KG
11365
759

1915phae.proj..766c

Photographic Observations

Arequipa

1915-4-15

1915-5-

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1915phae.proj...760C

April 15, 1915.
Cont. from previous book.
Photometric Obs.
L² Ruffis. Obs.
A.B. Rec.

E & W wand = 18 feet.

07 10 44
10 00
2 50 W -44.5"

Below
269.3 < Vardis.

I

8:20	15	277.3	8.0	
		85.8	7.2	
		93.0	15.2	- 5.89
		269.6		
8:21	49	277.2	7.6	
		-85.7	8.1	- 5.82
		93.8	15.7	- 5.82
		Above		
		179.6	Means =	- 5.790
8:23	29	185.2	5.6	
		356.3	7.9	
		--41.2	13.5	- 6.15
		177.2		
8:25	05	186.1	8.9	- 5.7
		354.2	11.0	- 5.30
		5.2	19.9	-

10 38
8 22 40
20 603.55 7
8 22 22

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1915phae.proj..7600

april 15, 1915

Same Again

		Above		
~~8:30~~		178.4		
8:30	42	184.6	8.2	
		354.7	10 5	
		5.2	18 7 —	5.44
		179.2		
8:32	12	187.2	8.0 —	5.51
		354.7	9 5	
		-4.2	17 5 —	5.58
		Below	Mean =	-5.538
		84.8		
8:33	41	93.2	8.4	
		270.5	8.7	
		279.2	17 1 —	5.63
		82.2		
8:35	34	92.0	9.8 —	5.565
	12 09	270.4	8.4	
8	33 02	278.8	18 2 —	5.50
	603.565			
8	32 44			

Obs. very difficult, such var is so bright & red while comp * is considerably fainter and blue

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April 15, 1915 —

L.C. Susp. Var on Z Ruffis Chart

07 27 20

Above

~~Below~~

	249.2	Comp. star dis	
8:45 39	293.3	441	
	71.5	350	
	110.5	831	+ 2.10

246.8		
291.3	445	+ 2.065
68.8	412	
110.0	857	+ 203

Mean = + 2.132

Below

164.8		
203.3	385	
339.8	354	
15.2	739	+ 238

	164.8		
8:52 26	205.2	404	+ 2.32
9 05	337.6	374	
49 02	15.0	778	+ 226
49 44			
603.576			

Diff. due to closeness & difference in brightness of star

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1915phae.proj..760C

April 15th 1915

R Trianguli Aust.

15 7066
10 45
4 35 E −66.1

~~Write~~ Right

	348.0	(~~Write~~)	
9:06 15	−14.6	< Var. dis	26.6
	166.3		28 0
	194.3		5×6 — 3.07

345.5		15
15.6	301	−3.02
168.6	272	
195.8	57.3	— 2.96

~~Left~~

Mean = −3.055

258.3		
286.6	283	
76.8	264	
103.2	5×7	— 3.07

259.5		3.09
9:11.0 1 286.2	267	—
76.6	267	
17 16 103.3	5 3.4	— 3.12

9 9 0f 3f
0f 20
603. ~~590~~
588

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1915phae.proj..760C

April 15, 1915

Same again

Left

II

	258.6		
7:12 27	287.2	286	
	−75.8	318	
	106.6	60.4	− 2.84
	255.0		
	286.3	313	− 2.82
	−75.2	30.3	
	105.5	61.6	− 2.80

~~Waste~~ Right. Mean = −2.850

	168.1		
	196.3	282	
	344.2	310	
	−15.2	59.2	− 2.89
	167.3		
9:16 39	197.6	303	− 2.88
24 06	344.3	295	
9 14 33	−13.8	598	− 2.87
9 14 15			
603.5	9 4/3		

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1915phae.proj..760C

April 15, 1915

Right III

		166.3		
9:23	45	195.5	29.2	
		344.3	29.5	
		13.8	58.7	− 2.91
		168.6		
9:25	18	198.2	29.6	− 2.92
		343.6	25.6	
		12.2	58.2	− 2.93

Left Mean = − 2.950

		75.2		
9:26	36	104.2	29.0	
		258.2	29.0	
		287.2	58.0	− 2.94
		76.8		
9:27	18	104.3	27.5	− 2.98
		257.8	28.5	
		286.3	56.0	− 3.02

23 27
9 25 52
9 25 34
603. ~~56~~
601

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April 15, 1915

IV

Left

77.3

29 46 103.3 260

257.2 271

284.3 531 — 3.1 cf

73.8 ~~3.00~~ ~~2.9~~

9:31.18 105.2 314 2.995

256.3 289

285.2 583 — 2.91

Mean — 2.9~~4~~5 2

Below

343.0

9:32.31 12.6 296

167.2 291

196.3 587 — 2.91

344.3

9:33 47 -14.2 29.9 — 2.91

168.9 288

197.7 587 — 2.91

722

9 31 50.
9 31 32
603.606

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April 15, 1915

R Arae

163156

1144

Below

238.5 Var dis

4 47 ε −1.76

10:01 34 300.3

618

−59.2

596

118.8

121.4 — 1.16

~~244.2~~

244.2

10:03 21 303.3

591 — 1165

−57.3

619

119.2

121.0 — 1.17

Above

Mean = — 1.262

154.2

10:04 50 212.6

584

330.0

616

31.6

120.0 — 1.19

156.8

10:06 07 208.2

514 — 1.36

15 52 328.8

540

10 03 58 22.8

1054 — 1.53

10 03 40

603.628

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1915phae.proj..7600

April 15, 1915

Same again

Above

154.2
0:07, 30 208.6 54.4
329.2 59.0
28.2 113.4 — 1.34

154.6 — 1.42
0:08.33 207.6 57.0
331.2 55.4
26.6 106.4 — 1.50

Below Mean = -1.290

59.2
0:09.46 117.2 58.0
238.3 65.0
303.3 123.0 — 1.13

61.2
0:11.09 119.0 57.8 — 1.16
36 58 241.2 62.4
303.6 120.2 — 1.19

10 09 14
10 08 56
603.631

Final Mean = -1.28

Conf * = * just N of Var
marked * on P.C. chart.

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1915phae.proj..7600

April 15, 1915

R R Velorum 101741 b

1207

150 W-41.9

Above

69.5

10:28 54 109.6 <K. dis <vel

252.6

292.1

401

395

79.6 − 2.21

72.3

10:30 20 112.6 −2.22

252.6

291.2

403

386

78.9 − 2.23

Below Mean = −2.232

342.3

10:32 27 −21.6

163.3

198.2

393

349

742 − 2.37

343.6

10:33 50 −18.2 2.445

5 31 163.6

10 31 23 198.6

10 31 05

603.6

346

350

696 − 2.52

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1915phae.proj..7600

April 15 1915

Same again

Below

	344.0		
20: 35.43	16.6	326	
	165.6	296	
	195.2	62.2	−2.78
	347.8		−2.785
10: 37.09	−17.8	300	
	166.2	320	−2.79
	198.2	62.0	

Above

Mean = −2.792

	253.6.		
10: 38 35	284.8	31.2	
	78.2	291	
	107.3	60.3	−2.85
	254.1		−2.80
10: 40 00	289.6	355	
31 27	72.3	275	
	99.8	63.0	−2.75

10 37 52
10 37 34
603.6 571

Comp with * d Sequence

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April 15th 1915

		above	IV	
		73.6		
10:46	36	99.1	255	
		253.6	357	
		289.3	612	−2.81
		−76.5		−2.69
10:48	05	109.6	331	
		255.0	350	
		290.0	681	−2.57
		Below	Mean = −2.59	
		345.2		
10:49	35	−22.2	370	
		163.3	353	
		198.6	723	−2.43
		346.4		−2.49
10.50	48	20.1	337	
	35 04	164.2	350	
		199.2	687	−2.55

10 48 46
10 48 28
6033.6 − 1
6591

L. P.
Foll

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D 20605

Sat. April 17, 1915

Photom. Obs. Tr. Obs. a.B. Rec.

Ch. W. used — 26.9905 — 133926

= 31.0 fast

9 09

430 Σ − 262

Above

343.2 Var. dis

7:20 12 17.5 346 3

163.2 396

202.8 739 − 2.3f

340.2 − 2.1f

7:21 49 − 25.3 451

159.6 426

202.2 877 − 1.9f

Below Mean = 2.062

246.8

7:23 12 291.2 444

−70.0 433

113.3 877 − 1.9f

249.2 − 1.945

7:24 38 293.2 440

951 67.6 462

22 28 113.8 902 − 1.91

21 57

20605.5753

5.266

0.249

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April 17 1915

Below Same again

250.8

7:26 16 290.2 394

72.2 380

110.2 774 — 2.27

249.8 — 2.18 7.5

7:28 12 291.2 414

71.2 426

113.6 838 — 2.08

above mean = — 2.13 3.5

340.6

7:30 24 22.2 416

158.2 484

206.6 900 — 1.91

340.2

7:32 02 -18.8 386 — 2.095

116 54 163.6 387

202.3 773 — 2.28

7 29 14

7 28 43

5.5.209

5.3.199

5.266

0.274

Too much hoge to continue on this Var.

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1915phae.proj..7600

April 17, 1915

~~above~~

γ Corvae 10295

above

318.6 (Var. dis

933

0.56E - 5 J.D.

-49.2

136.6

225.6

906

890

179.6 — 0.01

315.7 +0.04

44.2

131.1

227.5

885

964

184.9 +009

175.1

Below

Mean = +0.102

-47.6

134.6

225.5

325.2

870

997

186.7

173.3 + 0.13

-46.6

142.6

224.2

318.6

960

964

1906

169.6 + 020

3 20

50 50

50 19

5.5 3 2449

5.913

4.913

0.622

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1915phae.proj..7600

April 17. 1915

Same again

		Below			
		112.6			
7:55	04	138.8	962		
		220.2	986		
		318.8	1948	+ 0.28	
			1652		
		48.2			
7:56	16	138.7	905	+ 0.21	
		221.6	967		
		318.3	1872		
			1728	+ 0.14	
		Above			
		135.2		Mean = + 0.182	
7:58	07	231.8	966		
		315.9	909		
		46.8	1875		
			1725	+ 0.14	
		136.3			
7:59	15	231.2	969	+ 0.155	
		317.2	940		
28	32	-51.2	1889		
5	08		1711	+ 0.17	
56	37				
	393				

600.5
604.913
0.627

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April 17, 1915

R Centauri 14095 9

−59.4

Above

140.1 L Vardis

17 21 216.6 76.5

322.3 72.8

35.1 1493 −059

146.2

8.18 16 218.6 724 −0.68

328.2 68.0

−36.2 1404 −0.77

Below Mean = −0.605

55.3

8.23 06 128.2 729

232.3 789

311.2 1518 −054

50.3

8.24 46 128.1 778 −0.53

234.6 750

3 29 309.6 1528 −052

f 20 52

f 20 21

5 31

Too ft & diff to take a second group

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April 17, 1915.

R T Aug Aust. 15°066

Below

	349.8	Var. dis	10 21
8.34 54	23.5	+ assumed	33.7
	168.6		24.7
	193.3		58.4 — 292
			2875
	344.3		288
8:36 26	15.2		309 — 288
	165.8		300
	195.8		609 — 283
			mean = 2.88 92
	Above		
	256.2		
	285.6		294
8:37 46	77.2		296
	106.8		590 — 290
	258.6		
8:39 39	287.8		292 — 287
28 45	73.8		314
	105.2		606 — 286

8 37 11
8 36 40
605 567
603.882
1.685

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1915phae.proj..7600

April 17. 1915.

Above Same again

257.3

8.41 22 284.7 274

74.8 308

105.6 582 — 293

255.6

9:43 47 286.2 306 — 2845

76.6 320

108.6 626 — 276

Mean = — 2.830

Below

165.8

9:46 37 193.1 273

347.4 308

-18.2 581 — 293

165.2

8:48 02 198.6 334 — 2815

1 9 50 345.3 310

16.3 644 — 270

8 44 58

8 44 27

31

Final M = 2815

Obs. Lee = -66.3

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April 17, 1915

R Arae 16315-6

1050

5541 E -56.8

above

149.8 Var. dis

8:59 58 212.2 624

334.2 520

26.2 1144 -1.32

~~9:00~~ 156,2

9:00 09 208.0 518 -1.43

334.2 530

27.2 1048 -1.54

Below 1.395

59.6 Mean = -1.46

9:01 39 122.6 630

240.1 555

295.6 1185 -1.23

62.2 -1.36

9:02.51 114.2 520

244.2 550

299.2 1070 -1.49

4 37

9 01 09

00 37

55 84

5.31 6

0.228

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1915phae.proj..7600

April 17, 1915

Same again

Below

	63.3		
9:04 32	118.2	549	
	241.2	589	
	300.1	113.8	−1.33
	60.0		−1.185
1:08 58	122.6	626	
	234.5	645	
	299.0	127.1	−1.04

Above

	333.2		
1:07 38	22.2	490	
	157.8	494	
	209.2	98.4	−1.70

Mean = −1.365

	331.1		−1.545
1:08 49	26.2	551	
26 57	156.1	561	
	212.2	111.2	−1.39

906 44
906 13

5.588
5.356
0.232

Final M = −1.380

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1915phae.proj..760C

Sun. April 18. 1915

RR Velorum 10 17 41 aB. Rec

Below

	157.8	1 00 2	−41.8
7:23 09	208.8	510	
	329.9 −6	577	
	27.6	108.7	−1.4 v
	153.2		
7:25 07	210.2	570	−1.4 7½
	332.6	54.6	
	27.2	111.6	−1.3 8

Above

Mean = −1.248

	62.2		
7:27 08	121.8	59.6	
	241.2	621	
	303.3	121.7	−1.16
	58.2		
7:28 30	125.2	670	−1.0 f
23 54	240.5	621	
7 25 58	302.6	129.1	−1.00

606.5 177

606.47 x

0.8 x 3

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1915phae.proj..760C

April 18, 1915

		about		II
		63.3		
7:34	26	115.6	52.3	
		246.6	54.2	
		300.8	106.5	− 1.50
		60.0		− 1.365
7:37	03	120.2	60.2	
		243.3	57.9	
		301.2	118.1	− 1.23
		Below	Mean =	− 1.325
		332.0		
7:38	54	31.8	59.8	
		155.5	57.3	
		212.8	117.1	− 1.26
		331.6		− 1.285
7:40	59	29.2	57.6	
		154.3	56.9	
		211.2	114.5	− 1.31

31 22
37 20
36 50
606.5 − 256
606.674
0052

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1915phae.proj..760C

april 18, 1915

Below

14

		336.2		
7:45	21	26.8	50.6	
		158.2	500	
		208.2	100.6	− 1.64
		334.2		− 1.5 (15)
7:47	0	31.8	57.6	
		154.8	53.8	
		208.6	111.4	− 1.39

Above

Mean = − 1.440

		243.2		
7:48	59	299.2	560	
		60.3	59.7	
		120.0	113.7	− 133
		244.1		
7:50	25	300.2	56.1	− 1.365
		64.2	546	
		118.8	110.7	− 140

31 45
7 47 56
) 47 26
606.5329
606.474
0.059

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1915phee.proj...7600

april 18, 1915

IV

above

247.6

7.55 28 292.5 449

−64.2 536

117.8 985 − 1.67

244.6

7:56 56 297.6 530 − 1.685

−67.2 494

116.6 1024 − 1.60

Below

Mean = −1.642

154.8

7:58 41 205.3 505

333.6 530

26.6 1035 − 1.57

156.3

8:00 31 205.6 493 − 1.65

31 36 338.3 479

26.2 972 − 1.73

7 57 54

7 59 24

606.53 99

606.47 4

0.064

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1915phae.proj..760C

April 18. 1915

Below

V

158.2

8:04 49 203.8 456

340.0 422

22.2 878 — 1.97

151.6

8:06 35 202.6 510 — 1.88

340.1 437

023.8 947 — 1.79

Above

67.3 Mean = — 1.845

8:08 12 115.8 485

245.8 658

291.6 943 — 1.80

69.2

8:09 47 113.8 446 — 1.81

245.2 491

294.3 937 — 1.82

29 23

8 07 21

F 0.6 57.1

606.5 46 75

606.4 74

0.0 73

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1915phae.proj..760C

April 18. 1915

Below Tel Vernier VI

		341.2		
8:47	18	-21.6	404	
		157.5	451	
		202.6	855	— 204
		340.6		
8:49	05	22.4	418	— 2045
		158.6	432	
		201.8	850	— 2.05

