National Aeronautics and
Space Administration

Goddard Space Flight Center
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NASA

Reply to Attn of: 602

November 7, 1980

TO: Distribution

FROM: 602/Data Manager
Orbiting Satellites Project/Science

SUBJECT: Revision to IUE 3-Agency Information Interchange Document

As was bound to happen eventually, changes to the content and format of some of the IUE observatory data items covered by the above document were recently made without the benefit of the formal change procedures. These changes concern the catalogue source, object ID and luminosity class, and the printed format of NASA and merged logs.

These changes were made in order to improve the usefulness of the affected item and we hope that they will be accepted without the need for negotiation. However, if there are any comments which need to be considered, please let me know. I will then revert to the approved procedure of negotiations.

The subject revisions are as follows:

a. Catalogue source and object ID format changes were made on September 1, 1980, at the request of the NSSDC, IUE Science Operation, and the IUE Observatory Administrator, in order to allow unique identification of targets in a standardized format. The change created a separate 1-byte field in the IUE database to contain a coded catalogue source, which in turn enabled the object number/name to utilize a full 8-byte field. Formerly, the catalogue source occupied the first byte of the 8-byte object ID field. The coding convention for the catalogue source and the standard object number/name format are given in Tables 1 and 2. Physical conversion of all entries to these new standards is underway.

b. Luminosity class coding was changed in the database approximately October 1, 1980, utilizing the conventions listed in Table 3.

c. Tapes affected by these changes are the IUESOC archival tape information tape (Appendix D), and the GSFC Observatory Log and Merged Log tape (Appendix J).

d. Printouts affected by these changes are the IUESOC archive tape information listing (Appendix E, parts 1 and 2; Appendix F). Note that in these listings the station ID has also been added at the request of NSSDC.

e. The printed listings of the GSFC IUE Observatory Logs and Merged Log (Appendix K) were modified on November 1, 1980, at the request of IUE Science Operations, to provide a more useful display of the data. The spectral tape and luninosity class (in decoded form) has been added, and the order of appearance and format of several other entries were changed.

Replacement copies of the affected appendices (D, E part 1, E part 2, F, J, and K) are enclosed herewith.

Gilbert D. Bullock

Enclosure

Distribution: M. Sandford/Appleton Lab.(5)
M. Penston/Villafranca Tracking Station (10)
P. Corrigan/GSFC/602
I. Mason/GSFC/602
D. Went/GSFC/685 (10)

TABLE 1

Catalog Source

The preferred catalog source is the HD.

Y - Bright Star Catalog
1 - BD
2 - CD
3 - CPD
G - Boss General Catalog
H - HD catalog
N - NGC
P - PG numbers
K - Parkes catalog numbers
Q - other extragalactic sources with designations of the form HHMM=DDM, e.g. Burbidge catalog of quasars
S - SAO catalog numbers
X - X-ray sources with designations of the form HHMM=DDM, e.g. 2A, MXB, 4 U numbers
O - other designations as chosen by the observer, e.g., RHO CAS, AR PAV, 3C120

TABLE 2

Object Number/Name

Eight alpha-numeric characters.

A	IDENT	
Y	OOOOXXXX	XXXX is the Bright Star Catalog number
1	± XXYYYY	BD number
2	XX YYYYY	CD number
3	XX YYYYY	CPD number
		X = declination zone
		Y = star number
G	OOOXXXXX	XXXXX is the GC number
H	OOXXXXXX	XXXXXX is the HD number
N	OOOOXXXX	XXXX is the NGC number
P	XXXX±YYY	XXXX is the RA portion of the designation in the form HHMM
K	XXXX±YYY	
Q	XXXX±YYY	YYY is the Dec portion of the designation in the form DDM
X	XXXX±YYY	
S	OOXXXXXX	XXXXXX is the SAO number
O	XXXXXXXX	XXXXXXXX is specified by the observer

TABLE 3

Luminosity Class

A single digit from 1 to 9 follows:

Class	L
Ib	1
II	2
III	3
IV	4
V	5
SD	6
WD	7
Ia	8
Iab	9

If not specified, a default value of 5 will be assumed.

