

PREFACE

The increasing size of the complete volume of the *Transactions* of the Union has made it necessary to divide the present volume (the eleventh to be published) into two parts, bound and published separately. In order to preserve the relationship with the corresponding General Assembly, both books will carry the same volume number together with a distinguishing letter A or B.

The present volume, XI A, contains the Draft Reports of Commissions as presented to the eleventh General Assembly of the Union, held in Berkeley, California, from 15 to 24 August 1961, and as subsequently amended; it has been given the separate title *Reports on Astronomy*, as it stands in its own right as an authoritative, detailed and unique record of the present state of Astronomy in all its branches.

In continuation of previous practice the Draft Reports were printed for advance circulation to Members of the Union in the *Agenda and Draft Reports*; however, that for Commission 22 (Meteors and Meteorites) has been added subsequently. A few substantial additions have been made but otherwise only corrections and minor additions have been incorporated. The Reports of Commissions 3, 5, 6 and 38, which are almost entirely of an administrative character, have been omitted; they will be included, as appendices to the Report of the Executive Committee, in Volume XI B.

Volume XI B, which will be published somewhat later than the present volume, will be given the sub-title *Proceedings of the Eleventh General Assembly* and will contain: a full report of the Inaugural Ceremony, and of the sessions of the General Assembly; the Report of the Executive Committee, together with the Reports of Commissions 3, 5, 6 and 38; texts of the administrative and scientific resolutions adopted by the General Assembly and by Commissions; the texts of the Invited Discourses delivered during the General Assembly; the reports of the meetings of Commissions held in Berkeley; the reports of the four Joint Discussions; the texts of the revised Statutes and By-laws; and the full lists of Commissions and their membership, and of Members of the Union and their addresses. This volume will thus be a complete record of both the administrative and scientific proceedings of the General Assembly.

No symposia were held during the eleventh General Assembly; the proceedings of Symposia Nos. 15 (Problems of Extra-Galactic Research), 16 (The Solar Corona) and 17 (Visual Double Stars), held either immediately before or immediately after the General Assembly, will be published separately.

As for earlier volumes of the *Transactions* an attempt has been made to improve the presentation by requesting Presidents of Commissions to conform to a few recommended conventions, particularly in regard to the treatment of references. But complete consistency of presentation is unattainable with reports from many different authors from many different countries. In particular, rather more departures from the system of abbreviating the titles of periodicals in the standard form in which they appear in the *World List of Scientific Periodicals* have been allowed; in all such cases shorter abbreviations, which are familiar to astronomers, have been permitted to stand.

In the production of a volume of this nature the Editor is very conscious of the great amount of help he receives from many sources. I am deeply grateful for: the ready co-operation of Presidents of Commissions in the preparation and proof-reading of their Reports; the invaluable

assistance from members of the staff of H.M. Nautical Almanac Office, in particular Mr H. W. P. Richards and Dr G. A. Wilkins, in the preparation of the typescripts for the printer; the care and skill exercised by the Assistant Secretary, Miss Nel Splinter, who has borne the brunt of the checking of many details and has faithfully conveyed to the printer on the proofs the intentions of the authors.

Finally it is my pleasure to acknowledge with gratitude the excellent co-operation that I have received from our new printers, Messrs Willmer Brothers and Haram Limited, and to record my appreciation of their fine craftsmanship and efficiency.

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