	85.0	73.0		
	193.0	72.8		
	265.8	145.8	-0.66	
	10.0			
	88.9	78.9	-0.58	
	187.2	74.4		
	261.6	153.3	-0.51	
	PA = A			mean = 0.19
	88.8			
	190.2	91.4		
	268.0	96.3		
	364.3	187.7		
		360.0		
		172.3	+0.14	
	92.0			
	186.8	94.8		
	271.4	98.6	+0.20	
15.4.30	370.0	193.4		
		360-0		
15.2.20		166.6	+0.25	

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1921phae.proj..647C

Jan 25, 1921

Ceres (1)

	PA = A			24
15. 6. 30	91.0			
	188.2	97.2		
	266.3	105.9		
	372.2	203.1		
		360.0		
		156.9	+0.44	
	89.3			
	192.3	103.0		
	267.8	99.9	+0.44	
	367.7	202.9		
		360.0		
		157.1	+0.44	
	PA = B			mean = −0.02
	195.2			
	266.9	71.7		
	12.0	82.0		
	94.0	153.7	−0.50	
	191.2			
	270.9	79.7	−0.49	
	10.2	75.0		
15. 10. 30	85.2	154.7	−0.48	
15. 8. 30				

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Jan 25, 1921

Ceres (1)

25-

	PA = B		
15.12.50	192.0		
	266.8	74.8	
	12.2	77.7	
	89.9	152.5	−0.53
	195.2		
	266.9	71.7	−0.50
	5.8	83.4	
	89.2	155.1	−0.48

Mean = −0.11

	PA = A		
	269.4		
	368.0	98.6	
	88.4	92.6	
	191.0	191.2	
		360.0	
		168.8	+0.21
	268.8		
	367.0	98.2	
	90.2	100.6	
15.16.30	190.8	198.8	+0.28
		360.0	
15.14.40		161.2	+0.36

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Jan 25, 1921

Ceres (1)

	PA = A			26
15. 21. 0	269.6			
	365.8	96.2		
	88.8	103.2		
	194.0	199.4		
		360.0		
		160.6	+0.37	
	270.4			
	364.9	94.5		
	86.2	107.0	+0.39	
	193.2	201.5		
		360.0		
		158.5	+0.41	
	PA = B			mean = −0.04
	8.9			
	89.9	81.0		
	192.8	76.1		
	268.9	157.1	−0.44	
	4.9			
	88.4	83.5	−0.46	
	190.2	72.0		
15. 25. 20	262.2	155.5	−0.47	
15. 23. 10				

Sfr. 6.1

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1921phae.proj..647C

Wed. Jan. 26–1921

12 27 16

G.M.T. Leeds 12" Polar HSK Rec

11 26 SS Cyg 213+43 est 8.6

11 30 SU Tau 053813 est 10.0 R = 4

11 32 SS Aur. 060112 est < 12 A

11 34 UZ Gem 070922 est < 13.0

Reading Mirror!!!!!

X and 001046 est 10.3

S Cet 000909 In treetops

U Com 005426 est 9.3

V Androm 004431 est 11.2

RR Androm 004533 est 11.1

RV Cass 004746 A est 9.6

Var. close by est 11.0

RX Androm 005840 est 12.9 Var appears unduly faint.

12 ~~7~~ 10.30 Z Cet 010102 est 12.2

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Jan. 26, 1921

12. 13. 50	U Androm	010940	est.	13.0
	o Ceti	021403	est.	9.4
	RU Androm	013238	est.	10.4
	Y Androm	013338	est.	13.0
	U Pers.	015354	est.	8.7
12. 39. 0	S Arietis	015912	est.	11.8

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1921phae.proj..647C

Thurs Jan 27, 1921

LC Clk 12" Polar HSK Rec

G.M.T.			
11 17	SS Cygni	21 3 0 + 43	est 8.5
11 20	SS Cygni	06 05 47	est < 12.0
11 23	SU Tauri	05 43 19	est 10.0
	Quetus	02 10 24	est 12.9
	W And	02 11 43a	est 12.0
	S Per	02 15 3 0	est 9.9
	R Ari	02 20 00	est. 8.4
	R R Per	02 21 50	est. 9.7
	U Ceti	02 28 13	est. 8.3
	R Triang	02 31 33	est. 10.8
	W Per	02 43 56	est. 9.3
	X Ceti	03 14 01	est. 9.1
11.59.50	Y Per	03 20 43	est. 8.7

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1921phae.proj..647C

Jan 24, 1921

12. 2. 3.30	Nova Persei No 2	032443	est. 13.0
	R Per	032335	est. 9.3
	T Tauri	041619	est. 9.8
	R Tauri	042209	est. 11.4
	S Tauri	042309	est. 12.8
	W Tauri	042215	est. 10.0
	RX Tauri	043208	est. 12.9
	R Orionis	045307	est. 12.2
	R Lep	045514	est. 8.3
	V Orionis	050003	est. 12.6
	T Lep	050022	est. 9.2
	S Aurig	052034	est. 8.3
	W Aurig	052036	est. 12.7
12. 24. 20	T Orionis	053005a	est. 10.4

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1921phae.proj..647C

Jan 27, 1921

12, 25, 10	S Orionis	052404	est. 12.4
	RR Tauri	053326	est. 11.8
	U Orionis	054920	est. 10.8
12.28.0	Variable close by		est. 11.4
14. 31.50	Z ~~Tauri~~ Aurigae	05 N2535	est. 9.4
	X Aurig	060450	est. 11.7
	V Aurig	061647	est. 10.7
	S Lyncis	063558	est. 11.4
	X Gemin	064030	est. 12.0
	W Monoc	064707	est. 10.2
	Y Monoc	065111	est. 12.2
	X Monoc	065208	est. 7.6
	RS Gem	065530	est. 11.0
14.55.20	V Cam min	070109	est. 12.9 Barely seen

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1921phae.proj..647C

Jan 27, 1921

14. 56.10	R Can min	070310	est. 8.0
	Y Gem	071713	est. 11.5
	S Can min	072708	est. 12.8
	T Can min	072811	est. 11.4
	Z Pupis	072820 b	est. 7.6
	X Pupis	072820 a	est 8.8
	U Can min	073508	est 12.3
	S Gem	073723	est 12.9
14. 15.10.	T Gem	074323	est 11.7

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1921phae.proj..647C

2 2 7 18 5

Friday, Jan 28, 1920.

G.M.T.	L.C Obs	12" Polar	H.S.K. Rec.
12.5 0	SS. Aurigae	060547	Est 12,8
	SU Tauri	054319	Est 10,0

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1921phae.proj..647C

54

Tuesday ~~Monday~~ Feb. 1, 1921

G.M.T.	L.C. Obs	12" Polar		H&K Rec
12.5-0.10	SS. Aurig	060547	Est.	12.6
	U Gemin	074922	Est.	12.8
	SU Tauri	054319	Est.	9.9
13.0.0	T Orionis	053005a	Est.	10.1

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1921phae.proj..647C

Feb. 1, 1921

RV Androm 020448

13.6.20 ~~RA=~~ Est = b Inan.

a' 4 b' 8 10 a 6 c 2 b 6 c' 4 d 3 e 1 f 7 g
3 h 4 k

S Triang. 022132 Abandoned

~~RA=~~

~~Dec=~~

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1921phae.proj..647C

Friday Feb. 4, 1921

G.M.T.	L.C.Obs	12.4 Polar		H.S.K. Rec.
12.23.30	SS. Aurig.	060547	Est 12.7	
	SU Tauri	054319	Est. 9.7	
	U Gem	074922	Est. 12.5	
	o Ceti	021403	Est. 9.4	
12.30	Nova Regium 2	40	OK	Consid Haze
13.7.20	R Cancri	081112	Est ~~10.6~~ 9.3	
	V Cancri	081617	Est 11.8	
	U Cancri	083019	Est 12.4	
	S Hydri	084803	Est 10.6	
	T Cancri	085120	Est 8.8	
	R Cancri	090425	Est 10.4	
	R Leo Min	093934	Est 8.4	
13 38	R Leonis	094211	Est 6.2	

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1921phae.proj..6470

Tuesday Feb, 8, 1921

2 2 7 2 9.5

G.M.T.	L.C. Obs	12" Polar	H.S.K. Rec
~~SS. Aurigae~~	060547		
12. 17, 20	SS. Aurigae	060547	Est 12.7
	U Gem	074922	Est 12.8
	SU Tauri	054319	Est 9.7
	Massalia No 20		

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1921phae.proj..647C

Feb 8, 1921

1.

Massalia No 20

PA = B

13.6.20	20.6	Comp Star dec		Phot T
	73.3	52.7		
	204.7	55.9		
	260.6	108.6	+1.45	
	21.2			
	75.8	54.6		+1.50
	203.4	49.4		
	252.8	104.0	+1.56	
	PA = A			mean = +1.12
	106.4			
	175.9	69.5		
	282.2	71.8		
	354.0	141.3	+0.75	
	101.4			
	170.2	68.8		+0.74
	281.1	73.3		
13.10.40	354.4	142.1	+0.73	

Sfr 3.4

Comp star is star at 8h19 +18,5° (1855)

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2.

Massalia No 20

	PA = A		
13.14.10	103.5		
	176.2	72.7	
	283.2	71.9	
	355.1	144.6	+0.68
	102.1		
	174.3	72.2	+0.69
	282.0	71.3	
	353.3	143.5	+0.70
	PA = B		means +1.14
	205.2		
	257.8	52.6	
	24.7	51.0	
	75.7	103.6	+1.57
	204.4		
	253.6	49.2	+1.58
	20.2	54.0	
13.19.20	74.2	103.2	+1.58

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Feb. 8, 1921

3.

Massalia No 20

PA = B

13. 24. 0	204.4		
	253.7	49.3	
	25.2	47.5	
	72.7	96.8	+1.74
	~~197.~~		
	197.3		
	257.4	60.1	+1.50
	20.4	56.8	
	~~80.0~~	116.9	+1.26
	77.2		

PA = A

Mean = +1.06

	277.7		
	353.9	76.2	
	106.1	70.6	
	176.7	146.8	+0.64
	281.2		
	355.8	74.6	+0.62
	102.8	73.8	
13. 29. 0	176.6	148.4	+0.61

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4.

Massalia ho 20

	PA = A		
13.30.20	284.1		
	357.4	73.3	
	102.4	68.8	
	171.2	142.1	+0.73
	282.2		
	354.4	72.2	+0.70
	102.4	73.1	
	175.5	145.3	+0.67
	PA = B		mean = +1.09
	23.4		
	74.3	50.9	
	202.8	54.4	
	257.2	105.3	+1.53
	20.8		
	72.8	52.0	+1.48
	197.4	57.8	
13.34.40	255.2	109.8	+1.43

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Feb. 8, 1921

5

Massalia No. 20

PA = B

13 40.30	22.8		
	73.8	51.0	
	200.8	56.8	
	257.6	107.8	+1.47
	21.4		
	78.0	56.6	+1.48
	205.2	50.4	
	255.6	107.0	+1.49

PA = A

mean = +0.98

	100.4		
	178.4	78.0	
	282.3	76.1	
	358.4	154.1	+0.50
	101.2		
	176.4	75.2	+0.48
	277.0	80.7	
13.45.0	357.7	155.9	+0.46

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Feb. 8, 1921

6

Massalia No 20

	PA = A		
13.49.40	103.6		
	175.5	71.9	
	281.2	75.2	
	356.4	147.1	+0.63
	105.5		
	178.8	73.3	+0.70
	286.3	66.8	
	353.1	140.1	+0.77
	PA = B		mean = +1.18
	206.2		
	252.4	46.2	
	23.8	47.4	
	71.2	93.6	+1.82
	4		
	205.7		
	255.1	50.4	+1.65
	20.4	57.0	
13.54.20	77.4	107.4	+1.48

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Feb. 8, 1921

?

Massalia No 20

	PA = B		
13.55.50	204.0		
	253.4	49.4	
	22.4	53.8	
	76.2	103.2	+1.58
	201.4		
	251.6	50.2	+1.61
	20.0	50.4	
	70.4	100.6	+1.64

PA = A

mean = +1.18

	283.8		
	355.3	71.5	
	105.6	66.0	
	171.6	137.5	+0.82
	283.2		
	355.6	72.4	+0.76
14.0.20	105.5	71.1	
	176.6	143.5	+0.70

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Feb. 8, 1921.

8

Massalia No 20

	PA = A		
14.6.30	277.4		
	359.8	82.4	
	101.2	80.6	
	181.8	163.0	+0.32
	278.2		
	359.6	81.4	+0.39
	104.4	74.6	
	179.0	156.0	+0.46
	PA = B		mean = +0.92
	22.2		
	76.6	54.4	
	201.8	49.4	
	251.2	103.8	+1.56
	22.4		
	76.2	53.8	+1.54
	198.9	52.3	
14.10.20	251.2	106.1	+1.51

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Feb, 8, 1921

9

Massalia No 20

PA = B

14.12.40	22.2		
	75.5	53.3	
	199.8	54.6	
	254.4	107.9	+1.47
	22.9		
	75.0	52.1	+1.42
	200.2	59.7	
	259.9	141.8	+1.38

PA = A

Mean = +1.04

	102.6		
	173.2	70.6	
	281.4	77.5	
	358.9	148.1	+0.61
	102.9		
	175.6	72.7	+0.65
	281.0	71.4	
14.16.30	352.4	144.1	+0.69

131 E at 6.52 S.T.

Dec +17.5

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Feb. 8 — 1921

E.M.T. — L.C.Obs.

