IUE OBSERVING ALLOCATIONS

For a purpose quite different from this Newsletter, I have recently collated the statistics of the observing allocations made by the three participating agencies during the first three years of IUE. During an observing trip to VILSPA, the editor persuaded me to present them in this article because he believes they will be of widespread interest. These are listed below in tabular form and although mainly self-explanatory, clarification is needed on a few points. PI stands for Principal Investigator as stated on each accepted proposal, and the numbers given are of different PI's; that is, every individual is only counted once including those fortunate enough to be a PI on more than one programme. Co-I stands for Co-Investigator and the numbers listed of different Co-I's also exclude anyone who has already been counted as a PI. Hence, the sum of these two gives the total number of different astronomers listed on the programme proposals. In the statistics on geographical distribution, 'internal' covers those investigators who are working within the domains of the different agencies — the United States for NASA, ESA member states for ESA, and the UK for SRC.

There are many conclusions, both broad and subtle, that can be drawn from these statistics but I will leave the reader to his or her own analysis and content myself with a few brief comments.

- (1) Although there was a heavy demand for IUE time in response to the first invitation to propose issued well before launch, that demand has increased substantially in the subsequent years. This is shown by the fact that the number of accepted programmes has doubled by the third year and the number of user astronomers has trebled to 603. This has led to a continuing increase in pressure on the three allocating committees who, in many cases, have been forced to reject or give a very reduced allocation to excellent proposals.
- (2) There is a wide dispersion in the average allocations between the three agencies. Whether by programme, PI or astronomer, NASA allocates about four times the number of shifts as does ESA, with SRC in an intermediate position. These numbers reflect a balance between the degree of the excess demand on each agency for the time at its disposal, and the degree to which it is selective and discriminating in its allocations. I do not know to what extent these two factors explain the differences in average allocations, but it is clear that the greatest oversubscription is borne by ESA.
- (3) The data on geographical distribution show that there are now 603 user scientists on IUE drawn from 27 countries rather impressive figures. It is interesting to note that the largest user community is in the ESA member states 334, compared to 190 in the United States, and 79 in all other countries.

The very wide nature of the IUE user community is reflected by the very broad nature of its mission; there is hardly an area of importance to modern astronomy that it has not touched upon. At the time of writing, 149 papers based on IUE have appeared in print in the Astrophysical Journal, Astronomy and Astrophysics, Monthly Notices of the Royal Astronomical Society, or Nature. A further 280 are in print or in press in the proceedings of the three international conferences devoted to its results and held in London, Tübingen, and Washington. Clearly IUE has become an important and indeed essential part of world astronomy.

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IUE OBSERVING STATISTICS

	1st Year					2nd Year				3rd Year			
Programmes Accepted	NASA	ESA	SRC	All Agencies	NASA	ESA	SRC	All Agencies	NASA	ESA	SRC	All Agencies	
Solar System	6	0	3	9	11	2	3	16	13	3	1	17	
Stellar	36	38	20	94	47	72	29	148	73	69	35	177	
Interstellar	9	8	7	24	33	7	14	54	20	24	14	58	
Extragalactic	8	7	11	26	18	25	14	57	20	30	16	6 6	
TOTAL:	59	53	41	153	109	106	57	272	126	126	66	318	
Shifts Allocated	678	134	165	977	612	152	172	936	608	153	162	923	
Different PI's	53	38	22	113	91	94	37	222	9 8	96	42	236	
Different Co-I's	32	47	26	105	91	129	47	267	121	173	73	367	
Total Astronomers	85	85	48	218	182	223	84	489	219	269	115	603	
Max/Programme	16.0	5.5	14.0	16	11.0	4.0	12.0	11	10.0	3.0	9.0	10	
Average/Programme	11.5	2.5	4.0	6.4	5.6	1.4	3.0	3.4	4.8	1.2	2.5	2.9	
Average/PI	12.8	3.5	7.5	8.6	6.7	1.6	4.6	4.2	6.2	1.6	3.9	3.9	
Average/Astronomer	8.0	1.6	3.4	4.5	3.4	0.7	2.0	1.9	2.8	0.6	1.4	1.5	

GEOGRAPHICAL DISTRIBUTION

		1st Year				2	2nd Year				<u>3rd Year</u>		
		NASA	ESA	SRC	All Agenci	NASA	ESA	SRC	All Agenci	NASA	ESA	SRC	All Agenci
PI's:	Internal	44	36	21	101	81	93	31	205	93	96	37	226
	External	9	2	1	12	10	1	6	17	5	0	5	10
Co-I's:	Internal	28	46	23	97	79	124	34	237	97	156	4 5	298
	External	4	1	3	8	12	5	13	30	24	17	28	69
Total A	stronomers:												
	Internal	72	82	44	1 9 8	160	217	65	442	190	252	82	524
	External	13	3	4	20	22	6	19	47	29	17	33	79

The foregoing statistics were collated by R. Wilson (SRC), A. Boggess (NASA), and J. Darius (ESA).

COUNTRY	1978-79			:	1979-80	1980-81			
	NASA	ESA	SRC	NASA	ESA	SRC	NASA	ESA	SRO
Argentina	X	X						X	
Australia	l x	X	X		X	X	χ	X	Х
Austria *		X		X	Х			X	•
Belgium *	}	X			X			X	
Brazil					~			χ	
Canada	x			X		X	X	X	Х
Chile				,	χ	^	^	^	,
Denmark *					X			χ	
Finland					,			^	Х
France *		χ		X	χ	X	χ	χ	Х
Germany *		X		Λ	X	^	^	X	,
India		Х			^	X		X	Х
Iran		^			Χ	^		^	^
Israel				Х	^				
Italy *		Х		Λ	χ		Х	Х	
Japan	Х	Λ.			^		Λ	^	
Mexico	X			Х			χ		Х
Netherlands*+ ESTEC	'n	Х		^	X		*	X	۸
Norway				X					
Poland					χ			Χ	Χ
South Africa						X			
Spain*+ Vilspa		Х		X	X	X	Х	X	Х
Sweden*		Х			Х			Х	
Switzerland*+ ESO		Х			X	X		X	X
UK*	Х	X	Х	Χ	Х	χ	Х	Χ	Χ
USA	Χ	Х	X	Х		χ	X	χ	χ
USSR	X			Х			χ		

The above table includes all investigators, whether co-or principal. Note that international organisations have been collocated according to their host country. Thus ESO astronomers are assigned to Switzerland (although as of September 1980 they will have transferred to Germany). An asterisk signifies membership in ESA; the twelfth member, Ireland (Eire), is not listed.