

COMMISSION 30: RADIAL VELOCITIES  
(VITESSES RADIALES)

Report of Meeting, 1979 August 15

PRESIDENT: A.H. Batten

SECRETARY: J. Andersen

1. The President opened the meeting and recalled the loss by death of the following members of the Commission: J.F. Heard, A.D. Thackeray, and R.K. Young. The Commission stood in silence as a tribute to the memory of these distinguished colleagues.
2. The report by the President was approved, with a typographical correction.
3. The following changes in the composition of the Commission for the next three years were unanimously approved:

President:	M. Duflot
Vice-President:	A.G.D. Philip
Organizing Committee:	A.H. Batten, J. Andersen, E. Maurice, J. Sahade
Resigned:	H. Gollnow
New Members:	J. Andersen, A. Florsch, I.D. Karachentsev, M. Mayor, C.L. Morbey, B. Nordström, N.B. Sanwal, C.D. Scarfe

Prof. Fehrenbach found it desirable that the Organizing Committee should have a member from the U.S.S.R. The President regretted that his extensive efforts to obtain this had not been successful.

4. Brief reports were given on the Joint Meetings on Nomenclature (M. Barbier) and on Space Astronomy (J. Andersen).
5. In 1976, a working Group was established to advise on:
  - suitable procedures to compute the mean velocity of a constant velocity star from published measurements, and
  - the information to be given when publishing new radial-velocity data.

As Chairman of the Working Group, Dr. Barbier reported on the first subject that questionnaires had been distributed to all members of the Commission asking their opinion on the following points:

- application of systematic corrections
- weighting procedure (dispersion, number of measurements, external m.e.)
- use of the mean velocities of the Wilson catalogue

A summary of the answers, which were received from most of the institutions currently active in this field, was distributed, but unfortunately it had been impossible for the Working Group to meet before the Commission meeting. The conclusions of an extended discussion were that systematic corrections, however desirable, were often impossible to apply in practice because of inadequate

standardization. Weighting should be done according to external mean error and increase more slowly than the square root of the number of measurements, if that number is large. The Wilson mean velocities should be treated as single measures with suitable weight.

There was also agreement that computation of the best mean velocity still requires a specialist judging all the available data. A general recipe for generating an overall mean value from a computerized bibliographical catalogue cannot be optimal, because even the mean velocity in a given paper may well contain measures from previous publications.

The Commission was informed that Prof. Evans' new edition of the General Catalogue is now complete from 0<sup>h</sup> through 20<sup>h</sup> and that part released for distribution through the Stellar Data Centre in Strasbourg. Arrangements have been made to complete it using the methods employed by Prof. Evans.

On the second subject, Dr. Duflot presented the recommendations of the Working Group for the rules to be followed. It was unanimously agreed to forward these as a resolution to the General Assembly.

The Working Group's task was thus completed and the Group dissolved. The Commission expressed its appreciation of the active work performed.

6. During the scientific session, the following papers were given:

- |                 |   |
|-----------------|---|
| B. Campbell:    | High-Precision Measurements of Radial Velocities  |
| A.H. Batten:    | Standard-Velocity Stars: Introduction   |
| C. Fehrenbach:  | Work at Observatoire de Haute-Provence  |
| E. Maurice:     | Work at Marseille: Standard Stars and Minor Planets;<br>Wave Lengths of Forbidden Lines |
| J. Andersen and | The Copenhagen Programme: Need for Extended and Improved                                |
| B. Nordström:   | Lists of Standards  |
| M. Mayor:       | Standardization of Radial Velocities Measured with CORAVEL                              |

Dr. F. Ochsenbein presented the microfiche version of the updated Bibliographical Catalogue now available from Strasbourg.