5⁻ 30 Moon Sunset. — from roof of Bldg C

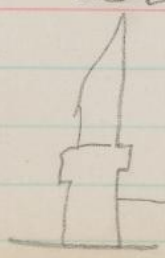
5 42 Moon surely seen and at intervals thereafter until too low in cloud at 5:47

Copied from original record.

Fri. Feb. 18 — 1921

15⁻ 00± From roof of Bldg C. L.C. confirmed place of setting of Moon on Feb 8 by noting approx place of a region at −7°.

Housed 70 Tauri and α Cet as morning stars and looked for 77 Eri. a big effort was place where Moon sat on Feb 8. Everything checked up perfectly



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Sunday Feb. 13, 1921

G.M.T.	L.C. Obs		12" Plan	HSK Rec
13.58	S Sturig	060547	Est 11.6	
	U Gem	074922	Est. 12.8	
	Batteries given out			
14.4.	SU Tauri	054319	Est 9.7	

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1921phae.proj..6476

22 35'

Monday Feb. 14, 1921

G.M.T.	L.C. Obs	12" Polar	H.S.K. Rec
14.40	SS Aurig	060547	Est. 11.1
	V Gemin.	074922	Est. not bright. At least 9 ~~not~~ Cloudy in region

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1921phae.proj..647C

70

2 2 3 7.5

Wednesday Feb. 16, 1921

G M T. L.C. 060 12" Polar N.S.K. Bo

mirror received Feb. 15, replaced Feb. 16.

11.50 S.S. Aurig. 060547 Est 12.0

U Gem. 074922 Est 12.0

Sky very murky so impos. to discover degree of improvement.

S V Tauri 54319 moon exactly in field.

12.40 Too Cloudy to continue with advantage

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1921phae.proj..6476

2ʰ 1ᵐ 38ˢ.5

Thurs Feb 17 - 1921

L.C. Obs 12" Polar H.S.R. Rec.

11 38 S S Aurigae ⊙ 60547 ~~est 11.1~~
est of last night should be 11.0 not 7.0

11 42 U Tauri ⊙ 76522 est <123

11 45 S U Tauri 05ᵏ 319 est —
I must have set the 1st A. circle
down out last night for tonight setting
the telescope ~~would~~ by the region of
S U Tauri. The moon is plainly
in the field.

X And 001046 est 11.1
⊙ Cet 021403 est 9.4
U Cam 004047 ~~est 9.4~~

R Ur And 004132 est 12.0
V And 004435 est 11.8
R R And 004533 est 10.1
R V Cam 004746 est 8.8
— Cam 004746 est 10.8

12.15 R X Androm 005840 est 11.0

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1921phae.proj..647C

Feb. 17, 1921

G.M.T.			
12 28.10	RU Androm	013238	Est 11.8
~~13.30~~	Y Androm	013338	Est 10.3
13.30	Too cloudy to continue		

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1921phae.proj..6476

2 2 7 39

Thu. Feb 18 – 19 21

G.M.T.	R.C. Obs 12" Polar	N.S.K. Rec.
11 42	SS Aurigae 06 05 47	est 11.2
11 45	SU Tauri 05 43 13	est 9.6
11 48	U Geminorum 07 43 22	< 11.5
	Moon just for Eff.	
11 52	RX And 00 5f 40	est 11.5
	Z Ceti 01 01 02	est 11.5
	RZ Per 01 23 30	est 10.6
	U Per 01 35 54	est 8.0
	S Ariatis 01 59 12	est. 12.0
	R Ariatis 02 10 24	est. 11.6
	S Per. 02 15 58	est. 9.4
	R Ceti 02 20 00	est. 10.1
	RR Pers. 02 21 50	est. 9.2
	R Triang 02 31 33	est. 9.1
12.20	W Per 02 43 56	est 8.8

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74

Feb. 18, 1921

22 7 39.5

12.23	U Arietis	030514	est. 12.0
	X Ceti	031401	est. 9.0
	Y Pers	032043	est. 7.8
	R Pers	032335	est. 10.6
	T Tauri	041619	est. 10.2
	W Tauri	042215	est. 9.6
	R Lep.	045514	est. 8.0
	V Orionis	050003	est. 11.8
	T Leporis	050022	est. 8.8
	S Aurig.	052034	est 8.9
	T Orionis	053005a	est 10.2
	S Orionis	052404	est 11.7
12.46	RR Tauri	053326	est. 12.6

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Feb. 18, 1921

12" Polar Reeb
H.S. Kinsley Rec.

Jupiter. Dis. of Sat 3. III

	G.M.T.		Phot R	
14 18 19	14. 17.58	291.2	ff.4	
-9	18,12	19.6	~~f50~~	
14 18 10	18,24	293.8	96.2	
-18 f	18.43	30.0	184.6	+175.4 +0.09
-10 f f	18,55	287.9		
14 19 14	19.07	21.8	93.9	
10	19,20	289.9	91f	
14 19 4	19,33	21.7	185.7	+174.3 +0.10
-17 14	19.42	291.6		
-1034	19.52	21.2	f9.6	
14 19 56	20.01	292.2	f7f	
10	20.10	20.0	177.4	-0.05
14 19 46	20.20	293.8		
-16 32	20.28	19.8	f6.0	
-992	20.38	293.1	90.9	
14 20 33	20.45	24.0	176.9	-006
10	20.56	293.8		
20 23	21.08	20.2	f6.4	
-16 55	21.15	294.6	f5.2	
-955	21.23	19.8	171.6	-0.16
20 10	21.36	296.0		
10	21.46	18.0	f2.0	
14 21 02	21.59	298.0	78.9	
-14 26	22.06	16.9	160.9	-0.36
-f76	22.15	296.2		
22 2f	22.23	15.1	78.9	
10	14,22.33	293.0	f17	
14 22 18			160.7	-037
-14 00				
-f40				

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Feb. 18 - 1921.

	14-22.40	14.7		
	22.53	295.0		
14 23 06	23.02	18.8	f3.8	
10				
14 22 56	23.10	294.9	f0.1	
-13 22	23.21	15.0	1629	-0.30
-f02				
	23.30	298.0		
14 23 50	23.40	19.5	f1.5	
10				
	23.51	294.6	f2.3	
14 23 40	24.00	17.1	163.8	-0.31
-12 38				
-758				
	24.17	294.2		
14 24 33	24.26	15.6	f1.4	
10				
	24.37	294.0	ff.0	
14 24 23	24.48	22.0	169.4	-0.20
-11 55				
.715	24.56	296.8		
25 07	25.04	16.9	f0.1	
10				
	25.12	295.2	f2.0	
14 25 57	25.25	17.2	162.1	-0.34
-11 -6f 21				
	25.39	290.2		
	25.47	19.2	f9.0	
14 26 05	26.~~07~~32	293.3	f6.9	
11				
14 25 54	26.32	20.2	175.9	-00f
-10 24				
-624	26.44	295.6		
27 00	26.54	17.1	f1.5	
11				
	27.05	293.0	f3.2	
14 26 49	27.14	16.2	1647	-0.29
-569 29				
	27.35	295.1		
27 48	27.42	15.2	f0.1	
11				
14 27 37	14 27.54	294.4	f3.4	
-8 46			163.4	-0.32
-52				

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Feb 18 - 1921

14	28.05	17.8	
	28.15	298.8	
14 28 31	28.26	16.6	87.8
"			
	28.36	294.2	85.6
15 28 20	28.49	19.8	163 4 - 0.32
- 7 58			
- 478	28.02	294.4	
29 15	29.10	16.2	81.8
"	29.20	296.3	82.9
14 29 04	29.30	19.2	164.7 - 0.29
- 7 14			
- 438	29.44	294.0	
30 00	29.54	21.1	87.1
"	30.06	295.2	84.8
14 29 49	30.15	20.0	171.9 - 0.15
- 6 29			
- 388	30.29	295.8	
14 30 48	30.42	18.1	82.3
"	30.55	296.0	78.1
15 30 37	31.04	14.1	160.4 - 0.37
- 5 41			
- 341	31.15	300.0	
31 30	31.26	14.6	74.6
"	31.36	298.0	77.1
14 31 19	31.44	15.1	151.7 - 0.54
- 4 59			
- 299	31.52	294.9	
32 00	32.00	14.2	79.3
"			
14 31 54	32.09	298.0	76.0
- 4 24			
- 264	32.18	14.0	155.3 - 0.47
32 45	32.31	294.0	
"			
14 32 33	32.40	16.8	82.8
- 3 45	14.32.50	294.9	84.1
- 225			166.9 - 0.25

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1921phae.proj..647C

78

14	32.59	19.0					
14 33 27	33.06	293.3					
12							
14 33 09	33.17	14.2	10.9				
-3 9	33.25	296.9	7.2				
-189	33.36	15.1	159.1	-0.60			
	33.49	296.0					
34 07	34.00	18.0	8 2.0				
12	34.12	294.8	3.3				
14 33 55							
-143 -2 23	34.26	18.1	16.5.3	-0.28			
-151 34 21	34.39	288.0					
-104						6	
-139 39	34.51	23.3	95.3	190.6	1894	+0.20	
-87							
-115 35 03	35.15	287.1	96 2	192.4	1676	+024	
+60 -68 18	35.30	20.0	92.9	185.8	1742	+011	
-52							
-45 33	35.45	287.8	92.2	184.4	1756	+0.0	
-38							
31 47	35.59	26.2	98 4	1968	1632	+032	
-22							
-12 3606	36.18	285.2	101.0	2020	1580	+042	
-2							
+9 27	36.39	29.9	104.7	209.4	1506	+0.56	
+14							
+20 38	36.50	285.0	104.9	2098	1502	+057	
+24							
+29 47	36.59	30.2	105.2	210.4	1496	+058	
+34							
+40 58	37.10	280.0	110.2	220.4	1396	+078	
+46							
53 37 11	37.23	30.1	110.1	2202	1398	+078	
+58							
64 22	37.34	281.4	108.7	217.4	1426	+072	
+72							
79 37	37.49	31.4	110.0	2200	1400	+077	
+90							
100 58	38.10	278.1	113.3	226.6	1334	+091	
+106							
113 38 11	38.24	29.9	111.8	223.6	1364	+085	
125 23	38.36	277.2	112.7	225.4	1346	+088	
142 40	38.53	33.8	116.6	233.2	1258	+1.07	
+155 53							
14	39.06	274.2	119.6	2392	1208	+1.18	

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1921phae.proj..047C

Febr 18 - 1921

+170

14 39	8	14-39.21	40.6	126.4	2528	1032 + 1.58
+182	20	39.33	269.2	131.4	2628	972 + 1.93
195	33	39.46	43.2	134.0	2680	920 + 1.86
209	47	40.00	268.1	135.1	2702	898 + 1.92
227 60	05	40.18	44.9	136.8	2736	864 + 2.01
246	22	40.35	258.8	1461	2922	678 + 2.58
269	37	40.50	51.9	1531	3062	538 + 3.11
272	50	41.03	258.0	153.9	3078	522 + 3.17
		Eyepiece.	Nearest			
298 44	16	41.29	See			
310	28	41.41	Susp.			
325	33	14-41.46	gone			

L.V.

	14-43.9	258.2	232
	43.31	235.0	248
14 43 42	43.56	53.9	47.0 + 3.41
14 44 29	14-44.11	77.7	
+431			

Comp with only seat. on off. side = set I.

Ballou 103
At 14.09.00

14.49.00
14.50.00

Frodsham 345-1
14.09.08

14.49.14
14.50.14.5

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1921phae.proj..647C

22 > 4^2.5

Monday Feb. 21, 1921

L.C. Obs 12" Polar HSK Roc

G.M.T.

12.31 S.S. Aurigae 060547 Est 12.5
Obs dec = +46.8 H.A = 17.E at 5:48

U Lyn 074922 Est 9.8
Sky very poor in this region

12.36 SU Tauri 054319 Est 9.3
Obs dec. = +18.6 HA = 0.8 W at 5:5-)

Too cloudy to continue with advantage

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1921phae.proj..647C

Wednesday Feb. 23, 1921

γ^2 74 4.