APPENDIX D

IUESOC ARCHIVAL TAPE INFORMATION TAPE FORMAT

FIELD	LENGTH
IMAGE SEQUENCE NO.	6
PROGRAM ID	5
CATALOGUE SOURCE	1
OBJECT ID	8
RIGHT ASCENSION	
HOUR	2
MINUTE	2
SECOND	2
TENTH	1
DECLINATION	
SIGN	1
DEGREE	2
MINUTE	2
SECOND	2
PHOTOWRITE TAPE FILE	11
GO TAPE FILE	11
RELEASE DATE	5
PHOTOWRITE TO NSSDC	5
GO ARCHIVAL TAPE	11
SORT CODE	1

APPENDIX E

IUESOC ARCHIVAL TAPE INFORMATION LISTING FORMAT

ORDERED BY IMAGE SEQUENCE NUMBER

PART 1

Since this list is provided as a computer printout, information is listed by column position only.

Column	Information
1	Camera and image sequence number
2	Catalog source
3	Object identification
4	Station ID
5	Target position in right ascension (equinox 1950)
6	Target position in declination (equinox 1950)
7	Program identification (5-character code)
8	Image release date in form YR/DAY
9	Photowrite tape identification and files containing image
10	Photowrite delivery date to NSSDC in form YR/DAY
11	Archive tape identification and files containing image
12	Archive tape delivery date to NSSDC in form YR/DAY
13	Sort codes for image description in special cases of reprocessing, raw image only supplied, etc.

APPENDIX E
IUESOC ARCHIVAL TAPE INFORMATION LISTING FORMAT
ORDERED BY IMAGE SEQUENCE NUMBER
PART 2

IMAGE SEQ NUM	CAT SEC	OBJECT ID	ST ID	TARGET RA HR MN SC	TARGET DEC DEG MN SC	PROG ID	RELEASE DATE YR/DA	PRIOR/RITE TAPE FILE	DEL TO NSSDC YR/DAY	GO TAPE	ARCH FILE	DEL TO NSSDC YR/DAY	SORT CODE
SWP 1591HD		93131	G	10 41 56.	-59 51	OSPSC	80/343	BW1195K/ 2- 4	80/151	BW1156C/ 8-10		80/038	1 111
LWR 1595	* UPS SGR		G	19 18 52.	-16 02	MP2YK	80/288	BT4191C/ 2- 4	80/116	BT4191A/ 2- 4		80/088	1 11
SWP 1595HD		164796	G	18 00 48.	-24 22	OSPSC	80/343	BW1195K/ 5- 7	80/151	BW1156C/11-13		80/038	1 111
LWR 1596	* AC CAS		G	00 15 03.	51 09 19	MP2YK	79/080	QK8059E/02-04	79/229	PJ2580D/01-03		79/030	1
SWP 1596HD		164794	G	18 00 48.	-24 22	OSPSC	80/214	QK6844D/01-04	79/271	QK6849E/06-13		79/011	1D
SWP 1596HD		164794	G	18 00 48.	-24 22	OSPSC	80/214	QK6844D/01-04	79/271	QK6849E/06-13		79/011	2
LWR 1597HD		5679	G	00 57 49.	01 36 24	MP2YK	79/003	QK8097J/08-10	79/229	QK8067K/21-25		79/039	1
SWP 1597HD		5980	G	00 57 52.	-72 26	OSPSC	80/214	SC1610F/ 8-10	80/242	QK0005D/01-08		79/011	1D
SWP 1597HD		5980	G	00 57 52.	-72 26	OSPSC	80/214	SC1610F/ 8-10	80/242	QK0005D/01-08		79/011	2
LWR 1598	* BET LYR		G	18 48 11.	33 18 12	MP2YK	79/080	QK8059E/05-07	79/229	PJ2580D/04-06		79/030	1
SWP 1598HD		5980	G	00 57 52.	-72 26	OSPSC	80/214	QK6850H/09-11	79/229	QK6849F/01-05		79/011	1
LWR 1599	* BET LYR		G	18 48 11.	33 18 12	MP2YK	79/080	QK8092C/07-09	79/159	PJ2514B/13-15		79/030	1
LWR 1600	* UW CMA		G	07 16 35.	-24 27 58	MP2YK	79/080	QK8092C/10-12	79/159	PJ2514B/16-18		79/030	1
LWR 1601	* UW CMA		G	07 16 35.	-24 27 58	MP2YK	79/080	QK8092C/13-14	79/159	PJ2514B/19-21		79/030	1
SWP 1601HD		188001	G	19 50 07.	18 32	OSPSC	80/353	BW2383I/ 2- 4	80/179	BW3679E/17-19		80/116	1 111
LWR 1602	* UW CMA		G	07 16 35.	-24 27 58	MP2YK	80/141	BK7675C/ 8-10	79/334	BK7698K/ 5- 7		79/334	1 11
SWP 1602HD		188001	G	19 50 07.	18 32	OSPSC	80/214	QK6888D/03-08	79/299	QK0005E/17-24		79/011	1D
SWP 1602HD		188001	G	19 50 07.	18 32	OSPSC	80/214	QK6888D/03-08	79/299	QK0005D/17-24		79/011	2
SWP 1603HD		151932	G	16 48 48.	-41 46	OSPSC	80/353	BW2383I/ 5- 7	80/179	BW3679F/20-22		80/116	1 111
SWP 1604HD		151932	G	16 48 48.	-41 46	OSPSC	80/214	QK6844D/05-09	79/271	QK6849E/14-18		79/011	1
LWR 1606NGC		6572	G	18 09 40.	06 50 25	PN2AB	79/319	QK8091E/01-03	79/229	QK8087C/01-05		79/017	1
LWR 1607NGC		6818	G	19 41 06.	-14 16	PN2AB	79/005	QK8051F/09-12	79/159	QK8067K/11-15		79/039	1
LWR 1608NGC		6818	G	19 41 06.	-14 16	PN2AB	79/018	QK8097J/01-04	79/229	QK8001H/06-10		79/017	1
LWR 1609NGC		7009	G	21 01 30.	-11 34	PN2AB	79/019	QK8013K/06-08	79/271	QK8001H/01-05		79/017	1
SWP 1609	* ETA UMA		G	13 46 34.	49 33 44	PHCAL	80/091	BI9152A/ 5- 7	79/271	BI9173D/18-20		79/299	1
LWR 1610NGC		6790	G	19 20 42.	01 25	PN2AB	79/017	QK8013K/04-05	79/159	BK7696D/29-29		79/334	1 C11
LWR 1610NGC		6790	G	19 20 42.	01 25	PN2AB	79/017	QK8013K/04-05	79/159	BK7696D/29-29		79/334	1 C11
SWP 1610	* NULL		G	.		PHCAL	81/019	SA9328A/10-11	80/207	SA9361J/ 4- 5		80/207	1 22
SWP 1611	* NULL		G	.		PHCAL	81/019	SA9328A/12-13	80/207	SA9361J/ 6- 7		80/207	1 22