Above Mean = — 2.028

		250.6		
8:51	04	294.8	442	
		67.5	461	
		113.6	903	— 1.91
		251.8		
8:52	43	293.2	414	— D 1.97
	10	67.1	445	
δ 50	02	111.6	859	— 203
δ 49	32			

606.5761
606.4714
.1047

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1915phae.proj..7600

April 18. 1915

VII

above

		250.6		
9:01	07	290.0	394	
		67.2	450	
		112.2	844	— 207
		249.2		
9:02	42	292.8	436	— 203
		71.7	435	
		115.2	871	— 199

Below

Mean = — 2058

		157.2		
9:05	11	199.8	426	
		340.0	398	
		19.8	826	— 212
		160.0		
9:06	49	202.2	422	— 2085
		340.1	427	
		22.8	849	— 205

15 49
9 03 57
9 03 21
606.58 57
606 457
0.112

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1915phae.proj...7666

April 18, 1915

VIII

Below
168°.6
9:33 16 204.2
340.0
-20.2

162.2

9:35.20 201.2
340.6
-22.8

43.6
402
83.8 — 2.08

390 — 2.12
422
81.2 — 216

Mean = — 2.095

Above
-70.3
9:37 14 110.8
251.2
291.8

405
406
81.1 — 2.16

-69.6
9:38.59 115.6
251.6
293.2

460 — 207
416
876 — 81.9f

24 49
9 36 12
9 35 42
6066 81
606.474
0.134

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1915phae.proj..760C

April 18. 1915

IX

Above

71.2

9:48 54 112.6 41.4

248.2 43.4

291.6 848 — 206

69.2

9:50 59 112.6 434 — 2065

249.2 410

290.2 844 — 207

Mean = — 2090

Below

341.2

9:52 55 22.2 410

160.0 42.6

202.6 836 — 209

341.8

9:54 27 -22.2 404 — 215 15

160.0 41.3

201.3 817 — 214

7 15

9 51 49
9 51 14

606.689
606.674

601 45

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1915phae.proj..7666

April 18, 1914 5

X

	Below		
	342.8		
10:16.20	23.2	404	
	161.2	388	
	200.0	792	— 222
	341.3		
10:18 13	20.5	392	— 224
	161.1	387	
	199.8	779	— 226
	Above	Mean =	— 2232
	253.3		
10:20 07	291.0	377	
	70.1	424	
	112.5	801	— 219
	251.8		
10:21 32	290.5	387	— 2225
	71.6	392	
76 12	110.8	779	— 226

10 14 03
10 18 33
6666 3879
6.474
0.164

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1915phae.proj..760C

April 18, 1915

XX

Above

		253.3		
10:25	15	291.7	384	
		70.6	417	
		112.3	801	−219
		253.6		−221
10:26	49	289.9	363	
		69.3	425	
		111.8	788	−223

Below

Mean = −2.262

		161.3		
10:28	28	199.3	380	
		343.8	383	
		22.1	763	−231
		161.4		−2315
10:30	07	201.6	402	
		345.1	355	
	30 39	20.6	757	−232

10 27 40
10 27 10 38
606 644
.4 4
0.170

Ob Dec Tel W = −41.8

1915phaeo.proj..7600

Mon April 19, 1915

Patriots Day

Phot'n

Cl W = 26° for 4.

P.C. clk

a.B. Rec

RR Velocity

Above

		60.8		
7: 11	29	118.1	Var. dis	101741
		247.2		907
		299.2		1002 − 41.8
				573
				520
				109.3 − 1.463
		60.6		
7: 12	48	121.2		606 − 1.370
		245.1		541
		299.2		1147 − 1.31

Mean = − 1.330

Below

		330.2	
7: 14	11	− 27.8	576
		153.8	550
		208.8	1126 − 136
		329.6	
7: 15	59	− 30.2	606 − 1.290
		152.7	581
14	27	210.8	1187 − 122

13 37
13 09

607.5091
606.479
1.036
−0.418

607.5091
.401
0.109

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1915phae.proj..7600

April 19. 1915

Below II

	332.2		
7:20 41	28.6	56.4	
	155.5	527	
	208.2	109.1	−1.44
	333.6		
7:22 15	27.6	540	−1.42
	155.3	569	
	212.2	110.9	−1.40

Above Mean = −1.410

	243.6		
7:23 54	301.2	576	
	64.6	562	
	118.8	1118	−1.34
	244.6		−1.40
7:25.08	293	547	
	65.2	551	
11 54	120.3	1098	−1.42

23 00
22 34
607.5 (605)
606.4

1.042
−0.812

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1915phae.proj..760C

April 19, 1915.

III

Above

245.8

7:29 36 299.7 539

64.6 526

117.2 1065 − 1.50

245.3 − 1.50

7:31 06 296.2 509

61.3 555

116.8 1064 − 1.50

Below Mean = 7.5720

155.2

7:03 15 206.6 514

334.4 534

27.8 1048 − 1.54

154.4

7:34 44 209.3 549 − 1.54

336.6 500

26.6 1049 − 1.54

+ 41

32 10

31 44

607.5220

606 478

1,048

−0.806

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1915phae.proj..760C

April 9, 1915

IV

Below

		157.1		
7:40	25	206.2	489.1	
		334.8	520	
		26.8	101.1	− 1.63
		158.1		
7:41	54	204.8	467	− 1.665
		333.6	516	
		− 25.2	98.3	− 1.70

Above

Mean = − 1.608

		61.6		
7:43	31	115.9	543	
		243.6	532	
		296.8	107.5	− 1.48
		65.1		
7:44	53	118.8	537	− 1.550
	10 43	247.6	476	
	42 41	295.2	1013	− 162
	42 15			

607.5 294

606.67

1.056

−0.798

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1915phao.proj..760C

April 19, 1915

V

	Above		
	64.2		
7:51 27	120.6	564	
	243.6	529	
	296.5	109.3	−1.43
	65.9		−1.44 −1.5
7:52 05	119.8	539	
	246.3	518	
	298.1	105.7	−1.52
	Below	Mean	−1.510
	335.8		
7:53 47	26.6	508	
	156.3	50.5	
	206.8	101.3	−1.62
	334.3		−1.545
7:54 28	27.3	530	
	154.3	54.9	
	209.2	107.9	−1.47

124)

53 12
52 46
607.53 66
606.47

1.063
−0.791

Diff as it approaches the meridian

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1915phae.proj..760C

April 19, 1915

VI

Below

		333.3		
7:59	20	22.8	495	
		153.8	461	
~~8:00~~	02	209.9	95.6	−1.77
		333 5		−1.65
8:00	40	28.8	55.3	
		156.2	501	
		206.3	105.4	−1.53

above — Mean = −1.68 72

		246.3		
8:02	12	297.4	511	
		67.2	480	
		115.2	99.1	−1.68
		249.2		1.69 5
8:04	42	296.1	469	~~−1.70~~
654		63.2	51.0	
		114.2	97.9	−171

8 01 44
8 01 18
60) 5-426
606.467
1.0 69
0.785

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1915phae.proj...7600

April 19, 1915

VIII

Above

	246.8		
8:09 59	295.6	488	
	64.2	514	
	115.6	100.2	−1.65
	249.3		−1.75
8:10 30	294.8	455	
	66.6	470	
	113.6	925	−1.85

Below

Mean = −1.812

	158.2		
8:12.17	203.3	451	
	334.2	447	
	22.9	898	−1.92
8:	158.1		−1.8875
8:13 46	204.2	461	
6 32	337.2	469	
	24.1	930	−1.83

8 11 38
8 11 12
607.550
606.474

1.076
−0.778

Obs. Rec

Tel W = −42.0

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1915phae.proj..760C

April 19, 1915

Tel. now East of Pier. VIII

Above

66.3

8:36 34 115.8 495

246.3 490

295.3 985 − 169

68.2

8:~~38~~ 08 115.8 476 − 171

247.3 493

296.6 969 − 173

Below Mean = − 1.770

337.3

8:40 59 23.3 460

157.1 471

204.2 931 − 183

337.2

8:41 56 25.3 481 − 183

157 37 158.2 451

203.3 932 − 183

8 39 24

8 ~~38~~ ~~57~~

607.569

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1915phae.proj...760C

April 19, 1905

Below

IX

	340.6		
8:47.26	-23.6	430	
	158.2	441	
	202.3	871	−1.99
	339.3		
8:49.10	26.8	475	−1.905
	157.1	462	
	203.3	937	−1.82

Above

Mean = −1.94

	249.2		
8:50.56	293.8	446	
	69.2	461	
	115.3	907	−1.90
	250.2		
8:52.26	293.6	434	−1.930
	63	450	
199 5f	111.3	884	−1.96

8f 349 5-76 607.

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1915phae.proj..7600

April 19, 1915

X

above

248.8

9:02 47 291.0 422

70.6 43.6

114.2 85.8 − 2.03

250.2

9:04 00 292.2 420 − 203

68.6 43.6

112.2 85.6 − 2.03

Below Mean = − 2.035

155.8

9:05 48 201.6 458

343.6 350

21.6 838 − 208

159.2

9:07 22 202.6 434 − 208

342.2 40.6

22.8 84.0 − 208

19 57

9 04 50

9 04 34

607.587

1915phae.proj..760C

April 19, 1915

XI

Below

	158.3		
9:11 45	204.2	459	
	342.3	398	
	22.1	857	− 2.03
	161.2		
9:13 12	201.6	404	− 2.09
	339.6	410	
	20.6	814	− 2.15

Above

Mean = − ~~2.08~~ 2.072

	68.8		
9:14 53	115.2	464	
	251.2	388	
	290.0	852	− 2.05
	70.3		
9:16 20	112.2	419	− 2.08 5.5
16 10	248.9	427	
	291.6	846	− 2.06

9 14 02
14 13 36
607.593

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1915phae.proj..760C

April 17, 1915

Above. XII

	70.5		
9:25.11	114.6	441	
	251.6	375	
	289.1	816	— 2.15
	69.6		11.5
9:26.33	112.7	431	— 2.12
	250.3	409	
	291.2	840	— 2.08

Below Mean = — 2.112

	342.2		
9:28.05	23.6	416	
	158.6	412	
	199.8	828	— 2.12
	340.6		
9:29.43	23.3	427	— 2.10
29 32	160.2	40.4	
	200.6	831	— 2.10

9 27 23
9 26 57
607.602

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1915phae.proj..7600

April 19. 1915

XIII

Below

		344.2		
9.36	34	23.6	394	
		159.6	420	
		201.6	81.4	— 215
		344.8		
9.37.	59	23.2	384	— 216
		157.6	426	
		200.2	81.0	— 217

Above

Mean = — 220

		251.6		
9.39	34	290.8	392	
		072.3	419	
		114.2	81.1	— 216
		253.3		— 224
9.41	15	287.3	340	
		-71.6	417	
	35 22	113.3	75.7	— 232

9 38 50
9 38 24
(0)7.610

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1915phae.proj..760C

April 19, 1915

XIV

above

		250.6			
9:46	36	289.6	39.0		
		71.6	42.5		
		114.2	81.5	−	215
		250.6			214
9:47	55	290.1	395	−	~~221~~
		73.2	401		
		113.3	796	−	221

Below

Mean = −2202

		160.2			
9:49	23	201.6	414		
		342.2	396		
		21.6	810	−	217
		160.2			2225 2
9:50	41	200.8	406	−	~~224~~
	34 35	345.2	364		
		21.6	770	−	228

9 48 39
9 48 13
607.67

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1915phae.proj..7600

April 19, 1915

XV

Below

	157.8	
10:09.30	199.8	420
	3448	374
	222	794 — 221
		— 2.1[illegible]
	160.2	
10:11 12	201.3	411
	341.6	400
	21.6	811 — 2.16

Above

Mean = — 2.182

	70.6	
10:12.45	112.4	418
	250.8	392
	290.0	810 — 219
	72.6	— 2.18
10:14 10	113.8	412
737	250.6	398
	290.4	810 — 2.17

10 11 54
10 11 28
607.633

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1915phae.proj..760C

April 19, 1915

XVI XIV

above

70.2

10:21 29 113.8 X36

251.8 378

289.6 814 — 215

71.2

10:22 48 113.2 420 — 216

250.8 388

289.6 808 — 217

Below Mean = — 2.205

344.8

10:24 28 23.8 390

161.6 396

201.2 786 — 224

343.6

10:25 47 22.8 392 — 2.25

161.6 385

200.1 777 — 2.26

14 32

10 23 38

10 23 12

607.642

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1915phae.proj..760C

April 19, 1915

XVII

Below

	344.3		
10:35.5	23.2	389	
	160.8	414	
	202.2	80.3	− 2.19
	344.8		− 224
10:37 41	21.6	368	
	161.2	401	
	201.3	76.9	− 229

Above

Mean = − 2.222

	250.8		
10:39.00	289.8	390	
	72.2	406	
	112.8	79.6	− 221
	252.3		− 2.205
10:40 16	290.5	382	
	70.6	416	
	112.2	79.8	− 220

3248
10 38 12
10 37 46
60).65

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1915phae.proj..760C

April 19, 1915

XVIII

above

		251.8		
10:49	20	290.6	388	
		70.8	430	
		113.8	818	— 214
		250.2		
10:50	46	289.8	396	— 218
		63.6	396	
		113.2	792	— 222

Below

Mean = — 2210

		160.6		
10:52	14	200.2	396	
		343.3	393	— 223
		22.6	789	
		161.6		— 224
5				
10:43	38	199.6	380	
5	58	343.3	603	
		23.6	983	— 225

10 51 30
10 51 04
607.660

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1915phae.proj..7600

april 19, 1915

XIX

Below

	160.3	
10:57:40	198.3	38.0
	346.6	356
	22.2	>36 — 2.39
	160.6	— 2.33
10:59 13	199.6	35.0
	343.6	386
	22.2	>>6 — 2.27

Above

Mean = — 2.328

	72.8	
~~11:~~ 00 53	112.8	400
	252.6	366
	289.2	>66 — 2.30
	72.2	
11:02.15	111.9	39> — 2.325
	252.6	353
0 01	287.9	>5.0 — 2.35

11 [illegible]
10 59 34
60.66

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1915phae.proj..760C

April 19, 1915

XX

Above

		71.2		
11:06	05	112.2	410	
		252.8	358	
		288.6	)68	— 229
		72.2		
11:08	33	111.3	391	— 2305
		252.6	366	
		289.2	)57	— 232

Below

Mean = — 2342

		349.6		
11:09	57	22.2	346	
		161.6	380	
		199.6	)26	— 242
11:11.11		343.8		
~~11:11.11~~		22.3	385	— 238
		162.2	367	
35	40	198.9	)52	— 234

11 08 53
11 08 29
607. 673

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1915phae.proj..7600

Gill = 23" foot

Tues. April 20. 1915

R R Veburnum 101741.

Above (Tel W of Pier)

		65.2	Var. dec		
6.48	20	116.6		57.4	
		246.6		52.6	
		299.2		110.0	−1.56
		63.8			−1.445
6.50	53	121.3		57.5	
		244.1		56.5	
		300.6		114.0	−1.33

Below

Mean = −1.222

		329.0			
6.51	33	30.9		619	
		154.8		624	
		219.2		1243	−1.10
		331.2			−1.000
6.53	02	35.3		641	
		148.8		698	
		218.6		1339	−0.90

3 48
6 50 57
6 50 34
608.494
+.328
0.166

I Cliff a Bootes Photom 13 inch.