G M T. Lc Obs 12" Polar H&K Rec

13.23 V Gem 074922 Est 11.4

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1921phae.proj..647C

Thu Feb. 25 - 1921

FCOb 12" Polar

12 53 21 Gem 074922 est < 13.7
Obs'd Dec = +21.9

12 56 SU Tauri 05 43 (9) est 9.4

12 58 SS Aurigae 06 05 (4) est < 13.4
Obs'd Dec = +47.5

16 00 S Cam 2 min 07 27 0 est 12.0

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1921phae.proj..647C

2 2 15 3

Friday March 4, 1921

G.M.T.	L.C. Obs	12" Polar	H.S.K. Rec
12.0.30	U Gem.	074922 Est. 13.3	
		Obs. Dec. 21.3	
	SU Tauri	054319 Est. 9.5	
		Obs. Dec. +18.8	
	SS Aurigae	060547 Est. 13.2	
		Obs. Dec. 46.8	
	o Ceti	021403 Est. 9.2	
	RX Androm.	005840 Est. 13.0	
	RU Androm.	013238 Est. 12.3	
	Y Androm.	013338 Est. 9.0	
	U Pers.	015356 Est. Too low by	
	R Trianti	021024 Est. 11.3	
	R Ceti	022000 Est. 12.0	
	RR Pers	022150 Est 9.7	
	X Ceti	031401 Est 8.7	
	Y Pers	032043 Est 8.0	
12.37.0	Nova Pers 2	32443 Est 13.0	

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1921phae.proj..647C

2227 5 3.5

March, 4, 1921

12. 39.0	R Pers	0 32335	Est. 12.4
	T Tauri	041619	Est. 9.8
	R Tauri	042209	Est. 12.0
	S Tauri	042309	Est. 13.4
	RX Tauri	043208	Est. 13.6 if seen
	V Tauri	044617	Est. 9.0
	V Orionis	05 0003	Est. 12.1
	R Aurigae	05 0953	Est. 12.1
	W Aurigae	052036	Est. 13.3 if seen
	T Orionis	05 3005a	Est 10.1
	S Orion	05 2404	Est. 10.9
	RR Tauri	053326	Est. 12.6
	U Aurigae	053531	Est. 10.4
13.20.0	Z Tauri	05 4615a	Est. 13.4

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1921phae.proj...647C

March 4, 1921

13. 21.40	RU Tauri	054615-b	Est. 11.8
	RS Tauri	05-4615-c	Est. 9.0
	U Orionis	054920	Est. 11.8
	Variable near by	U.W.	Est. 10.2
	Z Aurigae	05-53-3	Est. ~~10.7~~ 11.3
	X Aurigae	060450	Est. 11.4
	V Aurigae	061647	Est. 11.4
	V Monoc.	061702	Est. 13.1
	U Gemin	063159	Est. 12,3
	R Monoc.	063308	Est. 12.0
	S Lyncis	063558	Est. 12.8
	X Gem.	064030	Est. 12.3
	W Monoc.	064707	Est. 10.9
13.5-8.40	Y Monoc.	065111	Est. 12.7

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March 4, 1921

14. 0. 20	R Lyncis	065-35-5	Est. 10.9
	RR Monoc.	071201	Est. 13.5
	V Gem.	071713	Est. 13.4 if even
	T Can. Min.	072811	Est. 10.4
	Z Puppis	072820b	Est. 8.0
	U Can. Min.	073508	Est. 12.6
	S Gemin.	073723	Est. 10.6
	T Gemin.	074323	Est. 10.0
	U Cancri	083019	Est. 13.4
	X Urs. Maj	083350	Est. 10.5
	S Hydrae	084803	Est. 12.7
	T Hydrae	085008	Est. 13.2
14.55	S Pyxidis	090024	Est. 9.8

Vis estz. posted to here.

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1921phae.proj..6476

2 2 75 9.

Thursday. March 10, 1921

G.M.T.	L.C. Obs	12" Polar	H.S.K. Rec
12.25.30	SS. Aurigae	060>-47	Est. 13.0
	U Gemin.	074922	Est. 13.5 if seen
12.28.0	SU Tauri	054319	Est. 9.7
	Searched for Messalia No 20 but not found.		
13.29.0	X Hydrae	093014	Est. 9.3
	Est. of Comp. stars		
13.30.	(86) 3 (87) 3 (91) 6 (99) 5 (105) 5 (110) 3 (111)		
	At 13.32 9th mag. meteor shot thru field of X Hydrae close to variable from North to south		
	3 (113) 4 (115) 5 (118) 6 (120)		
	(105) 3 (104) 2 (110) — (76) 10 (87)		
	R Leo Min	093934	Est. 7.2
	R R Hydrae	094023	Est. 12.8
	R Leonis	094211	Est. 7.4
	Y Hydrae	094622	Est 6.6
	V Leonis	095421	Est 9.0
13.49.30	W Leonis	104814	Est 10.8

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March 10, 1921

4

13. 50. 40	S Leonis	110506	Est 10.2
	R Comae	115919	Est 13.4 if seen
	SU Virg.	120012	Est. 12.8
	SS Virg.	122001	Est. 8.0
	T CanVen	123532	Est 10.1
	R Virg.	123307	Est 7.7

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1921phae.proj..647C

2 27 6d' 5

Friday March 11, 1921

	L. C. Obs	12" Polar	H.S.K, Roc
12. 20	U Gemin	074922 Est 13,1	
	SU Tauri	054319 Est 9.8	
	SS Aurigae	060547 Est 12,8 Obs. Dec + 47.2	

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1921phae.proj..647C

March 11, 1921

	Fredeham 345-1	Ballou 103
	13,36.54	13.37, 0
	~~Fred~~	
	13,37.54½	13.38. 0

G.M.T. Reap of Jupt. ~~X~~. IV

13.50.10	more cloudy	
13 . 51,25	Clearer	Sat. invis.
13 . 53.9	more Cldy.	
13 . 53.39	Jup. invis.	
13.58.31	All sat. invis.	
14. 0.32	Three sat seen but not 4th	
14. 1 32	Seen Sat. 4	14 / 3~~4~~
14. 1.42	Sure seen	14 / 44

Too cldy to secure measures with Micr.
Above obsv. made with low power eyepiece.

	Fredeham 345T	Ballou 103
14	14.6.59.0 =	14.7.00
	14.7.59.0 =	14.8.0

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1921phae.proj..647C

22762.6

Sunday, March 13, 1921

G.M.T.	L.C. Obs	12" Polar	H.S.K. Rec.
14.48	U Virg.	124604 Est. 12.4 Fix R.A. light	
	U Gem	074922 Est. 12.8 Obs Dec 21.4	
	RU Virg	124204 Est. 12.4	
	V Virg.	132202 Est, 9.8	
	S Virg	132706 Est. 7.4	
	R Can Ven.	134440 Est 9.4	

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1921phae.proj..647C

α 2765

Wednesday March 16, 1921

G.M.T.	L.C. Obs	12" Polar	HSK Rec
12.09	U Gem	074922 Est. 12.0	
		Obs. Dec. +22.2	
	SS Aurig	060547 Est. 13.0	
		Obs. Dec. = +47.3	
15.23	U Gem	074922 Est 11.3	

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1921phae.proj..647C

Friday March 18, 1921

1.

G.M.T.	L.C. Hs	12" Polar	H.S.K. Rec
12.17.	U. Gem	074922	Est. 9.2
	SU Tauri	054319	Est. 9.7
	T Orionis	053005a	Est. 10.7
	S Orionis	052404	Est. 10.6

S Cauri 0B19 Plate I.

PA=B

13. 0. 35	298.8	Yerkes,
	14.2	75.4
	122.2	72.1
	194.3	147.5 -0.62

Comp ★ = the 9.30 used by O.C.V.

	296.2	
	12.2	76.0 -0.66
	122.8	68.4
	191.2	144.4 -0.69

PA=A

	17.2	
	107.4	110.2
	197.4	102.2
	299.6	212.4
		360.0
		147.6 +0.62

	21.2	
	113.3	92.1
	200.0	95.2 +0.38
	295.2	187.3
		360.0 +0.14

9.30	
mean = -0.14	
9.16	

Phan -0.180

13.5.52
13 3 14 2422767 5-445

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March 18, 1921

2.

S Cancri

PA = BA

13. 7 . 35

15, 2		
112, 8	97.6	
197, 4	96.8	
294, 2	194.4	
	340.0	
	165.6	+0.27

25, 8		
103, 2	77.4	+0.06
199, 8	95.4	
295, 2	172.8	−0,14

9,30

mean = −0.26

9.04

PA − AB

117, 7		
186, 4	68, 7	
296, 4	78.0	
14, 4	146.7	−0.64

117, 3		
190, 6	73, 3	−0,59
298, 3	78, 3	
16, 6	151.6	−0,54

13.12,04

19 38

13 9 50

2h 2767.549

67.224

0.175

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1921phae.proj..647C

March 18, 1921

3

S Cancri

PA = B

13. 16. 54	120.1		
	192.2	72.1	
	297.7	74.1	
	11.8	146.2	-0.65
	121.2		
	193.9	72.7	-0.58
	294.6	80.6	
	15.2	153.3	-0.51

9.30

Mean = -0.16

9.14

PA = A

	197.2		
	295.0	97.8	
	17.8	98.1	
	115.9	195.9	
		360.0	
		164.1	+0.30
	198.8		
	288.2	89.4	
	14.8	101.0	
13 21. 49	115.8	190.4	+0.25
38 43		360.0	
13 19 22		169.6	+0.20

2276 > 1955

-0.169

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March 18, 1921

4. 3,

S Cancri

PA = ~~B~~A

13. 25. 00	195.8		
	293.8	98.0	
	23.2	85.6	
	108.8	183.6	
		360.0	
		~~1~~76.4	+0.07

T'

	196.4		
	294.0	97.6	
	18.9	98.8	
	117.7	196.4	
		360.0	
		163.6	+0.31

9.30

mean = -0.18

9.12

PA = ~~A~~B

	295.5		
	~~3~~18.8	83.3	
	121.8	74.4	
	196.2	157.7	-0.43

	298.8		
	15.7	~~8~~6.9	-0.42
	113.7	82.1	
13. 29. 28	195.8	159.0	-0.40

13 27 14

22767.560

-0.164

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1921phae.proj..647C

March 18, 1921

S Cancri

	PA = B			
13.35 .01	298.2			
	16.2	78.0		
	118.2	76.1		
	194.3	154.1	-0.50	
	297.7		-0.48	
	15.3	77.6		
	119.2	78.1		
	197.3	155.7	-0.46	
	PA = A			9.30
			mean =	-0.12
	14.8			9.18
	112.4	97.6		
	201.8	95.6		
	297.4	193.2		
		360.0		
		166.8	+0.25	
	17.8			
	116.4	98.6		
	195.2	94.2	+0.24	
13.39.52	289.4	192.8		
		360.0		
		167.2	+0.24	
13 37 26				
22767.568				
-0.156				

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March 18, 1921

6

S Cancri

	PA = A			
13.43.07	19.2			
	117.5	98.3		
	200.8	95.8		
	296.6	194.1		
		360.0		
		165.9	+0.27	
	21.2			
	115.5	94.3	+0.24	
	199.8	96.8		
	296.6	191.1		
		369.0		
		168.9	+0.21	9.30
	PA = B		mean =	-0.20
	117.2			9.10
	188.6	71.4		
	298.0	74.1		
	12.1	145.5	-0.66	
	118.6			
	188.8	70.2	-0.64	
	297.2	77.6		
13.47.40	13.8	147.8	-0.62	

13 45 24

22767.573

-0.151

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1921phae.proj..647C

March 18, 1921

7

S Cancri

	PA = B		
13.5 4.12	298.4		
	15.6	77.2	
	118.8	77.4	
	196.2	154.6	−0.49
	298.8		−0.44
	19.7	80.9	
	117.4	78.4	
	195.8	159.3	−0.39
	PA = A		
	17.8		
	120.8	103.0	
	193.2	100.6	
	293.8	203.6	
		360.0	
		156.4	+0.45
	17.6		
	119.6	102.0	
	195.8	102.2	+0.46
13.59.11	298.0	204.2	
13 23		360.0	
13 56 42		155.8	+0.46
22767.581			
−0.143			

9.30
mean = +0.02
9.32

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1921phae.proj..647C

March 18, 1921

8

S Cancri

	PA = A			
14. 5. 58	9.6			
	115.0	105.4		
	195.8	102.6		
	298.4	208.0		
		360.0		
		152.0	+0.54	
	14.6			
	120.1	105.5		
	197.8	101.4	+0.52	
	299.2	206.9		
		360.0		
		153.1	+0.51	9.30
	PA = B		mean =	+0.15
	110.2			9.45
	196.8	86.6		
	296.6	83.0		
	19.6	169.6	-0.20	
	115.2			
	201.8	86.6	-0.22	
	300.1	80.7		
14. 9. 33	20.8	167.3	-0.24	

14 7 46

22767.589

- 0.135

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March 18, 1921

9

S Cancri

	PA = B			
14.13.57	118.6			
	201.8	83.2		
	293.1	81.7		
	14.8	164.9	−0.29	
	107.6		−0.12	
	202.0	94.4	~~−0.06~~	
	292.3	88.5		
	20.8	182.9		
		360.0	+0.06	9.30
	PA = A	177.1		mean = +0.30
	192.2			9.60
	304.8	112.6		
	12.8	108.8		
	121.6	221.4		
		360.0		
		138.6	+0.80	
	195.1			
	303.0	107.9		
	15.8	105.0	+0.72	
14.18.35	120.8	212.9		
12 32		360.0		
14 16 16		147.1	+0.63	
22767.594				
−0.130				

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March 18, 1921.

10.

