Resolutions of the Union and of the Associations

RESOLUTIONS OF THE UNION

Resolution N°1

The International Union of Geodesy and Geophysics
Considering that the study of volcanoes of the Pacific area is of great interest,
Recommends the establishment of a new volcanological centre under the Pacific Science Association.

Resolution N°2

The International Union of Geodesy and Geophysics
Considering the information contained in the papers and proceedings of the Symposium on "Utilization of Surface Water Resources," held during the General Assembly of the IASH in Berne,
Resolves to draw the attention of, UNESCO, ECE (Economic Commission for Europe), ECAFE (Economic Commission for Asia and the Far East) and other international organizations interested in this field to the information obtained on the utilization of surface water resources and
Invites the representative of the IASH in the ECE Body on Water Resource Development to promote the utilization of these materials in the ECE Manual on Water Resources Development, now under preparation, with special attention to terminology.

Resolution N°3

The International Union of Geodesy and Geophysics
Endorses Phase III of the Upper Mantle Project (1968-1970) as defined and published by the Upper Mantle Committee and
Urges the continued participation of scientists from many disciplines in developing programmes for this Phase.

Resolution N°4

The International Union of Geodesy and Geophysics
Noting the importance of world coverage of heat flow observations,
Recommends that oceanographic institutes conduct routinely heat flow measurements on expeditions,
Urges the extension of oceanic heat now measurements into such areas as the Celebes Sea, Banda Sea, Java Sea and Coral Sea, inviting the participation of Indonesian scientists, and
Calls attention to the urgent need for heat flow measurements in Africa, South America and Antarctica.

Resolution N°5

The International Union of Geodesy and Geophysics
Considering the proposed change of policy of ICSU in respect to the distribution of payments by FAGS to geophysical services,
Noting the serious concern of the Associations at this change aimed at reducing payments to long-standing permanent services in favour of increasing support to new services,
Recognizes such a policy as detrimental to geophysical science,
Regards the long-standing services in general as unostentatious but vital contributors to science, contributors which are, moreover, already beset with serious financial problems and
Recommends to ICSU the maintenance of the policy followed till now and the increase, whenever possible, of payments to the permanent geophysical services according to their needs and importance.

Resolution N°6

The International Union of Geodesy and Geophysics
Noting with interest that it has been proposed to create two new international volcanological centres, one in Iceland on the initiative of a national organization, for volcanological and geothermal research,

and the other in Naples at the suggestion of the Vesuvian observatory, for research and for training specialists in physical volcanology,
Considering moreover that the multiplication of study and training centres would increase and improve researches in volcanology,
Expresses the hope that UNESCO will consider these two projects.

Resolution N°7

The International Union of Geodesy-and Geophysics
Considering the importance of a thorough study of the northern Anatolian fault zone within the framework of the problem of earthquake forecasting and the interest of the research already done in this direction,
Recommends the establishment of an international working group in the region composed of representatives of the different organizations interested in the study of seismo-tectonics in Turkey,
Urges this working group to present at the next General Assembly of the European Seismological Commission a detailed plan of the research to be done and of the material means to be used and
Commends to the appropriate local authorities the importance of improving the network of seismograph stations in the region.

Resolution N°8

The International Union of Geodesy and Geophysics
Reaffirms its strong approval of the objectives of the International Seismological Centre, Edinburgh,
Expresses its appreciation of the excellent work being carried out by the Bureau Central International de Seismologie, Strasbourg, particularly with regard to the rapid determination of earthquake epicentres in the European area, and
Urges that the international, regional and national seismological centres continue to receive-adequate support for carrying on their work in the closest cooperation.

Resolution N°9

The International Union of Geodesy and Geophysics
Considering that the interest of a small-scale World Volcanological Map resides in illustrating the geographic distribution of post-Miocene volcanic activity and in correlating the activity with tectono-structural features, geophysical anomalies, deep-seated features of the Earth,
Recommends that the World Volcanological Map be compiled in close collaboration not only with interested groups within this Union, but also with the Commission for the Geological Map of the World, particularly as regards scale and projection, and that this Commission be requested to provide, whenever possible, the topographic base maps for such compilations.

