OBSERVATIONS OF THE THIRD COMET OF 1854,

MADE AT CLOVERDEN

WITH THE FILAR-MICROMETER OF THE SHELBY EQUATORIAL.

By B. A. GOULD, Jr., and JOSEPH WINLOCK.

[Corrected for refraction.]

Date.	M. T. Cloverden.	Comparison-Star.	☄ − ✱				☄'s apparent		Observer.
			$\Delta\alpha$	No. of Comp.	$\Delta\delta$	No. of Comp.	α	δ	
1854.	h. m. s.		m. s.		′ ″		° ′ ″	° ′ ″	
June 27	9 36 53.9	*a*	+1 37.56	17	+7 17.9	6	106 27 40.5	+60 17 17.7	W.
	10 23 56.0	Argel. Z. 93, 120	−2 57.06	5	+6 12.6	2	106 37 31.4	60 16 17.0	W.
28	10 34 37.4	" 96, 87	−5 40.53	12	−1 23.0	8	111 23 42.9	59 36 12.4	G.
	14 48 8.8	" 96, 85	+0 56.36	11	+2 37.5	5	112 13 29.7	59 28 9.2	W.
July 1	9 42 33.8	" 188, 20	+2 35.75	3	−8 52.4	1	123 29 38.4	56 46 48.7	G.
	10 4 47.8	" 188, 19	+2 49.83	9	−7 32.3	5	123 32 53.1	56 45 40.3	G.
	10 41 21.5	" 83, 44	+7 14.10	3	−1 12.0	2	123 39 12.9	56 41 2.2	G.
3	9 34 49.2	*f*	−0 21.89	18	+2 7.7	11			G.
	13 44 32.1	*g*	−0 48.03	16	−5 8.1	6			G.
5	9 20 13.6	Argel. Z. 99, 39	+0 53.91	8	−7 58.6	3	135 9 43.5	51 53 22.0	G.
(1)	9 28 59.2	" 99, 40	+0 8.67	9	−1 1.1	7	135 14 45.5	+51 52 54.6	G.

Mean Places of Comparison-Stars for 1854.0.

✱	Mag.	α	δ	Authority.
		h. m. s.	° ′ ″	
a	6.7	7 4 14.60	+60 9 53.1	Shelby Equatorial from A. Z. 93, 119; 93, 120.
Argel. Z. 93, 120	6	7 9 28.63	60 9 57.5	Mean, A. Z. 93, 120; 96, 58; and B. A. C. 2397.
" 96, 87	7.8	7 31 16.74	59 37 27.6	Argelander's Zones.
" 96, 85	8.9	7 27 58.97	59 25 24.1	" "
" 188, 20	9	8 11 23.82	56 55 32.2	" "
" 188, 19	9	8 11 22.72	56 53 3.7	" "
" 83, 44	7	8 7 23.99	56 42 5.5	Mean, Argel. Z. 83, 44; and Rümker 2452.
f	8.9			
g	8.9			
Argel. Z. 99, 39	9	8 59 45.61	52 1 11.0	Argelander's Zones.
" 99, 40	9.0	9 0 50.97	+51 53 46.7	" "

(1) Coincidence in α with Arg. Z. 99, 40, at $9^h.\ 49^m.\ 3^s.3$ M. T.

ELEMENTS OF THE COMET 1854, III.

By PROFESSOR B. PEIRCE.

The accompanying elements are computed from the Cloverden observations of June 27, July 1, and 5.

Perihelion Passage, 1854, June $21^d.842225$, Clov. M. T.

Ω	347° 40′ 48.″8	App. equinox,
π	273 3 17.5	1854, July 1.
i	71 19 16.1	
Log q	9.8117690	

Retrograde.

C. − O.

For middle place, — $\delta\lambda = +4''.1$ $\delta\beta = +21''.2$