

The observations were combined into fourteen groups and the resulting normal places used in obtaining, by means of Dr. King's graphic method, preliminary elements for the orbit. The normal places with mean velocities, mean phases, weights and residuals from final curve are given below.

NORMAL PLACES.

	Julian Day.	Phase	Velocity.	Weight.	Residual.
1	2,119,045.213	.461	+21.7	1.0	-2.21
2	100.036	.590	+39.6	2.0	+1.04
3	099.244	.682	+18.3	2.0	+1.66
4	068.469	.840	+49.4	1.5	-4.64
5	073.649	.961	+56.7	2.0	-0.10
6	069.281	1.020	+55.4	1.0	-0.37
7	078.533	1.137	+52.5	2.0	+3.41
8	018.838	1.197	+43.5	1.0	+0.77
9	061.280	1.312	+19.8	2.0	-3.93
10	116.991	1.399	+6.0	1.5	+1.88
11	018.730	1.472	-8.9	.5	+3.52
12	017.472	.100	-27.3	1.5	-0.83
13	085.016	.252	-12.6	.5	-3.81
14	082.780	.518	+4.1	1.5	+2.11

The preliminary elements obtained were:—

$$P = 1.52732 \text{ days}$$

$$e = .25$$

$$\omega = 150^\circ$$

$$K = 43.5 \text{ km.}$$

$$\gamma = 21.92 \text{ km.}$$

$$T = 2,418,956.145 \text{ J. D.}$$

To get a closer approximation to the true values of the elements a least-squares solution was applied. P was assumed as determined but e , ω , K , γ and T were used in the solution.