Resolution N°10

The International Union of Geodesy and Geophysics
Noting that a world-wide standard seismograph network has been established by the United States Environmental Sciences Service Administration (Coast and Geodetic Survey), with the; cooperation of observatories in many countries
Noting also that the recorded data from the network are made readily available to scientists and the public for purposes including that of engineering seismology to provide increased protection against earthquake disaster, and those of seismological research requiring a uniformity of instrumentation -not previously available,
Recognizing further the outstanding value of the network and of the data it produces,
Expresses strong desire for the continued operation of the network, data centre, reproduction service and archives, and
Recommends that observatories operating the standard seismographs should make every effort, within their technical capabilities and financial resources, to defray the expenses incurred in this operation.

Resolution N°11

The International Union of Geodesy and Geophysics

Recognizing the particular geographic situation of the Orcadas observatory and its importance within the observatory network of the Southern Hemisphere,

Appreciates the efforts n-lade by the Argentine Government during these latest years to complete the facilities and the scientific equipment of this magnetic station, and

Expresses the wish that the aid granted to the Orcadas observatory be continued and increased in order to permit a continuous participation of this observatory in the international cooperation required for the study of magnetic phenomena.

Resolution N°12

The International Union of Geodesy and Geophysics

Recognizing the value of establishing a permanent geomagnetic observatory on the mainland of Chile:

1. for contributing to the world network of permanent observatories,
2. for providing a base to which Chile's observatory on Easter Island and her surface magnetic survey activities could be referred,

Recommends that the appropriate authorities give all the support necessary to establish and maintain a permanent geomagnetic observatory at Peldehue, or at such other site on the mainland as is considered suitable.

Resolution N°13

The International Union of Geodesy and Geophysics

Noting with regret that a high voltage AC power line is planned near the Geophysical Observatory of Huancayo, which will adversely affect the quality of the data obtained,

Noting the fact that the observatory, which is situated in a unique position, has been operating since 1922, and that a heavy loss to international science would result,

Urges the authorities concerned to consider re-routing of the power line so that the observatory remains undisturbed.

Resolution N°14

The International Union of Geodesy and Geophysics

Considering the recommendations of the Geophysics Research Board of the U. S. National Academy of Sciences, as transmitted by Dr. H. Friedman, and of the Academy of Sciences of the USSR, as transmitted by Dr. N. V. Pushkov, and further

Considering the desires of the IAGA Commissions IV, V, VI, VH and VIII to participate in the formulation and conduct of cooperative international programmes for Solar- Terrestrial Physics,

Supports the organization of an international cooperative programme for the Active Sun Years, 1968-1970 (IASY), to be organized under the general direction of the Inter-Union Commission for Solar- Terrestrial Physics (IUCSTP),

Urges the IUCSTP to complete a draft programme for the IASY as soon as possible,

Offers the cooperation of its interested Associations in the preparation of the programme, and

Recognizes the need for a general meeting organized by IUCSTP at an. early date to permit the appropriate working groups to finalize the details of the IASY projects,

Resolution N°15

The International Union of Geodesy and Geophysics

Noting the UNESCO document proposing an International Programme for Geological Correlation,

Recognizing that, within ICSU, this programme will be primarily the responsibility of the International Union of Geological Sciences,

Resolves to offer its services within its fields of competence, including geomagnetism, volcanism, geochronology and seismology, where these services would assist, in developing the programme.

Resolution N°16

The International Union of Geodesy and Geophysics

Recognizing that pollution of the seas by industrial, agricultural and domestic waste products is increasing, and that the problems to be solved require collaboration between physical, chemical and biological oceanography as well as other disciplines,

Approves the decision of IAPSO to cooperate with appropriate international organizations in promoting scientific discussions of the oceanographic aspects of the problem of marine pollution.

