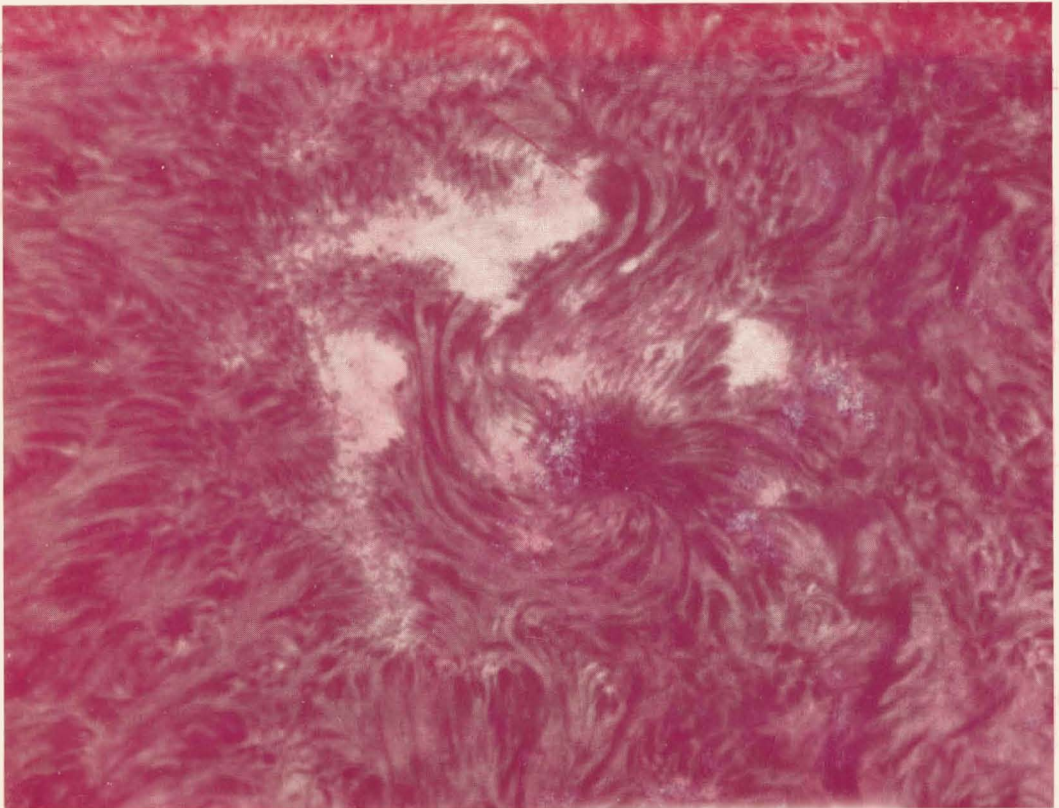


INTERNATIONAL ASTRONOMICAL UNION

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STRUCTURE AND DEVELOPMENT OF SOLAR ACTIVE REGIONS

Edited by K.O. KIEPENHEUER



INTERNATIONAL ASTRONOMICAL UNION

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Solar Activity has been investigated for quite some time now. Many years of careful observations have produced a wealth of data on a confusing variety of phenomena arising from disturbances on the solar surface. Only within the last few years this branch of astrophysics has experienced a remarkable step forward towards an understanding of the physics involved. This exciting progress is due to the rapid development of the techniques of measuring weak magnetic fields in the solar atmosphere as well as the application of the theory of magnetohydrodynamics in order to interpret the observations in terms of the interaction of these fields with the solar plasma.

The Budapest symposium held on 3–9 Sept. 1967 under the auspices of the International Astronomical Union was the largest international meeting ever held in the field of solar research. It was dedicated to the study of active regions of the sun comprising all the well-known phenomena such as spots, faculae, flares, prominences. The principal aim of the symposium has been to reach a better understanding of the basic underlying processes of an active region, rather than to explain every detail which has been observed.

This book presents the proceedings of the symposium including an account of the discussions. It gives an excellent review of the present-day knowledge on the physics of solar active regions, which will not only be useful for solar astronomers but also to the many workers in related fields where the influence of the sun plays an important part.

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