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1915phae.proj..760C

april 20, 1915

C1

Below

	332.3	578 ✓	
6:57.26	30.1	630 ✓	
	152.2	120.8 ✓	— 1.18
	215.2		

— 1.185

	330.3	603 ✓	
6:58.55	30.6	600 ✓	
	151.8	120.3 ✓	— 1.19
	211.8		

Above

Mean = 1.132

	239.3	603 ✓	
7:00 17	299.6	636 ✓	
	58.6	123.9 ✓	— 1.11
	122.2		

— 1.080

	242.6	602 ✓	
7:01 47	302.8	664 ✓	
238 25	60.8	126.6 ✓	— 1.05
	127.2		

6 59 36
6 59 13

6of. ~~5.010~~ 4994
6of. 328

0.172

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1915phae.proj..7600

april 20 1915

Above

	244.2	534	
7:11 00	297.6	577	
	62.9	111.1	−1.39
	120.6		
			−1.4600
	245.8	514	
7:12.26	297.2	589	
	63.5	110.3	−1.41
	122.4		

Below

Mean = −1.4450

	152.8		
7:13 48	208.8	560	
	334.8	521	
	26.9	108.1	−1.46
	154.9		
7:15 17	208.2	53.3	−1.5500
12 31	336.6	~~87~~	
7 13 08	~~25.5~~	51.7	
12	27.3	105.0	−1.54

~~208.5088~~
~~8.328~~
0.1881

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1915phae.proj..760C

April 20. 1915

Below

		154.6	522	IV.
7:20	43	206.8	564	
		332.2	108.6	− 1.45
		28.6		

		156.6	522	− 1.465
7:22	26	208.8	550	
		333.3	107.2	− 1.48
		28.3		

above

Mean = 1.448

		66.6	536	
7:23	56	120.2	517	
		245.1	103	− 1.53
		296.8		

		64.6	547	− 1.430
7:25	32	119.3	591	
		240.2	1138	− 1.33
12	37	299.3		

) 23 09
22 46
60f. 51 58
f. 328
+0.188

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1915phae.proj..7600

April 20, 1915

V

Above

	63.3	523	
7:29 50	115.6	525	
	244.8	104.8	−1.54
	297.3		
			1.525
	64.2	544	
7:31 06	118.6	515	
	243.3	105.9	−1.51
	294.8		

Mean = −1.510

Below

	332.2	540	
7:32 2/6	26.2	547	
	152.2	108.7	−1.45
	206.9		
			1.493
	334.2	514	
7:34 00	25.6	536	
7 22	155.6	185.0	−1.54
	209.2		

7 31 50
31 27
60 f. 52 2/f
P 3 28
0.194

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1915phae.proj..760C

April 20, 1915

Below

8		332.6	586	
7:38	22	31.2	609	
		151.3	1195	−1.20
		212.2		
		329.2	574	−1.170
7:32	47	286.6	648	
		146.8	1222	−1.14
		211.6		

above

Mean = −1.212

41		239.3	603	
7:36	42	299.6	586	
		62.6	1189	−122
		1212		
				−1.255
43		242.2	604	
7:38	07	302.6	550	
		64.6	1154	−129
2	5	119.6		

7, 40 44
60 21
60 r. 5 80
r 128

0.200

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1915phae.proj..760C

April 20. 1915

above

VII

7.47 45	244.2	544	
	298.6	564	
	61.9	110.8	− 1.40
	118.3		
			− 1.420
	243.3	556	
7.48. ~~02~~	298.9	536	
	66.6	109.2	− 144
	120.2		

Below

Mean = − −1.445

	154.6	540	
7.49.43	208.6	541	
	333.2	108.1	— 1.46
	27.3		
			− 1.470
	154.3	523	
7.57 15	206.6	550	
	330.6	1073	− 1.48
	25.6		

36 50

7 49 12
4F 49
60 53 39
60 3 28

+0 20 6

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1915phae.proj..760C

april 20, 1915

VIII

Below

		152.6	546		
7:56	25	207.2	532		
		333.3	107.8	− 1.47	
		26.5			
				− 1.350	
~~7:58~~		150.8	594		
7:58	48	210.2	587		
		330 9	118.1	− 1.23	
		29.6			

Mean = − 1.380

above

		64.2	544		
8:00	41	118.6	531		
		244.2	107.5	− 1.48	
		297.3			
				− 1.410	
		63.2	584		
8:01	58	121.6	550		
487	52	244.6	113.4	− 1.34	
		299.6			

4 59 28
5 19 05

608.5411
608.324
0.217

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1915phae.proj..7600

April 20, 1915

IX

	above			
	64.8	528		
8:05 43	117.6	524		5
	243.8	105.2	—	1.554
	296.2			
	65.8	506	—	1.5545
8:07 03	116.6	542		
	242.6	104.8	—	1.54
	296.8			
	Below			Mean = −1.5535
	335.6	506		
8:08 34	26.2	528		
	155.6	103.4	—	1.57
	208.4			
	333.6	550	—	1.525
8:10. 00	28.6	523		
31 20	153.6	107.3	—	1.48
	205.9			

δ 07 50
α 01 22
60f. 54
60f. 328
0.219

Obs exceedingly diff as upon approaches ~~for~~ meridian

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1915phae.proj..7600

April 20, 1915

Tel Nov Eq Rix X

above			
	~~244.6~~	0	
8:32 39	~~292.6~~		
	68.6	447	
8:52 55	113.3	472	
	245.6	919	− 1.86
	292.8		
	70.5	430	− 1.900
8:54 52	113.5	462	
	246.6	892	− 1.94
	292 8		
Below		Mean = − 1.995	
	342.3	419	
8:56 25	24.2	409	
	160.3	828	− 2.04
	202.2		
			− 2.090
	343.3		
8:58 14	23.2	399	
22 26	158.9	433	
	200.2	832	− 2.10

f 55 36
f 55 1/3
60 f 58 1/3

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1915phae.proj..7600

April 20, 1915

XI

Below

	340.5	437	
9:02.40	24.2	419	
	158.3	85.6	— 203
	200.2		

	341.2	411	— 1.995
9:04 09	22.3	470	
	156.8	88.1	— 1.96
	203.8		

Mean = — 1.930

Above

05	246.6	453	
9:~~10~~ 37	291.9	439	
	68.6	89.2	— 1.94
	112.5		

	243.9	527	— 1.870
9:07	296.6	417	
~~9:10~~ 07	71.3	94.4	— 1.80
49 33	113.0		

9 04 53
9 04 30
60f. of 7

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1915phae.proj..760C

April 20, 1915

XII

Above

	249.5	431	
9:16,20	292.6	437	
	69.6	86.8	−200
	113.3		
	248.2	446	−2005
9:18.24	292.8	420	
	70.6	86.6	−201
	112.6		

Mean = −2042

Below

	161.5	421	
9:20.08	203.6	420	
	340.1	841	−204
	22.1		
	161.6	410	−2040
9:21.45	202.6	428	
96 37	339.8	838	−204
	22.6		

9 1 of 09
9 8 ic6
6 of .590

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1915phae.proj..7600

April 20, 1915—

Below XIII

	160.3	453	
9:26 08	205.6	434	
	341.8	88.7	— 1.95
	25.2		
	160.3	423	— 1.995
9:28 40	202.6	432	
	340.3	85.5	— 2.04
	23.5		

above Mean = — 2.000

~~160.3~~			
9:	248.3	423	
31 23	290.6	446	
	69.6	869	— 200
	114.2		
	250.8	425	— 2005
9.32 43	293.3	440	
118 54	70.6	865	— 201
9 29 44	114 6		
9 29 21			
608. 604			

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1915phae.proj..760C

April 20, 1915

XIV

Above

		248.4	438		
9.36	28	292.2	447		
		68.9	88.5	−	1.95
		113.6			
					− 2.035
		251.6	~~485~~	38.5	
9.37	56	290.1	~~442~~	442	
		69.6	~~427~~	427	− 212
		1138			

Below

Mean = − 2.090

		160.6	429		
9.~~37~~ 41	18	203.5	400		
		343.6	829		− 211
		23.6			
					− 2.145
		160.8	394		
9.41	55	200.2	410		
		344.2	804		− 218
156	37	~~425~~ 25.2			

9 39 09
9 38 46
60f. 610

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1915phae.proj..7600

April 20, 1915

~~XV~~

Below

	160.0	433	
9:59 42	203.3	433	
	340.3	86.6	−201
	23.6		
	160.1	422	−2.025
10:01 06	202.3	431	
	340.5	85.3	−204
	23.6		

Mean = −2.070

above

	69.8	431	
10.02.52	112.9	407	
	249.3	838	−209
	290.0		
	70.1	417	−2115
10:04 19	111.8	401	
7 57	250.2	818	−214
	290.3		

10 01 59
10 01 36
626

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1915phae.proj..760C

April 20, 1915

XVI

Above

	70.2	414	
10:08 56	111.6	399	
	251.6	813	−216
	291.5		

	69.9	427	−2145
10:10 25	112.6	396	
	252.2	823	−213
	291.8		

Below

Mean = −2.175

	342.3	423	
10:12 09	22.6	386	
	162.2	809	−223
	200.8	18.9	

	342.5	403	−2205
10:13 40	22 8	403	
45 20	161.3	806	−218
	201.6		

10 11 20
10 10 57
433

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1915phae.proj..7600

April 20, 1915

~~XVII~~

Below

	342.3	399	
10:18.12	022.2	384	
	162.2	783	− 225
	200.6		

	342.6	396	− 2.220
10:19.57	22.2	406	
	161.6	802	− 219
	202.2		

Above Mean = − 215.8

	250.8	394	
10.21.42	290.2	466	
	65.6	860	− 202
	112.2		

	250.8		− 209.5
	290.3	395	
10 20 50	71.7	414	
10 20 27	113.1	809	− 217
6.40			

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1915phae.proj..760C

April 20, 1915

XVII

Above

	252.2	379		
10:27 32	290.1	404		
	70.8	783	— 225	
	112.2			
	252.9	373	— 2240	
10:29.27	290.2	416		
	71.6	789	— 223	
	113.2			

Below Mean = — 2240

~~252.2~~			
343.6	~~386~~		
10:31 20 23.2	396		
162.2	371		
199.3	767	— 229	
343.5			
10 3 4 20 23.8	405	— 2240	
162.6	396		
202.2	801	— 219	

229

10 30 37
10 30 1/4
(64)

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April 20, 1915

X / X

Below

	343.6	386	
10:37 22	22.2	384	
	163.2	76.0	− 2.24
	201.6	7.	
	344.2	384	− 2.270
10.39 00	22.6	393	
	163.3	77.7	− 2.26
	202.6		

Above

Mean = − 2.288

	253.2	366	
10:40.55	289.8	396	
	73.2	76.2	− 2.31
	112.8		
	253.6	362	− 2.305
10.42.30	289.8	402	
	72.6	764	− 230
39 47	1128		

10 39 57
10 39 53
653

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1915phae.proj..760C

April 20, 1915

XX

Above

		253.3	390		
10:48	05	290.3	406		11
		72.6	77.6	− 227	
		113.2			
		252.6	390	− 2270	
10:50	08	289.6	406		11
		71.9	77.6	− 227	
		112.5			

Below Mean = − 2.258

		163.2	390		
10:51	54	202.2	394		11
		344.2	78.4	− 2.24	
		23.6			
		162.6	396	− 2240	
10:53	47	202.2	384		11
	3 54	344.8	78.0	− 2.25	
		232			11
10	50 58				11
10	54 35				
	Idea				

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1915phae.proj..7600

Apr 20, 1915

XXI

Below

	162.2	399	
11:02.40	202.1	383	
	343.8	>82	— 2.25
	22.1		
			— 2.305
	163.6	360	
11:09 24	199.6	384	
	344.2	>44	— 236
	22.6		

~~Below~~ above

Mean = — 2.300

	72.8	408	
11:10 52	113.6	366	
	252.6	742	— 2.27
	289.2		
	72.6		
11:12 36	112.6	400	— 2.295
0 32	253.2	360	
	289.2	760	— 232

11 10 of
11 09 45

674

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1915phae.proj..760C

April 20, 1915

XXII

Above

	73.6	390	
11:17.03	112.6	364	
	253.6	75.4	−2.33
	290.0		
			−2.32
	73.6	396	
11:18 40	113.2	365	
	252.6	76.1	−2.31
	289.1		

Below # Mean = −2.312

~~11:20 02~~	~~92.6~~ ~~112.6~~		
57	162.6	396	
11:20.~~19~~	202.2	376	
	345.6	772	−2.24
	23.2		
	162.2		
			−2.305
11:22 27	199.3	381	
	345.3	383	
79 07	23.6	754	−2.33

11 19 47
11 19 24
681

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1915phae.proj..760C

April 20, 1915

XXIII

Below

	162.6	386	
11:27.10	201.2	364	
	345.9	75.0	— 235
	22.3		

	163.6	346	— 2400
11:28.33	198.2	370	
	345.3	71.6	— 245
	22.3		

above

Mean = — 2.38

	72.6	386	
11:30.38	111.2	346	
	253.3	73.2	— 240
	287.9		

	74.2	390	— 237
11:32 25	113.2	359	
	252.9		
38 46	288.8	34.9	— 235

11 29 42
11 29 19
687

Seeing not so very good tonight, especially in early groups. Latter groups considered best.

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1915phae.proj..760C

Wed April 21 1915

RR Velor. 10 17 41

I

Below

		153.9		
6.46	08	212.8	589	
		331.5	562	
		27.2	115.1	−1.30
				−1.33
		153.0	586	
6.47	35	211.6	538	
		333.8	112.4	−1.36
		27.6		

Mean = −1.315

Above

		62.8	605	
6.49.	21	123.3	560	
		244.2	116.5	−1.27
		300.2		
				−1.300
		61.3	565	
6.50	29	118.8	564	
		244.2	113.9	−1.33
33	93/33			
6 48	23	300.6		

Done interfers ?

6 48 04

609.4916

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April 21. 1915

II

Above

62.6

6:54 43 121.6 590

245.2 544

299.6 113.4 − 1.34

66.6

6:56 09 116.8 ? 502

245.2 56

296.8 2

A

Mean = − 1.350

Below

332.8

6:58 10 29.8 570

154.7 ~~21~~ 549

209.6 111.9 − 1.37

333.6 4

7:00 00 28.2 546 1.32

156.6 530

209.6 107.6 − 1.47

29 02

6 57 16

6 56 57

609.49 79

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1915phae.proj..7600

April 21 1915

III

Below

		331.6		
7:04	40	29.9	583	
		150.2	607	
		210.9	1190	−1.21
		329.3		
7:06.	59	27.8	585	−1.245
		153.8	574	
		211.2	1159	−1.28

Above Mean = −1.24

		241.3	589	
7:08	45	300.2	610	
		60.2	1199	−1.19
		121.2		
				−1.235
		242.6	562	
7:10.	04	298.8	597	
		61.9	1159	−1.28
		121.6		

30 28

7 07 37

7 07 18

609. 507

Extr.

In above group, obscuration rude and obs: much easier.

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1915phae.proj..760C

April 21. 1915

IV

	Above		
	242.2		
7:13 47	299.2	570	
	68.2	540	
	119.2	111.0	− 139
	243.3		
7:15 26	298.8	555	− 1.46
	66.2	496	
	115.8	1051	− 153
	Below		Mean = − 1.422
	155.6		
7:17.58	206.8	512	
	331.2	546	
	258	1058	− 152
	152.2		
			− 1.385
7:19.27	211.6	594	
	331.6	580	
26 38	29.6	1174	− 125
7 16 40			
16 21			
609.5713			

V.S.