APPENDIX F
IUESOC ARCHIVAL TAPE INFORMATION LISTING FORMAT
ORDERED BY TAPE AND DELIVERY DATE

IMAGE SEQ NUM	SICAT	TESEC	OBJECT ID	TARGET RA HR MN SC	TARGET DEC DG MN SC	PROG ID	RELEASE DATE YR/DA	PHOTOSITE TAPE FILE	DEL TO MSSDC YR/DAY	GC TAPE	ARCH FILE	DEL TO MSSDC YR/DAY	SORT CODE
LWP 6342	G	*	H 60778	07 33 38.1	-00 01 29	GCBAC	80/227	FM3834P/ 6-10	80/060	BKB323B/	26-28	79/362	2
SWP 7351	G	*	H 60778	07 33 38.1	-00 01 28	GCBAC	80/227	FM3834P/11-13	80/060	BKB323B/	29-33	79/362	2
SWP 7351	G	*	H 60778	07 33 38.1	-00 01 28	GCBAC	80/227	FM3834P/11-13	80/060	BKB323B/	34-36	79/362	1D
LWP 6343	G	*	N0000224	00 59 00.5	+40 59 42	PIBGW	80/266	FM3871P/ 2- 4	80/068	BKB323B/	37-41	79/362	2
LWP 6343	G	*	N0000224	00 40 00.5	+40 59 42	PIBGW	80/266	FM3871P/ 2- 4	80/068	BKB323B/	42-44	79/362	1D
LWP 1567	G		NGVSGR78	20 17 59.0	-14 03 06	GDPAB	80/175	BKB369G/ 2- 4	79/229	BKB368B/	2- 6	79/362	1 11
SWP 6164	G		MRK 6164	11 01 40.5	+38 28 43	XGBYX	80/174	BKB396A/ 2- 4	79/362	BKB373D/	2- 6	79/362	1
FES 1186	G		MRK 421	11 01 40.5	+38 28 43	XGBYX	80/161	/ -	/	BKB373D/	7- 7	79/362	1
SWP 7164	G	*	MARK0421	11 01 40.5	+38 28 43	XGBYX	80/174	FK8396A/ 5- 7	79/362	BKB373D/	8-12	79/362	1
FES 1187	G		MRK 421	19 18 51.8	-16 03 01	XGBYX	80/161	/ -	/	BKB373D/	13-13	79/362	1
SWP 7165	G	*	UBS 552	19 18 51.8	-16 03 01	GPBIM	80/174	BKB396A/ 8-10	79/362	BKB373D/	14-16	79/362	1
SWP 7173	G PG		0108+101	01 08 29.3	+10 5 38	PMBEG	80/174	FK8396A/11-13	79/362	BKB373D/	17-21	79/362	1
LWP 6173	G PG		0108+101	01 08 29.3	+10 5 38	PMBEG	80/177	FM0193J/ 2- 4	79/362	BKB373D/	22-26	79/362	1
SWP 7174	G PG		0108+101	01 09 45.4	+11 7 38	PMBEG	80/177	FM0193J/ 5- 7	79/362	BKB373D/	27-31	79/362	1
LWP 6174	G PG		0108+101	01 09 45.4	+11 7 38	PMBPG	80/177	FM0193J/ 8-10	79/362	BKB373D/	32-36	79/362	1
SWP 7175	G PG		0237+116	02 37 24.0	+11 35 36	PMBPG	80/178	FM0193J/11-13	79/362	BKB373D/	37-41	79/362	1
LWP 6175	G PG		0237+116	02 37 24.0	+11 35 36	PMBPG	80/174	FM0194B/ 2- 4	79/362	BKB373D/	42-46	79/362	1
SWP 2400	G HD		60753	07 32 08.	-59 28 29	PMCAL	79/277	BKB379C/ 8-10	79/362	BKB792J/	10-14	79/362	1D 11
SWP 2401	G HE		60751	07 32 08.	-59 28 29	PMCAL	79/277	FM8792C/ 8-10	79/362	BKB792J/	15-17	79/362	2 11
LWR 2154	G HD		60753	07 32 08.	-59 28 29	PMCAL	80/188	BKB378C/ 2- 4	79/069	BKB792J/	26-30	79/362	2 11
LWR 2199	G HE		60753	07 32 08.	-59 28 29	PMCAL	80/188	BKB378C/ 2- 4	79/069	BKB792J/	31-35	79/362	1D 11
SWP 1621	G	*	ALF BYI	01 57 11.	-61 48 45	AFBBV	80/214	QF6824A/07-11	80/207	BM0123E/	3- 6	79/362	1D
SWP 1621	G	*	ALF BYI	01 57 11.	-61 48 45	AFBBV	80/214	QK8027B/ 1-	80/207	BM0123E/	7- 9	79/362	2
SWP 7190	G PG		1159-035	11 59 12.2	-03 28 56	PMBPG	80/177	FM0165J/10-13	79/362	BM0123E/	10-14	79/362	1