S Cancri

	PA = A			
14. 24. 36	193.8			
	303.6	109.8		
	6.4	118.2		
	124.6	228.0		
		360.0	+0.94	
		132.0		
	196.1			
	306.2	110.1		
	7.4	116.3	+0.92	
	123.7	226.4		
		360.0		
		133.6	+0.90	
				9,30
	PA = B		mean =	+0.43
				9,73
	292.8			
	20.4	87.6		
	111.1	88.9		
	200.0	176.5	−0.06	
	292.2			
	20.2	88.0	−0.06	
14.29.10	114.2	89.4		
13 46	203.6	177.4	−0.05	

14 26 53

2276 ~~560~~ 602

−0.122

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1921phae.proj..647C

March 18, 1921

11

S Cancri

	PA = B		
14. 36.10	293.8		
	24.0	90.2	
	114.1	88.5	
	202.6	178.7	-0.02
	300.8		
	21.8	91.0	-0.01
	110.9	89.1	
	200.0	180.1	
		360.0	
		179.9	+0.00
			9.30
	PA = A		mean = +0.38
			9.68
	11.4		
	125.0	113.6	
	190.6	109.7	
	300.3	223.3	
		360.0	+0.84
		136.7	
	12.6		
	115.8	103.2	
	190.0	113.6	+0.78
14.40.55	303.6	216.8	
		360.0	
		143.2	+0.71

14 38 32

2276) 5669 (60

-0114

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1921phae.proj..647c

March 18, 1921

12

S Cancri

	PA = A			
14.44.18	10.8			
	127.0	116.2		
	194.7	108.1		
	302.8	224.3		
		360.0		
		135.7	+0.86	
	10.0			
	126.4	116.4		
	190.2	115.3	+0.94	
	305.5	231.7		
		360.0		9.30
	PA = B	128.3	+1.01	mean = +0.45
	111.3			9.75
	201.7	90.4		
	291.7	88.5		
	20.2	178.9	−0.02	
	112.2			
	202.8	90.6		
	290.2	94.0	+0.04	
14.49.29	24.2	184.6		
13 47		360.0		
14 46 54		175.4	+0.09	
22767.616				
−0.110f				

Watch Correct

S/M = 2.1

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1921phae.proj..647C

Tuesday March 22, 1921

2771

G. M. T. | L. C. No. | 12" Polar | H. S. K. R. C.

15. 35 | U Gem | 074922 | Est 9.8

R Coronae | 154428 | Est 8.7

PA = A

15. 55. 40 | 316.0 | Comp stars dec's

361.3 | 45.3

132.2 | 46.5

178.7 | 91.8 | +1.87

316.7

361.3 | 44.6 | +1.88

133.6 | 46.2

179.8 | 90.8 | +1.89

PA = B

33.1

102.2 | 69.1

211.8 | 68.6

280.4 | 137.7 | +0.82

35.1

101.7 | 66.6 | +0.80

210.5 | 72.9

15. 59. 30 | 283.4 | 139.5 | +0.78

7.20

mean = +1.34

8.54

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1921phae.proj..647c

Wed. Mar 23-1921

87J2 L.C. obs 12" Polar

Sat.

16 15 η Gemin 07 49 22 est 9.9

16 20 R Cor Bor 15 46 20 est 6.4

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1921phae.proj..6470

Friday March 25, 1921

2 2 7 4

G.M.T	L.S. Hr	12" Plate	H.S.K. Rec
15.49	U Gem	074922	Est 10.2
15:51	R. Coronae	D5-4428	Est 8.2

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1921phae.proj..647C

Tues Mar 29 - 1921

P.C. Obs 12" Polar H.S.K. Rec.

G.M.T.

12 30 U Geminorum 07 45 42 est 12.3

12 33 SV Camelopardalis 06 05 47 est < 13.2

12 35 S U Tauri 05 00 30 ? est 9.7

(5) Astraea

Est. found at RA 11h 9.2m +11° 20" (1855)

Comp. with preceding comp. of double at 11h 11 +11.4°

13.13.0

PA = B	comp standard	
125.6		
182.4	56.8	
310.6	51.0	
361.6	107.8	+1,47
		1.
129.2		
181.5	52.3	+1,51
310.3	51.9	
362.2	104.2	+1,55
PA = A		
202.2		Mean = +1.488
287.4	85.2	
26.8	77.6	
104.4	162.8	+0.33
202.6	90.3	+0.26
292.9	80.1	
24.7	170.4	+0.18
104.8		

13.16.30

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1921phae.proj..6470

~~Tues~~ March 29, 1921

2.

(b) Astraea

	PA = A		
13.21.0	202.8		
	288.8	86.0	
	29.4	73.4	
	102.8	159.4	+0.39
	202.6		
	285.6	83.0	+0.37
	28.2	78.7	
	106.9	161.7	+0.35
	PA = B		Mean = +0.92
	310.1		
	364.2	54.1	
	129.7	52.9	
	182.6	107.0	+1.49
	313.6		
	365.2	51.6	+1.47
	129.3	57.0	
13.25.70	186.3	108.6	+1.45

(3 23 20

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1921phae.proj..647C

March 29, 1921

3,

(5) Hathaea

	PA = B		
13. 28.20	312.4		
	361.1	48,7	
	128.5	52.6	
	181.1	101.3	+1.62
	310.3		
	365.5	55.2	+1.50
	128.3	56.5	
	184.8	111.7	1.38

PA = A

mean = +0.99

	30.5		
	100.4	69.9	
	207.8	82.0	
	289.8	151.9	+0.54
	25.2		
	106.2	81.0	+0.48
	206.8	77.5	
13.32.10	284.3	158.5	+0.41

13 30 15

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1921phae.proj..647C

March 29, 1921

4.

(5) Astraea

PA = A

13. 38. 0	30.8		
	101.7	70.9	
	204.0	82.8	
	286.8	153.7	+0.50
	27.8		+0.48
	101.8	74.0	
	203.3	82.0	
	285.3	156.0	+0.46

PA = B

Mean = +1.03

	127.0		
	182.6	55.6	
	310.5	45.8	
	356.3	101.4	+1.62
	128.8		
	180.4	51.6	+1.58
	308.4	53.1	
13. 42. 30	361.5	104.7	+1.54

13 40 15

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1921phae.proj..647C

March 29, 1921.

5.

(5) Astraea

PA = B

13. 49. 50	129.8		
	180.4	50.6	
	314.6	45.4	
	360.0	96.0	+1.76

+

	131.6		
	180.8	49.2	+1.72
	311.2	49.4	
	360.6	98.6	+1.69

PA = A

Mean = 1.05

	202.2		
	289.3	87.1	
	26.8	79.6	
	106.4	166.7	+0.25

	209.4		+0.38
	286.3	76.9	
	28.5	76.1	
13. 53. 0	104.6	153.0	+0.52

13 51 25

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March 29, 1921

6,

(5) Hetraea

	ΦA=A		
13.57.0	207.4		
	282.3	74.9	
	27.3	75.9	
	103.2	150.8	+0.56
	204.8		
	284.2	79.4	+0.50
	25.5	76.8	
	102.3	156.2	+0.45

ΦA=B — mean = +1.09

	311.1		
	358.8	47.7	
	129.7	53.0	
	182.7	100.7	+1.64
	310.9		
	358.8	47.9	+1.67
	129.8	50.2	
14.1.0	180.0	98.1	+1.70
13 59 0			

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March 29, 1921

7.

(5) Satura

PA = B

14. 3. 10

312.8		
361.0	48.2	
128.2	56.2	
184.4	104.4	+1.55

~~31~~

310.1		
363.8	53.7	+1.52
129.2	53.0	
182.2	106.7	+1.49

PA = A

mean = +0.97

27.2		
106.4	79.2	
204.0	81.7	
285.7	160.9	+0.36

26.4		
101.6	75.2	+0.42
205.2	79.9	
285.1	155.1	+0.48

14. 7. 40

14 55 25

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March 29, 1921

8.

(5) Istraea

	PA = A	
14.9.10	32.2	
	101.8	69.6
	206.8	77.9
	284.7	147.5 +0.62
	32.2	
	100.4	68.2 +0.60
	206.8	81.8
	288.6	150.0 +0.58

mean +1.11

	PA = B	
	129.8	
	178.8	49.0
	312.2	49.4
	361.6	98.4 +1.70
	129.2	
	185.3	56.1 +1.62
	311.4	~~43.0~~
14.13.0	~~354.4~~	48.6
	360.0	104.7 +1.54

14 11 05

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9

(5) Tauri

PA = B

14. 19. 40	~~180.2~~		
	308.8		
	361.8	53.0	
	131.6	48.2	
	179.8	101.2	+1.63
	314.8		
	361.8	47.0	+1.62
	126.6	54.4	
	181.0	101.4	+1.62

PA = A

mean = +1.09

	29.8		
	103.6	73.8	
	206.2	78.0	
	284.2	151.8	+0.54
	32.1		
	102.8	70.7	+0.56
	205.3	79.0	
14. 23. 40	284.3	149.7	+0.58

14 21 40

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10

(5) Athaea

P/T = A

14.26.40	30.0		
	107.4	77.4	
	205.8	83.0	
	288.8	160.4	+0.37
	33.9		
	103.2	69.3	+0.50
	207.2	78.1	
	285.3	147.4	+0.63

P A = B

mean = +1.12

	130.2		
	179.6	49.4	
	314.8	48.0	
	362.8	97.4	+1.72
	131.2		
	179.4	48.2	1.74
	312.2	47.6	
14.31.0	359.8	95.8	+1.76

57 60

14 28 50

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Jan. 29 - 1921.

Astraea 11

	PA = B		
14. 44. 50	129.4		
	181.7	52.3	
	312.8	52.2	
	365.0	104.5	+1.55
	130.2		
	179.8	49.6	+1.63
	311.8	48.1	
	359.9	97.7	+1.71

Mean = +1.08

	PA = a.		
	206.8		
	282.2	75.4	
	28.8	76.0	
	104.8	151.4	+0.55
	205.3		
	286.3	81.0	+0.53
	30.4	72.4	
14. 49. 40	102.8	153.4	+0.51
14. 47. 15			

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Jan 29 – 1921

Astraea 12

	P.a = a		
15. ~~59.0~~ 00.0	210.8		
	282.2	71.4	
	33.3	65.5	
	98.8	136.9	+0.84
	210.2		
	282.3	72.1	+0.78
	32.8	70.4	
	103.2	142.5	+0.72
	Pa. = B		Mean = +1.31
	314.3		
	361.0	46.7	
	131.0	46.2	
	177.2	92.9	+1.84
	312.2		
	360.8	48.6	+1.84
	132.2	44.0	
15.4.30	176.2	92.6	+1.84
15. 2.15			

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March 29, 1921

13.

Astraea

	PA = B		
15. 7. 20	311.8		
	361.4	49.6	
	130.3	53.0	
	183.3	102.6	+1.59
	310.2		
	361.8	51.6	+1.61
	130.2	49.5	
	179.7	101.1	+1.63
	PA = A		Mean = +1.18
	31.8		
	99.8	68.0	
	211.4	70.8	
	282.2	138.8	+0.80
	34.0		
	103.2	69.2	+0.74
	209.8	75.7	
15. 12. 0	285.5	144.9	+0.68
15. 9. 40			

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14

Athaea

PA = A

15. 16. 0

30.8		
102.2	71.4	
208.2	71.6	
279.8	143.0	+0.71

35.5		
99.4	63.9	+0.81
214.8	69.4	
284.2	133.3	+0.91

6

PA = B

Mean = +1.28

128.9		
181.8	52.9	
310.3	49.6	
359.9	102.5	+1.60

132.8		
178.4	45.6	+1.74
315.8	46.0	
361.8	91.6	+1.87

2

15. 20. 50

15 18. 25

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March 29, 1921 15-

Setting

	PA = B		
15.25.10	131.8		
	177.2	45.4	
	310.0	52.2	
	362.2	97.6	+1.72
	133.8		
	182.2	48.4	+1.76
	313.8	46.0	
	359.8	94.4	+1.80
	PA = A		
	207.7		
	281.2	73.5	
	33.3	66.9	
	100.2	140.4	+0.77
	210.3		
	285.7	75.4	+0.72
	32.8	70.0	
15.29.20	102.8	145.4	+0.67
15.27.15			

Mean = +1.24

Region on meridian 11.13 Sid Time
No. Dec 10.6°

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16

Ashaea

PA = A

15.33.20 209.2
283.8 74.6
34.2 68 8
103.0 143.4 +0.71

?
206.2
284.8 78.6 +0.64
31.8 71.4
103.2 150.0 +0.58

PA = D mean = 1.10

128.8
181.2 52.4
308.3 54 7
363.0 107.1 +1.49

131.1
180.4 49.3 +1.56
312.6 51.6
15.38.10 364.2 100.9 +1.63

15.35.45

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17

Astraea

PA = B

15. 42.0	129.2		
	182.8	53.6	
	309.8	53.4	
	363.2	107.0	+1.49
	132.0		
	178.8	46.8	+1.60
	312.2	51.1	
	363.3	97.9	+1.71

PA = A

Mean = +1.17

	210.1		
	282.8	72.7	
	329.6	73.0	
	102.6	145.7	+0.66
	212.1		
	280.4	68.3	+0.74
	32.7	70.0	
1546.10	102.7	138.3	+0.81
15. 44.05			

Sh = 5.2

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278

15h 52. R Coronae 15h 44m 28s Est 7.7

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126 22 22 22

Wednesday
~~Thursday~~ March 30, 1921

G.M.T.	L@.Obs	12" Polar	H&K Rec
12.20	~~SU Tauri~~	054319	Est 9.6
	~~U Gem~~	074922	Est 13.0
	SS Aurig	060547	Est 13.3

Athaea (51) Same comp stars as last night
PA: B Comp star disagt.

12.27,30	315.5		1.
	360.8	45.3	
	181.4	47.6	
	179.0	92.9	+1.84
	314.4		
	359.8	45.4	+1.85
	132.6	46.6	
	179.2	92.0	+1.86
	PA = A		
	32.2		Mean = +1.14
	105.1	72.9	
	205.1	81.7	
	286.8	154.6	+0.49
	29.8		
	103.7	73.9	+0.44
	206.1	86.1	
12.32.0	292.2	160.0	+0.38
12.29.45			

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2.

