

for three lines which seemed to be blends of two or more separate lines and yet were among the best measurable. The entire thirty-eight plates were now considered and the average residual of each line from the mean of the plate was determined. The three previously mentioned and two others $\lambda 4531.202$ and $\lambda 4404.927$ gave negligible residuals; the others are as follows:

Wave-Length	Residual.	Corresponding $d\lambda$	Corrected Wave-Length.
4586.163	-1.18 km.	+ .061	4586.227
4571.763	-2.46 km.	+ .037	4571.800
4549.766	+3.91 km.	- .059	4549.707
4535.965	+4.22 km.	- .061	4535.901
4522.855	-6.93 km.	+ .105	4522.961
4415.293	+4.71 km.	- .070	4415.221
4310.641	-1.77 km.	+ .069	4310.710
4271.760	-2.93 km.	+ .047	4271.807

The necessary changes being made, new velocities were obtained for each plate, the average numerical difference in the results not exceeding 0.5 km. It seemed almost useless to pursue the subject further; nevertheless the observations were combined into the same grouping and a least-squares solution performed.

Without giving the observation and normal equations, as the results were not used, it will suffice to state the differences between the newly derived elements and those previously accepted where the preliminary value of ω was 330° .

$$\begin{aligned} \text{Differences in } \gamma &= .06 \text{ km.} \\ \text{“ “ } K &= .07 \text{ km.} \\ \text{“ “ } e &= .000 \\ \text{“ “ } \omega &= 0^\circ.22. \end{aligned}$$

These differences being of an infinitesimal order would seem to show that the question of wave-length is not a vital one. Better agreement