

TRANSACTIONS
OF THE
INTERNATIONAL
ASTRONOMICAL UNION
VOL. XIVA (REPORTS 1970)

REPORTS ON ASTRONOMY

**TRANSACTIONS
OF THE
INTERNATIONAL
ASTRONOMICAL UNION
VOLUME XIVA – REPORTS**

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OF THE
INTERNATIONAL ASTRONOMICAL UNION
VOLUME XIVA

REPORTS
ON
ASTRONOMY

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PREFACE

The tri-annual preparation of the *Reports on Astronomy* is an impressive world-wide undertaking, involving not only the Presidents, Vice-Presidents and Organizing Committees of our thirty-eight Commissions, but also the greater part of the Commission members, and many other astronomers – certainly more than a thousand people. These large co-operative enterprises have led in the past to the successive *Draft Reports* and *Transactions* of the IAU. These constitute a series of monumental milestones characterizing in thirteen big steps the imposing progress of our science in the last fifty years.

An important change occurs in the present Reports. Financial reasons made it impossible for the Union to keep to the tradition of first printing the *Draft Reports* which, prior to the General Assembly were airmailed to all IAU members, and later printed again, finally amended and corrected. The Executive Committee of the Union had to decide that the reports should be printed directly, distributed to the participating IAU members at the General Assembly, and sent later by surface mail to the other members of the Union.

Furthermore it appeared necessary to reduce the size of these Reports to slightly more than one half of that of *Transactions XIII A* – the previous *Reports on Astronomy*. It is fully realized that these constraints made the task of the Commission Presidents and their coworkers heavier than usual. First of all, the deadline for submitting the manuscripts had to be a fairly strict one since the Reports had to be printed and bound in time, and the subsequent addition of material was no longer possible.

However, the greatest difficulty was the reduction of the size. The Executive Committee suggested Commission Presidents to achieve this by the following measures:

1. By deleting the full lists of references; these took about one third of the previous Reports. This suggestion seems justified by the recent appearance of the first issue of *Astronomy and Astrophysics Abstracts*, the successor to the *Astronomischer Jahresbericht*. This new publication gives a complete review of the astronomical literature, and appears within six to twelve months after the publication of the abstracted papers; it is more complete and certainly more up to date than would have been possible in our Reports. (We should add, however, that these restrictions were allowed to be interpreted more liberally in the case of Commission 14, where the inclusion of fairly long lists of references from fields adjacent to our science was thought to be useful.)

2. By a reduction of the contents of the Reports to the really essential matter.

3. It was furthermore thought that the value of the Reports could increase by the introduction of previews about the further development of our science, and by an enumeration of future plans and projects.

4. It was further decided no longer to publish the detailed lists of Commission members since these lists are already published in *Transactions XIII B* with the subsequent corrections listed in the various issues of the *Information Bulletin*.

These suggestions were found acceptable by many IAU members but not by all of them. The opinion was even expressed “that the new form of the Reports may make future volumes of less permanent value than Volume XIII A, which will be the last one to attempt a full coverage of astronomy” (*Observatory*, 89, 240, 1969). The reader is also referred to the introduction to the report of Commission 12.

Whether the value of the present Reports is less than that of previous ones is a matter to be decided by its users. Clearly, the precise form of the Reports needs further definition in certain respects, and some more experimenting may continue to be desirable. However, it is my personal belief, based on the reading of the present Commission Reports, that by intelligent reduction of the available

material, and by carefully separating the essential from the trivial, the Commission Presidents have generally succeeded in presenting a more condensed, but yet complete coverage of the whole field of astronomy in all its fascinating aspects, a review that, in certain respects, may even be more balanced than some of the previous Reports, and certainly not less in value than would have been the case with the inclusion of more, but perhaps less important details and references. That each report reflects the personal style of its author(s) is one of their traditional and charming aspects.

We wish to express our very sincere thanks to the Commission Presidents and their co-workers for the way they have interpreted our suggestions, and for so strictly observing the deadline for submission of the manuscripts. Our thanks are also due to the printer and publisher of this Volume, Mr A. Reidel and his staff, for their excellent and always pleasant cooperation.

C. DE JAGER
Assistant General Secretary

Utrecht
January 1970

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