The observations are well represented by a sine curve; the eccentricity is so small that it cannot be differentiated from zero by graphical methods, hence the values of ω and T are indeterminate in this way.

Recourse was had to the method of least-squares for finding the most probable values of the elements. Since the number of unknowns remained constant it was assumed that the elements which gave the least value for Σpvv would be the most probable. Several solutions were made using the following preliminary values:

$$P = 19{\cdot}605 \text{ days}$$
$$e = 0{\cdot}$$
$$\omega = 270°,\ 330°,\ 360°$$
$$T = \text{J. D. } 2{,}415{,}820{\cdot}752 \ldots\ldots\ldots 4{\cdot}019 \ldots\ldots\ldots 5{\cdot}653$$
$$\gamma = +\ 45{\cdot}75 \text{ km.}$$
$$K = 33{\cdot}75 \text{ km.}$$

Using the notation* of Lehmann-Filhés and adding a term with coefficient unity for the velocity of the system, observation equations were formed for each of these three sets of preliminary values. A previous solution with ω equal to 190° had given a negative value for the eccentricity showing that the major axis should be rotated in the neighbourhood of 90°. In each solution δT was considered $=0$ and substitutions were as follows:

$$x = \delta\gamma$$
$$y = \delta K$$
$$z = K\ \delta e$$
$$u = K \cdot \delta\omega$$

*Astronomische Nachrichten 3242.