*	α	δ	Autorità
	1908.0	1908.0	
15	1 ^h 30 ^m 47 ^s 69	+4° 32' 28".4	AG Alb 446
	1909.0	1909.0	
16	1 36 14.34	+6 29 54.5	AG Lpz II 629

Colle 3 osservazioni di Roma

1908 Nov. 5, 1909 Genn. 4, Marzo 6

vale a dire con un intervallo di 121 giorni, ho calcolato il seguente sistema di elementi:

Epoca 1909 Genn. 4 12^h T. M. Berlino

$$\begin{array}{lcl}
 M = 324^{\circ} 37' 38''.8 & & \\
 \omega = 38 \ 54 \ 48.4 & \left. \begin{array}{l} \\ \\ \\ \end{array} \right\} 1910.0 & \mu = 708''.6050 \\
 \Omega = 58 \ 54 \ 49.4 & & \log a = 0.466402 \\
 i = 13 \ 35 \ 36.1 & & m_0 = 11^m 0 \\
 \varphi = 10 \ 56 \ 13.8 & & g = 7.2
 \end{array}$$

A controllo dei calcoli fatti rappresentai il luogo di mezzo ottenendo:

$$A\alpha = +0''.6 \quad A\delta = -0''.1.$$

Per di più la rappresentazione delle due osservazioni di 1908 Dic. 4 e 1909 Febb. 2 diede come residui:

Roma, 1909 Maggio.

*	α 1909.0	δ 1909.0	Autorità
17	1 ^h 35 ^m 37 ^s 84	+ 6° 37' 35".6	AG Lpz II 626
18	1 36 58.15	+ 6 33 10.9	" 639
19	1 57 59.65	+10 56 2.1	AG Lpz I 609
20	1 58 25.12	+11 12 56.7	" 613
21	2 40 39.23	+16 38 14.4	AG Berl A 742

$$\begin{array}{ll}
 A\alpha = -0''.21 & A\delta = -1''.4 \\
 A\alpha = +0.06 & A\delta = -1.8.
 \end{array}$$

Se al sistema precedente si applicano le perturbazioni causate da Giove e Saturno e si oscula in 2^a opposizione si hanno gli elementi:

Epoca 1910 Marzo 3 12^h T. M. Berlino

$$\begin{array}{lcl}
 M = 47^{\circ} 47' 16''.8 & & \\
 \omega = 39 \ 1 \ 38.7 & \left. \begin{array}{l} \\ \\ \\ \end{array} \right\} 1910.0 & \\
 \Omega = 58 \ 54 \ 7.2 & & i = 13 \ 35 \ 36.6 \\
 i = 13 \ 35 \ 36.6 & & \varphi = 10 \ 57 \ 10.3 \\
 \mu = 708''.1886 & & \\
 \log a = 0.466572
 \end{array}$$

La seconda opposizione avrà luogo il 1910 Marzo 14, e a suo tempo per quell'epoca comunicherò l'effemeride di ricerca.

Lo scopritore, Sr. W. Lorenz, volle gentilmente permettermi di dare al pianeta il nome di Rachele.

E. Bianchi.

Observations of the Comet 1908 c (Morehouse)

made with the 16.2 cm refractor (ring micrometer) at the Tokyo Astronomical Observatory.