LWP 6193	G PG		1159-035	11 59 12.2	-03 28 56	PMBPG	80/177	FM0153D/ 2- 4	79/362	BM0123E/	15-19	79/362	1
SWP 7191	G	*	1700+687	17 07 14.0	+68 44 44	PMBPG	80/269	FM0153D/ 5- 7	80/008	BM0123E/	20-24	79/362	1
LWP 6194	G PG		1159-035	17 07 14.0	+68 44 44	PMBPG	80/269	FM0153D/ 8-10	80/036	BM0123E/	25-29	79/362	1
SWP 7192	G PG		1210+511	12 10 55.5	+51 20 38	PMBPG	80/177	FM0153D/11-13	79/362	BM0123E/	30-34	79/362	1
LWP 6195	G PG		1210+511	12 10 55.5	+51 20 38	PMBPG	80/237	FM1543D/ 2- 4	80/060	BM0123E/	35-39	79/362	1
LWR 6188	G	*	G0609311	07 01 08.7	+20 38 43	DCPDD	80/175	BM0139A/ 2- 4	79/362	BM0139E/	3- 6	79/362	1D
LWP 6188	G	*	G0609311	07 01 08.7	+20 38 43	DCPDD	80/175	BM0139A/ 2- 4	79/362	BM0139E/	7- 9	79/362	2
SWP 7186	G	*	G0609311	07 01 08.7	+20 38 43	DCPDD	80/175	BM0139A/ 5- 7	79/362	BM0139E/	10-14	79/362	1
LWP 6189	G	*	G0038291	06 22 31.1	+ 7 6 54	DCPDD	80/175	FM0139A/ 8-10	79/362	BM0139E/	15-19	79/362	1D
LWP 6189	G	*	G0038291	06 22 31.1	+ 7 6 54	DCPDD	80/175	BM0139A/ 8-10	79/362	BM0139E/	20-22	79/362	2
SWP 7187	G	*	G0038291	06 22 31.1	+ 7 6 54	DCPDD	80/175	BM0139A/11-13	79/362	BM0139E/	23-27	79/362	1
LWP 6190	G	*	G0008371	06 25 21.3	+30 31 33	DCPDD	80/177	BM0155K/ 2- 4	79/362	BM0139E/	28-32	79/362	1D
LWR 6190	G	*	G0008371	06 25 21.3	+30 31 33	DCPDD	80/177	BM0155K/ 2- 4	79/362	BM0139E/	33-35	79/362	2
SWP 7188	G	*	G0008371	06 25 21.3	+30 31 33	DCPDD	80/178	BM0155K/ 5- 7	79/362	BM0139E/	36-40	79/362	1
LWR 6191	G	*	G0009311	07 01 08.7	+20 38 43	DCPDD	80/177	FM0155K/ 8-10	79/362	BM0139E/	41-45	79/362	1
LWR 6267	G	*	S0125159	19 49 59.5	+00 52 33	DCPDS	80/233	BM0155C/ 2- 4	80/060	BM0152E/	3- 6	79/362	1
LWP 6268	G	*	S0249311	05 33 11.3	-62 37 20	DCPDS	80/233	BM0155C/ 5- 7	80/060	BM0152E/	7- 7	79/362	1
LWP 6269	G	*	S0073031	07 01 08.6	+20 38 43	DCPDS	80/234	BM0155C/ 8-10	80/060	BM0152E/	8-10	79/362	1
SWP 7271	G	*	S0073031	07 01 08.6	+20 38 43	DCPDS	80/233	BM0155C/11-13	80/060	BM0152E/	11-13	79/362	1
LWP 6250	G	*	B+371977	09 21 00.0	36 56 0	HBDAK	80/218	FM3845J/ 2- 4	80/025	BM0152E/	14-16	79/362	1
SWP 7287	G	*	+43 44	09 21 00.0	36 56 0	HBDAK	80/218	FM3845J/ 5- 7	80/025	BM0152E/	21-25	79/362	1
LWP 6251	G	*	B+371977	09 21 00.0	36 56 0	HBDAK	80/218	FM3845J/ 8-10	80/025	BM0152E/	26-28	79/362	1
SWP 7248	G	*	B+371977	09 21 00.0	36 56 0	HBDAK	80/218	FM3845J/11-13	80/025	BM0152E/	29-31	79/362	1
LWP 6252	G	*	H0030361	04 45 17.0	+43 11 8	HBDAK	80/219	FM3852C/ 2- 4	80/060	BM0152E/	32-36	79/362	1
SWP 7249	G	*	H0030361	04 45 17.0	+43 11 8	HBDAK	80/219	FM3852C/ 5- 7	80/025	BM0152E/	37-41	79/362	1
SWP 3777	G HD		60283	08 07 57.	-37 12	CBZJS	79/283	BM0160C/ 5- 7	79/304	BM0160E/	3- 7	79/362	1 11
LWP 5110	G	*	H0117970	13 31 29.0	-25 7 19	CBZJS	80/160	FM0160C/08-10	79/306	BM0160E/	8-12	79/362	1 11

