ELEMENTS OF COMET 1905 III.

By H. R. MORGAN and ELEANOR A. LAMSON.

This comet was discovered by GIACOBINI at Nice, France, on March 26, 1905. Elements were computed from three observations, March 26 at Nice, March 27 at Lick, and March 28 at Washington. The method used is that given in *Bahnbestimmung der Kometen und Planeten*, by THEODOR R. V. OPPOLZER.

The observations are as follows:

Date.	Place.	Greenwich Mean Time.	Apparent α .	Apparent δ .	Red. to 1905.0	
					α	δ
1905		h m s	h m s	° ' "	s	"
Mar. 26	Nice.....	7 42 32	5 44 14.0	+10 56 56	-0.3	+8
27	Lick.....	16 3 39	5 48 54.8	+12 35 43	-0.3	+8
28	Washington.....	12 56 34	5 52 0.5	+13 39 30	-0.3	+8

Elements.

$T = 1905, \text{ April } 3.5723, \text{ Greenwich Mean Time.}$

$$\left. \begin{array}{l} \omega = 357 \ 12 \ 52 \\ \Omega = 154 \ 8 \ 10 \\ i = 42 \ 58 \ 42 \\ q = 1.1508 \end{array} \right\} 1905.0$$

Elements were also computed by ELEANOR A. LAMSON from the following observations made at Washington.

Date.	Washington Mean Time.	Apparent α .	Apparent δ .	Log $p\Delta$.		Red. to 1905.0	
				α	δ	α	δ
1905	h m s	h m s	° ' "			s	"
Mar. 28	7 48 18	5 52 0.12	+13 39 41.5	9.429	0.604	-0.35	+8.0
31	7 46 44	6 3 6.17	+17 19 8.0	9.435	0.553	-0.37	+8.1
Apr. 3	8 39 41	6 15 3.38	+20 58 42.0	9.560	0.543	-0.38	+8.2

Elements.

$T = 1905, \text{ April } 4.04783, \text{ Greenwich Mean Time.}$

$$\left. \begin{array}{l} \omega = 358 \ 12 \ 25.6 \\ \Omega = 157 \ 7 \ 9.9 \\ i = 40 \ 23 \ 51.9 \\ q = 1.11784 \end{array} \right\} 1905.0$$

The residuals (O-C) for the middle place are $\cos \beta \Delta\lambda = -5''.3$ and $\Delta\beta = +0''.3$.

Heliocentric Coordinates 1905.0

$$\begin{aligned} x &= r [9.985755] \sin (250 \ 23 \ 24.2 + v) \\ y &= r [9.986593] \sin (156 \ 37 \ 20.4 + v) \\ z &= r [9.545605] \sin (\ 24 \ 20 \ 44.7 + v) \end{aligned}$$