

**International Association of  
Meteorology and Atmospheric Physics (IAMAP)**

**International Union of Geodesy and Geophysics**

**REPORT OF PROCEEDINGS  
XVII General Assembly  
Canberra  
December 1979**



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International Association of  
Meteorology and Atmospheric Physics (IAMAP)

International Union of Geodesy and Geophysics (IUGG)

REPORT OF PROCEEDINGS  
XVII GENERAL ASSEMBLY  
CANBERRA  
DECEMBER 1979

## FOREWORD


The IAMAP sessions, details of which are given in these Proceedings, reflected the current topics of interest in our fields. We were most pleased to collaborate in some of them with IAGA and IAPSO. The Union Symposia also afforded IAMAP an opportunity to collaborate with our sister Associations.

The success of the Canberra Assembly can be traced in significant part to the excellent arrangements and support provided by our Australian colleagues. CSIRO and the Australian Meteorological Office, in particular, supported the IAMAP sessions in a most generous way. The warmth and can-do spirit with which this support was given made all of us realize how important the interpersonal relationships are in our international scientific activities. The site of the meeting, on the campus of the Australian National University, was most conducive to a relaxed interchange among participants. The locale of the meeting in Australia gave many of us a chance to make new friends among our colleagues in the Southern Hemisphere, and to appreciate the breadth and quality of the scientific work carried out there.

Once again, we were most happy to have this opportunity to collaborate with the World Meteorological Organization, and we express our appreciation for financial support from WMO for the Assembly.

We also wish to acknowledge with deep appreciation the substantial financial support from the U.S. Department of Transportation (the program of the Federal Aviation Administration), which assured that key scientists could be invited to participate in the sessions on the chemistry of the middle atmosphere.

All of those who participated in the Canberra Assembly will long remember it as one of our outstanding scientific and personal experiences.



Stanley Rittenberg  
Secretary General, IAMAP

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I. MINUTES OF THE FIRST EXECUTIVE COMMITTEE MEETING

2 December 1979

A. The Agenda

The agenda was approved.

B. The IAMAP Canberra Program

A short discussion of the scientific and administrative sessions was held. No major problems have been encountered in the arrangements.

It was agreed that the Executive Committee should meet at least once more before the Closing Plenary. Lunchtime Thursday, 13 December, was proposed and accepted.

C. Agendas for the Plenary Sessions

These were approved with one addition, to announce the possibility of a Scientific Assembly in 1985.

D. Committees

In accordance with the Statutes, it was agreed to propose the following Committees to the Plenary:

Finance Committee: R. Pearce, Chairman (UK); O. Avaste (USSR); G. B. Tucker (Australia)

Nominations Committee: R. Murgatroyd (UK); C. B. E. Priestley (Australia); C. Junge (FRG); J. London (USA, to replace S. Fritz, who could not attend IUGG XVII)

It was also agreed to propose a Statutes Committee to assist in the preparation of a final version for consideration at Hamburg, taking into account suggestions from the Executive Committee, National Committees, and the Commissions; and also to make sure that the Statutes are consistent with the new Union Statutes:

Statutes Committee: W. Godson (Canada); P. Goldsmith (UK); R. G. Soulage (France); S. Rüttenberg (USA, ex officio)

## E. Statutes

The third version, 9 July 1979, had been circulated to the Executive Committee and to all National Committees. There have been some additional suggestions for clarifications, etc., but no objections to the substantive modifications. It was agreed to propose to the First Plenary that the 9 July version be accepted as a working basis for the Association until the final version is prepared for consideration at Hamburg.

## F. Commission Reports

Each Commission representative present discussed the status of plans for Hamburg, 1981, or for specialized symposia. Following is a summary of these plans:

### 1. Radiation Commission

- 1980: 11-16 August, Fort Collins. General symposium topics to include radiation in the middle atmosphere; radiometric sounding of the atmosphere, atmospheric optics and spectroscopy, radiation in climate and weather modeling and forecasting, earth radiation budget, scattering and absorption of radiation in cloudy and turbulent atmospheres.
- 1981: Hamburg. Optics, sodar and lasers; radiative transfer in oceans (possibly in cooperation with IAPSO); the solar input and its spectral variability (possibly in cooperation with Climate Commission).
- 1984: In Europe. Possibilities are being discussed for the next regular radiation symposium.