1908	Greenw. M. T.	$A\alpha$	$A\delta$	Cp.	α app.	$\log p \cdot A$	δ app.	$\log p \cdot A$	Red. ad l. app.	*	
Oct.	12	2 ^h 15 ^m 30 ^s	+0 ^m 23 ^s 13	- 2' 10".9	9	19 ^h 40 ^m 12 ^s 44	9.923	+55° 56' 33".3	0.245	+0° 71' +23".3	1
	13	23 39 7	+0 19.08	+ 6 51.5	4	19 32 13.85	9.738	+52 35 59.4	9.994 _n	+0.64 +22.6	2
	15	22 57 46	+0 14.15	+ 3 44.1	12	19 25 17.00	9.647	+49 8 8.4	9.983 _n	+0.59 +21.9	3
	15	23 30 44	+1 16.97	-10 19.0	12	19 25 8.52	9.717	+49 5 20.4	9.639 _n	+0.64 +21.9	4
	20	2 28 11	-0 32.53	- 2 4.7	10	19 14 12.04	9.804	+41 49 43.1	0.641	+0.53 +20.4	5
	22	1 47 55	-1 59.49	- 8 10.8	10	19 10 14.04	9.785	+38 24 57.6	0.599	+0.53 +19.6	6
	22	2 15 2	-1 35.87	+ 7 35.6	11	19 10 10.92	9.883	+38 23 16.8	0.654	+0.54 +19.6	7
	24	23 19 35	+0 45.74	- 1 11.7	12	19 5 31.05	9.680	+33 33 9.9	0.318	+0.53 +18.0	8
	24	23 40 45	0 0.00	0 0.0	—	19 5 29.37	9.704	+33 31 29.9	0.380	+0.53 +18.0	9
	26	0 47 26	-0 56.29	- 5 29.2	12	19 4 4.77	9.741	+31 49 40.4	0.566	+0.53 +17.6	10
26	1 6 51	-0 24.13	- 0 5.8	12	19 4 3.40	9.748	+31 48 13.8	0.602	+0.53 +17.5	11	
Nov.	1	0 42 49	+0 6.72	- 1 7.3	16	18 58 0.00	9.713	+22 44 26.5	0.656	+0.54 +14.6	12
	9	23 19 26	-0 37.87	- 4 0.4	8	18 53 9	9.673	+11 30	0.666	+0.57 +10.6	13
	11	23 36 46	+0 4.27	- 5 3.5	12	18 52 35.66	9.680	+ 9 17 49.3	0.688	+0.57 + 9.7	14
	12	21 32 36	-0 48.10	+ 0 7.8	12	18 52 20	9.579	+ 8 21	0.644	+0.58 +10.1	15
	12	21 52 11	+0 30.00	+ 4 35.2	12	18 52 19	9.606	+ 8 20	0.651	+0.58 +10.1	16
	13	21 5 54	+0 33.01	- 7 31.1	14	18 52 6.40	9.541	+ 7 21 0.7	0.646	+0.58 + 8.8	17
	14	21 10 25	+0 54.38	- 8 37.0	10	18 51 53.28	9.559	+ 6 21 31.4	0.658	+0.59 + 8.5	18
	14	21 27 23	+0 21.65	+ 7 8.1	12	18 51 52.98	9.582	+ 6 21 6.9	0.662	+0.59 + 8.5	19
	15	21 54 12	-0 19.45	+ 3 28.3	12	18 51 40.45	9.620	+ 5 23 36.7	0.676	+0.60 + 8.1	20
	15	22 12 55	+0 19.06	- 8 28.8	11	18 51 40	9.638	+ 5 22	0.681	+0.60 + 8.1	21
16	21 23 43	+0 29.31	+ 8 21.4	12	18 51 30.21	9.587	+ 4 27 34.1	0.677	+0.60 + 7.7	22	

1908	Greenw. M. T.	$\Delta\alpha$	$\Delta\delta$	Cp.	α app.	$\log p \cdot A$	δ app.	$\log p \cdot A$	Red. ad l. app.	*
Nov. 16	21 ^h 49 ^m 17 ^s	-0 ^m 26 ^s 98	+10' 21.9	12	18 ^h 51 ^m 29 ^s 86	9.618	+ 4° 26' 33.4	0.682	+0.60 + 7.8	23
17	21 42 51	+0 0.62	- 6 24.8	12	18 51 19.77	9.615	+ 3 32 21.4	0.687	+0.60 + 7.5	24
17	22 1 17	+0 6.80	+11 25.1	12	18 51 20.30	9.634	+ 3 31 25.7	0.690	+0.60 + 7.4	25
18	21 30 14	+0 27.04	- 4 27.7	12	18 51 12	9.605	+ 2 40	0.692	+0.60 + 7.2	26
18	21 48 56	-0 37.91	+ 8 5.6	12	18 51 11.29	9.626	+ 2 38 42.1	0.694	+0.60 + 7.2	27
19	21 10 42	+1 5.99	+ 1 36.5	16	18 51 4.07	9.585	+ 1 48 2.5	0.696	+0.60 + 6.8	28
22	20 53 27	-0 40.95	+ 2 0.9	10	18 50 45.72	9.577	- 0 39 7.6	0.712	+0.62 + 6.0	29
22	21 9 38	-0 25.72	+ 6 40.1	12	18 50 36	9.602	- 0 40	0.712	+0.62 + 6.0	30
26	20 54 29	+0 37.31	+ 3 29.6	16	18 50 29.62	9.601	- 3 41 24.8	0.728	+0.64 + 4.8	31
28	20 40 9	-0 3.42	+ 9 41.2	12	18 50 25.25	9.594	- 5 5 42.3	0.736	+0.64 + 4.4	32
28	20 57 47	-0 41.50	-11 33.6	12	18 50 25.47	9.615	- 5 6 15.2	0.733	+0.64 + 4.4	33
29	20 44 34	-0 37.01	+ 4 10.3	14	18 50 23.74	9.606	- 5 46 39.8	0.738	+0.65 + 4.2	34
Dec. 1	20 50 48	-0 14.83	+ 2 22.1	12	18 50 18.94	9.623	- 7 6 57.0	0.740	+0.65 + 3.7	35
2	20 47 22	+0 52.27	- 2 32.0	16	18 50 18.02	9.624	- 7 45 3.2	0.742	+0.66 + 3.5	36
3	20 59 3	-0 29.82	- 4 36.0	15	18 50 16.95	9.640	- 8 23 59.9	0.740	+0.67 + 3.4	37
4	20 43 36	-0 36.84	- 6 11.4	12	18 50 15.62	9.629	- 9 0 54.0	0.746	+0.67 + 3.2	38
4	21 3 20	+0 10.90	- 6 5.5	12	18 50 15.44	9.648	- 9 1 39.2	0.739	+0.67 + 3.2	39
5	20 51 13	+0 34.79	- 3 23.4	16	18 50 13.86	9.641	- 9 37 44.8	0.744	+0.67 + 3.0	40
8	20 49 45	-1 5.11	+ 1 30.1	14	18 50 11.98	9.653	-11 24 55.3	0.744	+0.70 + 2.5	41