Astraea (5)

PA = A

12. 34. 20

26.8	
103.2	76.4
203.3	83.5
286.8	159.9 +0.38

26.4	
103.8	77.4 +0.40
207.2	80.2
287.4	157.6 +0.43

PA = B

Mean = +1.02

129.5	
182.4	52.9
313.4	51.0
364.4	103.9 +1.56

129.3	
177.4	48.1 +1.65
311.3	48.5
358.8	96.6 +1.74

12. 37. 30

12. 35. 55

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March 30, 1921

Astraea (5) 3

	PA = B		
12.39.30	133.8		
	182.2	48.4	
	311.4	50.4	
	361.8	98.8	+1.69
	131.8		
	182.2	50.4	+1.67
	311.4	49.7	
	361.1	100.1	+1.65
	PA = A		Mean = +1.04
	201.8		
	285.5	83.7	
	30.2	72.2	
	102.4	155.9	+0.46
	204.4		
	288.0	83.6	+0.40
	28.4	78.0	
12.43.30	103.4	161.6	+0.35
12 41.30			

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4

Polaris (5)

PA = A

12.45.40	204.6		
	286.6	79.0	
	25.5	78.7	
	104.2	157.7	+0.43

	202.6		
	286.4	83.8	+0.42
	28.3	75.0	
	103.3	158.8	+0.40

PA = B

mean = +1.05

	315.0		
	360.4	45.4	
	131.6	48.0	
	179.6	93.4	+1.82

	311.4		
	364.8	53.4	+1.68
	131.4	50.9	
12.49.50	182.3	104.3	+1.55

12.47.45

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Astraea (5) (6)

	PA = B		
12. 52. 30	309.4		
	364.4	55.0	
	129.4	51.2	
	180.6	106.2	+1.51
	312.6		+1.59
	362.2	49.6	
	129.4	49.8	
	179.2	99.4	+1.67
			mean = +1.04
	PA = A		
	29.0		
	104.6	75.6	
	202.2	81.8	
	284.0	157.4	+0.43
	31.4		
	100.2	68.8	+0.50
	202.7	81.5	
12. 57. 0	284.2	150.3	+0.57
12. 54. 45			

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(6)

Astraea (5)

PA = A

13. 2. 30

28.0		
106.2	78.2	
212.1	73.5	
285.6	151.7	+0.54

30.0		
103.8	73.8	+0.56
210.0	76.0	
286.0	149.8	+0.58

PA = B

Mean = +1.08

130.7		
183.4	52.7	
313.2	48.6	
361.8	101.3	+1.62

131.8		
182.2	50.4	+1.61
309.8	52.0	
361.8	102.4	+1.60

13. 7. 0

13. 4. 45

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7

Astraea (5)

PA = B

13. 9. 40

131.0
181.0 — 50.0
310.8 — 48.2
359.0 — 98.2 +1.70

131.1
178.8 — 47.7 +1.68
310.4 — 51.6
362.0 — 99.3 +1.67

Mean = +1.15

PA = A

206.8
284.8 — 78.0
29.4 — 73.8
103.2 — 151.8 +0.54

206.0
280.6 — 74.6 +0.62
31.0 — 69.8
100.8 — 144.4 +0.69

13. 14. 20

13 12.0

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c.

Tethaea (5)

	PA = A		
13.22.30	210.2		
	287.4	77.2	
	34.0	66.4	
	100.4	143.6	+0.70
	210.6		
	284.9	74.3	+0.67
	30.4	72.4	
	102.8	146.7	+0.64

Mean = +1.18

	PA = B		
	310.1		
	358.9	48.8	
	132.8	48.6	
	181.4	97.4	+1.72
	310.2		
	361.8	51.6	+1.68
	131.4	48.6	
13.26.30	180.0	100.2	+1.65

13.24.30

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9

Astraea (5)

	PA=B		
13.34.0	310.9		
	358.2	47.3	
	130.0	51.6	
	181.6	98.9	+1.68
	308.2		
	361.2	53.0	+1.62
	128.8	51.0	
	179.8	104.0	+1.56

PA=A

mean = +1.07

	25.9		
	100.4	74.5	
	208.8	78.6	
	287.4	153.1	+0.51
	32.1		
	101.4	69.3	+0.52
	204.2	82.4	
13.37.30	286.6	151.7	+0.54
13.35.45			

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10.

Atlantis (5)

	PH = 14		
13.42.40	30.1		
	105.0	74.9	
	204.4	80.4	
	284.8	155.3	+0.47
	30.8		
	101.6	70.8	+0.52
	206.2	79.0	
	285.2	149.8	+0.58
			mean = +1.12
	PH = B		
	130.4		
	178.8	48.4	
	308.8	53.9	
	362.7	102.3	+1.60
	133.0		
	177.4	44.4	+1.72
	312.4	48.0	
13.46.50	360.4	92.4	+1.85
13.44.45			

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Astraea (5) 11,

P/A = B

13.50.40

132.4		
181.2	48.8	
308.6	52.7	
361.3	101.5	+1.62

128.2		
178.4	50.2	+1.60
309.3	52.9	
362.2	103.1	+1.58

P/A = A

mean = +1.07

206.8		
282.6	75.8	
29.8	74.4	
104.2	150.2	+0.57

203.2		
286.4	83.2	+0.54
28.4	70.9	
99.3	154.1	+0.50

13.54.10

13.52.25

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12

Astraea 5

PA = A

[3, 5-9, 20	208.6		
	285.8	77.2	
	32.6	70.7	
	103.J	147.9	+0.62
	205.6		
	283.4	77.8	+0.60
	29.8	72.6	
	102.4	150.4	+0.57

PA = B

Mean = +1.11

	310.4		
	359.8	49.4	
	131.2	50.6	
	181.8	100.0	+1.66
	309.8		
	361.2	51.4	+1.62
	131.7	51.6	
14.4.0	183.3	103.0	+1.58

14.1.40

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13

Athara (5)

	PA = II		
14.08.40	310.0		
	362.4	52.8	
	131.7	47.2	
	178.9	100.0	+1.66
	309.6		
	359.8	50.2	+1.65
	130.2	50.6	
	180.8	100.8	+1.64
	PA = A		mean = +1.13
	30.2		
	103.6	73.4	
	209.8	75.0	
	284.8	148.4	+0.61
	32.1		
	101.4	69.3	+0.61
	208.4	78.8	
14.13.30	283.2	148.1	+0.61
14.11.05			

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14

Aehaea (5)

PA = 17

14, 18, 10	30, 8		
	103, 2	72.4	
	206, 2	81.4	
	287, 6	153.8	+0.50
	30, 2		
	102, 3	72.1	+0.46
	202, 3	86.5	
	288.8	158.6	+0.41

PA = B

Mean = +1.07

	309, 6		
	363, 3	53.7	
	129, 9	46.5	
	176, 4	100.2	+1.65
	311.4		
	359, 2	47.8	+1.68
	129, 3	49.5	
14, 22, 10	178, 8	97.3	+1.72

14, 20, 10

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15—

Astraea (5)

	PA = B		
14, 26, 30	313.8		
	361.4	47.6	
	131.2	52.1	
	183.3	99.7	+1.66
	307.7		
	362.3	54.6	+1.65
	130.4	46.2	
	176.6	100.8	+1.64
	PA = A		mean = +1.04
	29.8		
	102.1	~~7~~2.3	
	202.8	84.4	
	287.2	156.7	+0.44
	31.2		
	108.4	77.2	+0.42
14, 31, 30	~~+97.8~~	81.2	
~~14, 31, 40~~	205.6	158.4	+0.41
	286.8		
~~14, 28, 35~~			
14, 29, 0			S/μ = 7,0

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16

Athaea (5)

	PA = A			
14.36.40	32.2			
	112.8	80.6		
	209.8	78.2		
	288.0	158.8	+0.40	
	31.2			
	105.8	74.6	+0.42	
	206.2	81.6		
	287.8	156.2	+0.45	
	PA = B			mean = +1.07
	130.4			
	181.0	50.6		
	312.2	48.0		
	360.2	98.6	+1.69	
	128.7			
	176.4	47.7	+1.72	
	314.0	49.0		
14.40.50	363.0	96.7	+1.74	

14.38.45

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Read of Sup. I
Fredeha 345-1 Ballon 103
G.M.T. 13 44 14.5 = 13.45.0

14.53.37 Seen.

Phot R
12" Polar
FC clb.
14 K. Rec.

14.54 49	28.8
14 55.4	102.7
14,55,20	33.3
.40	111.4
.54	23.2
14,56.09	112.2
.20	23.4
.34	106.4
.46	21.3
.57	106.8
14,57.12	18.9
.24	112.0
.35	19.2
.48	116.8
14,58.04	18.7
.15	115.7
.35	14.9
.59	25.5 ← Phot Reversed here
14,59.13	292.8
.23	23.0
.36	292.2
.47	22.4
.57	294.2

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1921phae.proj..647C

March 30, 1921

15. ~~50~~ 59. 5	25.1
18	298.7
25	22.4
36	294.7
47	23.8
58	293.2
15.81.08	24.2
.19	292.8
.29	24.8
.38	291.0
.	
L.V.	
52	311.2
15. 2.07	10.0
.20	311.0
.33	8.8
.	

15.6.30 R Coronae 15 41 28 Est 7.4

Bell 103 Final Bkg = 1

14 09 00 160A 17.5

Posted to here.

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1921phae.proj..647C

Friday April 1, 1921

12..26	SU Tauri	05-4319	Est 9.6	
	U Gemin	074922	Est. 13,0	Sanford in pgr
	SS Aurig	60547	Est. 13,0	

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1921phae.proj..647C

Sat. April 2 – 1921

LC Obs. 12" Polar H & K Rev

Astraea (5) 1.

11 11 +11.5

8 21

2 50

12.38.30	PA = B		
	293.0	Obt. dis,	
	379.1	86.1	
	112.8	93.3	
	206.1	179.4	-0.01
	295.6		
	375.0	79.4	-0.09
	113.8	91.4	
	205.2	170.8	-0.17
	PA = A		Mean = +0.47
	189.2		
	305.3	116.1	
	10.8	113.2	
	124.0	229.3	
		360.0	
		130.7	+0.96
	189.6		
	307.3	117.7	
	9.8	120.2	+1.05
12.40.10	130.0	237.9	
		360.0	
12.39.20		122.1	+1.14

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1921phae.proj..647C

April 2, 1921

Tetraea (5) (2)

PA = A

		comp star	diff	
12. 47. 30	126.2			
	192.6	66.4		
	309.6	62.2		
	369.8	128.6	+1.01	
	128.2			
	196.8	68.6		+0.95
	300.8	65.8		
	366.6	134.4	+0.89	

PA = B

mean = +0.56

	202.2			
	291.3	89.1		
	19.4	86.6		
	106.0	175.7	+0.08	
	205.9			
	290.6	84.7		+0.18
12. 52. 0	27.4	80.0		
	107.4	164.7	+0.29	
12. 49. 45 30				

Comp star = +11°

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1921phae.proj..647C

April 2, 1921

Atlaea (5) (3)

PA = B

12.54.10	200.8		
	286.4	85.6	
	23.6	86.6	
	110.2	172.2	+0.15
	202.1		
	289.4	87.3	+0.12
	23.3	88.0	
	111.3	175.3	+0.09

PA = A

mean = +0.46

	304.3		
	374.7	70.4	
	123.7	72.6	
	196.3	143.0	+0.71
	302.7		
	369.0	66.3	+0.79
	124.4	69.2	
12.59.0	193.6	135.5	+0.87
12.56.35			

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April 2, 1921

Astraea (5) 4

PA = 17

13.3.0	300.6		
	368.3	67.7	
	126.2	75.0	
	201.2	142.7	+0.72

	308.2		
	368.8	60.6	+0.85
	125.8	69.5	
	195.3	130.1	+0.98

PA = B

mean = +0.54

	22.2		
	105.0	82.8	
	204.2	84.9	
	289.1	167.7	+0.23

	24.3		
	109.3	85.0	+0.22
	208.6	84.0	
13.7.40	292.6	169.0	+0.21
13.5.20			

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1921phae.proj..647C

April 2, 1921

Astraea (5) 57.

PA - B

13. 12. 0

20.4		
109.4	89.0	
210.3	80.3	
290.6	169.3	+0.20

26.4		
109.2	82.8	+0.22
209.8	84.0	
293.8	166.8	+0.25

PA = A

mean = +0.50

121.8		
196.6	74.8	
304.8	66.8	
371.6	141.6	+0.74

126.1		
194.2	68.1	+0.78
302.2	68.9	
371.1	137.0	+0.83

13. 16. 30

13. 14. 15

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1921phae.proj.647C

April 2, 1921

Astraea (5) 6

PA = A

13.20.30	123.4		13
	195.8	72.4	
	305.1	60.5	
	365.6	132.9	+0.92

124.2		
193.2	69.0	+0.90
303.8	66.0	
369.8	135.0	+0.88

PA = B mean = +0.58

215.4		
289.1	73.7	
22.1	87.5	
109.6	161.2	+0.36

207.2		
291.7	84.5	+0.26
23.8	86.2	
110.0	170.7	+0.17

13.25.30

13.23.0

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April 2, 1921

Astraea (5) 7

PA = B

13. 31. 50	208.2		
	291.2	83.0	
	30.6	74.4	
	105.0	157.4	+0.43
	202.4		
	287.2	84.8	+0.40
	29.8	76.4	
	106.2	161.2	+0.36

PA = A mean = +0.65

	306.8		
	373.3	66.5	
	123.2	66.2	
	189.4	132.7	+0.92
	303.6		
	369.6	66.0	+0.90
	124.4	68.3	
13. 37.0	192.7	134.3	+0.89

13 34.25

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April 2, 1921

8

Astraea (5)

	PA = A			
13 41. 10	300,3			
	372.8	72.5		
	118.6	81.8		
	200.4	154.3	+0.49	
	298.2			
	375.8	77.6		+0.50
	118.2	75.4		
	193.6	153.0	+0.52	
	PA = B			mean = +0.42
	25.6			
	106.3	80.7		
	208.3	81.1		
	289.4	161.8	+0.35	
	25.0			
	108.6	83.6		+0.34
	210.6	79.6		
13. 46. 10	290.2	163.2	+0.32	
13 43. 40				

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1921phae.proj..647C

April 2, 1921

9.