### 2. Ozone Commission

- 1980: 4-9 August, Boulder. Symposium topics include: Recent developments in observational techniques, observational analyses, observations of relevant trace gases, photochemistry of ozone and related chemical systems, interaction of ozone and circulation, ozone effects on climate, future observational and research programs.
- 1981: Hamburg. No plans known as yet.

### 3. Commission on Planetary Atmospheres and their Evolution

- 1980: London. Remote observations of the planets, including earth.
- 1981: Hamburg. Evolution of the atmospheres of the terrestrial planets.
- 1982: Dynamics of the atmospheres of other planets, possibly jointly with ICDM.

### 4. Commission on Dynamic Meteorology

- 1981: ? mid-81, European Centre for Medium Range Forecasting, Reading. Intense vortices, joint with IUTAM.

Hamburg. Scientific results of the First GARP Global Experiment and their consequences in understanding the dynamics of the atmosphere; dynamics of special atmospheric phenomena (e.g., blocking).

In addition to these symposia to be organized by ICDM, there is a symposium on some special aspects of the dynamics of the general circulation being arranged at Reading, by the university modeling group there. IAMAP has been invited to cosponsor this meeting. The Executive Committee suggested that the Reading symposium topic should be defined more explicitly so as to be more closely related to the ICDM sessions at Hamburg, and that the time of the Reading Symposium should be as close as possible to Hamburg so that participants could readily take part in both. The matter was referred to ICDM for further discussion.

### 5. Commission on Cloud Physics

- 1980: 14-18 July, Clermont-Ferrand. The Commission will hold its Quadrennial Symposium followed by a Weather Modification Conference organized by WMO.
- 1981: Hamburg. The Nucleation Working Group will hold its regular conference.

### 6. Commission on Climate

- 1981: March-April period, Oxford. An interdisciplinary symposium is being organized on the variability of the global water

budget. IAHS and IAPSO could co-sponsor, and approaches could be made to INQUA.

Hamburg. Some preliminary discussions have been held as to the possibility of a joint symposium with IAPSO on ocean-atmosphere coupling, in particular the Southern oscillation and El Nino. In addition, some sessions may be proposed on climate sensitivity studies with respect to CO<sub>2</sub> and other trace gases, in cooperation with ICDM and ICACGP.

#### 7. Commission on Polar Meteorology

1981: The week after Easter, Innsbruck. A three-day meeting is planned by the German Society for Polar Research, on topics to be selected later. ICPM will co-sponsor.

Hamburg. Topics are still under discussion. One possibility is the mass balance of Alpine glaciers; another is the results of the International Hydrological Decade, 1964-1974.

#### 8. Commission on Meteorology of the Upper Atmosphere

1981: Hamburg. The Commission will make provisional plans at Canberra, but one idea that has emerged already is the full discussion of sources of upper atmosphere data, and accessibility of them for research.

It was agreed that such discussion of Commission plans, and inter-Commission collaboration, is an important function of the enlarged Executive Committee.

#### G. Hamburg Assembly 1981

The above summary indicates that a full range of topics will be covered. President Junge has been discussing with the Hamburg organizing committee some general aspects of the program and reported the desire from Hamburg for a symposium on satellite methods and results for meteorology and oceanography, and a session on climate and human influence on climate. A special lecture is also proposed on latest planetary missions. During the discussion it was also proposed that a symposium on long-range transport of atmospheric pollutants would be of wide interest to the European area.

#### H. Data Exchange

Some brief information was presented on the current status of data exchange and documentation of data collections held in places other than the World Data Centers. The ICSU WDC Panel and also the ICSU Committee on Data for Research (CODATA) have invited IAMAP's Secretary to collaborate.

#### I. Other Business

The possibility was discussed briefly of establishing some IAMAP focus for solar-terrestrial problems, in view of the widening interests in this area. It was agreed to consider some possibilities and to try to discuss this topic further at a later date.