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1915phae.proj..7600

April 21, 1915

V

Below

		157.7			
7:23	26	206.8	491		
		331.6	562		
		27.8	1053	−	1.53
		156.2			
7:24	59	205.8	496	−	1.515
		331.5	567		
		28.2	1063	−	1.50

Above

Mean = − 1.555

		66.2			
7:26	55	115.8	496		
		245.2	536		
		298.8	1032	−	1.58
		67.1			
7:28	18	116.6	495	−	1.595
23 40		246.6	522		
) 25 55		2988	1017	−	1.61
609	25 36				
	5178				

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1915phae.proj..760C

April 21, 1915

VI

Above

	63.3		
7:49 45	115.6	523 ✓	
	243.6	517 ✓	
	295.3	1040 ✓	− 1.56

	64.3		
7:51 22	116.6	523 ✓	− 1.555
	244.5	521 ✓	
	296.6	104.4 ✓	− 1.55

Below

Mean = − 1.530

	333.6		
7:52 55	26.8	532 ✓	
	153.6	503 ✓	
	204.9	104.5 ✓	− 1.55
	3		
	334.6	✓	− 1.505

7.54 ~~46~~ 42	28.8	542	
	152.8	540 ✓	
7 ~~69~~ 49	2068	108.2	− 1.46

) 51 52
) 51 33
Log. 5358

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1915phae.proj..7600

April 21, 1915

VII

Below

		333.6		
7:58	26	25.8	522	
		156.2	510	
		207.2	103.2	−1.58
		335.3		−1.605
7:59	54	26.8	515	
		155.8	494	
		205.2	100.9	−1.63

Above

Mean = −1.645

		246.2		
8:01	29	295.8	496	
		67.2	489	
		116.1	985	−1.69
		245.3	503	−1.685
8:02	53	295.6	488	
	2 42	65.8	991	−1.68
		114.6		

8 00 40
8 00 21
609. 419

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1915phae.proj..760C

Apr. 21, 1915

B & C	8 19	14.5	
C & W	8 25	5.0	
	8 24	45.8	
∴ C & W =	0	19.2 fast	
	5 29.5		
	1.8		
	5 31.3		

Tel Nov 2 of Pairs VIII

Below

	346.2			
8:30 10	28.8	426		
	158.3	460		
	204.3	88.6	− 1.95	
	347.1			
8.31 56	27.6	405	− 1.98	
	160.2	460		
	206.2	86.5	− 2.01	
	Above		Mean = − 1.962	
	252.2			
8:34 00	294.2	420		
	71.2	456		
	116.8	876	− 1.98	
	252.5			
8:35 45	295.6	431	− 1.945	
11 51	72.2	480		
8 33 43	120.2	91.1	− 1.91	
8 33 24				
609 5649				

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1915phae.proj..760C

Sept. 21, 1915

IX

Above

		251.8			
8.39	16	294.8	430		
		71.8	455		
		117.3	88.5	−	1.95
		252.6			
8.40.	47	297.8	452	−	1.92
		71.6	466		
		118.2	91.8	−	1.87

Mean = 1.908

Below

		162.3			
8.42	57	207.7	454		
		342.2	450		
		27.2	904	−	1.90
		160.8			
8.44	10	206.3	455	−	1.905
	710	344.3	445		
		28.8	90.0	−	1.91

8 41 44
8 41 29
609.5705

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1915phae.proj..760C

april 21, 1915

Below

X

	159.6			
8:51 32	207.8	482		
	346.2	407		
	26.9	889	− 194	
	159.9		− 1.905	
8:53 01	207.7	478		
	343.3	439		
	27.2	917	− 187	
	above		Mean = 1.952	
	72.2			
8:54 37	119.3	471		
	253.2	406		
	293.8	877	− 194	
	72.8			
8:55. 58	116.6	438	− 200	
	253.2	424		
15 08	295 6	862	− 202	
53 47				
5328				
609.5				

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1915phae.proj..7600

Apr. 21, 1915

XI

10 17
12 52
2 35

Above

	43.8	~~438~~	438
10: 45. 46	117.6	~~458~~	358
	247.3	~~89.6~~	79.6 — 2.21
	293.1		

	75.6		— 2.28
10: 47. 52	115.2	396	
	256.8	354	— 233
	292.2	750	

Below

Mean = − 2.290

	344.8		
10 49 30	23.3	385	
	164.2	384	
	202.6	769	— 229

	347.9		— 2.30
10: 51 01	25.6	377	
34 09	165.2	385	
	203.7	76.2	— 231

10 48 32
10 48 13
609.65 H

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1915phae.proj..760C

apr 21, 1915

XII

Below

	346.8			
10:55 18	23.8	370		
	163.3	400		
	203.3	770		−228
	348.8			
10:57 07	25.2	369		−2285
	163.3	400		
	203.3	769		−229

above

Mean = −2.290

11:00 56	254.8		
~~10 58~~	291.2	364	
	73.6	409	
	114.5	773	−228
	254.5		
11:02 20	292.6	381	−2295
	75.6	382	
35 41	1138	763	−231

10 58 55
10 58 36
6 09.665

10 59 Another meteor shot thru the field from above to below a W to E

1915phae.proj..7600

Thurs. April 22. 1915

RR Velor 101741 L.C.O. @ 13/Rec

13-inch photo.

Below

		335.2 Var. dis	5	
6:50	15	32.6	574	
		155.8	650	
		220.8	1224	−1.14
		332.6		
6:51	58	34.8	622	1.06
		150.9	676	
		218.5	1298	−098

Above

Mean = −1.03

		243.2		
6:53	37	306.8	636	
		58.6	670	
		125.6	1306	− 0.97
		245.1		1.00
6.55	02	307.5	624	
		62.2	656	
10	52	127.8	128.0	−1.02
6 52	43			
	13			
6 52	30			
610.4947				

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1915phae.proj..760C

April 22. 1915

II

Above

		244.1			
6:59	38	305.6	615		
		65.6	570		
		122.6	118.5	−	1.23
		246.5			
7:01	28	305.2	587		1.235
		65.8	590		
		124.8	118.7	−	1.24

Below

Mean = 1.23

		156.6			
7:03	05	216.2	586		
		335.6	580		
		33.6	118.76	−	1.25
		157.7			
7:04	55	217.6	599	−	1.225
706		332.6	597		
701 46		32.3	119.6	−	1.20
13					
701 33					
610.5011					

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1915phae.proj..7600

apr. 22, 1915

Below

		158.8		
7:08	47	213.2	544	
		337.2	516	
		28.8	1060	− 1.51
		157.2		
7:10	28	215.2	580	− 1.39
		333.8	580	
		31.8	1160	− 128

Above

Mean = 1.27 s

		63.2		
7:12	23	125.5	623	
		245.6	600	
		305.6	1223	− 1.14
		65.8		
7:13	58	126.8	610	− 1.55
		245.6	600	
		305.6	1210	− 1.17

5 36

7 11 24
13

11 11
610. 5077

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1915phae.proj..760C

Apr. 2 [illegible]. 1915

IV

Above

	67.8		
7:19 12	122.5	547	
	246.3	565	
	302.8	1112	− 1.39
	67.6		
7:20.54	124.2	566	− 1.32
	243.6	606	
	304.2	1172	− 1.25

Below Mean = − 1.378

	337.2		
7:22.42	31.9	547	
	158.2	526	
	210.8	1073	− 1.48
	332.6		
7:24 29	33.6	610	− 1.435
7 15	~~54.8~~	500	
	~~212.8~~	1111.0	139
21 49	161.2		
13	211.2	uncertain	
21 36			
610.5150			

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1915phae.proj..7600

Apr. 22, 1915

V

Below

		338.2		
7:31	34	31.8	536	
		155.5	593	
		214.8	1129	− 1.35
		337.6		− 1.39
7:33.20		32.8	552	
		156.8	540	
		210.8	109.2	− 1.44

Above

Mean = − 1.435

		246.2		
7:35.18		302.3	561	
		63.8	~~600~~	
		~~83.8~~	535	
		117.3	109.6	− 1.43
			clds	
		247.2		− 1.47
7:38	25	301.6	~~600~~ clouds	
		66.2	544	
	4 37	117.6	514	
	34 39		105.8	− 1.52
	13			
	34 26			
	610.5239			

Troubled by clouds near end of group

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Apr. 22, 1915

BoC	7	37	54.0
CiW	7	43	40.0
		5	33
	7	43	27
CiW	=	0	.13[s] fast

One exam of the ~~map~~ photg chart of this var. I find that the star assumed as RR & marked with arrow is not RR, but my comp star d is RR. Now are both stars variable and if so how? It will be necessary to determine this by comparison with star F of my sequence anew.

1915phae.proj..760C

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1915phae.proj..760C

Apr. 22, 1914

Star x with f

Star x is C.D.M. −41.5805 (9.1)
Star d is C.P.M. −41.5804 (9.9) = RR Vol 9
Star f is ft comp f. N.J. RR.

Below

	173.3			
8:56.06	197.6	∠Star x dis		
	353.2	243		
	19.4	262		
	172.6	505	− 3.25	9.
8:58 38	201.2			
	352.2	286	− 3.13	
	19.8	276		
	172.4	562	− 3.01	9

above

Mean = −2.95

	80.6			
9:00 27	109.8	~~310~~		
	258.4	292		
	291.2	328	− 2.79	9:
	76.8	620		
9:02.43	111.3	345	− 2.77	9
37 54	261.2	284		9
8 59 28	289.6	629	− 2.75	6
8 59 15				6
610.5829				6

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1915phae.proj..7600

April 22, 1914

Star (12R cl) with ℓ

above

		154.6		∠ Var. d dis
9:10	06	214.5		
		337.2	599	
		30.3	531	
			1130	− 1.35
		158.6		
9:12.16		283.8	552	− 1.43
		338.8	510	
		29.8	106.2	− 1.51

Below Mean = − 1.475

		67.6		
9:14.43		117.2	496	
		249.6	530	
		302.6	1026	− 1.59
		68.2		
9:17	32	179.8	516	− 1.52
14	37	247.2	570	
9 13	39	304.2	108.6	− 1.45
9 13	26			
610.	5926			
610.	1820			
0.	4106			

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1915phae.proj..760C

Apr. 22. 1914

Star x. with f

Below

		172.8		
9:23	50	198.2	< x dis.	
		353.3	254	
		17.3	240	
			49.4	− 3.30
		173.6		
9:25	44	199.6	260	− 3.24
		350.8	264	
		17.2	52.4	− 3.17
		Above	Mean − 3.09	
		280.0		
9:28	30	288.2	282 ✓	
		80.3	298	
		110.1	580	
				− 294
		258.8		
9:30	15	288.6	298	− 294
28	19	81.2	281	
9 27	05	109.3	57.9	− 294
9 26	52			

610.6019

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1915phae.proj..760C

Apr. 22, 1915

d(RR) with f

above

~~300.6~~ 642 no good

			d(RR)	dis.	
9:37	10	125.3			
		243.3		611	
		302.2		589	
				120.0	− 1.19
		62.2			
9:39	25	126.6		644	1.09 s
		242.8		638	
		306.6		128.2	− 1.00
		Below			Mean = 1.042
		150.2			
9:42	56	220.8		7.06	
		336.8		598	
		36.6		1304	− 0.97
		152.2			− 0.99
9:45	04	216.6		644	
		332.6		640	
		36.6		1284	−1.01

4 35

9 41 09

9 40 56

610. 618

610. 820

4298

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1915phae.proj..760C

Apr 2 2, 1915

Below ~~to~~ of with ∠
154.2 < of dus

10:12.	30	212.8	586 ✓	
		341.3	549 ✓	
		36.2	1135	— 1.34
		156.2		— 1.30
10:14	33	211.8	556	
		335.8	608	
		36.6	1164	1.27
		Above		
		65.8		Mean = 1.242
10:16	35	126.2	604	
		243.3	603	
		303.6	1207	— 1.18
		62.8		
10:18	18	126.2	634	— 1.18
		245.8	570	
		302.8	1204	— 1.18

21 56
10 15 29
10 15 — 16
610. 635 4
610 ~~+~~ 20
0.4536

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1915phae.proj..760C

Apr 22, 1915

Star X with f.

	Above		
	82.2		
10:24.25	110.1	< X dis	
	260.1	279	
	2868	267	
		54.6	— 3.07
	81.2		
10:26.25	108.8	276	— 3.11 s
	2622	250	
	287.2	52.6	— 3.16
	Below		Mean = −3.172
	351.6		
10:28.16	16.6	250	
	171.8	265	
	198.3	51.5	— 3.21
	3528	2	
10:30 03	17.6	248	— 3.23
29 09	172.2	256	
10 27 17.4	197.8	504	— 3.25
10 27 03			
610.6 37			

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1915phae.proj..760C

Apr. 22, 1915

d (RR) with f

Below

	~~+2167.2~~	Ld. dis		
~~10:36~~	67.2			
10.36 27	121.2	540		
	240.6	637		
	304.3	117.7		−1.24
	67.8			
10:38 32	125.8	580		
	245.5	597		−1.24
	305.2	117.7		−1.24

Above Mean = −1.375

	336.3			
10:40 28	30.3	540		
	156.6	530		
	209.6	1070		−1.49
	337.2			
10:42 34	28.8	516		−1.51
38 01	157.8	538		
10 39 30	211.6	105.4		−1.53
10 39 17				
610.6523				
1826				
4703				

Of quite difficult & scattered stars comp star 7 is no faint & for angle & dist not well placed for obs

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1915phae.proj..7600

Apr. 22, 1915

a 1(x) 5 b 4 c 6(d) 5 e 5 f.

10 53 x = Cö surf Var.

d = RR Volume

1915phae.proj..760C

Fri. Apr. 23, 1915

RR Vela Region. Eclip. Pole

x with f

$x = \cos - 41.5705$ (9.1)

Below $<x$ dis 1017416

		165.6			
6:51	24	207.2	416		
		341.8	414		
		23.2	83.0	− 2.11	
		165.3			
6:52	58	206.5	412	− 2153	
		346.6	386		
		25.2	79.8	− 2.20	

Means − 2178

Above.

		77.2		
6:55	19	111.6	344	
		252.2	434	
		295.6	77.8	− 226
		76.6		− 220
6:56	47	116.8	402	
16 28		252.6	417	− 214
6 54 07		294.3	81.9	

6 54 4

611.495 f

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1915phae.proj..760C

α Cyg 23h 19m 5s

II

Above

	77.8			
7:04 33	103.8	360		
	256.6	326		
	289.2	686	− .262	
	79.2			
7:06 10	111.3	321	− 2.5 45s	
	254.7	389		
	293.6	71.0	− 247	

Below

Mean = −2.37 s

	344.8			
7:07 42	25.2	404		
	164.2	407		
	204.9	81.1	− 2.16	
	342.2			
7:09. 08	25.6	434	− 2205	
27 33	167.8	348		
} 06 53	202.6	78.2	− 225	
} 06 50				
611. 5045				

713 a 7.x 2b 5c 8(RR)d 3e 5f 6g

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1915phae.proj..760C

April 23. 1915

III

Below

345.8

7:19. 08 22.2 364

166.6 359

202.5 72.3 − 243

344.8

7:21 21 23.2 384 − 2395

163.3 390

202.3 77.4 − 236

Above Mean = − 2312

254.5

7:22 50 292.8 383

74.6 376

112.2 75.9 − 232

255.2

7:24 14 292.2 370 − 223

77.5 347

7 33

) 21 53 112.2 81.7 − 214

) 21 50

611.5150

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1915phae.proj..7600

April 23. 1915

IV

		above			
		256.2			
7:40	10	288.8	326		
		79.8	308		
		110.6	634	−	273
		256.3		−	2.61
7:41	49	291.2	349		
		96.8	355		
		112.3	10.4	−	249
		165.8			mean = − 2.55 f
7:44	17	201.6	358		
		348.3	329		
		21.2	68.7	−	2.55
		165.5			
7:45	48	200.8	353	−	2.505
1204		345.3	362		
		215	1.5	−	246

43.01
42 58
611.5 299

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1915phae.proj..760C

Apr. 23, 1915

BAC 7 45 400
CSW 7 51 17.0
5 34
7 57 14
CSW = 3.2 faint
δ 14 a 24 x 24 b 4 c 6 d 2 e 4 f 59 V
above el. Now East of Pier

		82.2		
8:15	57	109.8	276	
		259.3	313	
		290.6	589	−290
		82.5		
8:17	45	112.2	297	−284
		257.8	324	
		290.2	621	−278
		Below		Mean = −28[illegible]
		348.2		
8:19	39	20.8	326	
		170.8	314	
		202.2	640	−271
				79
		348.3		−2.[illegible]
8:21	47	19.8	315	
		172.2	281	
35	08	200.3	596	−287

δ 18 47
δ 18 44
611.5547

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1915phae.proj..760C

Aug. 23, 1915

VI

Below

	349.6			
8:36 43	19.8	302		
	170.8	290		
	199.8	592	−2.89	
	349.2		−2.905	
8:38 20	18.8	296		
	170.7	289		
	199.6	~~579~~	−2.92	
		58.5		

Above

Mean = −2.93

	260.2			
8:40 08	285.9	257		
	80.6	279		
	108.5	53.6	−311	
	258.6		−2.95	
8:41 42	288.3	297		
	79.2	32.1		
36 53	111.3	61.8	−279	
8 39 13				
8 39 10				
611.5689				

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1915phae.proj..760C

Apr 23, 1915

VII

Above

	262.6			
8:55 15	288.8	262		
	78.2	290		
	107.2	552	−	3.17
	257.8			
8:56 56	289.3	315	−	307
	82.2	256		
	107.8	571	−	297

Mean = − 306

Below

	172.6			
8:58 47	200.3	277		
	349.6	272		
	168	549	−	3.07
	173.3			
9:00 16	201.5	282		
31 14	350.3	275	−	3.05
	X 17.8	557	−	303
8 57 48				
57 45				
611. ~~623~~ 581				

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1915phae.proj..760C

Apr. 23, 1915

VIII

Below

	170.3		
9:07.50	199.2	289	
	350.2	267	
	16.9	55.6	− 3.03
	171.3		
9:09 25	198.2	269	− 3.05
	349.6	280	
	17.6	54.9	− 307

Above

Mean = − 3.044

	81.3		
9.11.18	109.8	285	
	260.3	265	
	286 8	55.0	− 306
	82.6		− 3.045
9:12 55	109.3	267	
8 28	259.3	289	
1	288.2	55.6	− 3.03

9 10 22
9 10 19
611.590K

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1915phae.proj..760C

April 23, 1915

IX

		above		
		81.6		
9:35	49	108.8	272	
		260.1	301	
		290.2	573	− 2.96
		80.8		− 2.955
9.37	39	109.3	285	
		260.5	292	
		289.7	57.7	− 2.95
		Below		Mean = −3.022
		349.8		
9:39.56		18.9	291	
		173.3	259	
		199.2	550	− *306
		348.9		
9:41	30	17.3	284	− 3.09
34	54	173.6	250	
9 38	44	198.6	534	− 3.12
9 38	41			
611.	6102			

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1915phae.proj..760C

April 23, 1915.

