

## TABLE OF CONTENTS

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Observatory Controller's message .....	1
World Astronomy Days .....	2
IUE Bibliography Index .....	5

## IUE ESA NEWSLETTER

Tel: +34-1-8131100 - Fax: +34-1-8131139 - Telex: 42555 VILSE  
SPAN: VILSPA::IUEOBS - EARN/BITNET: IUEHOT@VILSPA

### OBSERVATORY CONTROLLER'S MESSAGE

Let me start this message expressing the best wishes for all of you in the year 1992 from the full staff of the ESA IUE Observatory at VILSPA. Carmen, the observatory secretary is at the time of writing, struggling with a flood of proposals, which all have to be prepared for the IUEAC meeting early next year. I wish you success with your applications. It is clear that, as usual the IUEAC will not have an easy task.

You may have noticed that the ESA IUE Newsletter has a new cover. It was felt that the start of the 15th year of IUE observing (for those of you who wonder: IUE was launched on 26 January 1978) deserves special recognition. The new cover has been chosen to highlight one of the strong points of the IUE Project: to be able to accommodate even the most demanding science requirements. To illustrate this we have chosen a somewhat complex illustration (see the back of the cover for a detailed explanation). This highlights both the science done with IUE as well as the very strong international astronomical collaborations developed between the important individuals involved with IUE through the use of its scientific capabilities: the Guest Observers. The multi-agency nature (NASA/ESA/SERC) has had very strong influence on the evolution of the IUE Project. More than 50 scientists shared the burden of the observing program on NGC 5548 - "The AGN Watch": the results of this program are summarized on the new cover of the ESA IUE Newsletter.

The current Newsletter is a special issue without the normal reports on the status of the S/C (in good health although the slowly increasing FES background requires somewhat more care in the observation preparation) and ongoing project activities such as Final Archive, EDS replacement and others. It was felt appropriate to mark the start of the 15th year of IUE observing and highlight the science resulting from the IUE scientific program. Therefore the main body of this Newsletter is a complete bibliography of refereed papers using IUE data from 1978 through 1990. The collection of this information was done by our colleagues from GSFC.

I also draw your attention to the information note from Dr. Bonnet, on page 2. This highlights the plans and current status of one of ESA's activities in the context of the International Space Year: the World Astronomy Days (WAD). Anyone who would like to participate in the WADs, either through participation in an already existing program or with a new proposal, is kindly requested to get in touch with me (E-mail related to WAD should be directed to VILSPA::SAFISY).

The reports presented during the bi-annual 3-Agency meeting in GSFC last month showed clearly that the IUE Spacecraft, its Scientific Instruments, and further IUE Project support are still in good shape.

W. Wamsteker

December 1991

### WORLD ASTRONOMY DAYS

In 1992 - in the International Space Year (ISY) - space exploration by mankind will be highlighted in various ways.

Plans of the different Space Agencies have been discussed in the Space Agencies Forum for the ISY (SAFISY). One of the activities accepted by the Panel of Experts of SAFISY is a programme for the simultaneous collection of multi-spectral information of astrophysical sources, which is referred to as the World Astronomy Days. The general objective of the World Astronomy Days is to obtain important astrophysical observations, which - were it not for the ISY - would present insurmountable logistic and other problems associated with the simultaneous scheduling of numerous observatories.

ESA took on the lead role in coordinating the World Astronomy Days and this task is being managed by the ESA's IUE controller in Villafranca.

The World Astronomy Days shall achieve the following aims:

- Use, to a maximum extent, the possibilities available through coordination of the current set ground-based of space-borne and observatories;
- demonstrate that combining facilities is a fundamental requirement for current and future astrophysical studies, and
- show the enormous potential of world-wide international collaboration in astronomy, especially including scientists from the developing countries.

Current plans for World Astronomy Days call for observing periods where all ranges of the electromagnetic spectrum accessible now should be used, with 24-hour coverage to obtain an astrophysically important reference data set. The data set will later be made freely available.

The observatories which have already made a commitment to collaborate in the World Astronomy Days are listed below, and the current list of project leaders is given as well.