The International Union of Geodes-v and Geophysics

Considering that further development of international cooperation aimed at obtaining data on external forces and other factors affecting the stability of ships, and also on the effects of winds and waves on other structures, can be satisfactorily achieved only with the advice of experts representing both engineering and wave research interests,

Recommends the creation of a Working Group on Statistical Data on Wind and Waves, jointly with Unesco, the World Meteorological Organization, the International Union of Theoretical and Applied Mechanics, the International Association of the Physical Sciences of the Ocean, IMCO and ISSC

Approves the decision of IAPSO to appoint a representative to this group.

Resolution N°17

The International Union of Geodesy and Geophysics

Considering that further development of international cooperation aimed at obtaining data on external forces and other factors affecting the stability of ships, and also on the effects of winds and waves on other structures, can be satisfactorily achieved only with the advice of experts representing both engineering and wave research interests,

Recommends the creation of a Working Group on Statistical Data on Wind and Waves, jointly with Unesco, the World Meteorological Organization, the International Union of Theoretical and Applied Mechanics, the International Association of the Physical Sciences of the Ocean, IMCO and ISSC

Approves the decision of IAPSO to appoint a representative to this group.

Resolution N°18

The International Union of Geodesy and Geophysics

Recognizing the interest inherent in the various methods used for reducing photographic plates to obtain the directions of satellites,

Associates itself with COSPAR in recommending a colloquium on the subject to be organized in accordance. with Resolution No 3 (1967) of COSPAR.

Resolution N°19

The International Union of Geodesy and Geophysics

Resolves that the coordinate of the instantaneous pole shall be referred to an origin defined by the following initial coordinates:

Mizusawa:	39° 08’ 03” 602
Kitab:	39° 08’ 01” 850
Carloforte:	39° 08’ 08” 941
Gaithersburg:	39° 08’ 13” 202
Ukiah:	39° 08’ 12” 096

and called the Conventional International Origin (CIO).

(These values of latitude define the mean pole of 1903.0, which is identical with the more commonly defined mean pole of 1900-05 of G. Cecchini.)

Resolution N°20

The International Union of Geodesy and Geophysics

Approves the charter of the Central Bureau for Satellite Geodesy as given in the Bureau's report to the XIVth General Assembly, and

Recommends that the Central Bureau continue its invaluable work in the furtherance of satellite geodesy along the lines indicated in its charter.

Resolution N°21

The International Union of Geodesy and Geophysics

Supports the proposal of the United Kingdom that the ITU recognize Microwave Distance Measurement as a user on a secondary basis of the following frequency bands:

2.800 - 3.200 gHz
10.000 - 10.500 gHz
34.300 - 35.100 gHz

with the inclusion of a suitable footnote to this effect in the frequency tables annexed to the International Radio Regulations of the International Telecommunications Union (ITTJ), and

Recommends to member countries that they should be ready to support the United Kingdom in its proposed approach to the ITU at the next appropriate World Administrative Radio Conference.

Resolution N°22

The International Union of Geodesy and Geophysics

Recognizing that the International Ellipsoid adopted in Madrid in 1924, and the International Gravity Formula adopted in Stockholm in 1930, do not represent the size, shape and the Earth's gravity field any longer with adequate accuracy, although they may continue to be used as reference for current work, where a change would be disadvantageous, and

Considering that

a) more appropriate values are needed and now available for scientific use,
b) the International Astronomical Union (IAU) has adopted, in consultation with -the IUGG at its General Assembly in 1964, values, as a part of a new set of astronomical constants, far closer to those currently considered the best, and
c) the IAU and IUGG have adopted, in 1967, a new Conventional International Origin for the polar motion, and the Bureau International de I'Heure adopts the conventional longitudes for the determination of UT 1 (and UT 2),

Recommends that

a) the following conventional set of constants define the Geodetic Reference System 1967:
   equatorial radius of the earth: ae 6 378 160 m
   geocentric gravitational constant of the earth, including the atmosphere: GM = 398 603 x.109 m 3 s-2
   dynamical form factor of the earth: J2 = 10 827 x 10-7
b) the minor axis of the reference ellipsoid equipotential in the system defined above be parallel to the direction defined by the Conventional International Origin for polar motion, and the primary meridian be parallel to the zero meridian of the BIH adopted longitudes.
   (Ellipsoidal parameters and a gravity formula consistent with the above defined constants of the Geodetic Reference System 1967 will be published in a special publication of the IAG).