Astraea (5)

	P/A=B		
13.48.40	22.8		
	108.2	85.4	
	202.8	88.9	
	291.7	174.3	+0.11
	22.4		
	109.8	87.4	+0.11
	204.4	87.0	
	291.4	174.4	+0.11
	P/A=A		mean = +0.54
	125.0		
	191.1	66.1	
	303.2	67.6	
	370.8	133.7	+0.90
	125.1		
	190.0	64.9	+0.96
	303.7	63.2	
13.53.40	366.9	128.1	+1.02
13 51.10			

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April 2, 1921

Astraea (5) with Comp Star B 10

PA = B

14.3.20	227.0	Comp star dis	
	285.8	58.8	
	51.8	46.4	
	98.2	105.2	+1.53
	231.3		
	279.8	48.5	+1.57
	47.7	53.3	
	101.0	101.8	+1.61

PA = ~~B~~ +1.96

Mean = ~~+0.1~~

	325.8		
	363.8	38.0	
	145.9	38.5	
	184.4	76.5	+2.30
	325.0		
	363.2	38.2	+2.35
	145.0	35.2	
14.7.20	180.2	73.4	+2.40

14.5.20

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11

~~Astraea (5)~~ Comp star A. with B.

	PA = A	B displ.	
14.8.30	327.2		
	362.2	35.0	
	146.8	42.0	
	188.8	77.0	+2.28
	329.3		
	361.3	32.0	+2.40
	147.2	38.0	
	185.2	70.0	+2.51
			mean = +2.26
	PA = B		
	322.8		
	369.8	47.0	
	146.6	40.0	
	186.6	87.0	+2.00
	326.8		
	365.8	39.0	+2.12
	145.5	39.3	
14.12.0	184.8	78.3	+2.25

Seeing extremely poor
Comp. stars not well placed for satisfact. observ.

14:50. R Coronae 154426 Est 7.0

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1921phae.proj..647C

Sunday April 3, 1921

L.C. 60

12" Polar

H.S.K. Rec

GMT | Rod 3605-1 | Ball 103

14 56 20.0 | 14 56 0.0

Reaff. of Sat II comp. with nearest of 2 sat. on same side = Sat I.

15. 8. 48 Seen → First Spectra with low power eyepiece.

Re

~~15.~~

15. 9. 47	140.4
10. 0	179.6
.12	135.3
.25	186.2
.41	126.0
.57	196.8
11. 08	124.6
.20	190.0
.30	122.0
.43	193.0
.54	124.0
12. 07	197.7
.19	124.0
.34	99.4 → Plate removed
.49	30.8
.56	97.0
13. 04	38.4
.11	100.2
.19	39.1
.29	102.0
.38	30.2
.47	99.6

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1921phae.proj..647C

April 3, 1921

.56	34.4
15.14.05	100.2
.12	34.4
.21	102.2
.29	31.8
.40	100.4
.48	30.0
.59	107.7
15.09	25.0
.18	101.8
.28	27.1
.36	103.6
.44	28.8
.54	104.4
16.04	25.5
.13	103.0
.22	32.7
.30	105.6
.39	30.2
.49	104.8
.57	28.0
17.07	101.8
15-17.16	30.2
L V.	
17.37	51.1
.49	88.0
18.05	52.4
15.18.14	86.8

Trocloudy on R Coronae
Sky somewhat cloudy but apparently clear near Jupiter

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1921phae.proj..647C

April 3, 1921

Fredeham 3451 Baltim 103
15, 24, 24.5 at 15, 24, 0

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1921phae.proj..647C

Saturday, April 9, 1921

G.M.T.	L.C. Obs	12" Polar		N S K Rec
13.15	S U Tauri	054319	Est 9.5	
	S S Aurigae	060547	Est 13.0	
	U Gemin	074922	Est 12.5	Hazy in this region
	X Aurigae	060450	Est. 10.0	
	Y Aurigae	061647	Est. 10.8	
	Y Monoc	061702	Est. Clouds.	
9.12	R Coronae	154428	Est. 6.7±	Obs. made through Clouds

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1921phae.proj..647C

2 27 9 1

From April 11-1924

LC Obs 12" Blan

16 30 R Coronae 15 44 20 est 6.3

Var. bright - eldr adl

about equiv.

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1921phae.proj..647C

Tues Apr 12 – 21

12" Polar H&K, Rec

12 35 SU Tauri 05 43 est 9.5

12 37 U Gem 07 49 22 est <12.8

12 39 SS Aurigae 06 05 47 est <12.8

Actaea (5) (1)

13 01. 50 PA = B

233.6	Comp Standard	
278.4	44.8	
55.2	40.6	
95.8	85.4	+2.04
230.2		
275.7	45.5	+2.01
54.6	42.2	
96.8	87.7	+1.98

PA = A

Mean = +2.36

332.8		
363.8	31.0	
148.2	31.1	
179.3	62.1	+2.78
332.8		
364.4	31.6	+2.72
147.2	34.2	
181.4	65.8	+2.65

13. 6. 0

13. 3. 55

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1921phae.proj..647C

April 12, 1921

Pendulo readjusted

Aethaea (5) (2

	PA = A		
13.9.40	181.4		
	214.7	33.0	
	5.6	32.2	
	37.8	65.2	+2.67
	185.9		
	214.2	28.3	+2.74
	6.6	33.2	
	39.8	61.5	+2.80
	PA = B		mean = +2.43
	270.4		
	312.8	42.4	
	90.6	40.0	
	130.6	82.4	+2.12
	271.2		
	312.8	41.6	+2.12
	91.1	41.1	
13.14.0	132.2	82.7	+2.12
13.11.50			

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1921phae.proj..647C

Astraea (5) (3)

	PA = B		
13.19.10	270.2		
	309.8	39.6	
	91.4	40.0	
	131.4	79.6	+2.21
	272.6		
	311.2	38.6	+2.24
	92.2	39.2	
	131.4	77.8	+2.26
	PA = A		mean = +2.60
	7.5		
	40.2	32.7	
	187.4	26.4	
	213.8	59.1	+2.89
	7.8		
	38.2	30.4	+2.96
	185.6	25.2	
13.23.0	210.8	55.6	+3.03
13.21.05			

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1921phae.proj..647C

April 12, 1921

(4)

Astraea (5)

PA = A

13. 30. 10

8.4		
37.4	29.0	
185.5	27.3	
212.8	56.3	+3.00

7.5		
36.8	29.3	+2.91
183.8	31.8	
219.6	61.1	+2.82

PA = B

mean = +2.53

90.6		
132.4	41.8	
269.8	40.0	
309.8	81.8	+2.14

93.1		
131.2	38.1	+2.15
270.1	43.1	
313.2	81.2	+2.16

13. 34 10

13 32. 10

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1921phae.proj..647C

(5)

Aletaea (5)

	PA = B		
13.40.0	91.2		
	130.6	39.4	
	269.2	42.0	
	311.2	81.4	+2.15
	88.8		
	131.2	42.4	+2.16
	270.6	38.6	
	309.2	81.0	+2.17
	PA = A		mean = +2.51
	187.3		
	214.8	27.5	
	9.4	30.3	
	39.7	57.8	+2.94
	185.5		
	217.7	32.2	Reject notation below
	7.4	32.8	
14.43.50	40.2	65.0	+2.68
13.41.55	184.8		+2.86
	214.8	30.0	
	6.6	32.0	
	38.6	62.0	+2.79

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1921phae.proj..647C

April 12, 1921

(6)

Astraea (5)

PA = A

13.50.30	186.8		
	216.4	29.6	
	8.2	26.0	
	34.2	55.6	+3.03
	184.8		
	213.6	28.8	+2.98
	6.8	29.0	
	35.8	57.8	+2.94

PA = B

Mean = +2.47

	268.2		
	311.8	43.6	
	90.6	44.5	
	135.1	88.1	+1.96
	266.2		
	309.8	43.6	+1.96
	86.3	44.8	
13.54.50	131.1	88.4	+1.96
13.52.40			

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1921phae.proj..647C

(7)

Astraea (5)

	PA=B		
14.3.20	270.8		
	312.4	41.6	
	91.8	40.1	
	131.9	81.7	+2.14
	271.3		
	311.4	40.1	+2.12
	89.4	43.4	
	132.8	83.5	+2.09
	PA=B		Mean = +2.50
	268.7		
	310.2	41.5	Extra Reject
	87.8	43.0	
	130.8	84.5	
	PA=A		
	5.5		
	34.8	29.3	
	187.4	29.4	
	216.8	58.7	+2.91
	7.8		
	38.2	30.4	+2.89
	184.8	29.4	
14.9.0	214.2	59.8	+2.87
14.6.10			

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April 12, 1921

(8)

Astraea (5)

PA = A

14. 19. 10

7.4		
35.0	27.6	
183.6	33.1	
216.7	60.7	+2.84

7.9		
37.2	29.3	+2.88
186.2	29.3	
215.5	58.6	+2.91

PA = B

mean = +2.48

92.2		
130.6	38.4	
267.4	45.0	
312.4	83.4	+2.10

89.8		
132.8	43.0	+2.07
267.2	42.2	
309.4	85.4	+2.04

14. 23. 40

14. 21. 25

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(9)

Aletaea (5)

	PA = B		
14. 32.30	90.8		
	130.0	39.2	
	268.8	41.0	
	309.8	80.2	+2.19
	91.8		
	131.6	39.8	+2.14
	266.4	44.0	
	310.4	83.8	+2.08

Mean = +2.49

	PA = A		
	187.4		
	214.1	26.7	Reject
	7.3	27.1	Relative Below
	34.4	53.8	+3.11
	188.0		
	214.4	26.4	
	6.8	33.0	
	39.8	59.4	+2.88
14, 36.50			
14, 34.40	185.4		
	215.9	30.5	+2.84
	7.4	31.5	
	38.9	62.0	+2.79

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1921phae.proj..647C

April 12, 1921

(10)

Aethra (5T

PA = 17

14.48.30	185.8		
	215.5	29.7	
	4.8	35.0	
	39.8	64.7	+2.69

	185.8		
	213.2	27.4	+2.86
	6.9	28.6	
	35.5	56.0	+3.02

PA = B

Mean = +2.60

	268.8		
	306.8	38.0	
	92.9	38.8	
	131.7	76.8	+2.29

	270.4		
	306.8	36.4	
	95.2	~~31.9~~	+2.34
14.53.0	~~+27.1~~	37.0	
	132.2	73.4	+2.40
14.50.45			

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1921phae..proj..647C

(11)

Astraea (5)

PA = B

14.56.0
268,2
309.8 41,6
91,4 40.4
131.8 82.0 +2.14

269.2
310.0 40.8 +2.14
90.8 41.4
132.2 82.2 +2.13

PA = A Mean = +2.58

5.8
35.8 30.0
186.2 27.8
214.0 57.8 +2.94

8.4
34.0 25.6
~~188.9~~ ~~24.9~~
15.0.20 ~~213.8~~ 50.5 +3.02

187.8
215.8 28.0
53.6 +3.11

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1921phae.proj..647C

April 12, 1921

12

Hetaera (5)

PA = A

15 9,30	6.4		
	35.8	29.4	
	186.9	29.9	
	216.8	59.3	+2.89
	7.4		
	35.8	28.4	+2.94
	186.8	28.5	
	215.3	56.9	+2.96

PA = B

Mean = +2.63

	95.4		
	129.7	34.3	
	266.8	42.1	
	308.9	76.4	+2.30
	92.4		
	131.3	38.9	+2.32
	269.4	36.6	
15.13.10	306.0	75.5	+2.33

15.11.20

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1921phae.proj..647C

April 12, 1921

13,

Deltaea (5)

	PA=B		
15.18.30	91,4		
	131.6	40,2	
	266.8	43.2	
	310,0	83.4	+2,10
	93,3		
	132.8	39.5	+2,20
	271,3	36.7	
	308,0	76.2	+2,31

mean = +2.66

	PA=A		
	188,4		
	213,8	25.4	
	8,4	24,4	
	32,8	49,8	+3,28
	188,8		
	216,2	27,4	+3,17
	9,8	30,0	
15.22,0	39,8	57,4	+2,96

S/N. 3.3

L.V. of 5" glass appears to be 13± with high power

15.52.30 R Coronae 15.44.28 East 6.4 in 5" tab.
16 00 β Lyrae est β Lyr. 5/33 β Lyrae
= 3.42

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1921phae.proj..647C

Wednesday April 13, 1921

L.C. 8b. 12" Polar H&S.K. Rec

Astraea (5) (1)

13.45.40

PA = B			
265.4			
312.2	46.8		
91.8	40.6		
132.4	87.4	+1.98	
269.2			
309.8	40.6	+2.12	
91.6	37.6		
129.2	78.2	+2.25	
PA = A			mean = +2.56
7.4			
35.6	28.2		
185.5	27.8		
213.3	56.0	+3.02	
7.8			
35.8	28.0	+3.00	
186.0	28.8		
214.8	56.8	+2.98	

13.50.0

13,47.50

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1921phae.proj..647C

Astraea (5) 2.

