

## INTRODUCTION

The principal purpose of IAU Colloquium No. 35 was to discuss those aspects of the techniques of the compilation, evaluation, and distribution of data that are common to astrometry, photometry and spectrometry of stars and stellar systems. In the announcement of the Colloquium, it was suggested that there would be special emphasis on the techniques of quality control, and on the standards for the presentation of numerical data in both printed and computer-readable form. As the meeting progressed it became clear that the lack of a standard, unambiguous system for the identification of stellar objects was a source of much confusion and inefficiency in the use of existing data files. This and other such matters were the subject of further discussions by Commission 5 at the General Assembly of the International Astronomical Union (IAU), which was held at Grenoble during the following fortnight, 24 August - 2 September 1976.

The proposal for the Colloquium was prepared by J. Jung, who was then Director of the Centre des Données Stellaires at Strasbourg, and G.A. Wilkins, Chairman of the IAU Working Group on Numerical Data, and was accepted by the IAU Executive Committee on the recommendation of the President of Commission 5, with the support of Commissions 25, 29 and 45. The Scientific Organising Committee consisted of W. Fricke, B. Hauck, C. Jaschek, J. Jung, B. Kukarkin, P. Lacroute, A. Underhill and G.A. Wilkins (Chairman). The Local Organising Committee consisted of A. Florsch, C. Jaschek, P. Lacroute (Chairman), and F. Ochsenbein. C. Jaschek acted as the Secretary of the Colloquium.

The Colloquium was held at the kind invitation of the Université Louis Pasteur at Strasbourg. Generous financial assistance was given by the National French Committee for Astronomy, the U.E.R. de Mathématiques (University of Strasbourg), the Conseil Regional de la region d'Alsace, the Municipalité de la Ville de Strasbourg and the Strasbourg Observatory, and some travel grants were given by the International Astronomical Union.

An informal gathering of the participants was held at the Observatory of Strasbourg during the evening of Wednesday, 18 August. The Colloquium opened at 0900 a.m. on Thursday, 19 August, when Professor P. Lacroute invited Professor P. Karli, President of the University, to speak; he welcomed the participants and gave a brief account of the history and relationships of the three universities at Strasbourg. G.A. Wilkins replied on behalf of the participants; he then reviewed the aims of the Colloquium and described the arrangement of the scientific programme. Then Dr. A. Florsch, who had been recently appointed Director of the Strasbourg Observatory in succession to Professor P. Lacroute, welcomed the participants on behalf of the Observatory and described the local arrangements and the social functions which would be held in the evenings.

The programme consisted of five sessions, each of which was opened by the presentation of an invited paper on a topic of general interest. After the general discussions on these papers there were short presentations of contributed papers, which often led to further discussion. Whenever possible the contributed papers were arranged so that their topics were related to that of the preceding invited paper, but for various reasons this could not always be done. The programme is given on pages v-vii.

The papers formally presented at the Colloquium are given in full, or by abstract. The discussions have been summarised (see pages 295-316) and, where appropriate, the sequence has been changed to bring together related points. Use has been made of the notes which were provided by the participants after the discussions, and which have been transcribed under the supervision of C. Jaschek, as well as of other manuscript notes and tape recordings. It is hoped that no-one's views have been seriously misrepresented, and that no significant comments have been omitted, but it has not been practicable to verify the correctness of this report.

At the conclusion of the Colloquium, Professor W.D. Heintz, Vice-President of IAU Commission 5, expressed the thanks of the participants to the organisers and especially to the staff of the Observatory at Strasbourg for making all the necessary arrangements for what had proved to be a very interesting and useful meeting.

It is an agreeable pleasure to thank Misses Ch. Bruneau and S. Miller, who prepared the manuscript of the proceedings for printing.

The Editors