

THESE two maps have recently been compiled under the auspices of the Hydrologiske Afdeling of Norges Vassdrags- og Elektrisitetsvesen and of Norsk Polarinstitut.

On the first map, constructed by Dr. O. Liestøl and Dr. G. Østrem, nearly all the glaciers in southern Norway are plotted; many details, however, are omitted for practical and technical reasons. The map gives the general pattern of the glaciers as they appear on air photographs dating mainly from 1955.

On the second map, made by Dr. G. Østrem, the glacier outlines are plotted from different sources: old and new maps, sketches, and air photographs made in different years, including a Swedish glacier map made in 1960 by Dr. V. Schytt. In 1962 Dr. L. Vilborg revised Dr. Schytt's map, adding some fifty glaciers, and this revised map was used by Dr. Østrem. Owing to the fact that the information was obtained from so many different sources, varying accuracy in the map may have resulted. The most accurate parts, compiled from recent air photographs, have been marked with a green screen. Outside these areas the map gives only a very approximate outline of glaciers or glaciated areas.

More detailed maps of the glaciers in northern Norway will be made as soon as a better air photograph coverage is available in that part of the country.

The above notes have been amplified from material supplied by Dr. Gunnar Østrem, who has presented the maps to the Society's library.

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JEAN TRICART. *Géomorphologie des régions froides*. Paris, Presses Universitaires de France, 1963. [iv], 289 p. ("Orbis", Introduction aux Études de Géographie.) Fr. 24.

THIS is a complete work on the effects of cold upon the Earth's surface. It is divided into three sections; the first deals with the areas of glaciation (former glaciers), glacierization (existing glaciers) and permanent snow cover throughout the world. It touches on the cold periods in geological history, although concentrating more upon those prevailing in the Quaternary.

The second section describes the effects of frost action, periglacial features, and erosion by air and by water. The term "permafrost" is not used, although the conditions are described in other language.

The third section is the longest. It is devoted to snow, ice and glaciers, beginning with snow and its transformation into ice. The author proceeds with consequences of snow and ice action, plain erosion and avalanche action. Cirque formation and classification are dealt with in a very interesting way. As one would expect from their importance, much space is devoted to the effects of erosion by glaciers and ice caps, to the morphology of the glacier margin, and of the land over which the glacial waters flow.

As the author points out, the importance of an account of the conditions in the cold regions of the Earth in comparatively recent times, naturally explains much of its present geomorphology, not only for scientific reasons but also for its economic applications.

There is a minor criticism which must be made—the lack of an index—but this is to some extent compensated for by a more than usually detailed list of contents.

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