Resolution N°23

The International Union of Geodesy and Geophysics

Noting that the European Seismological Commission (ESC) has set up a coordinating working group for explosion seismology and

Recognizing the need for coordination of seismic crustal studies and their interpretation in various parts of Europe,

Recommends that IASPEI and the Upper Mantle Committee take the initiative to ensure this coordination in the regions of the three sub-Commissions of the ESC, and

Recommends that contacts be made through the International Union of Geological Sciences with its international and national, bodies interested in this programme.

Resolution N°24

The Council of the International Union of Geodesy and Geophysics

Recalling Resolution 1802 of the XVU General Assembly of the United Nations inviting the International Council of Scientific Unions to participate in the development of an expanded programme of atmospheric research in response to developments in space technology;

Being mindful of the action of the ICSU Executive Committee at its meeting in London in 1964 establishing a Committee on Atmospheric Sciences under the- aegis of IUGG to develop such a programme;

Noting the series of reports prepared by the ICSU/IUGG Committee on Atmospheric Sciences (CAS) during the period 1965 to 1967, culminating in a comprehensive proposal for a Global Atmospheric Research Programme (GARP) prepared during the GARP Study Conference held in Skepparholmen, Sweden, from June 28th to July 10th, 1967, in cooperation with WMO and Working Group VI of COSPAR;

Recognizing that the success of GARP will depend upon close cooperation among international, non-governmental and intergovernmental institutions;

Noting the action of the Fifth Congress of WMO in proposing that ICSU and WMO cooperate in this programme under the terms of a Draft Agreement between WMO and ICSU on the GARP which provides for a Joint Organizing Committee of 12 members to sponsor, develop and keep under review a jointly agreed programme of activities for the planning and implementation of GARP, together with terms of reference and details of procedure for that Committee;

Endorses the general scientific nature and objectives of OARP as an appropriate and imaginative response to United Nations Resolution 1802 (XVII) and urges that the nations of the world, acting singly and in concert, ICSU and its constituent bodies, adhering academies and research councils provide strong and sustained support for this important programme;

Urges prompt action by the ICSU Executive Committee so that the momentum now developed in GARP be maintained;

Recommends:

1. The adoption of the amended draft agreement between the World Meteorological Organization and the International Council of Scientific Unions on the Global Atmospheric Research Programme, as appended.
2. That the present ICSU/IUGG Committee on Atmospheric Sciences (CAS) be disbanded on the formation of the new joint GARP Organizing Committee.
3. The creation of a new small committee, to be named the ICSU/IUGG Panel on GARP which would act for ICSU in the implementation of the agreement with WMO on GARP, including in particular, the securing of facilities and financial support for the programme.
4. That the new panel should have the following composition
   a) As Chairman, President of IUGG;
   b) IUGG liaison Officer with WMO;
   c) Two or three members of the present ICSU/IUGG CAS, to maintain continuity, and
   d) Three or five additional members as may be necessary to advance the activities of the Panel.
5. That IUGG be invited to act as parent Union for this Panel and to provide secretarial facilities.

Resolution N°25

The International Union of Geodesy and Geophysics

Extends its most sincere thanks for the arrangements made to hold the XIVth General Assembly in Switzerland to the Swiss Academy of Natural Sciences, the members of the Central Organizing Committee, the members of the Local Organizing Committees in Zurich, Berne, Lucerne and St. Gall, and to all those organizations in Switzerland which participated in these arrangements.