NORMAL EQUATIONS.

$$11\cdot700x - 1\cdot504y - \cdot141z - 1\cdot604u + 1\cdot604v - 7\cdot200 = 0$$
$$5\cdot625y - 1\cdot517z - \cdot043u + \cdot090v + 1\cdot265 = 0$$
$$5\cdot924z + 1\cdot116u - 1\cdot113v + 2\cdot214 = 0$$
$$5\cdot939u - 5\cdot926v + 2\cdot559 = 0$$
$$5\cdot936v - 2\cdot590 = 0$$

From these equations resulted the corrections,

$$\delta\gamma = +\cdot56 \text{ km.}$$
$$\delta K = -\cdot19 \text{ km.}$$
$$\delta e = -\cdot017$$
$$\delta\omega = +4°\cdot70$$
$$\delta T = +\cdot055 \text{ day.}$$

The final values of the elements with their probable errors are, then, as follows:—

$$P = 3\cdot789 \text{ days}$$
$$e = \cdot033 \pm \cdot022$$
$$\omega = 19°\cdot70 \pm 19°\cdot70$$
$$K = 21\cdot56 \text{ km.} \pm 0\cdot50 \text{ km.}$$
$$\gamma = -10\cdot74 \text{ km.} \pm 0\cdot34 \text{ km.}$$
$$T = \text{J. D. } 2,420,802\cdot715 \pm \cdot206 \text{ day}$$
$$a \sin i = 1,122,600 \text{ km.}$$

The graph represents the final elements with the observations as grouped.

Dominion Observatory,
   Ottawa,
      January, 1916.