

SYMPOSIUM ON THE MONSOONS OF THE WORLD

A THREE-DAY Symposium on the Monsoons of the World, organised jointly by the International Association of Meteorology and Atmospheric Physics of the International Union of Geodesy and Geophysics, the World Meteorological Organisation and the Government of India, was held from the 19th to 21st February 1958, at New Delhi. It was inaugurated on the 19th February by Dr. K. S. Krishnan, Director of the National Physical Laboratory, India and Vice-President of the International Council of Scientific Unions. More than 300 scientists directly or indirectly interested in Meteorology were present. Dr. K. R. Ramanathan was elected Chairman.

The timing of the Symposium was adjusted so as to make it follow immediately the Second Session of the Commission for Synoptic Meteorology of the World Meteorological Organisation, which was held at Delhi between January 21 and February 17, 1958. This enabled the delegations of many nations, who had attended the Meetings of the Commission for Synoptic Meteorology, to stay on for the Symposium and participate in its proceedings.

The delegates were welcomed by Dr. K. R. Ramanathan, Convener of the Organisation Committee of the Symposium.

Dr. Krishnan in his inaugural speech emphasised the need for the holding of such symposia on subjects of wide interest, for better promotion of all scientific work in general, and

of scientific work in the earth sciences in particular.

The officers of the Indian Meteorological Department had to put forth intense effort to organise the Symposium at very short notice.

Prof. H. Flohn of the Meteorological Service of the Federal Republic of Germany was the only invited expert who could participate in the Symposium. His papers were thought-provoking, particularly his arguments that the monsoon of India has worldwide connections and was an important part of the general circulation of the atmosphere.

The Symposium lasted for full three days. Thirty-four papers falling under the following seven headings: (1) Climatology of the Monsoons—Surface and Upper Air; (2) Monsoons and the General Circulation; (3) Dynamics of the Monsoons; (4) Depressions and Other Perturbations in the Monsoon; (5) Rain and Clouds of the Monsoons; (6) Variability of the Monsoons; (7) Forecasting of the Monsoon—Extended and Long Range, were received. Discussion followed presentation of papers in groups. It was the general feeling that the deliberations of the assembled meteorologists led to better understanding of the phenomena of the monsoons in Asia, Africa and Australia. The Symposium came to a close at 6-30 p.m. on February 21, with a vote of thanks from Dr. P. R. Pisharoty, the Secretary of the Organising Committee. P. R. P.

A REMARKABLE SOLAR RADIO EVENT

ON November 4, 1957, a large increase in solar radio noise was observed on a frequency of 200 Mc./s. at the receiving station 'Nera' of the Netherlands Telecommunications Services. The increase started rather abruptly at 0848 U.T. and lasted for more than 5 hrs., the greatest intensity being reached at about 0930 U.T., when it amounted to approximately 900 times the noise level of the quiet Sun. The smoothed intensity level showed considerable fluctuations with periods of the order of a few minutes. No solar flare has been reported as occurring near the onset of the radio event, nor was a sudden ionospheric disturbance observed. The phenomenon manifested itself over a considerable frequency-range in the metre wavelength band.

The lack of correlation with a solar flare or associated effects, and the absence of disturbances on the decimetre-centimetre wavelengths, must be considered as rather exceptional for so large a 200 Mc./s. event. However, the extra-

ordinary character of this radio phenomenon was particularly apparent from records obtained with a negligible time-constant.

No ionospheric scintillation of radio sources of any importance was observed at the Jodrell Bank Experimental Station or at the Mullard Radio Astronomy Observatory on November 4. Ionospheric scintillations of so short a period have never, in fact, been observed in Cambridge (Dr. A. Hewish, Private communication). The very short-period fluctuations of intensity must also, therefore, be ascribed to solar conditions.

All these facts together justify the conclusion that the radio phenomenon which occurred on November 4 is of a new, so far unknown type of great rarity. It should be noted that this peculiar type of variability is revealed only by a recording instrument with a time-constant no greater than a very small fraction of a second. (*Nature*, Vol. 181, 542, 1958.)