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# REPORTS ON ASTRONOMY

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# **REPORTS ON ASTRONOMY**

Transactions of the International Astronomical Union, Volume XXIA

edited by

## DEREK McNALLY General Secretary of the Union

IAU Transactions are published as a volume corresponding to each General Assembly. Volume A is produced prior to the Assembly and contains Reports on Astronomy, prepared by each Commission President. The intention is to summarize the astronomical results that have affected the work of the Commission since the production of the previous Reports up to a time which is about one year prior to the General Assembly. Volume B is produced after the Assembly and contains accounts of Commission Meetings which were held, together with other material. The reports included in the present volume range from outline summaries to lengthy compilations and references. Most of the reports are in English.

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# VOLUME XXIA

### REPORTS

INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS INTERNATIONAL ASTRONOMICAL UNION UNION ASTRONOMIQUE INTERNATIONALE

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#### Foreword

Reports on Astronomy represent a triennial survey of the progress of Astronomy. They are not an abstracting service, such as Astronomy and Astrophysics Abstracts, nor a volume of reviews. An abstracting service aims to be comprehensive, while no review volume can encapsulate the whole of astronomy. Because Reports are contributed by the Commissions of the Union, it covers the whole of Astronomy for the preceding 3 years terminating for Volume XXIA on 1990 June 30. However, because of pressure of space, Reports cannot be comprehensive but must concentrate on what each Commission considers to be important at the time of compilation. The subjective element thus introduced into the selection of the material is not a bad thing -users of Reports can get a rapid overview of those matters considered of importance in particular subject areas which may well direct their subsequent searches of the literature more fruitfully.

The Commissions have produced their expected high standard in their Reports. The Reports are varied in style and manner of reporting as befits the varied nature of the tasks allotted to each Commission. Nevertheless, Reports constitute a unique triennial record of the trends and directions in astronomy.

I would like to thank each Commission President for organising the compilation of their report and their Organising Committees who frequently were equal partners in the task. I would also express my appreciation to Monique Orine for her work in assembling the reports and for proding (it must be admitted) the tardy few.

I hope this volume will prove as useful to the Astronomical Community as its predecessors.

Derek McNally General Secretary, IAU 1990 December

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\*\*\* No report provided