

are given in Table I, the six possible combinations being given in the six lines. The order of brightness of the satellites was always, III, I, II and IV. The brighter of the two satellites compared is given in the first column, the fainter in the second. The times of observation, expressed in Julian Days and decimals, omitting the three left-hand figures 241, are given in the third column. The mean of all the measures is given in the fourth column, and the residuals from the mean, expressed in hundredths of a magnitude, are given for the different days in the next three columns. A least square solution, from the results in the fourth column, gave the values 0.42, 0.16, and 0.64, for the three intervals, III to I, I to II, and II to IV, respectively. The computed values of all the intervals are given in the eighth column, and the residuals found by subtracting them from the observed values given in the third column are given in the ninth column. In 1877 and 1878, measures of the satellites of Jupiter were made here and are described in Volume XI, Chapter VIII. The difference in

magnitude there found between Jupiter and the four satellites, and given on page 246 in the second column of Table XLVIII, is for Satellite I, 8.13; for II, 8.27; for III, 7.76; for IV, 8.89. The corresponding differences between the magnitudes of the satellites are given in the tenth column of Table I. Thus, for Satellites I and III, we have, $8.13 - 7.76 = 0.37$, which is entered in the first line of the column. The differences between these and the computed values are found by subtracting the values in the eighth column from those in the tenth and are entered in the eleventh column. It will be noticed that all of these differences are negative, that is, that the interval between the satellites appeared to be less in the earlier than in the later observations. Correcting this difference, for which there is no obvious explanation, by multiplying the results in the tenth column by 1.08 and subtracting the products from the computed values given in the eighth column, we have the residuals given in the twelfth column.

Table I. Results of observations.

Br.	Ft.	Julian Days	Mean	I	II	III	C	O-C	XI	Res.	Res.
III	I	6900.592, 6907.524	0.42	00	00, 00	—	0.42	0.00	0.37	-0.05	-0.02
III	II	6904.538, 6906.528, 6918.542	0.62	00, 00	00, 04 _n	01 _n , 03	0.58	+0.04	0.51	-0.07	-0.03
III	IV	6905.526, 6911.524, 6915.522	1.18	00, 01	02 _n , 02 _n	01	1.22	-0.04	1.13	-0.09	0.00
I	II	6902.528, 6909.533, 6916.547	0.14	05 _n , 05 _n	05, 00, 00	02	0.16	-0.02	0.14	-0.02	-0.01
I	IV	6922.518	0.83	00, 00	—	—	0.80	+0.03	0.76	-0.04	+0.02
II	IV	6911.549, 6920.520, 6928.518	0.66	08 _n	04, 06	02 _n	0.64	+0.02	0.62	-0.02	+0.03

The average value of the 26 residuals in the fifth, sixth and seventh columns is ± 0.020 , and of the 6 residuals in the eighth column, is ± 0.025 . The average value

of the residuals in the twelfth column is even smaller, ± 0.018 . There appears therefore to be no evidence of variation during the time that these measures were made.

Harvard College Observatory, 1905 April 11.

Edward C. Pickering.

Osservazioni di piccoli pianeti e di comete

fatte col micrometro circolare al rifrattore equatoriale di 8 pollici del R. Osserv. di Brera in Milano.

Data	T. m. Milano	$\Delta\alpha$	$\Delta\delta$	Cf.	α app.	$\log p.\Delta$	δ app.	$\log p.\Delta$	Red. ad l. app.	*
(419) Aurelia.										
1904										
Lugl. 9	11 ^h 11 ^m 7 ^s	+0 ^m 20 ^s 99	+ 1' 54".4	16	18 ^h 17 ^m 57 ^s 15	7.734	-17° 1' 47".2	0.617	+3 ^s 06 +11".5	1
(78) Diana.										
1905										
Genn. 0	9 56 28	-0 20.28	+ 1 57.5	8	6 41 51.51	9.427 _n	+36 17 57.0	0.281	+1.21 -10.3	2
1	15 55 14	+0 53.33	+ 8 2.4	16	6 40 27.07	9.645	+36 15 5.4	0.505	+1.23 -10.1	3
2	9 8 38	+0 3.42	+ 6 13.4	16	6 39 37.17	9.525 _n	+36 13 16.4	0.356	+1.24 -10.1	3
4	9 49 13	-0 35.21	- 4 39.8	12	6 37 15.36	9.382 _n	+36 7 22.7	0.263	+1.27 -9.8	4
8	10 10 56	-1 36.77	+14 31.7	9	6 32 41.36	9.189 _n	+35 53 6.8	0.206	+1.30 -9.4	5
12	9 50 5	+0 4.26	- 4 34.6	8	6 28 25.57	9.193 _n	+35 35 28.1	0.218	+1.33 -8.8	6
14	8 36 38	+0 8.14	+ 4 10.9	16	6 26 28.43	9.450 _n	+35 25 46.7	0.324	+1.33 -8.6	7
(71) Niobe.										
1905										
Febb. 5	9 29 41	-0 45.78	- 0 34.1	8	7 21 21.76	9.036 _n	+34 7 25.1	0.252	+1.34 -8.7	8
6	9 1 59	-1 44.40	- 7 44.7	10	7 20 23.14	9.194 _n	+34 0 14.6	0.277	+1.34 -8.6	8
7	8 59 49	+0 34.19	- 1 4.6	11	7 19 24.90	9.177 _n	+33 52 49.8	0.278	+1.33 -8.5	9

1905	T. m. Milano	$\Delta\alpha$	$\Delta\delta$	Cf.	α app.	$\log p.\Delta$	δ app.	$\log p.\Delta$	Red. ad l. app.	*
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(42) Isis.

