Cordoba Observations of Comet 1891 I (Barnard-Denning).

Owing to cloudy weather, this comet could not be observed until the 17th of June, and it was then so faint in the strong moonlight that, until after full moon, filar micrometer measures could only be obtained with great difficulty. These were continued, however, as the weather permitted, until its light had diminished so much that it was lost under the faintest possible illumination of the micrometer threads. June 28th, the comet was undistinct from its proximity to an 8th magnitude star. July 6, clouds after the first observation. Upon the first three dates given below, the observations were made by me; thereafter, by first assistant Richard H. Tucker.

1891	Cord. M. T.	$\Delta\alpha$	$\Delta\delta$	Cp.	Obs.	α app.	$\log p.\Delta$	δ app.	$\log p.\Delta$	Red. ad l. app.	*	
June	17	6 ^h 32 ^m 46 ^s	+0 ^m 40 ^s 50	— 0' 9".5	6	T	7 ^h 1 ^m 29 ^s 37	9.857	—46° 43' 27".2	0.311 _n	—1° 70' — 2".4	1
	18	6 24 55	+0 13.64	— 6 26.5	10	»	7 11 27.43	9.854	—47 1 43.2	0.235 _n	—1.69 — 3.0	2
	18	6 57 15	—4 36.82	— 0 49.0	5	»	7 11 41.38	9.866	—47 2 1.0	0.394 _n	—1.68 — 3.1	3
	22	6 23 24	—0 6.64	+ 5 35.5	11	»	7 49 57.83	9.846	—47 43 37.7	0.042 _n	—1.63 — 5.1	4
	23	6 59 40	+5 15.02	—11 30.4	6	Tr	7 59 19.09	9.864	—47 47 25.3	0.261 _n	—1.62 — 5.2	5
	24	6 50 57	+4 19.95	+ 3 53.2	6	»	8 8 7.48	9.867	—47 48 38.2	0.173 _n	—1.60 — 5.7	6
	25	6 34 41	+0 57.50	+ 3 32.8	10	»	8 16 40.57	9.843	—47 47 53.7	0.002 _n	—1.56 — 6.3	7
	26	6 28 16	+2 4.47	— 0 42.7	7	»	8 25 1.01	9.834	—47 45 21.1	9.883 _n	—1.54 — 6.6	8
	27	6 26 34	+1 23.50	— 6 3.5	7	»	8 33 8.00	9.829	—47 41 17.5	9.818 _n	—1.51 — 7.0	9
	28	6 55 30	+1 29.60	+ 7 28.4	5	»	8 41 8.03	9.847	—47 34 59.5	0.085 _n	—1.49 — 7.2	10
July	1	6 36 23	—1 41.70	+ 3 8.4	5	»	9 3 9.67	9.820	—47 10 30.6	9.779 _n	—1.37 — 8.5	11
	6	6 35 44	—2 44.00	— 4 6.1	1	»	9 35 9.77	9.799	—46 13 40.4	9.626 _n	—1.17 — 9.8	12
	9	7 22 46	—1 28.33	— 9 19.8	6	»	9 51 59.66	9.831	—45 34 17.0	0.142 _n	—1.09 — 10.1	13

Mean Places of Comparison stars for 1891.0.

*	α 1891.0	δ 1891.0	Authority	*	α 1891.0	δ 1891.0	Authority
1	7 ^h 0 ^m 50 ^s 57	—46° 43' 15".3	Cord. ZC. 26	8	8 ^h 22 ^m 58 ^s 08	—47° 44' 31".8	Cord. GC. 11358
2	7 11 15.48	—46 53 13.7	Cord. ZC. 735	9	8 31 46.01	—47 35 7.0	Cord. GC. 11593
3	7 16 19.88	—47 1 8.9	Cord. ZC. 1100	10	8 39 39.92	—47 42 20.7	Cord. GC. 11828
4	7 50 6.10	—47 49 8.1	Cord. GC. 10392	11	9 4 52.74	—47 13 30.5	Cord. GC. 12461
5	7 54 5.69	—47 35 49.7	Cord. GC. 10510	12	9 37 54.94	—46 9 24.5	Cord. GC. 13243
6	8 3 49.13	—47 52 25.7	Cord. GC. 10793	13	9 53 29.08	—45 24 47.1	Cord. ZC. 4073
7	8 15 44.63	—47 51 20.2	Cord. GC. 11155				

National Argentine Observatory, Cordoba 1891 July 22.

John M. Thome.

Planet (311) (Charlois 1891 Juni 11).

Dieser Planet ist von Herrn Charlois an 9 Tagen vom 11. Juni bis 7. August beobachtet worden. Aus drei Oertern, 11. Juni, 6. Juli und 7. August, hat sich folgende sehr kreisähnliche Bahn ergeben:

Epoche 1891 Aug. 7.5 M. Z. Berlin.

$$\begin{array}{lcl}
 M = 128^{\circ} 54' 55".4 & & \varphi = 1^{\circ} 18' 26".0 \\
 \omega = 60 13 11.6 & & \mu = 721".972 \\
 \Omega = 81 13 6.6 & \text{M. Aequ. 1891.0} & \log a = 0.460991 \\
 i = 3 16 14.5 & &
 \end{array}$$

Berlin 1891 Sept. 1.

A. Berberich, Hülfсарbeiter am astr. Recheninstitut.

Beobachtung des Planeten (314) (Palisa Aug. 30) auf der Sternwarte in Hamburg.

1891 August 31 11^h 0^m 17^s M. Z. Hamburg $\Delta\alpha = +2^{\text{m}} 3^{\text{s}} 96$ $\Delta\delta = +5' 9".0$ α app. = 23^h 0^m 33^s 14 (9.0856_n)

δ app. = —1° 34' 13".2 (0.8585) Red. ad l. app. = +2° 45' +13".8

Vergleichstern (1891.0): $\alpha = 22^{\text{h}} 58^{\text{m}} 26^{\text{s}} 73$ $\delta = -1^{\circ} 39' 36".0$ $\frac{1}{2}$ (BB.VI 4385 + M₁ 31958)

Während der Beobachtung mehrfach Wolken.

Sternwarte Hamburg 1891 Sept. 1.

W. Luther.