Below

	351.8			
9:47 55	17.6	258		
	174.2	240		
	198.2	498	− 3.33	
	349.8			
9:50 04	17.8	280	− 3.245	
	174.2	245		
	198.7	525	− 3.16	

Above

Mean = − 3.205

	261.8			
9:52 06	287.8	260		
	80.9	277		
	108.6	537	− 3.11	
	262.3			
9:54. 02	286.9	246	− 3.165	
4 07	81.8	266		
	108.6	512	− 3.212	

9 51 02
9 50 59
611.6(8)

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1915phae.proj..760C

April 23, 1915 —

XI

		Above			
		262.2			
9:59	33	287.2	250		
		82.3	265		
		108.8	51.5	—	3.21
		241.3			
10:01	55	285.5	242	—	3.245
		83.6	256		
		109.2	49.8	—	3.28
		Below			
		172.3		Mean =	3.23
10:04	04	195.7	234		
		351.8	264		
		18.2	49.8	—	3.28
		178.3			
10:05	46	197.3	260	—	3.22
		352.3	265		
11	18	18.8	52.5	—	3.16

10 02 56
10 02 47

611.6269

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1915phae.proj..760C

april 23, 1915 —

XII

Below

		171.2		
10: ~~13~~	58	198.3	271	
		353.3	249	
		18.2	52.0	— 3.18
		172.2		— 3.19
10:15	40	198.5	263	
		353.2	256	
		18.8	51.9	— 320

Above

Mean = -3.22

		81.6		
10:17	35	109.2	276	
		260.3	245	
		284.8	52.1	— 318
		83.2		
10:19	07	108.2	250	— 3.25 5
		262.1	237	
26	20	285 8	48.7	— 333

10 16 35
10 16 32

611 6365

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1915phae.proj..760C

April 23. 1915

& RR Velorum 101741a with f.

I

Above

64.2 Var. dis

10.24 56 126.3

241.6 621

304.5 629

125.0 — 1.08

63.6

10.26 32 127.2

240.3 636 — 1.01

308.2 679 — 0.9

131.5

Below

336.1 Mean = 1.00

10.28 40 35.5 594

152.3 680

220.3 1274 — 1.03

332.2

10.30 25 35.2 630 — 0.98

150.8 690

30 33 219.8 1320 — 0.93

10 27 38

10 27 35

611.6441

10 1820

1.4621

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1915phae.proj..760C

April 23 1915

Same again ~~H~~

Below

336.6

10:35 38 35.3 587

152.2 656

217.8 124.3 — 1.10

337.2

10:38.23 34 2 570 — 1.115

150.8 660

216.8 123.0 — 1.13

above Mean = — 1.12

242.6

10:40 30 302.6 600

65.1 604

125.5 120.4 — 1.14

242.8

10:42 25 304.8 620 — 1.13

36 56 63.3 633 —

10 39 14 126 6 125.3 — 1.08

10 39 11

611.65 2 20

10:46 a 2x5b 4c 6 (RR d 3 e 4 f 6 g

147.02

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1915phae.proj..760C

Obs. 2 3, 1915

III

Above

242.2

10:49.20 304.6 624

66.5 587

125.2 121.1 — 117

243.6

10:50 57 301.6 580 — 118

63.9 623

126.2 120.3 — 119

Mean = — 1.12

Below

152.2

10:52 53 213.8 616

333.8 624

36.2 124.0 — 111

150.8

10:54 31 217.3 665 — 107

335.6 610

6 41 36.6 127.5 — 103

10 51 40

10 51 37

611.6608

640 1F20

1.4788

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1915phae.proj..760C

April 23 1915 —

101741 b — Velocum with "f"

XIII

	Below			
	171.7			
10:59.15	197.8	261		
	352.8	260		
	18.8	521	—	318
	171.3			
11:00 53	197.8	265		3.15
	351.3	269		
	18.2	534	—	312
	Above		Mean =	-3.11
	80.8			
11:02.31	109.2	284		
	260.3	279		
	288.2	563	—	300
	82.2			
11:03.54	108.6	264	—	3.07
6 33	261.3	269		
	288.2	533	—	314

11 01 38
11 01 35
611.6677

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1915phae.proj..760C

April 23, 1915

XIV

Below

Above

256.6

11:~~12~~ 42 288.2 316

82.2 259

108.1 57.5 — 296

2603

11:14 ~~59~~ 2873 270 — 3.00 s

80.2 281

108.3 55.1 — 305

Below Mean = 306

1712

11:17 27 198.2 260

351.3 268

18.1 52.8 — 3.15

1703 3.11

11:18 54 1987 284 —

3523 263

2402 18.6 547 — 3.07

11 16 00

11 15 57

611.67 49

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1915phae.proj..760C

April 23, 1915 —

XV

Below

	171.6		
11:38.47	198.6	270	
	352.5	248	
	17.3	51.8 —	3.19
	170.9		
11:41.31	192.8	269	— 3.17
	352.6	256	
	18.2	52.5 —	3.16

above Mean — — 3.12

	80.9		
11:43.20	108.3	274	
	259.3	275	
	286.8	54.9 —	3.07
	80.6		
11:48.04	109.2	286	— 3.05
	261.3	256	
11 42	286.9	54.2 —	3.09

11 42 56
11 42.53
611.696

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1915phae.proj..760C

Sat. Apr 24, 1915

RR Vel. 1017 41a
Phot on 13"
~~a 7 b~~
a 7 x 1 b
c 7 RR 2 e

ECdb
AB Roe

B 41

Below
242.5 Var. dis

I

6.46	44	308.6	661	
		61.8	644	
		126.2	130.5	-0.97
		244.6		
6.48	39	309-2	646	0.97
		60.3	652	
		125.5	129.8	-0.98
		Above		
		153.3		Mean = -0.97
6.50	31	218.6	653	
		332.7	646	
		37.3	129.9	= 0.98
		152.4		
6.52	10	217.7	653	- 0.96
		330.3	660	
		36.3	131.3	- 0.95

35 04
6 49 36
612.4927
12.0363
0.4564

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1915phae.proj..7600

April 24, 1915

II

Below

	152.6		
6:55 55	215.8	632	
	331.8	660	
	32.8	129.2	− 1.00

	152.3		
6:57. 33	214.3	620	− 1.03
	331.3	642	
	35.5	126.2	− 1.06

Below

Mean = − 1.052

	62.2		
6:59 32	128.2	660	
	246.2	624	
	308.6	128.4	− 1.01

	64.5		
7:01 44	126.2	617	− 1.075
34 44	245.2	606	
6 58 46	305.8	123	− 114

6 12.4991
6c 2.0362
0.4629

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1915phae.proj..760C

Apr. 24 1915

Below

61.7

7:05. 30 126.3 646

246.6 596

306.2 124.2 — 1.10

60.8

7:07. 33 128.6 678 — 1.085

246.6 580

304.6 125.8 — 1.07

Above

333.5

7:09. 24 38.5 650

153.8 618

215.6 126.8 — 1.05

330.3

7:11. 11 33.3 630 — 1.095

154.6 592

213.8 122.2 — 1.114

33 38

> 0 f 29

612.5019

612.0362

0.0697

Mean = — 1.090

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1915phae.proj..7600

Apr. 2 4, 1915

IV

Above

~~153.6~~

7:26	25	212.5	589		
		331.8	698		
		33.6	1207	—	1.18

		158.2			
7:~~39~~ 30	10	213.3	551	—	1.28
		337.2	564		
		33.6	1115	—	1.38

Below Mean = — 1.26

		64.2			
7:32	04	124.3	601		
		246.2	585		
		304.7	1186	—	1.22

		65.2			
7:33.39		123.8	586	—	1.235
		246.6	586		
	~~78~~				
2	18	305.2	1172	—	1.25
30	39				

P 1.05

612.5213
612.0962

0.4851

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1915phae.proj..760C

April 24. 1915

V

Below

		652		
7:47	49	125.2	600	
		249.2	566	
		303.8	1166	− 1.27
		67.2		−1.28
7:49.	23	123.3	561	
		245.8	594	− 1.29
		305.2	1155	

Above

Mean = −1.23

		342.2		
7:51.	12	33.3	611	
		153.8	608	
		214.6	1219	− 1.15
		335.5		
7:53	11	34.2	587	− 1.18
		153.5	607	
		214.2	1194	− 1.21

1 35

50 29

612.5350

12.036

0.4988

1915phae.proj..7600

April 24, 1915

VI

D & C 7 51 38.0
C is W 7 57 10 0
5 37

7 57 15.0
5-2 slow.

10 07
10 5-2
0 41

C is W = Above

66.1 Tel. Now East of pier.

8:33 10 / 26.8
242.2 607
303.3 611
63.3 / 21.8 — 1.15

8:34 50 / 25.8
243.8 625 — 1.125
305.8 620
Below 1245 — 110
334.3 Mean = —1.21

8:36 49 32.2
157.2 579
2128 556
1135 — 1.34

334.6

8:38 36 34.8 — 1.29
155.2 602
22 25 2026 574
35 36 1176 — 1.25
35 41
612.565
612.0362
0.5303

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1915phae.proj..760C

α Cyg 24.0951

VII

Below

		333.3		
9:03	35	35.2	619	
		156.2	606	
		216.8	122.5	−1.14
		336.6		
9:06	06	30.2	536	−1.37
		162.2	487	
		210.9	1023	−1.60

Above

Mean = −1.342

		248.2		
9:08	20	303.8	556	
		63.8	590	
		122.8	1146	−1.31
		2483		
9:10	08	301.2	529	−1.395
28	09	67.2	544	
9 07	02	121.6	1073	−1.44
9 07	07			

612.5883
612.0362
0.5521

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1915phae.proj..7600

Apr. 24, 1915

VIII

above

246.4

9:14.42 305.2 588

65.3 560

121.3 114.8 — 1.31

246.8

9:16 31 306.2 594 — 1.315

68.8 550

123.8 114.4 — 1.32

Mean = — 1.42

~~Below~~

158.2

9:18.26 211.9 537

337.6 512

28.8 1049 — 1.54

158.2

9:20.14 211.9 537 — 1.53

2953 336.5 521

9 17 28 28.6 1058 — 1.52

9 17 33

612.595 5

612.0362

0.5593

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1915phae.proj..760C

Apr. 24. 1915

IX

Below

158.2

9:41 31 216.2 580

336.2 541

30.3 112.1 −137

156.8

9:43 23 210.6 538 −143

334.6 531

27.7 1069 −149

above Mean = −141

64.3

9:45 50 122.6 583

245.7 549

300.6 1132 −134

66.8

9:47 35 122.8 560 −139

18 19 247.5 530

300.5 1090 −144

9 44 35

9 44 40

612.6144

612.0362

0.5782

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1915phae.proj..7600

Apr. 24, 1915

X

above

	65.6		
10:07 38	128.2	626	
	247.2	569	
	304.1	~~109.5~~	
		119.5	— 1.20
	64.6		
10:10 12	127.2	626	— 1.185
	244.3	585	
	302.8	1211	— 1.17

Below = Mean = — 1.33

	337.8		
10:12 00	29:5	517	
	158.2	526	
	210.8	1043	— 1.55
	333.8		
10:15 55	29.8	560	— 1.467
3 45	156.8	554	
10 10 56	212.2	1114	— 139
10 11 01			
612.6326			
612.0362			
0.5964			

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1915phae.proj..760C

Sun. April 25. 1915

L.C.Ch. RR Velocities 10174/a
a B Rec Photometer 13 inch I

Below
63.1 Var. dis.

6:43	59	124.2	611		
		241.6	659		
		307.5	1270	−1.02	
		63.3			
6:46	05	126.6	633	−1.04	
		244.2	636		
		307.8	126.9	−1.04	

Above Mean = −1.05
330.2

6.48	07	34.2	640		
		158.2	604		
		218.6	1244	−1.10	
		330.6			
6.50	22	35.2	646	−1.06	
		152.8	634		
28	33	216.2	128.0	−1.02	

6 46 08
6 47 20

613.4911
12.0363
1.4549

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1915phae.proj..7600

Apr. 25, 1915

II

Above

	331.6			
6:54 31	37.6	660		
	151.8	694		
	2212	1354	− 0.87	
	332.2			
6:56 21	36.3	641	− 0.93	
	152.6	652		
	217.8	1293	− 0.99	

Below

Mean = − 1.002

	243.1		
6:58 48	309.3	662	
	64.8	575	
	124.3	1237	− 1.11
	244.8		
7:04 00	308.3	635	− 1.075
	61.6	637	
	125.3	1272	− 1.04

2940

6 57 25

6 57 37

613.6983

612.0362

14621

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1915phae.proj..760C

Apr. 25, 1915 —

III

Below

		247.8			
7:03	45	307.5	597		
		65.2	593		
		124.5	119.0	−1.21	
		246.3			
7:05	03	306.7	604	−1.22	
		65.2	581		
		123.3	118.5	−1.23	

Mean = −1.16

Above

		332.3			
7:08	37	37.2	649		
		156.2	611		
		217.3	126.0	−106	
		334.5		−1.10	
7:10	08	34.8	603		
	27 33	154.9	623		
	06 53	219.2	1226	−1.14	
	07 05				

613.5050
612 0362
1.4688

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1915phae.proj..7600

Apr. 25, 1915

IV

Above

	333.1		
7:13 54	35.5	624	
	153.8	624	
	216.2	124.8	— 1.09
	335.2		
7:15 32	33.8	586	1.14 s
	154.3	609	
	215.2	119.5	— 1.20

Below

Mean = — 1.17 s

	249.5		
7:17 37	306.4	569	
	63.5	617	
	125.2	118.6	— 1.22
	246.3		
7:19.00	308.4	621	— 1.20 s
26 03	65.2	581	
7 16 31.	123.3	1202	— 1.19

7 16 43

613.5716

612.0362

1.4754

80

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1915phae.proj..760C

Apr. 25, 1915.