	P A = A			
13. 5. 1 40	5. 8			
	35. 8	30, 0		
	187. 2	27. 6		
	214, 8	57. 6	+2, 95	
	4, 2			
	38, 2	34. 0		+2, 86
	185. 5	28. 7		
	214, 2	62. 7	+2. 76	
	P A = B			mean = +2, 88
	90. 8			
	131, 8	41. 0		
	261, 4	50. 8		
	312, 2	91, 8	+1, 87	
	89, 5			
	136. 4	46. 9		+1, 90
	269, 4	42. 1		
13. 56. 0	311. 5	89. 0	+1, 94	
13. 53. 50				

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1921phae.proj..647C

April 13, 1921

Athaca (5) 3,

	PA = B		
13.5 7.0	92.8		
	134.2	41.4	
	269.9	42.4	
	312.3	83.8	+2.08
	91.2		
	132.2	41.0	+2.08
	268.8	43.4	
	312.2	84.4	+2.07
	PA = A		mean = +2.43
	186.4		
	214.8	28.4	
	7.4	31.0	
	38.4	59.4	+2.88
	183.3		
	215.8	32.5	+2.78
	5.8	32.0	
14. 1. 20	37.8	64.5	+2.69

3
14. 5 9. 10

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1921phae.proj..647C

4.

Astraea (5)

	PA = ~~A~~			
14.5.0	185.3			
	213.8	28.5		
	4.8	31.5		
	36.3	60.0	+2.86	
	184.7			
	217.2	32.5	+2.73	
	4.8	34.6		
	39.4	67.1	+2.60	
	PA = ~~B~~			mean = + 2,40
	267.4			
	312.3	44.9		
	91.7	41.9		
	133.6	86.8	+2,00	
	269.8			
	311.4	41.6	+2.08	
	91.8	40.0		
14.9.40	131.8	81.6	+2.15	
14.7.20				

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1921phae.proj..647C

178

April 13, 1921

5,

Tetrad (5)

PA = B

4
15-24.0

270.2
310.8 40.6
91.3 41.5
132.8 82.1 +2.13

270.2
310.2 40.0 +2.16
90.3 40.5
130.8 80.5 +2.18

PA = A

Mean = +2.48

7.4
37.8 30.4
185.2 30.6
215.8 61.0 +2.82

5.2
38.0 32.8 +2.80
184.8 29.0
213.8 61.8 +2.79

4
15-28.30

4
15.26.15

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1921phae.proj..6470

April 13, 1921.

6.

Astraea (5)

PA = A

14.35.0	5.8		
	34.8	29.0	
	187.4	28.4	
	215.8	57.4	+2.96
	65		
	40.0	33.5	+2.78
	183.2	33.6	
	216.8	67.1	+2.60

PA = B

Mean = +2.44

	90.4		
	133.8	43.4	
	270.9	39.3	
	310.2	82.7	+2.12
	91.2		
	136.3	45.1	+2.10
	271.3	38.5	
14.39.0	309.8	83.6	+2.09

14.

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1921phae.proj..647C

April 13, 1921

Astraia (5) 7.

	PA = B		
14. 50.40	90.8		
	135.2	44.4	
	267.2	46.9	
	314.1	91.3	+1.88
	90.4		
	133.2	42.8	+1.94
	268.4	43.8	
	312.2	86.6	+2.01
	PA = A		mean = +2.36
	183.8		
	217.2	33.4	
	8.4	29.2	
	37.6	62.6	+2.76
	183.8		
	212.4	28.6	+2.78
	4.0	33.4	
14. 55.40	37.4	62.0	+2.79

Sp = 2.8

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1921phae.proj..647C

April 13, 1921

Astraea (5)

*8.

PA = A

~~Set.~~ drifted out of field
Abandoned.

PA = B

Mean = +

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1921phae.proj..647C

Wednesday April 20, 1921

p = 2800

	L.C. Obs	12" Polar	#S.K. Rec
12.45.50	SU Tauri	054319	Est. 9.6
	SS Aurigae	060547	Est. 12,2
	U Gem	074922	Est. 12.5
	Astraea found but too faint to measure in moonlight S.T. = 10.0 H.A. 1.5 E Dec 11.8		
	Y Gem	071713	Est. 12.6 if seen ∴ < 12.6
	T Can Min	072811	Est. 11.9
	UY Can Min	073508	Est. 12.4
	S Geminn	073723	Est. 9.4.
	T Gem	074323	Est. 8.9
	U Cancri	083019	Est. 12.4
	X Ursa Maj	083350	Est. 9.7
	The 9.6 near the 10.6 two grades fainter than the star just South preceding. The 9.6 a mag brighter than 10.6. The 9.6 to 2 the 10.0		
13.28.30	S Hyd.	084803	Est 11.8

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1921phae.proj..647C

April 20, 1921

	~~W Can Ci~~		
13.31.40	R Leo min	093934	Est. 8.6
	V Leonis	095421	Est. 10.3
	W Leonis	104814	Est. 12.3 2f seen
	S Leonis	110506	Est. 10.9
	R Comae	115919	Est. Var. mins 20 near moon ¾ haze
14.45.30	R Boreae	154428	Est. 6.1

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1921phae.proj..647C

$2^2 \; 40^5$

Monday April 25, 1921

	L. Obs	12" Polar		H5X Rec
12.53.	S U Tauri	054319	Est 9.7	
	S.S. Aurigae	060547	Est 10,7	var at max
	V Gem	074922	Est. 13.2	
	S Cancri	83819		
	PA = B			
12.58.30	66.2	Comp star dia.		
	149.9	83.7		
	252.6	83.6		
	336.2	167.3	+0.24	
	66.4			
	149.4	83.0	+0.30	
	254.7	78.6		
	333.3	161.6	+0.35	
	PA = A			9.30
	165.8		Mean =	+0.61
	240.4	74.6		9.91
	356.6	61.8		
	58.4	136.4	+0.85	
	174.6			
	236.6	62.0	+0.92	
	352.2	67.0		
13.3.0	59.2	129.0	+1.00	
13.0.45				

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1921phae.proj.:6470

April 25 1921

2

S Cancri

PA = A

13,10,30	352,2		
	61,2	59.0	
	163,3	73,8	
	237,1	132.8	+0,92
	348,7		
	54,4	65.7	+0,90
	165,2	69,2	
	234,4	134.9	+0,88

9,30

mean = +0,75

10,05

PA = B

	71,7		
	144,8	73,1	
	256,4	75.4	
	331,8	148,5	+0,60
	73,2		
	150,2	77.0	+0,60
	259,8	71.3	
13,14,30	331,1	148,3	+0,61

13,12,30

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1921phae.proj..647C

April 25, 1921

3.

S Cancri

	PA = B		
13.19.0	75.2		
	151.4	76.2	
	252.4	78.2	
	330.6	154.4	+0.49
	69.9		
	148.4	78.5	+0.49
	257.1	76.1	
	333.2	154.6	+0.49
			9.30
	PA = A		mean = +0.66
			9.96
	167.1		
	237.2	70.1	
	348.2	65.1	
	53.3	135.2	+0.87
	168.2		
	242.8	74.6	+0.84
	350.6	63.8	
13.23.0	54.4	138.4	+0.81
13.21.0			

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1921phae.proj..647C

April 25, 1921

S Cancri 4.

PA = A

13, 28, 20	163.1		
	246.8	83.7	
	348.8	63.6	
	52.4	147.3	+0.63
	169.8		
	233.8	64.0	+0.89
	352.1	57.8	
	49.9	121.8	+1.15

9.30
mean = +0.70
10.00

PA = B

	254.0		
	332.4	78.4	
	71.6	76.2	
	147.8	154.6	+0.49
	255.6		
	333.0	77.4	+0.51
	74.8	75.0	
13, 33.0	149.8	152.4	+0.53

13, 30.40

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1921phae.proj..647C

~2805

April 25 1921

13. 49.0	RS Leonis	093720	Est 12.8 th. or d 5 var
	R Comae	115919	Est 12.2
	T Virginis	120905	Est 13.0
	SU Virginis	120012	Est 13.4 if seen
	R Corvi	121418	Est 8.2
	SS Virginis	122001	Est 9.0
	T Can Ven	122532	Est. 10.4
	Y Virginis	122803	Est. 13.4
	R Virginis	123307	Est. 8.6
	U Virginis	124606	Est. 8.7
	RU Virginis	124204	Est. m o var 12.8 th
	RV Virginis	130212	Est 13.3
	V Virginis	132202	Est 12.8
14. 25.0	R Hydrae	132422	Est 9.3

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1921phae.proj..647C

April 25, 1921

14.28	S Virginis	132706	Est 9.2
	R CanVen	134440	Est 7.8
	RR Virginis	135908	Est 13.3 if seen ∴ not seen
	Z Virginis	140512	Est 13.1
	R Coronae	154428	Est 6.1

15 00 β Lyrae ζ Lyrae ∠ β + δ Lyrae N.E

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1921phae.proj..647C

Tuesday April 26, 1921

L.e. 10 6" W. Eq. #SKBoc

Lunar Maj 0d 3 3 5 2

HA 3.48W at Cs watch 10.45 Dec 50,2

14.15 50

90 2α 4100 296 3104 4106

2B Est 10.03 var 3104

d 33
3 4d

12 21 at 10:45
12 31 at 10:55
21 3F

9) 2 Too cloudy.

12" Polar

15.0	Z Boot.	140113	Est 10.2
	R S Ymg	142205	Est Too cloudy
	R Boot.	143227	Est 7.5
	U Boot	144918	Est 12.0
	S Serp.	151714	Est. 12.8
	S Coronae	151731	Est 10.0
15.14.30	X Coronae	154536	Est 12.7

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1921phae.proj..647C

April 26 1921

15.15:30	V Coronae	154639	Est,	10,2
	R Herc	160118	Est.	12.4
	R Serp.	154615	Est.	Clouds in this region.

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1921phae.proj..647C

22 8 a.m. L

Thursday April 28, 1921

	L.C. Obs	12" Polar	HS/S Rec
13.57	SS Aurigae	060547	Est. 10.5
	SU Tauri	054319	Est 9.5
	U Gem	074922	Est 12.9

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1921phae.proj..647C

Sunday May 1-1921.

L.C.Obs. 12" Polar H.T.C. Rec

R Coronae 154428 Est. Phot 7.

Index B. van den

+4.22,30	346.4		
	49.9	63.5	
	170.4	59.3	
	229.7	122.8	− 1.13
	347.0		
	51.4	64.4	− 1.04
	167.8	67.0	
	234.8	131.4	− 0.95

Index A Mean − 1.11

	85.4		Slope = 7.2/6.1
	138.4	53.0	
	261.3	62.3	
	323.6	115.3	− 1.30
	79.1		− 1.19
	142.4	63.3	
	258.8	61.8	
14.26,0	320.6	125.1	− 1.08

IC 24 15

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1921phae.proj.647C

May 1- 1921.

162807	S.S. Herc.	Est. 10.2
160210	U. Serp.	Est. 8.8
161138	W. Coronae	Est- 10.9
163137	W. Herc.	

Too much cloud to continue with advantage.

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1921phae.proj..647C

Monday May 9, 1921

2819

	4 P. Obs	12" Polar	H.S.K. Rec
13, 29.0	R Coronae	154128	Est. 6.1
	U Gem	074922	Est. 12.8
	S Hydrae	084803	Est. 11.3
	W Cancri	090425	Est. Abandoned.
	R Sex. Min.	093934	Est. 9.8
	V Leonis	095421	Est. 10.6
	W Leonis	104814	Est. 12.8
	S Leonis	110506	Est. Not seen with certainty 12.2
	R Comae	115919	Est. 10.2
	T Virg	120905	Est. Too cloudy in this region.
	R Corvi	121418	Est. 8.5
	SS Virg	122001	Est. 9.0
	T Can Ven	122532	Est. 11.8
14.11.0	Y Virg	122803	Est 12.5

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1921phae.proj..647C

May 9, 1921

14.13.10	TR Vrig	123307	Est 9.82
	T Ursa Maj	123160 ~~123961~~	Est. 7.7
	SS Ursa Maj	123961	Est 10.7
	RS Ursa Maj	123459	Est. 12.5

Ests Plotted to here.

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1921pnae.proj..647C

Wednesday, May 11, 1921

	L.C. Obs	12" Polar	N.S.K. Rec.
13. 4. 30	U. Jem	074922 Est 12.2	
	RC Can Ven	130636 Algol Var.	1.
13. 14. 0	PA = B		
	259.4	Vandis.	
	324.4	65.0	
	84.3	56.3	
	140.6	121.3 ∓1.16	
	261.0		
	321.3	60.3 −1.21	
	84.9	56.7	
	141.6	117.0 −1.26	
	PA = A		
	2.4		mean = −1.79
	39.2	36.8	
	185.6	35.2	
	220.8	72.0 −2.44	
	0.0		
	39.4	39.4 −2.37	
	181.4	37.2	
13. 18. 20	218.6	76.6 −2.30	
13 16. 10			

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May 11, 1921

R Can Ven

2.

