

RESULTS
OF
OBSERVATIONS OF THE FIXED STARS

MADE WITH THE
MERIDIAN CIRCLE

AT THE
GOVERNMENT OBSERVATORY, MADRAS,

IN THE YEARS
1865, 1866 AND 1867

UNDER THE DIRECTION OF
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GOVERNMENT ASTRONOMER AT MADRAS.

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INTRODUCTION.

A brief history and description of the Madras Observatory and its appliances, from 1792 to the present time, was given in the volume of *Madras Meridian Circle Observations*, 1862, 1863, 1864. It is therefore sufficient on this occasion to state that the observations of fixed stars during the next three years, the results of which are contained in this volume, were made and reduced upon the same plan as those in the former publication. The only changes introduced are in the arrangement of the Separate Results for each year, which have been printed in double column to save space; and in the flexure correction, which was inadvertently applied twice its proper amount up to the end of the year 1864. In consequence of this oversight the Polar Distances in the last volume will require a small correction to make them comparable with those in the present and future volumes of *Madras Meridian Circle Observations*. The necessary corrections will be furnished with sufficient accuracy by the following table.

From P.D.	Corr.	From P.D.	Corr.	From P.D.	Corr.	From P.D.	Corr.
0	"	44	"	79	"	117	"
3	- 0.9	52	- 0.4	86	+ 0.1	126	+ 0.6
14	- 0.8	59	- 0.3	93	+ 0.2	137	+ 0.7
25	- 0.7	66	- 0.2	100	+ 0.3	150	+ 0.8
35	- 0.6	73	- 0.1	108	+ 0.4	} + 0.9	
	- 0.5		0.0		+ 0.5		& S.P.N.

The flexure correction finally adopted is,

$$0''.85 \times \sin \text{Zenith Distance}$$

additive to all Polar Distances under 77° and subtractive from those of greater amount as well as from all observations below pole.

The observations were made throughout the three years by the two chief assistants, C. Ragoonatha Charry and T. Moottoosawmy Pillay, and with occasional exceptions were satisfactory; but it is much to be regretted that the reductions were not completed until both had so deteriorated, mentally and physically, that it has been a labor of unforeseen extent to detect and correct their numerous errors of calculation. The revision of every kind of reduction has to be gone through by the Astronomer personally before publication can be safely ventured upon. With no European assistance and too inadequate a staff of natives even to admit of duplicate calcu-