K

Below

247.1

7:33 40 302.3 552

67.7 531

120.8 108.3 − 144

247.5 − 142

7:35 39 305.2 577

67.5 538

121.3 111.5 − 138

Mean = − 1.365

above

156.3

7:~~37~~ 39 ~~40~~ 12 214.8 585

334.8 587

33.5 1172 − 125

158.6

7:40 13 213.6 571.0 − 1.31

27 44 336.2 570

7 36 56 33.2 112.0 − 137

7 37 08

613.525

612,0362

1.496

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1915phae.proj..7600

aft. 25, 1915 —

BoC	7 42	50	
E W.	7 47	32.0	
	5	39	
	7 47	44	

E W = 0m 12s slow

VI

Above

68.3

8.22.55	125.2	569	
	248.8	530	
	301.3	109.9	−1.42
	65.5		
8:24 57	125.6	601	−1.34
	246.7	569	
	303.6	1170	−1.26

Mean = −1.33

Below

336.2

8:26 35	33.8	576	
	157.5	557	
	213.2	1133	−1.34
	333.5		−1.32
8:28 54	31.8	583	
	56.7	569	
23 15	213.6	1152	−1.30

δ 25 49
δ 26 01
613.5597
012.0062
1.5535

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1915phae.proj..760C

Apr. 25, 1915

VII

Below

		335.6		
8:33	44	31.7	561	
		155.2	623	
		217.5	118.4	−1.23
		335.6		
8:36	10	30.8	552	−1.31
		156.3	559	
		212.2	111.1	−1.39

Above

Mean = −1.30

		247.2		
8:38	02	305.6	584	
		66.4	587	
		125.1	117.1	−1.26
		249.2		
8:40	04	302.8	556	−1.29
		66.3	585	
		124.8	114.1	−1.32

28 00

8 37 00

8 37 12

613.5675

612.0362

1.5313

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1915phae.proj..7600

Aft. 25/1915

VIII

	Above		
	244.6		
8:44.28	301.5	569	
	68.6	562	
	124.8	1131	— 135
	242.6		
8:46.01	304.5	619	— 1.275
	66.5	578	
	124.3	1197	— 120
	Below	Mean = — 1.25	
	156.6		
8:47 39	213.5	569	
	335.7	569	
	326	1138	— 133
	155.3		
8:49.30	212.6	573	— 1.295
2) 38	332.8	597	
f 46 54	32.5	1170	— 126
f 47 06			
6(3.5)44			
612.0362			
1.5382			

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1915phae.proj..760C

Apr. 25, 1915

Below

		159.6		
9:23	54	211.6	520	
		335.3	545	
		29.8	1065	−1.50
		164.2		
9:25	43	212.8	516	−1.52
		335.8	530	
		28.8	104.6	−1.54

IX

Above

Mean = −1.435

		67.2		
9:29	49	122.8	556	
		245.2	577	
		302.9	113.3	−1.34
		66.6		
9:29	56	121.6	550	−1.35
26 02		247.3	573	
9 26 30		304.6	112.3	−1.36
9 26 42				

613.6018
612 0362
1.5656

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1915phae.proj..7600

Apr. 25, 1915

X

above

	65.3		
9:35.02	123.2	579	
	246.6	570	
	303.6	114.9	−1.31
	67.7		
9:36 46	121.5	538	−1.33
	245.8	590	
	304.8	112.8	−1.35

Below

Mean = −1.41

	335.5		
9:~~38~~ 39	~~15~~ 17 26.6	511	
	156.8	540	
	210.8	1051	−1.53
	335.3		
9:41 01	30.8	555	−1.485
32 06	158.6	536	
9 38 02	212.2	1091	−1.45
9 38 14			
613.6099			
612.0362			
0.5737			

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1915phae.proj..7600

Apr. 25, 1915

Below

XI

		337.8		
10:10	03	28.8	510	
		158.5	531	
		211.6	104.1	−1.56
		338.8		
10:11	59	31.3	525	−1.535
		158.6	537	
		212.3	106.2	−1.51

above

Mean = −1.465

		246.2		
10:14	37	302.6	564	
		68.1	555	
		123.6	111.9	−1.37
		248.2		
10:16	59	302.6	544	−1.395
13	38	67.2	554	
		122.6	109.8	−1.42

10 13 24
10 13 36
613.6344
612.0362
1.5982

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1915phae.proj..7600

Apr. 25, 1915.

XII

Above

246.2

10:45.53 300.8 546

68.6 538

1224 1084 — 145

246.6

10.50 12 300.8 542 — 1.44

65.8 554

121.2 109.6 — 1.43

Below Mean = −1.41

335.2

10:53 15 31.8 566

156.8 560

212.8 112.6 — 1.36

334.8

10:55 13 30.1 553 — 1.375

157.1 557

4 33 212.8 111.0 — 1.39

10 51 08

10 57 20

613-6606

612-0362

1.624 k

Copied for C.

Lodged

To date —

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1915phae.proj..760C

Mon. Apr. 26, 1915

RR Velor 101741a Lobs. @ B. Rec

Below Phot. on 13-inch

243.2 Var. dis

6:39 47 307.2 640 I

65.2 623

127.5 1263 − 1.06

242.3

6:41.14 306.3 640 − 1.03

60.8 650

125.8 1290 − 1.00

Above Mean = − 1.01

153.2

6:42.40 219.3 661

332.8 634

36.2 129.5 − 0.99

152.4

6:44 23 218.3 659 − 0.99

804 333.5 637

6 42 01 37.2 129.6 − 0.99

6 42 18

614.4877

613.8904

0.5973

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1915phae.proj..7600

Apr. 26, 1915

~~R~~ — Velocum 101741-b

I

Below

	345.8	Var. dis		
6:49.03	236		4	
	1655		378	
	205.8		403	
			878.1	— 1.96
	337.2			
6:50.54	25.8		486	— 1.88
	164.2		456	
	209.8		942	— 180

Above

	2492			Mean = — 1.81
6:53.06	299.3		501	FS
	92.2		461	— 2.66
	118.3		96.2	— 1.75
	2485			
6:54.37	297.2		487	1.735
+ 40	73.5		487	
6 52 10	122.2		97.4	— 1.72
6 52 28				
6 14.4947				
6 14.6)80				
0.0163				

Doubtless — Vel. was comp with RR — in this and the following groups, confusion being caused by my being to the left altitude

1915phae.proj..7600

April 26. 1915.

— Velox 1017414 II

Above

75.2
7:01 22 117.8 Var. dis
253.1 426
298.2 451
72.6 87.7 — A 1.98

7:03 04 116.2
248.8 436 — 1.93
296.6 478
91.4 — 1.88

Below

341.8
7:04. 33 25.6 438
157.2 554
212.6
99.2 — 1.68

Mean = 1.82
+.05
−.267

340.8 7
— 1.815
7:06 12 30.5 49.7
15 11 162.2 414
03 48 208.6 96.1 — 175
04 06
614.5029
614.4780
0.0249

~~614.5029~~
~~614.4780~~
~~0.0249~~
1.0209

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1915phae.proj..7600

Apr. 26, 1915

RR Velor. 10174 a II

above

		332.2	Var. dis	
7:10	15	34.6	624	
		157.2	584	
		215.6	120.8	−1.18
		332.8		−1.19
7:12	09	37.1	643	
		159.6	550	
		214.6	119.3	−1.21

Below

Mean = −1.25

		248.8		
7:13	44	302	584	
		65.3	552	
		120.5	113.6	−1.34
		247.8		−1.30
7:16	25	306.6	588	
1233		67.3	579	
13 08		125.2	116.7	−1.27

13 26

614.5093

~~6138904~~ Bet C = 7 14 57.5

~~613.8904~~ Es W = 7 20 20.2

0.6189 5 40

20 37.5

Cs W = 17.5 slow.

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1915phae.proj..7600

Apr. 26, 1915

RR Velor. 10174.1a

Below

III

~~7:~~		244.8	Var dis	
7:38	18	306.8		
		63.6	620	
		123.3	597	
			121.7	−1.16
		245.8		
7:40	13	306.8	610	−1.13
		64.8	634	
		128.2	124.4	−1.10
		Above		
		154.2		Mean = −1.18
7:42	07	212.8	586	
		334.8	590	
		33.8	1176	−1.25
		152.6		
7:43	40	216.3	637	−1.23
	4 18	336.6	556	
		32.2	119.3	−1.21

7 41 04

7 41 21

614.528

613.890

0.6383

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1915phae.proj..7600

$\alpha_{app} = 26,1915$

— Velocity 1017417 III

Below

	172.2		
7:47.54	200.3	281	
	349.5	258	
	15.3	53.9	− 3.11
	172.3		− 3.09
7:49.52	200.5	282	
	348.8	265	
	15.3	54.7	− 3.07

Mean = −3.01

Above

	258.2		
7:52.25	287.8	296	
	79.3	290	
	108.3	58.6	— 2.91
	259.2		
7:53.56	288.2	290	− 293
	81.6	286	
407	110.2	57.6	— 293

5102
5120
614.5356
614.4780
0.0576

Telescope fast meridian & alt high making obs. very difficult.

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1915phae.proj..760C

Apr 26 1915

~~1674~~

101741 b — Volo IV

Below

		170.2		
8:#13	06	198.3	281	
		349.2	280	
		17.2	56.1	— 3.01
		171.2		
8:15	11	197.6	264	— 3.045
		348.6	262	
		14.8	52.6	— 3.16

Above

Mean = — 3.06

		80.2		
8:17:	22	110.2	300	
		261.6	256	
		287.2	55.6	— 3.03
		81.2		
8:19	20	108.2	270	— 3.035
		261.8	284	
		290.2	554	— 3.04

59

8 16 15

8 16 32

6145532

6146760

0.0752

01

1080.0

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1915phae.proj..7600

Apr. 26, 1915

R R Velor IV

	above		
	68.8		
8:38.47	121.6	528	
	247.3	560	
	303 3	108.8	— 1.45
	68.2		
8:40.49	120.2	520	— 1.515
	248.6	510	
	299.6	103.0	— 1.58
	Below		
7	337.5		Mean = — 1.54
8:42.46	32.6	551	
	157.6	520	
	209.6	107.1	— 149
	337.6		
8:44.50	26.6	490	— 1.575
	161.6	510	
7 12	212.6	100.0	— 1.66

f 41 48
f 42 06
6)14.5710
6)3.8904
0.68006

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1915phae.proj..7600

Apr. 26, 1915

1617 4 1-b – Velez V

Below

		351.2		
8:50	07	13.8	226	
		172.2	264	
		198.6	49.0	−3.32

		352.2		
8:54	38	16.3	241	−331
		173.2	251	
		198.3	49.2	−3.30

Above Mean = −3.20

		261.2		
8:53	12	288.3	271	
		80.2	266	
		106.8	537	−311

		261.2		
8:55	15	288.3	271	−309
10	12	80.6	277	
8 52	33	108.3	548	−307
8 52	50			

614.5)17
614.4)80
0.1004

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1915phae.proj..7600

Apr. 26, 1915

1017419 RR Velorum V

Above

244.8

9:13 21 304.2 594

65.8 547

120.5 114.1 −132

9: Clouds

Below Mean = −140

155.2

9:15 05 209.3 541

336.8 538

7 14 13 30.6 107.9 −147

9 14 30

6/4 5933

6/13.8904

0.7029 Troubled by clds, revised between the two sets on this acct.

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1915phae.proj..760C

Mon May 3, 1915

Phot. on 13-inch Refl
aB Dec

133926 −26.9905

Cs W used 9

Comp with + +

I.

Below

		249.8	∠Var. dis	
6:52	44	292.3		
		78.4	425	
		112.8	344	
			76.9	− 229
		255.2		2255
6:54	22	294.8	396	
		74.8	395	
		114.3	79.1	− 222

Mean = −2.30

Above

		348.2		
6:56	33	24.8	466	
		165.8	417	
		2075	78.3	− 225
		346.3		2345
6:57	25	23.8	375	
21 04		70.2	344	
6 54 16		204.6	71.9	− 245
6 54 20				

621.4960

Cs W = 4s slow at 7:05

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1915phae.proj..7600

Iron. May 3. 1915

II

	above			
	347.1			
7:10 05	23.8	367		
	169.3	353		
	204.6	720	− 2.44	
	342.4			
7:11 05	24.6	422	− 2.315	
	168.8	380		
	206.8	802	− 219	
	Below			
	256.2			
7:12 30	297.2	410		
	76.2	376		
	113.8	786	− 224	
	255.8			
7:13 40	295.5	393	− 2.205	
	75.2	410		
7 20	116.2	803	− 217	

Mean = − 2.26

11 50

11 54

621.5 082

1915phae.proj..7600

May 3. 1915:

Below III

258.2

7.27 27 298.6 404

76.4 374

113.8 77.8 − 226

257.3

7.28 42 294.3 380 − 226

73.3 399

113.2 77.9 − 226

Above Mean = − 2.312

169.6

7.30 35 206.2 366

344.8 378

22.6 74.4 − 2.36

169.6

7.31 48 204.5 347 − 2.365

38 323 43.3 395

22.8 74.2 − 237

7 29 38

7 29 42

5 206

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1915phae.proj..7600

May 3, 1915

Above

	169.2		IV	
7:37 43	208.3	391		
	346.2	369		
	23.1	76.0	— 2.32	
	168.4			
7:39 00	212.2	438	— 2.16	
	343.8	430		
	26 8	868	— 200	

Mean = 2.182

Below

	76.3			
7:40-36	116.8	405		
	256.2	341		
	294.3	74.6	— 236	
	75.2			
7:42 02	117.2	420	— 2.205	
39 21	253.8	430		
	296.8	850	— 205	

> 3950
> 3954

5=77

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1915phae.proj..760C

May 3, 1915

V

Below

73.1

7:45	33	116.3	432	
		256.2	420	
		298.2	85.2	−2.05

72.8

7:46	54	120.2	474	−1.93
		257.8	464	
		298.2	93.8	−1.81

Above Mean = −1.86

341.6

7:48	56	29.2	476	
		164.3	469	
		211.2	94.5	−1.80

338.2

7:50	21	29.6	514	−1.85
		164.2	441	
31	44	208.3	95.5	−1.77

47 56

4 48.00

53 33

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1915phae.proj..7600

May 3, 1915

VI

Above

		343.2		
7.53	54	29.6	464	
		167.2	406	
		207.8	87.0	— 200
		343.3		
7:55	22	27.2	439	— 1.93
		160.2	486	
		208.8	92.5	— 1.86

Below

Mean = — 1.96

		257.6		
7:56	50	295.3	437	
		74.2	451	
		119.3	88.8	— 1.95
		255.3		
7:58	03	298.6	433	— 1.99
		74.2	426	
24 09		1168	859	— 2.03

5602
5606
5390

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1915phae.proj..760C

May 3, 1915

Below

VII

		253.2		
8:03	23	296.8	436	
		75.8	400	
		115.8	83.6	−20.9
		255.2		2075
8:04	59	297.9	427	
		74.6	420	
		116.6	84.7	−206

Mean = −2.01

Above

		161.6		
8:06	25	207.8	462	
		345.1	437	
		28.8	89.9	−1.92
		165.2		
8.07	41	209.3	441	−1.94
		344.6	442	
22:28		28.8	88.3	−1.96

8 05 37
8 06 41
621.5464

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1915phae.proj..7600

May 3, 1915

Above. VIII

166.6

8:14 12 207.9 413

344.6 452

29.8 865 — 201

163.6

8:15.54 205.8 422 — 2.005

344.3 445 200

28.8 86.7 ~~11.0~~

Below Mean = — 1.945

74.8

8:17 21 116.8 420

253.3 455

298.8 87.5 — 1.98

72.8

8:18 49 118.8 460 — 1.885

252.2 486

26 16 300.8 946 — 1.79

f 16 34

f 16 38 Abs. diff due to larger separation of ~~#2~~.

621.5562 Var. Not ~~all~~ Much ~~brought~~

so will stop.

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1915phae.proj..760C

Comp with ✱ May 3, 1915.

RR Velorum 101741a

Below 1132

343.3 ∠Var. dis 115 W

8:37 20 331.8

159.5 485

210.2 507

992 — 1.68 I

341.8

8:38 47 327.8 460 — 1.73

160.6 491

209.7 951 — 1.78

above Mean = −1.745

253.2

8:40 22 298.2 450

69.2 501

119.3 951 — 1.70

253.2

8:41.58 299.6 464 — 1.76

75.2 501

38 27 125.3 965 — 1.74

8 39 39

8 39 43

621.5693

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1915phae.proj..7600

May 3, (91)

II

above

	249.6		
8:46.59	305.2	556	
	72.6	480	
	120.6	103.6	— 1.57
	253.6		
8:48 37	303.6	500	— 1.59
	70.2	520	
	122.2	102.0	— 161

Below

Mean = — ~~1.625~~ 1.625

	162.5		
8:50 31	213.5	510	
	341.8	460	
	27.8	97.0	— 173
	160.8		
8:52 25	214.3	537	
38 32	339.6	492	— 1.66
	28.8	102.9	— 159

8 49 38
8 49 42
621.5762

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1915phae.proj..760C

May 3, 1915

~~III~~

Below

		162.3			
8:56	35	215.1	528		
		338.2	511		
		29.3	103.9	—	1.56
		163.6		—	1.65
8:58	00	208.8	452		
		337.7	515		
		29.2	96.7	—	1.74

Above Mean = −1.69

		73.3			
8:59	32	118.3	450		
		248.9	509		
		299.8	95.9	—	1.76
		71.6		—	1.71½
9:01	11	122.2	~~50~~ 506		
		249.8	490		
	35 18	298.8	99.6	—	1.67

8 58 50
8 58 54
621.3726

Slotted to observe variables visually
for C

1915phae.proj..7600

Tues. May 4. 1915.

13 inch ⊙ photos F.C.A.
A.B.Rec.

