

1874GOAMM..34E..65A

ROYAL OBSERVATORY, GREENWICH.

OBSERVATIONS OF γ DRACONIS

WITH THE

WATER-TELESCOPE;

AND

REDUCTION OF THE OBSERVATIONS.

1872.

GREENWICH OBSERVATIONS, 1872.

4 I

No. for Reference.	Day and Hour of Observation, 1872.		Observer.	Position of Telescope.		Thermometer Readings.		Wire used.	Constant for Reference to Wire 14.	Micrometer-Readings.		Level-Readings.				Wire-interval from Center, at Observation.	Correction for Curvature of Path and Inclination of Wire.	Sum of Equivalents for Wire, Microm., and Level, corrected for Curvature and Inclination.	Adopted Zenith Point.	Star's Z. D. North from Observation.
						Upper.	Lower.			A	B	a	b	c	d					
						°	°			r	r	div.	div.	div.	div.					
1	Feb.	d h 18. 20	E	W	42.8	41.7	14	"	0.00	26.068	28.000	13.3	113.2	17.5	169.2	1.0	- 1.42	1115.63	1198.98	83.35
2			E	E	42.8	41.5	13		255.91	26.068	26.780	13.5	112.5	17.8	168.6	1.0	- 1.03	1281.58		82.60
3	Feb.	20. 20	HC	E	37.5	37.6	14		0.00	28.000	28.276	12.6	116.0	18.0	173.3	0.3	- 0.22	1281.40	(1126.28)	82.42
4			W	W	37.5	37.6	15		-257.60	29.383	28.276	12.3	115.3	16.4	171.6	2.0	+ 1.31	(1126.28)		(72.70)
5	March	4. 19	C	W	44.5	43.6	14		0.00	28.101	26.000	14.4	118.2	18.2	167.6	1.0	- 1.42	1119.10	1198.98	79.88
6			E	E	44.4	43.5	13		255.91	28.101	24.684	14.5	113.0	18.1	166.9	1.0	+ 0.63	1278.37		79.39
7	March	5. 19	WC	W	44.5	43.6	14		0.00	28.117	26.000	11.9	110.2	17.8	165.4	0.5	- 1.22	1117.22	1198.98	81.76
8			E	E	44.4	43.5	13		255.91	28.117	24.692	16.7	114.6	19.8	167.6	0.5	- 0.47	1280.59		81.61
9	March	6. 19	HC	E	42.5	41.4	13		255.91	26.000	26.809	13.7	113.7	18.3	169.8	1.0	+ 0.63	1281.15	1198.98	82.17
10			W	W	42.3	41.0	14		0.00	27.337	26.809	13.6	113.6	18.2	169.4	2.0	+ 1.31	1124.36		74.62
11	March	8. 19	E	W	44.8	43.6	14		0.00	28.117	26.000	10.2	109.3	18.5	167.0	1.0	- 1.42	1116.95	1198.98	82.03
12			E	E	44.8	43.6	13		255.91	28.117	24.684	14.8	113.3	20.8	167.7	1.0	- 1.03	1278.92		79.94
13	March	10. 19	JC	E	..	34.0	13		255.91	26.000	26.818	9.3	118.0	11.6	174.2	1.0	+ 0.63	1281.20	1198.98	82.22
14			W	W	..	34.0	14		0.00	27.332	26.818	6.0	114.7	9.3	172.2	1.0	0.00	1120.20		78.78
