

PREFACE

This, the tenth volume of the *Transactions* of the Union, follows almost exactly the model of the previous volume. It contains, in addition to the *Draft Reports* of the individual Commissions and reports of the meetings, reports of the four Joint Discussions held during the tenth General Assembly in Moscow. It does not contain the proceedings of the symposia held in conjunction with that meeting; these are being published separately as follows, numbered in the series of I.A.U. Symposia Volumes:

No. 9. *Paris Symposium on Radio Astronomy*. Stanford University Press.

No. 10. The Hertzsprung-Russell Diagram. *Annales d'Astrophysique*.

No. 11. Rotation of the Earth and Atomic Time Standards. *Astronomical Journal*.

In continuation of previous practice the *Draft Reports* were printed for advance circulation to members of the Union before the General Assembly; however, those for Commissions 16, 16a, 22, 30b and 33b have been added subsequently. In a few cases, fairly substantial additions to the *Draft Reports* have been included as addenda; otherwise only corrections and minor additions have since been incorporated.

On the initiative of the former General Secretary, Prof. P. Th. Oosterhoff, and in co-operation with the Cambridge University Press, an attempt has been made to improve the presentation by asking Presidents of Commissions and others to conform to the conventions recommended in *Notes for Authors*, circulated in May 1957. There has undoubtedly been some improvement, but complete consistency of presentation is unattainable with reports from many different authors from many different countries. In particular, it has not proved practicable to introduce uniformly, as intended, the system of abbreviating the titles of periodicals in the standard form in which they appear in *The World List of Scientific Periodicals*. The following shorter abbreviations, which are familiar to astronomers, have been permitted to stand:

Trans. I.A.U.; *A.N.*; *M.N.* or *M.N.R.A.S.*; *Mem. R.A.S.*; *Ap. J.*; *Z. Ap.*; *A. Zh.* (for *Astr. J., Moscow*); *C.R.* (for *C.R. Acad. Sci., Paris*); *B.A.N.*; *H.A.C.*; *M.P.C.* (for *Minor Planet Circulars*); *N.A.Z.*; *J. d. Obs.*; *P.A.S.P.*; *J.R.A.S., Can.*

The large size of the complete volume of *Transactions* continues to be a serious problem, to which no immediate easy answer is available. The volume is unwieldy and expensive, and, still more important, takes proportionally longer to print and distribute. Some division of the volume may be necessary in the future.

The preparation of this volume would be impossible without the ready co-operation of the Presidents and Secretaries of the Standing Commissions of the Union and of the Reporters for the Joint Discussions. As Editor I am deeply grateful for the attention they have paid to the *Notes for Authors*, and for their compliance with the strict timetables that are necessary for early publication; I particularly thank those whose native language is not English or French for the care they have taken in presenting their reports in one of these languages.

To the former President, Prof. A. Danjon, I am indebted for invaluable assistance with the reports of the Opening Ceremony and the General Assembly; any deficiencies in the French texts are due to my inadequate knowledge of that language. Although the former

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General Secretary, Prof. P. Th. Oosterhoff, is not formally accorded any responsibility for this volume, the credit is largely his; I cannot overestimate the value of his advice and guidance. The Assistant Secretary, Miss N. Splinter, has borne the brunt of the preparation of Part I and of the final proof-reading of the whole; for her care and skill all members of the Union will, I am sure, be most grateful.

Finally it is my pleasure to acknowledge with gratitude and admiration the superb craftsmanship and ready co-operation of the Cambridge University Press.

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