Table II gives the journal of observations. These were formed into thirteen normal places.

NORMAL PLACES

| | Julian Day | Phase from J. D. 2,420,370 | Velocity | Weight | $(O-C)_1$ | $(O-C)_2$ | O-C Final |
|---|---|---|---|---|---|---|---|
| 1 | 2,420,370 | 0·121 | +15·30 | 0·6 | −5·40 | −3·89 | −3·47 |
| 2 | 370 | 0·613 | − 0·50 | 1·0 | +1·95 | +1·34 | +1·59 |
| 3 | 370 | 0·765 | − 7·90 | 0·9 | +1·02 | −0·38 | −0·27 |
| 4 | 370 | 0·954 | −14·50 | 0·5 | +0·25 | −1·64 | −1·59 |
| 5 | 371 | 1·519 | −11·50 | 0·5 | +3·80 | +3·40 | +3·74 |
| 6 | 371 | 1·648 | −16·50 | 0·6 | −3·90 | −3·86 | −3·42 |
| 7 | 371 | 1·990 | − 4·20 | 0·9 | −1·42 | −0·97 | −0·36 |
| 8 | 372 | 2·171 | + 4·00 | 0·6 | +0·75 | +1·04 | +1·55 |
| 9 | 372 | 2·552 | +17·20 | 0·9 | +1·34 | +0·61 | +0·76 |
| 10 | 372 | 2·795 | +23·65 | 1·0 | +0·73 | −0·59 | −0·69 |
| 11 | 373 | 3·008 | +28·76 | 1·2 | +0·91 | −0·54 | −0·81 |
| 12 | 373 | 3·436 | +32·80 | 0·9 | +0·85 | +0·54 | +0·41 |
| 13 | 373 | 3·635 | +32·50 | 0·6 | +2·30 | +2·93 | +3·05 |
| | | | | | $\Sigma pv^2 = 47·7$ | 35·0 | 34·2 |

Preliminary elements were selected by trial and corrected by least-squares. The result of this solution is indicated in the residuals under headings $(O-C)_1$ and $(O-C)_2$. The reduction in $\Sigma pv^2$ is satisfactory, but on computing the residuals from the observation equations they were found to differ from those computed from the ephemeris. To show the magnitude of the changes in the elements and indicate the degree of uncertainty which attaches to them, the two sets are given below.

| | 1st. | 2nd. |
|---|---|---|
| $P$ | = 3·854 days | 3·854 days |
| $T$ | = J.D. 2,420,370·55 | 2,420,370·375 |
| $e$ | = 0·10 | 0·030 |
| $\omega$ | = 105° | 89°·05 |
| $K$ | = 25 km. | 24·60 km. |
| $\gamma$ | = +7·65 km. | + 8·24 km. |