15	March	14. 18	JC	W	44.3	43.0	15		-257.60	31.406	26.000	12.0	111.3	16.1	166.0	1.0	- 1.42	(1102.07)	1198.98	(96.91)
16			E	E	44.0	42.9	14		0.00	31.406	24.858	16.7	115.8	20.0	169.3	1.0	- 1.03	1279.78		80.80
17	March	20. 18	L	E	..	31.5	13		255.91	28.000	25.603	13.4	124.3	15.2	181.3	0.5	+ 0.37	1343.98	1260.24	83.74
18			W	W	..	31.5	14		0.00	29.315	25.603	14.6	115.3	8.2	174.2	1.5	+ 0.61	1177.34		82.90
19	March	24. 18	WC	W	..	31.±	14		0.00	27.942	27.000	7.8	116.3	10.9	175.4	0.0	- 0.91	1179.79	1198.98	80.45
20			E	E	..	31.±	13		255.91	27.942	25.651	12.7	122.1	15.0	179.2	0.0	0.00	1341.58		81.34
21	March	26. 18	JC	E	36.0	35.0	13		255.91	28.000	25.587	13.7	119.4	16.2	176.0	1.3	+ 0.63	1340.83	1198.98	80.59
22			W	W	36.0	35.2	14		0.00	29.323	25.590	8.3	114.2	11.4	171.0	2.0	+ 1.31	1178.32		81.92
23	April	3. 17	WC	W	..	36.0	14		0.00	26.919	28.000	10.9	115.6	14.3	172.1	0.0	- 0.91	1178.84	1198.98	81.40
24			E	E	..	36.0	13		255.91	26.919	26.713	11.2	115.8	15.8	172.8	0.0	0.00	1341.22		80.98
25	August	23. 8	E	W	71.0	69.8	14		0.00	26.548	28.000	23.5	98.7	29.4	146.0	2.0	- 1.53	1147.02	1265.31	118.29
26			E	E	70.8	69.3	13		255.91	26.548	27.662	25.6	101.6	33.7	150.2	0.0	0.00	1382.84		117.53
27	August	24. 8	JC	E	75.4	73.3	13		255.91	27.000	27.197	28.0	99.8	36.9	147.8	1.0	+ 0.63	1382.83	1198.98	117.52
28			W	W	75.0	73.1	14		0.00	27.353	27.197	24.8	97.0	33.3	145.0	1.0	0.00	1149.22		116.09
29	August	26. 7	L	W	65.5	64.2	14		0.00	26.495	28.000	22.7	103.3	29.3	151.8	2.0	+ 1.31	1148.32	1198.98	116.99
30	August	27. 7	E	W	64.3	63.2	14		0.00	26.576	28.000	20.5	99.8	27.5	150.5	1.0	- 1.42	1149.35		115.96
31			E	E	64.2	63.3	13		255.91	26.576	27.625	23.5	105.5	30.7	155.5	0.0	0.00	1383.20		117.89
32	August	28. 7	JC	E	71.0	69.4	13		255.91	27.000	27.221	25.8	101.2	34.0	149.6	1.0	+ 0.63	1384.12	1198.98	118.81
33			W	W	70.6	69.3	14		0.00	27.306	27.221	23.7	99.2	32.0	147.8	1.0	0.00	1148.18		117.13
34	August	29. 7	E	W	70.0	69.2	14		0.00	26.556	28.000	22.8	99.6	31.5	148.2	0.0	- 0.91	1149.35	1198.98	115.96
35			E	E	69.6	68.5	13		255.91	26.556	27.673	24.6	101.7	33.2	150.6	1.0	- 1.03	1382.97		117.66

