PRELIMINARY ELEMENTS

$$
\begin{aligned}
P &= 3{\cdot}2195 \text{ days} \\
T &= \text{J.D. } 2{,}421{,}059{\cdot}945 \\
e &= 0{\cdot}05 \\
\omega &= 45^\circ \\
K &= 73{\cdot}6 \text{ km.} \\
\gamma &= -5{\cdot}10 \text{ km.} \\
\mu &= 111^\circ{\cdot}819
\end{aligned}
$$

NORMAL EQUATIONS

$$
\begin{aligned}
17{\cdot}8\Gamma \quad -0{\cdot}278\kappa \quad -0{\cdot}382\pi \quad +4{\cdot}249\epsilon \quad +0{\cdot}239\tau &= 1{\cdot}201 \\
9{\cdot}899\kappa \quad +1{\cdot}232\pi \quad -0{\cdot}150\epsilon \quad +1{\cdot}148\tau &= 0{\cdot}369 \\
+7{\cdot}901\pi \quad -0{\cdot}454\epsilon \quad +7{\cdot}133\tau &= 6{\cdot}828 \\
+2{\cdot}691\varepsilon \quad -0{\cdot}261\tau &= 3{\cdot}579 \\
+6{\cdot}479\tau &= 6{\cdot}134
\end{aligned}
$$

τ	$= -\ 5{\cdot}210$	dT	$= -\ 0{\cdot}033$ day	$\pm{\cdot}064$
ϵ	$= +\ 2{\cdot}207$	$d\omega$	$= -\ 4^\circ{\cdot}43$	$\pm 7^\circ{\cdot}13$
π	$= +\ 5{\cdot}688$	de	$= -\ 0{\cdot}0135$	$\pm{\cdot}0067$
κ	$= -\ 0{\cdot}04$	dK	$= -\ 0{\cdot}04$ km.	$\pm 0{\cdot}45$ km.
Γ	$= -\ 0{\cdot}27$	$d\gamma$	$= +\ 0{\cdot}23$ km.	

FINAL ELEMENTS

P	$= 3{\cdot}2195$ days	
T	$=$ J.D. $2{,}421{,}059{\cdot}912$	$\pm{\cdot}064$ day
ω	$= 40^\circ{\cdot}57$	$\pm 7^\circ{\cdot}13$
e	$= {\cdot}0365$	$\pm{\cdot}0067$
K	$= 73{\cdot}56$ km.	$\pm 0{\cdot}45$ km.
γ	$= -4{\cdot}87$ km.	
$a \sin i$	$= 3{,}240{,}000$ km.	
$\dfrac{m_1^3 \sin^3 i}{(m + m_1)^2}$	$= {\cdot}133\ \odot$	

The probable error of a single plate, computed from the residuals which result from the above elements, is $2{\cdot}5$ kilometres.

Dominion Observatory
Ottawa
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