551.591.2:551.577.2 (54)

VISIBILITY OF THE NILGIRIS FROM KODAIKANAL AND RAINFALL IN SOUTHEAST MADRAS IN JULY.

The Nilgiris are situated about one hundred miles to the northwest of Kodaikanal. Since July 1899, observations have regularly been made of the visibility of the Nilgiris from Kodaikanal Observatory. A summary of these observations, for each month, has been appearing in the "Annual Report of the Madras and Kodaikanal Observatories" up to the year 1921 and in the "India Weather Review" for the later years.

These visibility data had struck Mr. V. V. Sohoni's notice and he had anticipated as early as in 1941 that it might be possible to correlate these with some weather conditions.

It has recently been noticed by the author that there is a striking relationship between the rainfall in southeast Madras (comprising the districts of Madras, Chingleput. Chittoor, North Arcot, South Arcot, Tanjore, Tiruchirapalli, Madura, Tirunelveli. Salem and Coimbatore) and the visibility of the Nilgiris from Kodaikanal in the month of July, in many of the years when the rainfall in the southeast Madras is either abnormally high or unusually low. Considering the 40 year period 1901-1940, the largest number of days, viz, twenty-four on which the Nilgiris were visible in July from Kodaikanal occurred in 1916. It is remarkable that July 1916 has been the wettest July for southeast Madras with a rainfall 299% of the normal. For Kodaikanal itself, July 1916 is the second wettest July during the period 1901-1940. Similarly, southeast Madras had its driest July in 1939 when the rainfall was only 33% of the normal. During this month, the Nilgiris were visible from Kodaikanal on one day only. In the years 1914 and 1920, when the July rainfall in southeast Madras was only 45% of the normal, the Nilgiris were not fully visible from Kodaikanal on even a single day. The question is being studied further, on considerations of visibility in the monsoon air mass.

Meteorological office, Poona,

P. S. Hariharan.

June 14, 1949.