Marz. 8 | $10^h 12^m 12^s$ | $+0^m 44^s 27$ | $+ 2' 8'' 0$ | 10 | $12^h 23^m 26^s 87$ | 9.488_n | $+11^\circ 41' 36'' 6$ | 0.721 | $+1^s 46 - 17'' 1$ | 10

Cometa 1905 II (1904 e).

Gen. 7	8 50 57	+2 46.24	-12 38.9	9	1 25 52.74	9.405	- 2 41 31.6	0.811	-0.13 - 7.9	11
8	8 28 50	-3 39.29	- 0 13.3	10	1 27 21.67	9.352	- 1 53 51.9	0.807	-0.10 - 8.3	13
9	8 2 37	-0 14.26	- 1 18.6	10	1 28 52.31	9.274	- 1 6 40.8	0.803	-0.12 - 7.8	14
10	8 33 25	+0 45.40	- 2 22.0	16	1 30 28.26	9.378	- 0 17 41.1	0.797	-0.11 - 7.6	15
11	8 20 15	+2 7.84	+ 1 41.2	10	1 32 2.62	9.348	+ 0 29 30.3	0.792	-0.11 - 7.5	16

Cometa 1904 II (1904 d).

Gen. 10 | 17 14 39 | -0 49.25 | - 2 33.0 | 10 | 17 23 11.26 | 9.707_n | +39 38 2.2 | 0.556 | -1.81 + 1.2 | 17

Posizioni medie delle stelle di confronto.

*	α 1904-05.0	δ 1904-05.0	Autorità	*	α 1905.0	δ 1905.0	Autorità
1	$18^h 17^m 33^s 10$	$-17^\circ 3' 53'' 1$	AWe. 14317	10	$12^h 22^m 41^s 14$	$+11^\circ 39' 45'' 7$	AG. Leipzig I 4579
2	6 42 10.58	+36 16 9.8	AG. Lund 3521	11	1 23 6.63	- 2 28 44.8	BD. -2°220 rif. alla *12
3	6 39 32.51	+36 7 13.1	> > 3498	12	1 23 10.73	- 2 31 38.8	$\frac{1}{2}$ (W ₁ 346 + 2 Rad ₃ 342)
4	6 37 49.30	+36 12 12.3	> > 3479	13	1 31 1.06	- 1 53 30.3	AG. Nicolajew 308
5	6 34 16.83	+35 38 44.5	> > 3429	14	1 29 6.69	- 1 5 14.4	> > 300
6	6 28 19.98	+35 40 11.5	> > 3377	15	1 29 42.97	- 0 15 11.5	> > 302
7	6 26 18.96	+35 21 44.4	> > 3358	16	1 29 54.89	+ 0 27 56.6	> > 303
8	7 22 6.20	+34 8 7.9	AG. Leiden 3139	17	17 24 2.32	+39 40 34.0	AG. Lund 7144
9	7 18 49.38	+33 54 2.9	> > 3122				

Le osservazioni furono fatte dal sottoscritto; ad alcuni dei calcoli di riduzione prese parte l'assistente Dottor Giovanni Bottino Barzizza.

Milano, 1905 Marzo 29.

Ingegnere Luigi Gabba.

Osservazioni della cometa 1905 a

fatte col micrometro circolare al rifrattore equatoriale di 8 pollici del R. Osserv. di Brera in Milano.

1905	T. m. Milano	$\Delta\alpha$	$\Delta\delta$	Cfr.	α app.	$\log p.\Delta$	δ app.	$\log p.\Delta$	Red. ad l. app.	*
Apr. 6	$9^h 15^m 30^s$	$-1^m 17^s 84$	$+ 7' 9'' 1$	10	$6^h 26^m 41^s 73$	9.577	$+24^\circ 15' 5'' 1$	0.633	$+0^s 13 - 7'' 9$	1
8	9 9 30	+0 17.86	-13 56.6	9	6 35 25.52	9.577	+26 32 11.0	0.602	+0.13 - 6.9	3

Posizioni medie delle stelle di confronto.

*	α 1905.0	δ 1905.0	Autorità
1	$6^h 27^m 59^s 44$	$+24^\circ 8' 3'' 9$	riferita alla * 2
2	6 27 30.21	+24 6 41.2	AG. Berlin B 2443
3	6 35 7.53	+26 46 14.5	AG. Cambr. 3422

Milano, 1905 Aprile 27.

Luigi Gabba.

Beobachtungen von Kometen

am 12-zöll. Refraktor, Heidelberg-Königstuhl, astronom. Institut.

Datum	M. Z. Kgst.	$\Delta\alpha$	$\Delta\delta$	Vgl.	Bb.	α app.	$\log p.\Delta$	δ app.	$\log p.\Delta$	Red. ad l. app.	*
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1905

Komet 1904 I (1904 a).

Jan. 14	$17^h 16^m 45^s 1$	$-2^m 59^s 06$	$- 0' 22'' 1$	20.6	K	$11^h 46^m 27^s 29$	9.328	$+59^\circ 53' 23'' 0$	0.155 _n	$-0^s 09 - 16'' 8$	1
Febr. 9	11 58 48.3	+2 15.66	+ 0 49.9	20.6	>	10 26 31.89	9.927	+64 22 54.0	0.143	+1.84 - 11.8	2