If you are interested to participate in the World Astronomy Days, please contact Dr. Willem Wamsteker or - in case you want to contribute directly to one of the projects- the relevant Project Leader with copy to W. Wamsteker (Email VILSPA::SAFISY)

Dr. R.M. Bonnet  
Director  
Scientific Programme

APPENDIX #1

Observatories currently collaborating in the  
WORLD ASTRONOMY DAYS

Space-borne Observatories

ROSAT: Roentgen Observatory Satellite  
HST : Hubble Space Telescope  
IUE : International Ultraviolet Explorer  
UVS : Voyager Ultraviolet Spectrograph  
EUVE : Extreme Ultraviolet Explorer

Agencies

DARA/NASA  
NASA/ESA  
NASA/ESA/SERC  
NASA  
NASA

Ground-based Observatories

		<u>Country</u>
AAO	: Anglo-Australian Observatory .	Australia
ESO	: European Southern Observatory .	Chile
CTIO	: Cerro Tololo Inter Am. Observatory.	Chile
NOAO	: National optical Astronomy Observatoriaes.	USA
DAO	: Dominion Astrophysical Observatory.	Canada
NRAO/VLA	: National Radio Astronomical Observatory.	USA
IAC	: Institutue for Astrophysics. Canary Islands.	Spain
ING	: Isaac Newton Group , La Palma, Can. Isl. UK/Spain	
SAAO	: South African Astronomical Observatory.	S.Africa
IRAM	: Institute for Millimeter Radio Astronomy,	Spain
JCMT	: James Clerk Maxwell Telescope, Hawaii	UK/USA
DODAIRA	: National Astronomical Observatory,	Japan
Palomar	: Palomar Observatories	USA/Chile
McDonald	: McDonald Observatory, Austin, Texas,	USA
Colgate	: Foggy Bottom Observatory, NY.	USA
Haystack	: Haystack Observatory, Westford,	USA
Calar Alto	: MPI for Astronomie. Heidelberg.	RFA
FCRAO	: Five College Radio Observatory. Amhurst MA.	USA
Behlen	: Behlen Observatory. Lincoln. NE.	USA
Bradley	: Bradley Observatory. Decatur. GA.	USA

Institutes

	<u>Data Activity</u>
Inst. for High Energy Astrophysics.	
P.R.CHINA	Balloon Flight
Geneva Observatory. Switzerland	Reduction. Distribution & Analysis
Armagh Observatory. Northern Ireland	Reduction. Distribution & Analysis
Oxford Univ..Dept.of Physics. United Kingdom	Reduction & Analvsis
Univ. Complutense. Dept. of Astrophysics. Spain	Reduction. Analysis & Distribution

## APPENDIX #2

### Project #1: *The nature of the motor in NGC 3783*

#### Project leaders:

1. Prof. B. Peterson, Ohio State. USA
2. Dr. D. Alloin, Obs de Paris, France

122 participating scientists from 18 countries including.  
6 developing countries

Confirmed observatory participation: CTIO, ESO, CASLEO, MMT,  
SAAO, IUE.

Time requirement related to WAD activity: end of July 1992

### Project #2: *Planetary atmospheric reference*

#### Project leaders:

1. Dr. G. Orton, JPL, USA
2. Dr. F. Moreno, IAA, Granada

Time requirement related to WAD activity: February/August 1992

### Project #3: *Astrophysical and cosmological test using Gravitational Lenses*

#### Project leaders:

1. Dr. J. Surdej, Institut d'Astrophysique,  
Belgium
2. to be confirmed

Time requirement related to WAD activity: April/July 1992

### Project #4: *Neutron stars in Massive Binaries*

#### Project Leaders:

1. Prof. J. van Paradijs, Univ. of Amsterdam,  
Netherlands (Dr. M. van Kerkwijk)
2. To be confirmed

Time requirement related to WAD activity: late July 1992.

### Project #5: *Mapping Relativistic Jets Structure*

1. Dr. R. Edelson GSFC-NASA, Greenbelt. USA
2. Dr. W. Wamsteker, IUE-ESA, Madrid. Spain

Time requirement related to WAD activity: April 1992 GSFC

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