~~06~~ 133926 −26.9905

Cs W used 939 comp with ** I
= 15 slow 4002 − 262

above
3442 < Var dis

6:45 11	26.6	424	
	162.8	474	
	210.2	898	− 1.92
	341.6		
6 46 50	28.8	472	− 1.86
	161.8	470	
	208.8	942	− 1.80
	Below	Mean = −1.98	
	255.2		
6:48 35	298.2	430 ✓	
	76.6	400 ✓	
	116.6	830	− 2.11
	257.2		
6:49.47	296.6	394	− 2.11
	75.1	435	
36 23	118.6	829	− 2.11
6 47 36			
6 47 51			
622.4865			
622.6481			
−8.1616			

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1915phae.proj..760C

May 4. 1915

Below

		256.3		
6.54	25	298.2	419	
		74.1	417	
		115.8	83.6	— 209
		256.8		
6.55	38	300.1	433	— 1945
		68.8	510	
		119.8	94.3	— 180

above

Mean = — 1.40

		160.2		
6.57.	00	208.8	486	
		339.2	520	
		31.2	1006	— 164
		159.2		
6.58	04	208.8	496	— 1645
25	07	341.2	506	
		31.8	1002	— 165

6 56 17

6 56 32

6 22.4976

6 22.6398

—0.1423

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1915phae.proj..7600

May 4, 1915

Above

	160.2			III
7:03 16	212.6	524		
	342.2	524		
	34.6	1048	− 1.54	
	161.2			
7:04 14	210.2	490	− 1.56	
	338.2	540		
	32.2	1030	− 1.58	

Mean = − 1.54

Below

	69.8		
7:05 14	120.8	510	
	251.8	508	
	302.6	1018	− 1.61
	67.8		
7:06 20	123.8	560	− 1.515
19 04	246.1	541	
	300.2	1101	− .142

OH 46
7 05 01
622.5035
622.6399
−0.1364

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1915phae.proj..760C

May 4, 1915

IV

Below

71.8

7:11. 41 | 121.2 | 496

250.8 | 505

301.3 | 99.9 | −1.66

66.6

7:13 08 | 121.2 | 546 | −1.575

247.8 | 522

300.0 | 106.8 | −149

Above

Mean = −1.47

338.3

7:14 48 | 32.4 | 541

158.8 | 564

215.2 | 1105 | −141

338.2

7:15 46 | 31.8 | 536 | −1365

155.8 | 606

216.4 | 1142 | −132

15 23

7 13 51

7 14 06

622.5098

622.6399

−0.1301

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1915phae.proj..7600

May 11, 1915

Above V

	338.6		
7:25 58	33.8	552	
	157.2	590	
	216.2	1142	− 1.32
	337.3		
7:27 16	35.1	578	−1.21
	158.1	635	
	221.6	124.3	− 1.10

Below Mean = −1.36

	251.3		
7:29 00	303.2	~~05~~	
	66.6	519	
	121.8	552	
		107.1	− 1.49
	250.8		
7:30 20	302.8	520	− 1.50
3234	71.2	540	
28 of	125.2	1060	− 1.51
28 23			

622.579
622.639
−0.1202

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1915phae.proj..7600

May 4. 1915

VI

Below

		257.2			
7:45	50	301.9	507		
		66.1	582		
		124.3	108.9	—	144
		249.8			
7:47	10	301.8	520	—	142
		66.2	586		
		124.8	110.6	—	140

Above

Mean — 134

		160.2			
7:48	34	215.2	550		
		336.8	570		
		33.8	112.0	—	137
		158.6			
7:49	42	219.2	606	—	127
31	16	333.2	606		
		33,8	121.2	—	117

7 47 49
7 48 04
622.5333
622.6399
— 0.1066

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1915phae.proj..7600

May 4. 1915

VII

Above

	160.8		
7.55,31	220.8	600	
	337.8	545	
	32.3	1145	— 131
	156.6		
7:57 00	220.8	642	— 1235
	336.3	595	
	33.8	1217	— 116

Mean = — 1.16

Below

	66.3		
7.58 23	128.6	623	
	63.3	625	
	125.8	1248	— 109
	248.8		
7.59 58	311.8	630	— 1095
30 52	66.8	615	
7 57 43	128.3	1245	— 110
7 57 58			

622.5403
622.6399
-0.0996

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1915phae.proj..7600

May 4, 1915

VIII

Below

		247.7			
8:18	15	312.2	645		
		66.2	651		
		131.3	1296		−0.99
		243.2			
8.19	50	314.6	714		−0.945
		66.3	625		
		128.8	1339		−0.90

Above

Mean = −0.87

		329.8		
8:21	21	33.8	640	
		152.2	930	
		225.2	1370	−0.83
		332.2		
8.22	24	40.2	680	−0.80
		152.8	724	
	50	225.2	1404	−0.77

δ 20 28
δ 20 43
622.5561
622.6399
−0.0838

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1915phae.proj..7600

May 4, 1915

IX

Above

335.2

8.25.33 38.8 636

152.2 678

220.0 131.4 — 0.95

330.8

8.26.29 40.2 694 — 0.87

152.2 696

221.8 139.0 — 0.79

Below Mean = −0.76

63.8

8.27.40 133.8 700

238.6 767

315.3 146.7 — 0.64

61.3 — 0.665

8.28.35 133.2 719

28.17 240.3 735

313.8 1454 — 0.67

f 27.04

f 27.19

622.3606

622.3999

— 0.0793

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1915phae.proj..7600

May 4. 1915

Below

625

8:32	02	130.3	678	
		239.3	760	
		315.3	1438	−0.70
		65.6		
8:33.40		135.2	696	−0.69
		241.3	750	
		316.3	1446	−0.68

Mean = −0.695

above

152.2

8:34	55	223.8	716	
		329.3	710	
		40.3	1426	−0.72
		145.8		−0.615
8:36	08	227.3	815	
		330.6	716	
16	45	42.2	1531	−0.51

8 34 11
8 34 26

622.5656
622.6399
−0.0743

1915phae.proj..7600

May 4, 1915

XI

Above

	151.2		
8:39 57	222.8	Star faint.	716
	333.2		636
	368		135-2
		Clds.	Reject
	157.2		
8:41 27	223.8		726
	330.3	Clouds	709
	41.2		1435 — 0.70

Below

Mean = −0.54

	241.2		
8:42.46	321.3		801
	55.8		814
	137.2		1615 — 0.35
	240.6		
8:43 53	318.3		777 — 0.39
	59.8		795
7 57	139.3		157.2 — 043

f 41 59
f 62 14
622. 5711
622.6799
−0.0688

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1915phae.proj..7600

May 4, 1915

Below

XII

		240.8			
8.47	54	317.8	770		
		58.3	795		
		137.8	1565	−	0.45
		241.8			
8:49	01	314.6	728	−	0.48
		58.6	802		
		138.8	1530	−	0.52

Above

Mean = − 0.39

		326.3			
8:50	10	46.8	805		
		148.8	814		
		230.2	1619	−	0.34
		327.2			
8:57	18	48.4	816	−	0.29
38	23	146.8	856		
8	49 36	232.2	1670	−	0.25
8	49 57				
622.	5763				
622.	6399				
		−0.0636			

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1915phae.proj..7600

May 4, 1915

Above

XIII

9:32 23 145.0 8:5-5
~~8:5~~ 233.6 Clds, Stars gone

317.6
612

135.6

886
1036

1922
167.8 + 0.23

9: clds

Below Mean = +0.06

237.6
9:40 01 320.8 832
50.8 906

9 36 12 141.2 1)3.6 +- 0.12

9 36 27

622.6086
622.6399
-0.0313

1/2 wt. clds throughout

1915phae.proj..7600

May 4, 1915

XIV

Below

		233.3		
9:45	03	323.3	900	
		52.6	962	
		148.8	1862	
			1738	+012
		233.8		
9:47	03	323.2	894	+0.08
		51.2	926	
		143.8	1820	
			1780	+004

9 46 03
9 46 18 above
47.2

~~2.49~~

Clds Mean = +0.05

1/2 weight

6 22.615.4
6.22.6399
-0.0245

Impossible to continue
clds troublesome &
altitude light.

9 53

L-C

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1915phae.proj..7600

Thi. May 7. 1915 —

RC Clk ab Rac 13-inch Photom.

−26.980s 133926
Above ×951
142.8 Var. dis 348 E
6:45 07 227.3
326.2 845
40.8 746
159.1 — 0.40

151.6
6:46 12 226.3 747 — 0.44
323.3 800
433 154.7 — 0.48

Below Mean = −0.36
59.6
6:48 02 138.4 788
225.6 900
315.6 168.8 — 021

87.6
6:49 15 143.8 862 −027s —
239.8 758
28 36 315.6 1620 — 034
6 47 09
6 47 29
625.4912 Os Cr = 20s slow
−0.0044

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1915phae.proj..7600

May 7, 1915

II

Below

		57.8		
6:51	45	148.5	967	
		232.8	874	
		320.2	1841	
			1759	+008
		57.3		
6:52	49	145.6	943	+010
		228.8	920	
		320.8	1863	+012
			1737	

Above

Mean = -0.16

		1442		
6:54	18	224.3	801	
		328.8	804	
		49.2	1605	-037
		144.3		
6:55	19	224.5	802	-042
		325.3	755	
	14 11	40.8	1557	-046

6 53 33
6 53 53
6 25.4960
-0.0396

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1915phae..proj ..7600

May 7, 1915

III

Above

137.5

7:06.41	240.8	1033	
	320.6	925	
	52.5	1958	0.30
		1642	+0.049
	135.8		
7:08 03	238.6	1028	+0.315
	319.2	944	+0.050
	53.6	1972	+0.33
		1628	+0.052

+0.33 +0.047

Mean = +0.440

Below

	48.8		
7:09 30	147.8	990	
	229.6	949	
	324.5	1939	2
		1661	+0.046
	51.5		
7:10 33	154.8	1033	+0.0245
34 47	227.6	987	+0.044
7 08 42	326.3	2020	+0.023
7 09 02		1680	+0.042
			0.042
		1580	

625.3062

−0.0294

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1915phae.proj..7600

May 7, 1915

Below

IV

	44.2			
7:17.36	142.2	980		
	229.8	958		
	325.6	1938	+0.26	
		1662	+~~0.45~~	
	48.8			
7:18 58	145.8	970	+0.25	
	232.6	≠960	+~~0.46~~	
	328.6	1930	+0.25	
		1670	~~+0.46~~	

Mean = +0.16 ~~+0.16~~

above	318.2			
7:20 20	47.2	890		
	141.5	937		
	252	1827	+005	
		1773		
	324.2			
7:21 56	41.2	870	+007	
39 00	134.8	980		
	232.8	1850		
7 19 45		1750	+0.09	
7 20 05				

625.5160
-0.0216

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1915phae.proj..7600

May 7. 1915 —

V

Above

	320.2		
7.31.06	51.8	916	
	131.6	1026	
	234.2	1942	
		1655	+0.27
	315.3		
7.32.20	49.3	940	+0.265
	135.3	999	
	235.2	1939	
		1661	+0.26

Below

Mean = +0.30

	230.6		
7.33.58	328.5	977	
	45.3	985	
	148.8	1962	
		1638	+0.31
	224.8		
7.35.15	322.6	978	+0.335
	42.2	1011	
1239	143.3	1989	
		1611	+0.36

7 33 10
33 30
625.5232
-0 01 24

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1915phae.proj..7600

May 7, 1915

Below VI

228.5

7:44 50 322.8 943

45.6 996

145.2 1939

1661 +026

228.2

7:45 57 318.5 903

49.2 991 +022

148.3 1894

1706 +018

Above Mean = +020

139.2

7:47 33 233.2 940

319.5 963

55.8 1903

169.7 +020

136.2

7:48 43 234.5 983 +018

27 03 320.6 902

7 46 46 50.8 1885

7 47 06 171.5 +016

625.5327

-0.0029

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1915phae.proj..7600

May 7. 1915

Above

VII

136.2

8.01 20 235.1 989

316.2 987

54.9 1976 +0.33

1624

137.3 +0.24s⁻

8:02 28 234.5 972

318.6 912 +0.16

49.8

1884

1716

Below

Mean = +0.25s⁻

45.6

8:04 45 148.8 1032

223.2 933

316.5 1965

1635 +031

48.3

8:05 58 147.5 992 +0.26s⁻

228.8 925

321.3 1917

1683 +022

1h 31

f 03 38

f 03 58

625 5645

+0.0089

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1915phae.proj..760C

May 7, 1915

VII

Below

5X2.8

8:19	30	148.2	854	
		223.2	1020	
		325.2	1874	
			1626	+0.33
		51.1		
8:21	05	142.0	909	+0.20
		227.8	928	
		320.6	1837	
			1763	+0.07

Above

Mean = +0.15

319.6

8:22	37	48.8	892	
		138.6	957	
		234.3	1849	
			1751	+0.09
		320.8		
8:24	19	50.6	898	+0.10
7 31		138.5	961	
		234.6	1859	
8 21 52			1741	+0.11
8 22 12				
625.5371				
625.5356				
0.0215				

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May 7, 1915

Above

	315.8			
8:29 57	55.2	994		
	138.3	993		
	237.6	1987		
		1613		+0.36
	316.8			
8:31 00	48.8	920		+0.325
	135.8	1030		
	238.8	1950		
		1650		+0.29

Below

Mean = +0.32

	230.6			
8:32 54	323.6	930		
	47.3	993		
	146.6	1923		
		1677		+0.23
	229.2			
8:34 28	326.8	926		+0.31
	43.8	1028		
	146.6	2004		
		1596		+0.39

δ 13

ρ 32 03

~~δ~~ 3223

025 .5642
5356

0.0286

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1915phae.proj..760C

May 7, 1915

Below

	228.3		
8:41 .54	319.8	915	
	256.2	840	
	140.2	1755	−0.08
	232.3		
8:43. 30	329.2	969	+0.025
	53.6	900	
	143.6	1869	
		1731	+0.13

Above

Mean = X −0.03

~~2 5 2.~~	~~3~~		
8:46 05	319.3	876	
	46.8	891	
	144.2	1767	−0.06
	233.3		
	322.8		−0.085
8:47 32	46.8	840	
	140.6	900	
19 01	230.6	1740	−011

8 44 45

8 45 05

625 (5) 30

5356

0.0374

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1915phae.proj..7600

May 7, 1915

XI

	Above			
	321.2			
8:53 06	54.8	936		
	143.8	884		
	232.2	1820		
		1780		+0.04
	3183			
8:54 24	48.8	905		+0.03
	139.8	902		
	230.0	1807		
		1793		+0.02
	Below		Mean =	-0.09
	235.6			
8:56 17	315.8	802		
	57.8	880		
	139.8	1682		-0.22
	234.3			
8:57 54	317.6	833		-0.21
	56.4	862		
	142.6	1695		-0.20

21 41
8 5 25
625.5702
625.5356
0.0446

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1915phae.proj..760C

May 7, 1915

XII

Below

2355

9.02	01	317.3	818	
		53.8	843	
		138.1	1661	−0.26

232.8

9.03	33	311.6	788	−0.31
		55.8	825	
		138.3	1613	−0.36

abov

Mean −0.31

148.8

9.05	05	227.5	787	
		318.6	903	
		48.9	1690	−0.21

145.6

9.06	14	229.6	840	−0.31
		326.8	744	
16	53	41.2	1584	−0.41

9 04 13
9 04 33
625. 7865
5336
0.0509

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1915phae.proj..7600

May 7, 1915

XIII

above

	148.1		
9:09.58	227.2	791	
	330.1	752	
	45.3	1543	∓ −0.49
	141.6		−0.33
9:11 11	229.3	877	
	320.6	835	
	44.1	1712	−0.17

Below

Mean = −042

	56.8		
9:12.31	132.8	760	
	236.2	760	
	312.2	1520	−054
			−0515
	55.3		
9:14.06	136.4	811	
7 44	238.1	735	
	311.6	1546	−049

9 11 56
9 12 16
625 5910
5357
0.0562

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1915phae.proj..760C

May 7, 1915

XIV

Below

50.2

9:19 13 132.8 826

239.8 697

309.3 152.3 − 0.53

58.6

9:20 45 133.3 747 −0.57

237.7 723

310.0 147.0 −0.63

Above Mean = − 0.60

328.6

9:22 38 37.5 689

157.6 770

228.6 145.9 −0.66

329.3

9:23 56 40.3 710 −0.615

6 32 149.6 792

228.8 150.2 − 057

9 21 38

9 21 58

625.5986

5356

0.0630

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1915phae.proj..7600

May 7, 1915

XV

	Above			
	328.3			
9:28 02	40.0	717		
	145.5	782		
	223.7	149.9	−	0.57
	326.8			
9:29 24	37.7	709	−	0.57
	147.5	791		
	226.6	150.0	−	0.57
	Below	Mean = − 0.50		
	285.8			
9:31 12	318.8	730		
	55.5	831		
	138.6	156.1	−	0.46
	240.6			
9:32 52	315.6	750	−	0.425
	48.6	+47		
41 30	133.3	159.7	−	0.39

9 30 22

9 30 42

625.6046

5356

+0.0690

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1915phae.proj..760C

May 7, 1915

XVI

Below

		237.3		
9:36	48	308.5	712	
		60.6	732	
		133.8	144.4	− 0.69
		2405		
9:38	41	312.8	723	− 0.705
		61.3	703	
		131.6	142.6	− 0.72

above

Mean = −0.71

		157.2		
9:40	29	227.8	766	
		328.6	697	
		383	1463	= 065
		153.6		
9:41	54	222.2	686	− 0.715
		326.2	710	
37	52	37.2	1396	−078

9 39 28

9 39 48

Too high to count with advantage. Ok bracing too difficult.