Mean places of comparison stars.

*	α 1908.0	δ 1908.0	Authority	*	α 1908.0	δ 1908.0	Authority
1	19 ^h 39 ^m 48 ^s 60	+55° 58' 20.9	AG Hels 10716	22	18 ^h 51 ^m 0 ^s 30	+ 4° 19' 5.0	AG Alb 6421
2	19 31 54.13	+52 28 45.3	AG Cbr M. 6088	23	18 51 56.24	+ 4 16 3.7	" 6432
3	19 25 2.26	+49 4 2.4	AG Bo 13022	24	18 51 18.55	+ 3 38 38.7	" 6426
4	19 23 50.91	+49 15 17.5	" 12989	25	18 51 12.90	+ 3 19 53.2	" 6424
5	19 14 44.04	+41 51 27.4	" 12821	26	18 50 44	+ 2 44	BD +2°37'23
6	19 12 13.00	+38 32 48.8	AG Lu 8252	27	18 51 48.60	+ 2 30 29.3	Ba L 293
7	19 11 46.25	+38 15 21.6	" 8250	28	18 49 57.48	+ 1 46 19.2	AG Alb 6414
8	19 4 44.78	+33 34 3.6	AG Lei 7122	29	18 51 26.05	- 0 41 14.5	AG Nic 4726
9	19 5 28.84	+33 31 11.9	" 7132	30	18 51 1	- 0 47	BD -0°35'96 ¹⁾
10	19 5 0.53	+31 54 52.0	" 7125	31	18 49 51.67	- 3 44 59.2	Mü ₁ 17942
11	19 4 27.00	+31 48 2.1	" 7116	32	18 50 28.03	- 5 15 27.9	" 17986
12	18 57 52.74	+22 45 19.2	AG Berl B 6798	33	18 51 6.33	- 4 54 46.0	AG Strb 6384
13	18 53 46	+11 34	BD +11°36'0	34	18 51 0.10	- 5 50 54.3	Mü ₁ 18018
14	18 52 30.82	+ 9 22 43.1	AG Lpz II 8918	35	18 50 33.12	- 7 9 22.8	AG Ott 6445
15	18 53 8	+ 8 21	BD +8°39'15	36	18 49 25.09	- 7 42 34.7	" 6430
16	18 51 48	+ 8 15	BD +8°39'08	37	18 50 46.10	- 8 19 27.3	" 6448
17	18 51 32.81	+ 7 28 23.0	Mü ₁ 18067	38	18 50 51.79	- 8 54 45.8	" 6450
18	18 50 58.31	+ 6 29 59.9	AG Lpz II 8905	39	18 50 3.87	- 8 55 36.9	" 6439
19	18 51 30.74	+ 6 13 50.3	" 8913	40	18 49 38.40	- 9 34 24.4	" 6435
20	18 51 59.30	+ 5 20 0.3	Mü ₁ 18091	41	18 51 16.39	-11 26 27.9	Mü ₁ 18034
21	18 51 20	+ 5 30	BD +5°39'83				

¹⁾ Eine Rektaszensionsbeobachtung des Sterns findet sich in Par. 24972. Red.

Remarks.

Oct. 13. Comet hardly visible through thin clouds.
 Oct. 24. Nucleus of the comet over * 9.
 Nov. 13. Tail about 3° with naked eye.
 Nov. 19. Comet faint.
 Nov. 22. Seeing very bad, strong wind.

Dec. 1. Comet faint.
 Dec. 3. Observation difficult in twilight and moon light.
 Dec. 8. Observation difficult, comet being too near to the Sun.

Tokyo, 1909 March 26.

S. Ogura.