J. D.	Epoch	$O-C$
2425155·63713	1191	− ·00073
5174·72271	1248·5	+ ·00141
5498·80792	2225	+ ·00004

The agreement is very good and it may be remarked that the mean epoch of the secondary minimum gives a rather large positive value of $(O-C)$, in the same sense as those, derived from the Leiden observations.

In Table 2 all minima observed and published up to now are given.

I want to thank Prof. HERTZSPRUNG for his interest in my work.

Improved elements of 7 variable stars, by *P. Th. Oosterhoff.*

The investigation of 25 variable stars, published in *B. A. N.* 148 was based on estimates on Johannesburg plates taken during the years 1924, '25 and '26. As the number of plates of the Crux region is nearly doubled now by plates taken by H. VAN GENT during 1927, '28 and '29 and copies have been received of about a dozen old plates, I made estimates on these additional plates of 7 of the stars published in the quoted paper, in order to redetermine the elements. Only those plates on which the variable was found to be at minimum or at maximum have been used. For each star a least square solution was made, using the old epochs of minimum, or maximum respectively, given in *B. A. N.* 148 as well as the new ones given below. The times have been reduced to the sun.

TU MUS. (= *B. A. N.* 148 *b*) eclipsing variable.

Epochs of minimum: J. D. 2425351·468, 2425388·297, 2425404·235, 2425417·368.

*) Elements: J. D. 2424260·396 + ·69364 E
± ·008 ± ·00001 m. e.

TW MUS. (= *B. A. N.* 148 *f*) eclipsing variable.

Epochs of minimum: J. D. 2425330·297, 2425331·354, 2425348·266, 2425354·313, 2415354·532, 2425356·409, 2425362·267, 2425362·478, 2425381·313, 2425386·294, 2425388·377, 2425393·375, 2425414·296, 2425418·272, 2425714·373.

*) Elements: J. D. 2424260·344 + ·2089742 E
± ·003 ± ·0000010 m. e.

*) The period of revolution is double the apparent one given here.

UU MUS. (= *B. A. N.* 148 *m*) δ Cephei variable.

Epochs of maximum: J. D. 2425025·43, 2425328·43, 2425351·40, 2425386·33.

Elements: J. D. 2424280·96 + 11·6362 E
± ·07 ± ·0015 m. e.

UV MUS. (= *B. A. N.* 148 *n*) eclipsing variable.

Epochs of minimum: J. D. 2422084·30, 2425337·58, 2425714·26.

Elements: J. D. 2423943·338 + 2·003273 E
± ·009 ± ·000016 m. e.

BF CEN. (= *B. A. N.* 148 *c*) eclipsing variable.

Epochs of minimum: J. D. 2419878·270, 2425381·313, 2425418·272.

Elements: J. D. 2424262·28 + 3·69334 E
± ·02 ± ·00004 m. e.

BH CEN. (= *B. A. N.* 148 *e*) eclipsing variable.

Epochs of minimum: J. D. 2422084·297, 2425025·434, 2425329·408, 2425331·392, 2425351·536, 2425362·267, 2425385·228, 2425386·404, 2425404·209, 2425714·497.

*) Elements: J. D. 2424260·378 + ·3957907 E
± ·004 ± ·0000018 m. e.

TT CRU. (= *B. A. N.* 148 *w*) eclipsing variable.

Epochs of minimum: J. D. 2425380·35, 2425386·32.

Elements: J. D. 2424264·52 + 2·95201 E
± ·02 ± ·00008 m. e.