625.61

5356

0.0723

0.0754

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May 7, 1915.

~~D~~

R Aqr 16315-6

1326

3 05 E -5 -6 δ

Above

	157.8	Var. dis	
10:21.49	218.7		
	333.8	669	
	35.2	614	
		128.3	−1.01
	148.3		
10:23 11	218.8	705	−0.91
	328.2	676	
	35.8	138.1	−0.81

Mean = −0.70

Below

	48.3		
10:24.57	132.2	839	
	237.1	762	−0.34
	313.3	1601	
			−0.49
	53.9		
10:26 03	133.2	793	
15 54	240.3	693	
10 23 58	309.6	1486	−0.60
10 24 18			
625.6419			

Obs. very diff, since wisps are so bright, and diff to focus on well

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1915phae.proj..760C

Sat May 8, 1915

Phot. on 13-inch. LC dk

SS Centauri 130763

C W = 18° slow

9.7
3.10 ε -63.6

Below Comparison "dog" is Var.

		324.3	Var. dis	
7:11	55	43.6		
		146.2	793	
		227.3	811	
			160.4	-0.37
		322.2		
7:13	16	41.2	790	-0.375
		145.3	810	
		226.3	160.0	-0.34

Above Mean = -0.32

		234.2		
7:15	14	314.8	806	
		55.6	827	
		138.3	163.3	-0.32
		236.3		
7:16	24	318.9	826	-0.26
	16 49	49.8	870	
7 14 12		136.8		
7 14 30			169.6	-0.20
626.5100		-0.0698		

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1915phae.proj..7600

May 8. 1915

Above

		232.6		
7:21	06	318.8	862	
		50.2	846	
		134.8	1708	− 0.17
		229.6		
7:22	25	317.8	882	− 0.14
		48.1	861	
		134.2	1743	− 0.11

Below

Mean = − 0.26

		148.3		
7:23.	36	226.3	780	
		323.8	825	
		46.3	1605	− 0.37
		149.6		
7:24	49	2263	767	− 0.39
	11 56	323.8	819	
7 22 59		45.2	1586	− 0.41

7 23 17

626.5762

−0.0636

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1915phae.proj..760C

May 1, 1915

III

Below

		146.2		
7:29	10	228.6	824	
		321.2	860	
		47.2	168.4	−0.22
		143.6		
7:30	50	227.1	835	−0.27
		322.9	794	
		42.3	162.9	−03.2

Above

Mean = −0.30

		54.2		
7:32	45	134.8	806	
		235.6	796	
		318.2	160.2	−0.34
		54.5		
7:38	59	136.2	817	−0.335
5 44		235.6	830	
7 31 26		318.6	1647	−0.29

7 31 XX

626.5220
−0.0578

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1915phae.proj..7600

May 8, 1915

IV

Above

48.5

7:42. 23	142.6	941	
	233.3	913	
	324.6	1854	+ 0.10
		1746	
	50.2		+ 0.055
7:43 50	140.8	906	
	230.5	897	
	320.2	1803	+ 0.01
		1797	

Below

Mean = − 0.11

	322.2		
7:45 28	47.8	856	
	145.8	828	
	228.6	1684	− 0.22
	326.2		− 0.275
7:46 42	46.2	800	
	44.6	827	
18 23	227.3	1627	− 0.33

44 36
44 85

626.5313
−0.0485

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1915phae.proj..760C

May 6, 1915

V

Below

320.2

8:02	22	54.5	943	
		141.2	921	
		233.3	864	
		~~322.5~~	173.6	+0.12
		322.5		
8:03	45	51.3	888	+0.04
		143.3	898	
		233.1	178.6	−0.03

Above Mean = +0.08

322.3

8:05	09	50.8	885	
		141.6	926	
		234.2	181.1	
			178.9	+0.02
		318.5		
8:06	14	53.6	977	+0.11
17	30	137.8	955	
		233.3	1906	
8	04 22		1694	+0.20
8	04 40			

626.5450

−0.0348

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1915phae.proj..7600

May 8, 1915

VI

Above

	48.3		
8:11 07	141.6	933	
	229.2	934	
	322.6	186.7	
		1733	+ 0.13
	45.2		
8:12 59	137.3	921	+ 0.05
	234.8	860	
	320.8	178.1	− 0.03

Mean = − 0.08

Below

	324.5		
8:14 27	48.3	838	
	144.5	847	
	229.2	168.5	− 0.22
	324.3		− 0.225
8:15 56	47.6	833	
1429	148.8	845	
	233.3	167.8	− 0.23

f 1337

f 1355

⊙ 26.5513

− 0.0285

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1915phae.proj..760C

May 8, 1915

VII

Below

		323.3		
8:23	45	49.2	839	
		144.1	869	
		231.6	1708	−0.17
		320.1		
8:25	10	53.3	932	−0.095
		139.8	880	
		227.8	1812	
			1788	+0.02

Above

Mean = +0.00

		236.6		
8:26	42	323.8	872	
		54.8	883	
		143.1	1755	−0.08
		229.8		−0.07
8:27	58	316.1	863	
		52.6	905	
23	35	143.1	1768	−0.06

8 25 54
8 26 12
626.559A
−0.0200

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1915phae.proj..7600

May 8, 1915

VIII

Aboz

225.6

8:32 53 319.8 942

49.6 942

143.8 1884

1716 +016

228.5

8:34.05 323.5 950 +0175

51.6 951

146.7 1901

1699 +019

Bedow

Mean = ~~X~~ −0.02

145.2

8:35 20 228.6 834

379.5 920

51.5 1754 −0.09

150.2

8:36 2. 229.2 790 −0.205

325 3 843

16 38 49.6 163.3 −0.32

8 34 40

8 34 58

626.5660

0.0138

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1915phae.proj..760C

May 8, 1915

Below #IX

		142.2		
8:48	07	232.7	905	
		322.6	888	
		51.4	1793	−0.01
		143.2		
8:49	28	233.3	901	−0.04
		325.2	860	
		51.2	1761	−0.07

abov Mean = −0.05

~~8:50~~	~~31~~	~~228.9~~		
		228.6		
8:57	03	319.8	912	
		52.8	890	
		141.8	1802	
			1794	+0.00
		232.2		
8:53	15	319.1	869	
		55.6	871	−0.055
		142.7	1740	−0.11

2 53
8 50 43
8 51 01
626.5771
−0.0027

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1915phae.proj..7600

May 8, 1915

X

Above

		231.8		
8:58	20	318.6	868	
		50.3	929	
		143.2	179.7	— 0.01

		230.6		
8:59	42	320.2	896	— 0.035
		55.5	870	
		142.5	176.6	— 006

Below

Mean = — 0.12

		140.8		
9:01	02	228.2	874	
		321.6	852	
		46.8	172.6	— 014

		143.2		
9:02.20		228.8	856	— 0205
1 24		330.3	802	
		50.5	165.8	— 027

9 00 21
9 00 39
626.5038
+0.0040

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1915phae.proj..760C

May 8, 1915

XI

Below

	140.3		
9:07.48	232.1	918	
	322.3	889	
	51.2	1807	
		179.3	+ 0.01
	140.3		
9:09.14	232.2	919	0.00
	323.8	878	
	51.6	1797	− 0.01

above

Mean = 0.00

	50.9		
9:10 31	144.5	936	
	228.8	865	
	315.3	1801	
		179.9	0.00
	48.9		
9:11 44	145.8	969	+ 0.005
	231.8	838	
39 17	315.6	1807	
9 09 49		179.3	+ 0.01
9 10 07			

626.5903
+0.0105

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1915phae.proj..7600

May 8, 1915

XII

	Above		
	49.5		
9:15 40	148.2	987	
	229.8	998	
	320.6	198.5	
		161.5	+ 0.35
	50.8		
9:16 57	141.2	904	+ 0.16
	230.6	877	
	318.3	1781	− 0.03
	Below		Mean = −0.01
	324.2		
9:18.31	47.2	830	
	138.3	923	
	230.6	175.3	− 0.09
	325.2		− 0.175
9:19 44	48.2	830	
	142.3	833	
30 46	225.6	1663	− 0.26

9 17 42
9 18 00
626.595 f
+0.01 60

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1915phae.proj..760C

May 8, 1915

Below XIII

		321.2		
9:25	14	50.2	890	
		145.2	874	
		232.6	1764	−0.064
		328.3		
9:26	21	54.8	865	−0.105
		142.8	860	
		228.8	1725	−0.14

above Mean = −0.175

		~~318.1~~ 56.6		
9:28	06	137.6	810	
		233.8	833	
		317.1	1643	−0.30
		55.6		
9:29	15	144.6	890	−0.245
	28 56	235.3	809	
9 27	14	316.2	1699	−019
9 27	32			

626.6024
0.0226

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May 8, 1915

XIV

above

		48.6		
9:34	05	142.2	936	
		234.6	816	
		386.2	1752	−0.09
		54.8		
9:35	29	144.6	898	−0.15
		236.3	789	
		315.2	1687	−0.21

Below

Mean = −0.22

Mean =

		328.4		
9:36	50	50.3	819	
		142.4	868	
		229.2	1687	−0.21
		325.9		
9:37	57	44.8	789	−0.28
		453	825	−
	24 15	227.8	1614	−0.35

9 36 04
9 36 22
626.6086

+0.0288

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May 8, 1915

XV

Bebor

329.8
9.44 56 50.2 804
145.8 828
228.6 163.2 — 0.32

329.2
9:46 20 42.8 73.6 — 0.40
145.5 81.1
226.6 154.7 — 0.48

Abor Mean — 0.44

241.3
9:48 01 315.6 743
57.2 801
137.3 154.4 — 0.49

239.9
9:49 05 313.3 734 — 0.55
57.2 750
28 22 132.2 148.4 — 0.61
9 47 06
9 47 24
626.61.62
+0.0364

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May 8, 1915

Tel. Reversed.

VII

Above

		150.6		
10:11	35	218.2	676	
		329.2	261	
		453	1437	— 0.70

		150.3		
10:12	36	222.2	719	— 0.735
		333.3	683	
		41.6	1402	— 077

Mean = — 0.72

Below

		243.3		
10:14	02	312.3	690	
		61.5	652	
		126.7	1342	— 0.89

		242.1		
10:15.38		307.2	651	— 0.905
13 51		62.7	675	
10 13 28		130.2	1326	— 092
10 13 46				

626.6345

0.0547

1915phae.proj..760C

May 8. 1915

XVII

Below

~~10.2~~		235.6		
10.20	23	311.6	760	
		59.5	241	
		131.6	1501	− 0.57
~~10.~~		241.8		
10.21	32	308.8	670	− 0.715
		59.8	688	
		128.6	1358	− 0.86

Above

Mean = − 0.84

		150.5		
10.23	00	217.6	671	
		323.5	623	
		35.8	1294	− 0.99
		150.7		
10.24	05	216.2	655	− 0.965
		331.2	666	
9	00	37.8	1321	− 0.94

10 22 15
10 22 33
626.640
+0.0609

1915phae.proj..7600

May 8, 1915

XVIII

above

	150.2			
10:37.37	218.2	680		
	328.2	686		
	36.8	136.6	—	0.84
	154.6			
10.38 53	216.6	620	—	0.84
	321.5	613		
	32.8	123.3	—	1.12

Below

Mean = −1.06

	65.8			
10:40 28	128.5	627		
	246.6	600		
	306.6	1227	—	1.13
	62.6			
10.41 39	126.3	637	—	1.14 s
38 37	148.6	576		
10 39 39	306.2	1213	—	1.16
10 39 57				

626.65 28

0.0730

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May 8, 1915

XIX

Bebw

		64.5		
10:46.5	1	126.6	621	
		245.2	601	
		305.3	1222	−1.14
		65.5		
10:48 05	1	125.8	603	−1.18
		247.3	585	
		305.8	1188	−1.22

abvr

Mean = −1.14

		340.2		
10:49 16	1	40.3	601	
		151.2	670	
		218.2	1271	−1.04
		337.2		
10.50 18	1	36.8	596	−1.11
34	30	152 4	608	
		213.2	1206	−1.18

10 48 38
10 48 56
626.6590
+0.0792

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May 8, 1915 —

Above

XX

		332.9		
10:54	34	39.2	663	
		154.3	599	
		214.2	126.2	— 1.06
		340.0		
10:55	45	35.2	552	— 1.12
		152.2	654	
		217.6	120.6	— 1.18

Below

Mean = -1.19

		246.8		
10:57	02	304.8	580	
		64.7	627	
		727.4	120,7	— 1.18
		246.6		
10:58	04	302.3	557	— 1.26
25	25	66.8	578	
1056	21	124.6	113.0	= 136
1056	39			

626.6644
+0.0846

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May 8, 1915

XXI

Below

~~11:00~~		248.6		
11:02	28	304.8	562	
		65.8	584	
		124.2	114.6	— 1.31
		245.5		
11:03	34	303.8	583	— 1.33
		69.8	545	
		124.3	112.8	— 1.35

Above Mean = — 1.33

		159.8		
11:04	48	213.8	540	
		334.2	586	
		328	112.6	— 1.36
		158.6		
11:06.00		214.6	560	— 1.335
		335.6	586	
16 50		35-2	114.6	— 1.31

11 04 12

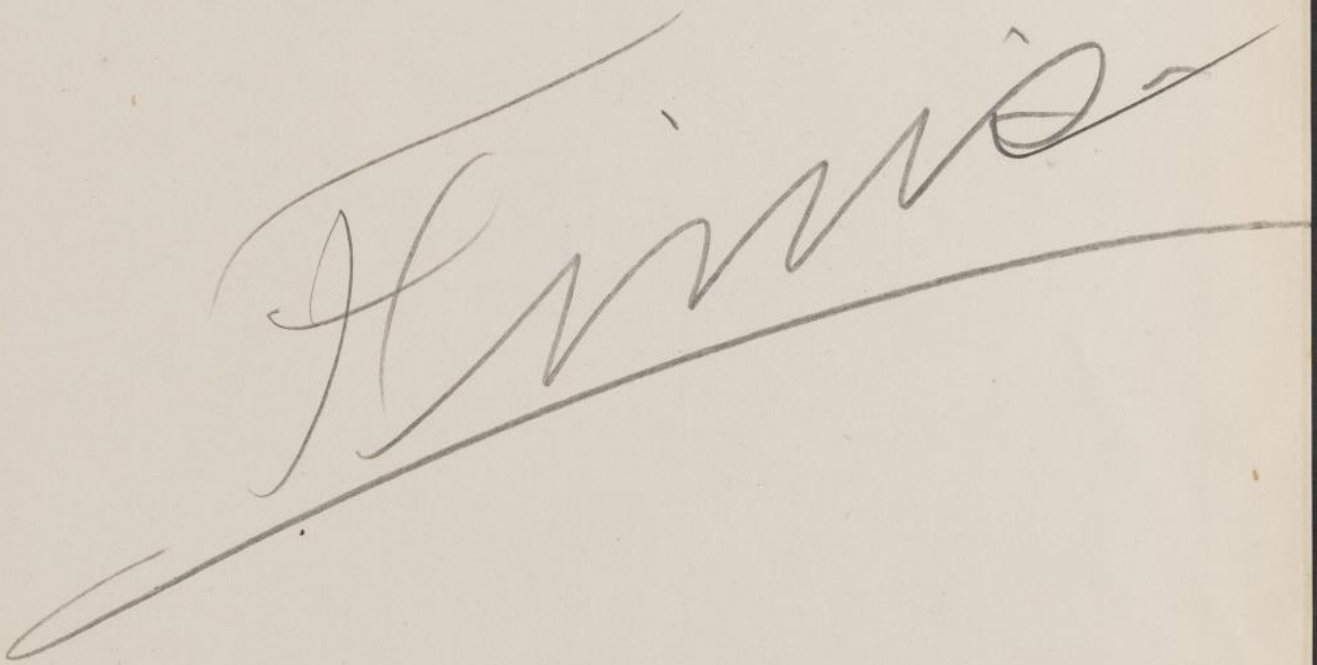
11 04 30

626.669
+0.0894

Early groups doubled by Lage
latter groups under good conditions

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106
16

636
106

1696

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