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STUDIES OF AURORA BOREALIS

Knowledge of the aurora borealis has been revolutionized by the studies made in Norway during the past twenty years under the direction of Professor Carl Stoermer, of the University of Oslo. Stoermer has several stations under his direction, at which simultaneous photographs of auroras are taken. The aurora is photographed against a background of stars. As the aurora is comparatively near while the stars are almost infinitely distant, the location in a picture of any auroral feature, such as a particular "streamer," with respect to the stellar background will depend upon the place from which the picture is taken. Thus a comparison of the pictures makes it possible to calculate the actual distance of the aurora, its height above the earth, the dimensions of its different features, etc.

At the 1927 meeting of the International Geodetical and Geophysical Union a program was drawn up for extending the work hitherto carried on in Norway to other circumpolar regions. A committee was appointed to prepare an atlas, containing photographs illustrating all the various typical forms of aurora, and the pictures for this work have since been selected from those taken in Norway. The number of stations for making aurora observations is now steadily growing. The group of stations directed by Stoermer, with headquarters at Oslo, continues to function in southern Norway, while at Tromsø, in northern Norway, an observatory devoted primarily to the study of the aurora has just been established with the aid of funds furnished by the Rockefeller Education Board. Other stations for taking auroral photographs have been established or are projected in Sweden, Finland, Greenland (Godhavn), Shetland Islands (Lerwick), Alaska (Fairbanks) and at places in Russia, including a proposed station in Nova Zembla.

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