

NORMAL PLACES

	Mean Phase		Mean Velocity	Weight	Residual, O-C	
	Preliminary	Final			Preliminary	Final
1.....	.931	.895	+ 8.9	1.2	+2.2	-0.2
2.....	1.152	1.116	+ 64.0	0.4	+1.9	+2.6
3.....	1.468	1.432	+101.9	0.7	-5.8	-3.0
4.....	1.625	1.589	+107.0	1.2	+0.4	+1.9
5.....	2.073	2.037	+ 10.5	1.3	+1.1	-0.9
6.....	.068	.032	- 65.0	0.3	+0.6	+2.3
7.....	.266	.230	-100.0	0.7	-2.4	-0.4
8.....	.610	.574	- 69.3	0.3	+3.2	+0.4

The period determined from our own and Mount Wilson observations was 2.25960 days. Grouping the observations according to phase into 8 normal places as above, the following preliminary elements were obtained graphically.

$$P = 2.25960 \text{ days}$$

$$e = .05$$

$$\omega = 120^\circ$$

$$K = 105 \text{ km.}$$

$$\gamma = + 7.12 \text{ km.}$$

$$T = \text{J. D. } 2,419,031.596$$



Observation equations connecting the mean residuals with the elements γ , K , e , ω and T were then built up and, with the substitutions

$$x = \delta\gamma$$

$$y = \delta K$$

$$z = K.\delta e$$

$$u = K.\delta\omega$$

$$v = [2.46688].\delta T$$

in the Lehmann-Filhés formula, the following observation equations resulted.

OBSERVATION EQUATIONS

	Weight	x	y	z	u	v	
1.....	1.2	1.000	- .004	+ .445	+ .957	- .914	-2.2=0
2.....	0.4	1.000	+ .524	- .594	+ .793	- .754	-1.9=0
3.....	0.7	1.000	+ .958	- .776	+ .141	- .172	+5.8=0
4.....	1.2	1.000	+ .948	- .058	- .275	+ .225	-0.4=0
5.....	1.3	1.000	+ .022	+ .605	-1.042	+1.085	-1.1=0
6.....	0.3	1.000	- .693	- .815	- .787	+ .819	-0.6=0
7.....	0.7	1.000	- .997	- .847	- .278	+ .252	+2.4=0
8.....	0.3	1.000	- .759	+ .821	+ .636	- .665	-3.2=0