

MT. WILSON OBSERVATIONS

Date	Julian Date	Phase	Velocity	O-C.
1911				
Oct. 30	2,419,310.959	9.127	-55.8	-5.2
Nov. 4	315.923	4.147	+21.2	-0.8
Dec. 11	382.978	1.426	-75.8	+0.1

NORMAL PLACES

	Mean Phase from Final <i>T</i>	Mean Vel.	Weight	O-C.		Mean Phase from Final <i>T</i>	Mean Vel.	Weight	O-C.
1	0.609	-85.9	.9	-0.1	7	6.662	+38.8	.6	-3.7
2	1.470	-72.0	.6	+4.2	8	7.554	+14.9	.5	-3.6
3	2.465	-39.5	.7	+2.7	9	8.227	-9.3	.3	-0.8
4	3.307	-8.5	.8	-0.9	10	8.852	-29.9	.5	+6.9
5	4.172	+21.7	.6	-1.5	11	9.671	-71.7	.9	-5.1
6	5.361	+48.8	1.1	+1.1					

Our own observations were grouped on the basis of phase into eleven normal places as above, and, after a few trials, preliminary elements were adopted as follows:—

$$P = 9.944 \text{ days}$$

$$e = .07$$

$$\omega = 160^\circ$$

$$K = 68 \text{ km.}$$

$$\gamma = -13.53 \text{ km.}$$

$$T = \text{J. D. } 2419342.0$$

using these elements and making the transformations,

$$x = \delta\gamma$$

$$y = \delta K$$

$$z = K\delta e$$

$$u = K\delta\omega$$

$$v = [1.63633]\delta T$$

we get the following observation equations according to the differential formula of Lehmann-Filhés:—