

## CHAPTER III

### RESOLUTIONS OF THE GENERAL ASSEMBLY

#### Introductory comments

The Resolutions Committee consisted of: J. Kovalevsky (France, Chair), I. Appenzeller (Germany), C. Corbally (Vatican City State), V. Trimble (USA) and R. West (Germany).

The Resolutions Committee received the following Resolutions of Type B

- Public Access to Astronomical Archives
- The value of Astronomy Education
- “2009 The year of Astronomy”

from, respectively, IAU Commission 5, IAU Commission 46 and the IAU Executive Committee.

**APPROVED RESOLUTIONS****RESOLUTION B.1.****PUBLIC ACCESS TO ASTRONOMICAL ARCHIVES**

The General Assembly of the International Astronomical Union

**Recognizing**

1. That scientific advances rely on full and open access to data.
2. That it is in the interest of astronomy generally that archive data be made as widely accessible as possible, and that the technology exists via the worldwide web to do so cheaply and effectively,
3. That the development of the Virtual Observatory will enable effective use to be made of such archives, thus increasing the effectiveness and scientific return of astronomical research,

**Considering**

1. That access to observing time on major astronomical facilities is sometimes necessarily and legitimately restricted for funding or other reasons,
2. That after data have been obtained on such a facility, that access to such data is often necessarily and legitimately restricted for some period (the “proprietary period”, typically of one to two years), to the observer, student, instrument builder, or other defined groups, so that they may have a reasonable opportunity to publish their results, and thereby capitalize on their investment of time and resources put into the observations,
3. That in many cases, after this proprietary period the data are placed in a data archive where they are made more widely available,

**Recommends**

1. That data obtained at major astronomical facilities should, after a reasonable proprietary period in which they are available only to observers or other designated users of the facility, be placed in an archive where they may be accessed via the internet by all research astronomers. As far as possible, the data should be accompanied by appropriate metadata and other information to tools to make them scientifically valuable,
2. That such data should not be subject to intellectual property rights. The form in which data are made available, and the subsequent processing of such data, may be appropriately protected by copyright laws, but their fair usage (including educational purposes) of archived data themselves should not be subjected to restrictions,

3. The funding agencies provide encouragement and support to enable data produced by astronomical research that they fund to be deposited, after some proprietary period as defined above, in recognized data archives which provide unrestricted access to these data.

## RÉSOLUTION B.1.

### ACCÈS PUBLIC AUX DONNÉES ARCHIVÉES ASTRONOMIQUES

L'Assemblée Générale de l'Union Astronomique Internationale

#### Reconnaissant

1. Que les avancées scientifiques reposent sur un accès complet et ouvert aux données.
2. Qu'il est dans l'intérêt général de l'astronomie que les données archivées soient rendues aussi accessibles que possible, et que des technologies existent, via le World Wide Web, pour que cela soit fait de façon peu coûteuse et efficace.
3. Que le développement de l'Observatoire Virtuel rendra possible une utilisation efficace de ces archives, augmentant ainsi l'efficacité et le retour scientifique de la recherche astronomique.

#### Considérant

1. Que l'accès au temps d'observation sur les grands observatoires astronomiques est quelquefois restreint pour des raisons nécessaires et légitimes liées à leur financement ou autres.
2. Qu'après que les données aient été obtenues par un observatoire, l'accès à ces données est souvent, pour des raisons nécessaires et légitimes, restreint pendant une certaine période (la "période propriétaire", en général de un à deux ans), à l'observateur, aux étudiants, aux constructeurs de l'instrument, ou à d'autres groupes identifiés au préalable, de telle sorte que ceux-ci disposent d'une possibilité raisonnable de publier leurs résultats, et ainsi de tirer profit des investissements en temps et en moyens consentis par eux pour ces observations.
3. Que dans de nombreux cas, après la période propriétaire les données sont placées dans une archive où elles sont rendues plus largement accessibles

#### Recommande que

1. les données obtenues par les grands observatoires nationaux ou internationaux financés sur fonds publics soient, après une période propriétaire raisonnable pendant laquelle elles sont réservées aux observateurs ou à d'autres utilisateurs identifiés de l'observatoire, être placées dans une archive où elles seront accessibles via internet à tous les chercheurs en astronomie. Autant que possible, les données doivent être accompagnées des métadonnées appropriées et des informations et des outils nécessaires pour qu'elles soient utilisables pour des objectifs scientifiques

2. ces données ne soient pas soumises aux droits de propriété intellectuelle. La forme dans laquelle ces données sont mises à disposition, et les traitements ultérieurs qu'elles ont subies, peuvent être protégés de façon appropriés par les lois sur le copyright, mais l'usage légitime (y compris pour des objectifs liés à l'éducation) des données archivées elle-mêmes ne doit pas être soumis à restriction.

## RESOLUTION B.2.

### THE VALUE OF ASTRONOMY EDUCATION

#### THE INTERNATIONAL ASTRONOMICAL UNION

##### Considering

1. that scientific and mathematical literacy and workforce trained in science and technology are essential to maintain a healthy population, a sustainable environment and a prosperous economy in any country,
2. that astronomy, when properly taught, nurtures rational, quantitative thinking and understanding of the history and nature of science, as distinct from reproductive learning and pseudo-science,
3. that astronomy has a proven record of attracting young people to an education in science and technology and, on that basis, to careers in space-related and other sciences as well as industry,
4. that the cultural, historical, philosophical and aesthetic values of astronomy help to establish a better understanding between natural science and the arts and humanities,
5. that, nevertheless, in many countries, astronomy is not present in the school curriculum and astronomy teachers are often not adequately trained or supported, but
6. that many scientific and educational societies and government agencies have produced a variety of well-tested, freely-available educational resource material in astronomy at all levels of education,

##### Recommends

1. that educational systems include astronomy as an integral part of the school curriculum at both the elementary (primary) and secondary level, either on its own or as part of another science course.
2. that educational systems and national teachers' unions assist elementary and secondary school teachers to obtain better access to existing and future training resources in astronomy in order to enhance effective teaching and learning in the natural sciences,

3. that the National Representatives in the IAU and in Commission 46 call the attention of their national educational systems to the resources provided by and in astronomy, and
4. hat members of the Union and all other astronomers contribute to the training of the new, scientifically literate generation by assisting local educators at all levels in conveying the excitement of astronomy and of science in general.

### **RESOLUTION B.3.**

“2009 THE YEAR OF ASTRONOMY”

THE INTERNATIONAL ASTRONOMICAL UNION

#### **Recalling**

that the introduction of the telescope in astronomical observations brought about a fundamental revolution in humankind’s perception of the world outside the Earth

#### **Recognizing**

that the series of developments initiated by this event led, in time, not only to the vast and richly detailed view of the Universe and humankind’s place in it which is modern cosmology, but to the entire framework of fact-based empirical investigation and analysis which underlies contemporary science and technology, and

#### **Considering**

that the immediate appeal of astronomy to the imagination of humans in all walks of life remains one of the most powerful ways to kindle the interest of young people everywhere in scientific research and education, and thus to contribute to the progress of the quality of human life,

#### **Recommends**

that the year 2009, the 400th anniversary of Galileo’s accomplishments and the real birth of modern telescopic astronomy, be declared the “Year World of Astronomy”, in which the potential astronomy to enlighten and enrich humans will be brought to the largest possible audience all over the world, and

#### **Requests**

that the Officers and Executive Committee with support from Commission 41 initiate prompt and effective action to organize this important worldwide event, in collaboration with all appropriate national and international organizations.