PA = A

13.20.10	1.2		
	39.8	38.6	
	180.6	42.1	
	222.7	80.7	-2.17
	358.0		
	42.2	44.2	-2.17
	183.3	36.7	
	220.0	80.9	-2.17
			-1.96
			Mean = ~~-1.46~~

PA = B

	267.7		
	315.2	47.5	
	89.0	45.8	
	135.8	93.3	-1.83
	269.4		
	316.6	47.2	-1.75
	83.4	52.4	
13.24.40	135.8	99.6	-1.67

13.22.25

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1921phae.proj..647C

May 11, 1921

R S Can Ven

PA = B

3,

13.26.0	89.8		
	137.2	47.4	
	264.7	50.5	
	315.2	97.9	-1.71
	87.4		
	133.4	46.0	-1.74
	263.7	49.5	
	313.2	95.5	-1.77

PA = A

mean = -2.03

	183.8		
	220.2	36.4	
	2.2	39.1	
	41.3	75.5	-2.33
	181.2		
	218.9	37.7	-2.32
	1.8	38.6	
13.29.40	40.4	76.3	-2.31

13. 27.50

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1921phae.proj..647C

May 11, 1921

4.

S
R Can V en

	PA = A		
13.40.30	179.4		
	224.2	44.8	
	358.2	44.2	
	42.4	89.0	-1.94
	182.4		
	226.2	43.8	-2.02
	3.3	39.0	
	42.3	82.8	-2.11
	PA = B		Mean = -1.90
	267.8		
	315.8	48.0	
	88.8	49.6	
	138.4	97.6	-1.72
	264.4		
	313.6	49.2	-1.77
	89.2	44.2	
13.44.40	133.4	93.4	-1.82
13.42.35			

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1921phae.proj..647C

S
R & Can Ven 5,

PA = B

13.46.0	267.2		
	315.6	48.4	
	89.8	41.6	
	131.4	90.0	-1.91
	265.5		
	314.0	48.5	-1.82
	87.7	48.7	
	136.4	97.2	-1.73

PA = A mean = -2.18

	3.8		
	37.4	33.6	
	183.7	30.9	
	214.6	64.5	-2.69
	2.4		
	39.4	37.0	-2.55
	181.8	36.0	
13.49.50	217.8	73.0	-2.41
13.47.55			

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1921phae.proj..647C

May 11, 1921

S
R Cam Ran

6

	PA = A		
13.51.30	4.4		
	40.8	36.4	
	177.6	40.0	
	217.6	76.4	-2.30
	3.4		
	41.2	37.8	-2.28
	184.7	40.1	
	224.8	77.9	-2.26
	PA = B		mean = -1.99
	87.2		
	136.8	49.6	
	267.4	48.0	
	315.4	97.6	-1.72
	86.2		
	135.2	49.0	-1.70
	267.6	50.2	
13.55.50	317.8	99.2	-1.68
13.53.40			

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1921phae.proj..647C

May 11, 1921

S
R Can Ven

7

PA = B

13.57.30 88.2
136.8 48.6
263.7 48.9
312.6 97.5 -1.72

87.7
137.4 49.7 -1.64
262.2 54.0
316.2 103.7 -1.57

PA = A

mean = -1.91

180.2
221.3 41.1
2.8 38.6
41.4 79.7 -2.20

178.1
220.2 42.1 -2.18
3.8 39.0
14.1.30 42.8 81.1 -2.16

13.59.30

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1921phae.proj..647C

May 11, 1921

R & Can Yen

PA = A

14. 3. 30	177.0		
	227.4	50.4	
	2.2	43.6	
	45.8	94.0	−1.81
	179.8		
	221.1	41.3	−1.92
	0.0	44.8	
	44.8	86.1	−2.02

PA = B

Mean = −1.67

	263.8		
	315.7	51.9	
	85.8	53.6	
	139.4	105.5	−1.52
	261.2		
	317.8	56.6	−1.42
	82.2	57.8	
1407.40	140.0	114.4	−1.32

14. 05. 35

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1921phae.proj..647C

9

R S & Can Vem

	PA=B		
14.9.50	260.2		
	318.2	58.0	
	85.1	55.1	
	140.2	113.1	-1.35
	265.8		
	314.2	48.4	-1.48
	85.2	54.1	
	139.3	102.5	-1.60

PA=A

Mean = -1.80

	3.0		
	42.4	39.4	
	180.2	41.0	
	221.2	80.4	-2.18
	0.8		
	43.2	42.4	-2.11
	177.9	42.9	
14.14.50	220.8	85.3	-2.04

Comparison star at 13h 5m +36°38

= +362347 (90)

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2 2 8 24

Sat. May. 14, 1921.

12" Polar

	L.C. Obs.		L.G.J. Rec.
13-35-0	~~Cat. 6.1~~ R. Coronae	154428	Cat. 6.1
13-45-0	R. Gomae	115919	Cat 9.8
13- -0			

13: Too much aurora which is polarized by photo.

Too much fog and aurora to continue.

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1921phae.proj..647C

2 2 & 27

Tues. May 17–1921

12" Polar

HSK. Roc

Pl Clo

	F 345-1	Barlow
G. M.T.	13 4 24.0	13 5 0.0

Reap. Jup 4. Comp with most remote satn eam and = satt. 3. Phot R.

13
G.M.T.
4 41. 0' Seen. Ob of 1st spec. made with 3" eyepiece.
Photometer.

42.8	~~1440~~
.35	238.8
.54	261.2
44.11	236.4
.30	263.8
.43	237.2
.57	261.8
45.15	233.9
.32	261.8
.52	236.7
46.11	263.2
.35	236.2
.49	268.3
.59	230.8
47.10	268.4
.23	230.6
.36	268.9
13 47.48	232.0

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1921phae.proj..647C

May 17, 1921

13	
H. 48.03	270.1
.12	229.0
.22	270.4
.30	228.8
.42	268.0
.54	228.4
49.07	268.8
.17	228.0
.32	268.1
.42	226.9
.55	269.8
50.05	225.8
.21	272.2
.34	227.2
.52	275.8
51.05	226.0
.14	272.0
.24	226.1
.35	275.1
.47	228.2
.59	275.2
52.11	227.0
.25	276.8
.36	228.0
.51	278.8
53.05	224.0
.15	272.4
H. 53.31	223.2

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1921phae.proj..647C

May 17, 1921

18	
H. 5 3.44	275.6
.57	221.8
54.06	273.8
.16	222.1
.25	275.2
.34	222.0
.44	279.8
.53	222.0
55.05	280.4
.14	222.1
.25	281.6
.34	219.2
.45	276.2
.54	221.0
56.03	276.8
.10	218.0
.19	281.4
.28	216.1
.38	279.0
.47	215.4
.55	276.8
57.00	222.1
.10	276.8
.18	221.0
.28	279.2
.37	217.8
.45	282.2
13 57.53	220.4

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1921phae.proj..647C

May 17, 1921

13		
H.	5 8.05	278.8
	.14	220.8
	.27	282.0
13	.36	221.8
H.	58.47	280.8

L. V

13		
H.	5 9.09	238.9
	.24	261.2
13	.35	236.8
H.	5 9.48	261.2

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1921phae.proj..647C

Thurs May 19-1921

E.C.Obs. 12" Polar

14h 28m R Coronae 15°44' 28" est 6.0

Sky very hazy & cloudy
with bright moon.

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1921phae.proj..647C

Monday, May 23, 1921

G.M.T.	L.C. Obs	12" Polar,	W.S.K. Rec.
14.25	2 Bootis	140113	Est. clouds

Hopelessly cloudy.

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1921phae.proj..6476

2 2 8 3 4

Tuesday May 24, 1921

G.M.T.	L.C. Obs	12" Polar		H.S.K. Rec.
13.38	R Coronae	154428	Est 6.4	
	R Coronae	115919	Est. 9.0	
	R Coronae			
	PA = B			
13.37.0	132.4	Comp Standard Phot R		
	188.0	55.6		
	315.2	51.0		
	6.2	106.6	+1.50	
	128.8		1.48	
	186.4	57.6		
	316.4	50.4		
	6.8	108.0	+1.46	
	PA = A		Mean =	7.6 +1.50
	47.4			9.10
	92.0	44.6		
	222.7	56.2		
	278.9	100.8	+1.64	
			+1.52	
	42.2			
	95.8	53.6		
	223.4	56.8		
13.41.30	280.2	110.4	+1.41	

Comp with 7.6 closely var.

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May 24, 1921

22834

14.50	R Corvi	121418	Est. 7.4
	Y Virg.	122803	Est. 12.2
	T Ursa Maj	132160	Est. 8.6
	S Ursa Maj	123961	Est. 9.5
	RS Ursa Maj	123459	Est 13.4
	RU Virg	124204	Est. α 4 var. 13.5 th.
	RV Virg	13 0212	Est. 13.5 if seen
	V Virg	132202	Est 13.4
	R Hydrae	132422	Est. 9.4
	S Virg.	132706	Est 9.6
14.33	6" Tel. from Needham tested for L.V. on R Ursa Majoris region. Seeing pretty poor but with 2" Eyepiece a star of 13.3 mag. could be seen. Est. Variable 12.9		
	12" Plan R.R Virg.	135908	Est 13.3
14.46.0	Z Virg.	140512	Est 13.5

Telescopic meteor at 14.44 G.M.T. Mag 9.0 thru field of Z Virg E to W.

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May 24, 1921

14.49	S Boot	141954	Est. 12.8
	RS Vulp	142205-	Est 9.4
	R Boot	143227	Est 7.0
	V Libræ	143417	Est. 12.8
	U Boot	144918	Est. 11.8
	S Serp	151714	Est. 12.1
15.4	X Coronæ	154536	Est. 13.1

Obs. at Vassar 12" Telescope May 27/21.

10376 R Ursæ Maj.

12.5 Pickering
12.6 Murray
12.9 Yalelen
17.00 12.7 Campbell
12.8 Olcott

12345 9 RS Ursæ Maj.

14.0 L. Campbell

S S Aquarii 213843

17 20

11.9 Pickering	11.9 Murray
11.7 Campbell	11.8 Olcott
12.0 Yalelen	

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Wed. June 1-1921

12" Polar LC. Ob.

1333 R Cor Bor 15442 est 6.2

R Lyr 09211 est 9.6

V Lyr 09542 est 12.4

R Coronae 11519 est 8.5

S Virg 12002 est 12.4

S S Virg 12201 est 8.8

Z Bootis 14013 est 9.8

U Virg 12606 est 8.5

R Hydrae 13422 est 9.3

R Can Ven 13440 est >7

R R Virg 13508 est <13.3

Z Virg 14052 est 13.5

R Z Scorp 15523 est 8.5

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1921phae.proj..647C

June 1 - 1921

S Boötis 14h 9.5m est 13.0

R S Vir 14 22.0s - est 9.7

V Boötis 14 25 39 est 8.7

R Boötis 14 32.7 est 7.2

6 S Serp 15 7 14 est 12.1

S Cor 15 7 31 est 11.0

V Coron 15 45 39 est 10.8

R Herc 16 0 11 est 8.4

R Serp 15 46 15 est 9.8

15 00 T Cor 15 55 26 est d 4.4 f

May 30, 1921 at Dr C. C. Godfrey
8½ reflector / Burnham at Colon

12 31 60 ι Ursæ Maj est 9.0 LC
" " " " 9.0 Waldo

12 34 59 R S Ursæ Maj est <13.3 LC
" " " " <13.3 Waldo

21 58 43 S S Cygni est 11.8 LC Waldo & Godfrey

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1921phae.proj..647C

Thurs June 2 - 1921

RC Obs 12" Polar

13 50 RT Librae 150 ct est 9.6

T Librae 15 05 9 est 13.0 ~~if seen~~

S Librae 15 15 20 est 10.5

Y Lybrae 15 20 01 est 9.2

RS Librae 15 18 22 est 11.7

RU Librae 15 21 X est 11.0

X Librae 15 30 20 est 11.4

R Librae 15 40 15 est < 12.8

RR Librae ~~15 15~~ 15 50 18 ~~est~~ 12.6 if seen

U Librae 15 36 20 est 11.4
Var & adj. & well seen

Z Librae 15 40 20 est 12.8

Z Coronae 15 52 29 est < 13.2

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1921phae.proj..6470

June 2 1921

S Her 16280 est 13.0

U Ser 16021c est 8.9

W Cor 16113A est 12.9

W Her 16317 est 10.9

RV Her 16561 est < 13.5

RT Her 17062 est 13.0

Z Oph 17101 est 10.9

RS Her 17123 est 13.4

R Oph 17209 est 10.2

RS Oph 17406 est 11.5

RT Oph 17511 est < 13 2

+ Dra 17545a est 10.4

14 42 Meteor 10th mag

W Dra 17548b 11.5

V Dra 17556 est < 13.3

T Her 18031 est 9.4

Nova Oph 18011 est 11.4

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1921phae.proj..647C

June 2—1921

1822 24 SV Herc ext 12.6

T Sct 18 23 06 ext 13.3

16 45 RY Sagitt 19 10 33 m 15.4 2 4.

ext 7.8

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