

*Catalogue of 317 Stars selected from the B.A. Catalogue (being such as were supposed to have large proper motions), deduced from Observations made at the Honourable E.I. Company's Observatory at Madras in the Years 1853-7. By Capt. W. S. Jacob, Director of the Madras Observatory.*

“The instruments employed on the observations from which this Catalogue is derived are a 5-foot transit and 4-foot mural circle, both by Dollond, which have been frequently described in the Madras volumes. Nearly the whole work of the Catalogue, both as regards observation and reduction, was executed by the native assistants in the observatory, and will be found creditable to them. In case of any doubt or discrepancy, I have occasionally repeated an observation, and have, of course, maintained a strict watch over the errors and adjustments of the instruments; the whole of the reductions have also been carefully checked by myself.

“During a portion of the time embraced by these observations, the charge of the observatory devolved on Major W. K. Worster, of the Madras Artillery, in consequence of my absence in England for the recovery of my health.

“The large proper motions which had been assigned to many of the southern stars, are for the most part contradicted, and seem to have their origin from instrumental or other errors in the Paramatta observations, they having been dependent chiefly on the Brisbane Catalogue.”

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*Proper Motions of the Stars of the Greenwich Catalogue of 1576 Stars for 1850 not included in the Greenwich Twelve-Year Catalogue, deduced by Comparison with the Results of Bradley's Observations as given in the "Fundamenta Astronomiæ." By the Rev. R. Main, M.A.*

This paper is a continuation of a former paper by the author, published in vol. xix. of the *Memoirs of the Society*, containing a determination of the proper motions of all the stars which are common to the *Fundamenta* and the Greenwich Twelve-Year Catalogue of 2156 Stars. The last-mentioned Catalogue, and the one referred to in the title of this paper, contain the results of all the star-observations made at Greenwich from the year 1836 to 1853 inclusive, comprising a period of eighteen years. The whole number of stars of which the proper motions are assigned in the two papers amounts to 1437. It was explained in the introduction to the former memoir that all the stars observed at Greenwich have been selected for special purposes, and that the accurate determination of their places forms one of the most important objects of modern sidereal astronomy. In this respect the stars contained in the