## II. MINUTES OF THE OPENING PLENARY SESSION

### A. Agenda

President Junge presented the agenda, which was approved.

### B. Memorium to Deceased Colleagues

President Junge asked the participants to rise in respect to colleagues active in IAMAP and in our field who have died in the period since IUGG XVI, Grenoble, as follows (from information supplied by National Committees):

• AUSTRIA	H. Holnkes
• BULGARIA	L. Krastanov
• FEDERAL REPUBLIC OF GERMANY	F. Baur
• FRANCE	P. Queney
• HUNGARY	A. Rethly
• ISRAEL	N. Rosenan G. Steinitz
• NEW ZEALAND	M.A.F. Barnett
• NORWAY	E. Hesstvedt
• POLAND	T. Kopcewicz
• SWEDEN	T. Bergeron
• UNITED KINGDOM	G.M.B. Dobson E. Gold F.H. Ludlam P.A. Sheppard J.M. Stagg G. Sutton G.I. Taylor
• UNITED STATES	D.E. Church R. Craig W. Nordberg E.T. Pierce V.P. Starr

● UNION OF SOVIET SOCIALIST  
REPUBLICS

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I.I. Galvoronsky  
S.P. Khromov  
E.M. Salman  
N.A. Vorontsov  
M.V. Zavarina

B. Establishment of Committees

1. Finance Committee

President Junge proposed to the Assembly that the Committee consist of:

- Prof. R. Pearce, Chairman (UK)
- Prof. O. Avaste (USSR)
- Dr. G. B. Tucker (Australia)

There being no objections, this committee was approved.

2. Nominations Committee

President Junge explained that an ad hoc committee had been working since the Seattle Assembly to prepare material and some suggestions for Canberra. He proposed to the Assembly that the Committee consist of:

- Dr. R. Murgatroyd, Chairman (UK)
- Prof. C. Junge (FRG)
- Prof. J. London (USA)
- Prof. C.-B. E. Priestley (Australia)

There being no objections, this committee was approved.

3. Statutes Committee

President Junge explained that the Executive Committee had agreed to continue work on revision of the Statutes, following general guidelines that had been adopted at Seattle. A draft had been distributed to all National Committees in July but still needed some clarifications and it still was necessary to prepare a suitable French version. Therefore, it was decided to propose establishment of an ad hoc Statutes Committee, as follows:



- Dr. W. L. Godson (Canada)
- Dr. P. Goldsmith (UK)
- Mr. S. Ruttenberg, ex officio (USA)
- Dr. R. G. Soulage (France)

There being no objection, this Committee was approved. Further action with regard to the Statutes is reported below.

#### D. IAMAP Activities Since IUGG XVI Grenoble

##### 1. Work of Commissions, Cooperation with WMO

President Junge and Secretary General Ruttenberg outlined briefly the major IAMAP activities since Grenoble. These are discussed in the Report to IUGG of the Liaison Officer to WMO. In addition to the activities mentioned in that report, IAMAP cooperated with IUTAM in organizing a symposium on Monsoon Dynamics in India, 1977, and has continued in cooperation with COSPAR to undertake special technical studies of observational possibilities for the World Climate Research Program. In this regard, a meeting of specialists was held in Alpbach, Austria, in 1978, to make specific recommendations for long-term studies of the earth's radiation budget.

##### 2. Finances

Secretary General Ruttenberg reported on the state of IAMAP finances. The financial report of the period 1975-79 had been distributed to all National Committees. In brief, IAMAP had built up a reserve fund in order to allow substantial travel grants for the IUGG XVII General Assembly. Approximately \$40,000 was allocated for travel grants to Canberra. IAMAP will still maintain an appropriate reserve for the coming period 1979-82, in which there will be at least six major Commission symposia, and the coming Scientific Assembly at Hamburg, 1981. IAMAP will also maintain financial possibilities to support participation of IAMAP representatives in meetings of WMO and other ICSU bodies, for which there is occasional assistance also from IUGG and ICSU. WMO and some USA agencies have made grants in the past period to support Commission symposia and also the Seattle and Canberra Assemblies. It is expected that some similar grants will be available in the next period.