MILAN KOLDOVSKÝ: *Fotografie in der Meteorologie*. Fotokinoverlag Halle (Saale), C 2, Mühlweg 19, 1960, p. 160, 20 tab., 126 fig. Price 24.90 DM.

The author, a Czechoslovak meteorologist, the winner of a number of international competitions in cloud photography, has divided his book into ten chapters. In the second and third chapters, which form a sort of introduction and in which a basic knowledge of photographic technique is assumed, a survey is given of photographic material produced in the GDR suitable for meteorological pictures. These two chapters also give a rough outline and explanation of some of the concepts of photographic and meteorological optics. It is worth mentioning the rather brief but helpful section on the filters used.

The fourth chapter forms the actual core of the book. Here the reader finds the basic notation and values of the different filters most often used for photographing clouds. However, the exacting reader will probably miss more detailed information on this important subject. A description is then given of the technique of the different photographs of pronounced cloudiness and emphasis is laid on the advantage of a series of photographs in certain time intervals, which naturally is very important in depicting the development of cloudiness. The author also gives a survey of the possibilities of photogrammetric measurement of cloudiness, which is undoubtedly very important. The instruments by means of which this problem can be solved are illustrated in the book, and briefly described. The chapter continues with modern section on the photography of cloud systems from large heights by means of rockets and satellites. Here the author devotes his greatest attention to the technique used in each case. The text is supplemented by effective photographs. The author then deals with the technique of photographing the whole sky and describes old and new methods, giving examples of different equipment. He deals very well with wide-angle photography which is at present greatly used in comparing the appearance of the sky at a given time and place both from satellites and when viewed from the Earth.

In the fifth chapter the author deals with the technique of photographing aurorae. Basically this is a description of the photographic methods of observation recommended for the IGY and some of the cameras adapted for this purpose are shown here.

The sixth chapter treats the photography of lightning. Here the author almost completely exhausts present-day knowledge on the technique of lightning photography and starts out primarily from the work of the South African Dr. Malan. The chapter is rich both in good examples of lightning photographs using different techniques and in diagrams of the instruments.

In the seventh chapter the author deals with the photography of ice crystals and snow flakes. This fundamentally exhaustive chapter is well supplemented by pictorial material.

The eighth chapter represents the author's attempt to give a survey of the multifariousness of the use of photographs in experimental work in meteorology. It is obviously extremely difficult to give all the possible uses and the author's treatment of the different problems must therefore be rated very highly. Although specialists in different fields will perhaps miss certain details, the treatment of this chapter represents a sort of survey of the basic problems of the photographs of experiments.

As a whole the author's publication gives a very good impression. No criticism can be made of the reproduction of the photographs, which are perfect. It is a pity, however, that the figures on p. 121 are reversed. The reader will probably also miss a subject index. Another drawback is that the book does not name the authors of the different photographs. The list of authors of the photographs, given on p. 150, is arranged so that it is impossible to determine which photograph belongs to which author. Due to the long time taken to publish it, the book gives the state of the problem up to the end of 1958. Photographs of clouds taken from satellites and other more modern facts in the sphere of meteorological photographs could not therefore be included.

The most positive feature of the book is that, assuming a basic knowledge of photographic technique, it gives an all-round picture of the solution of photographic problems in all basic branches of atmospheric physics.

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