

weighted unity. In the Table of Normal Places groups 1-9 inclusive represent our own observations, groups 10-16 those of other observatories.

TABLE OF NORMAL PLACES

	Mean Phase Preliminary	Mean Vel.	Wt.	O-C Preliminary	Mean Phase Corrected	O-C Corrected
1	1394.7	- 15.30	2	+ .43	1284.1	+ .24
2	1453.8	14.65	2	+ .74	1343.2	+ .50
3	1479.2	15.65	2	- .44	1368.6	- .68
4	1598.3	14.05	2	+ .07	1487.7	- .12
5	1802.7	11.65	2	- .52	1692.1	- .31
6	1841.2	10.90	2	- .58	1730.6	- .19
7	1870.7	9.50	1	+ .15	1760.1	+ .71
8	389.8	11.40	1	+ .35	264.2	- .79
9	740.3	15.75	2	- .15	614.8	- .04
10	962.0	16.10	1	+ .29	896.4	+ .55
11	580.4	15.25	2	- .88	484.8	- .75
12	1354.5	15.57	3	+ .36	1258.9	+ .12
13	2151.8	4.70	1	- 1.19	2056.2	+ .11
14	340.2	9.55	2	+ 1.24	229.6	+ .21
15	404.7	11.50	1	+ .52	204.1	- .21
16	430.1	11.40	1	+ 1.04	319.5	+ .44

Observation equations using the differential form of Lehmann-Fill  s were built up and transformed into normals from which the following corrections were obtained.

$$\delta \gamma = - .01 \text{ km.}$$

$$\delta K = - .38 \text{ km.}$$

$$\delta c = - .052$$

$$\delta \omega = + 16^{\circ}.31$$

$$\delta P = + 15.0 \text{ days}$$

$$\delta T = + 65.6 \text{ days.}$$

Using the corrected value of the period, 2175 days, the observations were again grouped as in column 6 of the table, and residuals obtained which were in general smaller than the previous ones. The value for Σpr for the preliminary elements was 11.1 and for the corrected elements 4.7. Using all the measures the probable error of a plate obtained from the last two columns of the measures is ± 0.55 km. per sec. This is extremely small for a star of this type when we consider that