1, 2. Faint; image good.

17, 18. A slight fog; star faint.

21. Bisections were made at $2\frac{1}{2}$ intervals from the center and at the center, the readings being 25.584 and 25.590 respectively.

No. for Reference.	Day and Hour of Observation, 1872.	Observer.	Position of Telescope.	Thermometer Readings.		Wire used.	Constant for Reference to Wire 14.	Micrometer Readings.		Level Readings.				Wire interval from Center at Observation.	Correction for Curvature of Path and Inclination of Wire.	Sum of Equivalents for Wire, Micrometer, and Level, corrected for Curvature and Inclination.	Adopted Zenith Point.	Star's Z. D. North from Observation.
				Upper.	Lower.			A	B	a	b	c	d					
								r	r	div.	div.	div.	div.					
1	August 30. 7	L	E	63.7	63.3	13	255.91	27.000	27.176	22.7	105.0	29.5	154.2	1.5	+ 0.75	1381.07	1265.31	115.76
2			W	63.6	62.9	14	0.00	27.343	27.164	21.3	103.4	28.7	152.8	2.0	+ 1.31	1148.87		116.44
3	Sept. 3. 7	HC	W	78.8	78.3	14	0.00	26.525	28.000	28.0	94.7	37.5	140.5	0.3	- 1.08	1146.55		118.76
4			E	78.5	77.7	13	255.91	26.525	27.662	30.4	97.3	40.3	143.3	0.0	0.00	1381.20		115.89
5	Sept. 4. 7	L	E	74.1	73.4	13	255.91	28.000	26.205	27.0	99.5	36.0	146.0	0.5	+ 0.37	1382.03		116.72
6	Sept. 5. 7	J	W	72.2	71.6	14	0.00	26.533	28.000	23.5	97.1	31.5	144.3	1.0	- 1.42	1145.71		119.60
7			E	72.0	71.2	13	255.91	26.533	27.657	27.6	101.8	36.2	149.8	0.0	0.00	1382.44		117.13
8	Sept. 11. 6	WC	E	72.6	72.2	13	255.91	28.000	26.212	27.1	100.5	36.1	147.8	1.0	+ 0.63	1383.55	1267.48	116.07
9			W	72.0	71.5	14	0.00	28.353	26.212	24.0	97.8	33.6	145.5	1.0	0.00	1150.41		117.07
10	Sept. 12. 6	E	W	72.8	72.3	14	0.00	26.594	28.000	25.2	95.0	32.5	144.3	0.0	- 0.91	1150.88		116.60
11			E	73.1	72.2	13	255.91	26.594	27.673	27.8	101.2	38.2	149.4	1.0	- 1.03	1387.40		119.92
12	Sept. 19. 6	C	E	61.0	60.2	13	255.91	28.000	26.186	23.3	108.0	30.3	159.8	1.0	+ 0.63	1384.10		116.62
13			W	60.7	59.8	14	0.00	28.378	26.186	16.4	101.9	23.1	153.2	2.0	+ 1.31	1150.05		117.43
14	Sept. 20. 6	JC	W	53.4	52.3	14	0.00	26.535	28.000	15.0	105.3	21.2	157.4	1.0	- 1.42	1146.48		121.00
15			E	53.3	52.2	13	255.91	26.535	27.651	21.7	112.4	28.0	165.7	0.0	- 0.20	1385.11		117.63
16	Sept. 28. 5	C	E	62.5	61.7	13	255.91	28.000	26.208	22.4	106.1	30.4	157.1	0.0	0.00	1383.75		116.27
17			W	62.2	61.6	14	0.00	28.340	26.208	18.0	101.8	25.8	153.0	2.0	+ 1.31	1149.88		117.60
18	Oct. 3. 5	C	W	60.0	59.0	14	0.00	26.558	28.000	16.4	101.8	23.0	152.6	2.0	+ 1.31	1149.64		117.84
19	Oct. 4. 5	L	W	55.2	53.5	14	0.00	26.597	28.000	14.8	103.3	22.0	157.2	1.0	- 1.42	1150.66		116.82
20	Oct. 7. 5	C	E	63.1	62.0	13	255.91	28.000	26.268	22.0	104.8	28.2	154.8	1.0	+ 0.63	1387.26		119.78
21			W	63.0	61.9	14	0.00	28.330	26.268	17.2	100.5	24.4	151.0	1.0	0.00	1150.89		116.59

1. Bisections were made at two intervals and at one interval from the center, the readings being $27^{\text{rev}}.187$ and $27^{\text{rev}}.164$ respectively.

5. Very cloudy; star seen only for a few seconds at the time of bisection.

7. The reading for level a was set down $22^{\text{div}}.6$.

8, 9. Image very good.

15. Bisections were made at one interval before the center, at the center, and at one interval after the center, the readings being $27^{\text{rev}}.626$, $27^{\text{rev}}.652$, and $27^{\text{rev}}.675$ respectively.

16, 17. The focus good.

18. Cloudy directly after bisection. Star not visible after reversion.

19. Very faint; not visible after reversion.