		Hohwu	Hewitt	Mean
Chimbete	a	$- 1^m 53^s 27$	$53^s 21$	$- 1^m 53^s 24$
	b	53.41	53.21	53.31
	c	53.03	52.83	52.93

We find in the first place that the longitude of N'Kutu on supposition b agrees exactly with the result of December 1903 which was $59^s.32$, and on supposition c differs strongly from it, whence appears clearly that the latter is less probable. It further appears that, with regard to the three other stations, the results on the two extreme suppositions b and c differ $1^s.2$ for Buku Zan and only $0^s.4$ for Mayili and Chimbete, while the results on suppositions a and b differ for Buku Zan $0^s.2$ and for Mayili and Chimbete less than $0^s.1$. The results from the two chronometers separately accord fairly well inter se, Mayili excepted.

As we reject the result of 1904 for N'Kutu and replace it by that of 1903 and as for Mayili we can take the mean of the results of 1902 and 1904, we find that the uncertainty caused in the final results by the perturbation is less than was to be feared.

Lastly I give here the final results obtained in this way, assuming thereby the most probable supposition b:

Difference of longitude with Chiloango
$$\text{Mayili} \quad - 1^m 20^s.8$$
$$\text{N'Kutu} \quad - 1 \ 59 .3$$
$$\text{Buku Zan} - 1 \ 36 .2$$
$$\text{Chimbete} - 1 \ 53 .3$$

The differences with the values adopted before are at the utmost $0^s.2$.

Astronomy. — "*Observation of the transit of Mercury on November 14, 1907 at Chiloango in Portuguese West-Africa*". By C. SANDERS. (Communicated by Dr. E. F. VAN DE SANDE BAKHUYZEN).

(Communicated in the meeting of May 30, 1908).

For a short time I have possessed a telescope of ZEISS of 80 mm. aperture and 120 cm. focal length. With this telescope I intend to observe in the first place occultations of stars in order to determine the longitude of my observing station with greater precision than hitherto has been possible. For the present the telescope has an azimuthal mounting, which however soon will be replaced by an equatorial mounting with slow motions and small divided circles. In the mean time

I have been able to use the telescope for observing, at least partly, the transit of Mercury on November 14 1907, and I venture to publish my results here.

To give my telescope a firm basis I had a pier built of beton surrounded by an isolated floor and provided with a movable roof open at the sides, which roof can be entirely moved aside. For the transit of Mercury, however, I kept the roof over the instrument in order to protect myself from the burning sunbeams and especially to keep out the light from outside as much as possible.

For the observations I had constructed a projection apparatus, a kind of camera having the shape of a truncated pyramid, of which one side is open and the three others are coated with black paper. The base on which the image was to be formed was at a distance of about 14 cm. from the eye piece. The camera was adjustable in distance and in inclination, to secure the proper position of the plane of the image.

With the highest power of the telescope, 133, the diameter of the projected image of Mercury was nearly 1 mm. The fine solar spots that were present could be sharply observed and those in the neighbourhood of the western limb could be seen surrounded by very distinct faculae.

Unfortunately the beginning of the transit was hidden from my view by clouds. Towards 1 o'clock mean time of Chiloango it began to clear up and, after Mercury had been visible on the sun as a well defined disc, its egress could be observed very well. I found:

<div align="center">

third contact at $2^h35^m38^s$ M.T. Chiloango

last   „   „ 2 38 7   „   „

</div>

The moment of the 4th contact, that at which the last impression on the limb seemed to disappear, was difficult to estimate within some seconds chiefly owing to the unsteadiness of the images, but I hold that but for this unsteadiness the observation of the last internal contact could have been made with great precision. The corrections of my chronometers were derived from time determinations before and after the transit.

The times computed from the Nautical Almanac for the 3rd and the 4th contact at Chiloango were $2^h35^m47^s$ and $2^h38^m24^s$. Thence follow for the differences observation — computation: — 9^s and — 17^s.[1])

[1]) (Note added by E. F. v. D. SANDE BAKHUYZEN). According to the mean of the observations made at Leiden, these differences were —6^s and —21^s. Hence the results of Mr. SANDERS agree very well with these. The greater difference for the 4th contact must probably be ascribed to the circumstance that all the observers have observed this phenomenon too early.