## RAINFALL

OF

### INDIA.

THIRD YEAR.

1893.

Published by the various Provincial Governments,

AND

Essued under the Authority of the Government of Endia,

BY

THE METEOROLOGICAL DEPARTMENT OF THE GOVERNMENT OF INDIA.



CALCUTTA:
OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.
1894.

### PREFACE.

PREVIOUS to the year 1890 there were large differences in the hour of measuring rainfall, in the form of rain-gauge used and in the methods of registering rainfall in the different provinces of India. The want of uniformity in the methods of registering rainfall was due to the fact that the establishment of rain-gauge stations and the collection of the data were commenced many years ago by the revenue departments of the various Local Governments. Each Government naturally established the system which was thought at the time best suited to local conditions and requirements. The disadvantages became more and more evident from year to year, and at length the Government of India in 1890, after a careful consideration of the question, ordered the following changes to be made in order to secure the uniformity of system that appeared to be desirable:—

- rst.—That a common hour for rainfall registration, viz., 8 A.M., and a common rainfall week ending on Saturday 8 A.M., should be adopted throughout the whole of India.
- and.—That all rain-gauges should be systematically inspected, and that copies of all inspection reports by local officers be sent to the Meteorological Reporter to the Government of India for his information, and in order that he might make, when desirable, suggestions for the improvement of any rain-gauge station at which the arrangements are not satisfactory.
- 3rd.—That Symons's rain-gauges, tested by the Meteorological Department, should be the only description of gauge used.
- and that a sufficient number of copies of these returns should be supplied to the India Meteorological Department, to enable it to prepare and issue annual volumes giving the rainfall data of the Indian Empire collected under this system for the information of all interested in the rainfall statistics of India.
- 5th.—That the Imperial Meteorological Department should adopt a fixed division of the year into four periods, corresponding with the periods of general rainfall throughout the year in India, for purposes of comparison.
- 6th.—That for the purpose of calculating the number of rainy days a fall of one-tenth of an inch and upwards should be taken to denote a rainy day.

The whole of these changes were made with effect from the 1st January 1891.

#### PREFACE.

The present volume contains the monthly statements of rainfall published by the various Local Governments for the year 1893, and gives practically the whole of the available rainfall data for that year of the Indian Empire. Symons's rain-gauges were in use at the great majority of stations during the whole of the year, the only important exception being the Mysore rain-gauge stations which are provided with rain-gauges of local construction. The rainfall is measured at all stations daily at 8 A.M., and the entries for each day in the tables give the rainfall of the 24 hours preceding 8 A.M. of the date in question.

The tables are arranged according to provinces and not according to months, that is, the whole of the rainfall data of each province is given together, and the provinces are arranged, so far as possible, in the order adopted in the Daily Weather Report and other publications of the Department.

The tables are drawn up in a form that, it is hoped, will explain themselves. It should be carefully noted that, although the rainfall is measured to hundredths of an inch, a rainy day is assumed to be that on which a tenth of an inch or upwards has fallen, and the figures in the column "Total number of rainy days" and "Normal total number of rainy days" are calculated on this supposition.

It may be noted that the whole of the available rainfall data of the Empire was recently collected and tabulated in the India Meteorological Office, and that the average monthly rainfall and number of rainy days in each month were calculated from this tabulated information for all stations for which at least five years' rainfall information was available. In the great majority of cases the rainfall data extend back to 20 or 30 years. The averages thus obtained are utilized for the columns of normal information and for the comparisons of normals with actuals.

METEOROLOGICAL OFFICE, Calcutta, the 15th May 1894.

JOHN ELIOT,

Meteorological Reporter

to the Government of India.

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