APPENDIX J

GSFC OBSERVATORY LOG AND MERGED LOG TAPE FORMAT

Note that in the merged log, bytes 21 through 25 (*) and bytes 107 through 251 (**) are blank for VILSPA image entries.

	FIELD	LENGTH	BEGIN	END
	DATE			
	YEAR	2	1	2
	DAY	3	3	5
	MONTH	2	6	7
	MINUTE	2	8	9
	CAMERA	3	10	12
	IMAGE SEQUENCE NO.	6	13	18
	APERTURE	1	19	19
	DISPERSION	1	20	20
(*)	SORT CODE	6	21	26
	PROGRAM ID	5	27	31
	OBJECT ID	8	32	39
	RIGHT ASCENSION			
	HOUR	2	40	41
	MINUTE	2	42	43
	SECOND	2	44	45
	TENTH	1	46	46
	DECLINATION			
	SIGN	1	47	47
	DEGREE	2	48	49
	MINUTE	2	50	51
	SECOND	2	52	53
	VISUAL MAGNITUDE	5	54	58
	SPECTRAL TYPE	4	59	62
	LUMINOSITY CLASS	2	63	64
	OBJECT CLASS	2	65	66
	B-V E(B-V)	5	67	71
	LARGE APERTURE	1	72	72
	EXPOSURE TIME			
	MINUTE	3	73	75
	SECOND	2	76	77
	STATION ID	1	78	78
	COMMENTS	20	79	98
	G.O. NAME	8	99	106
(**)	SIGMA-9 DAY PROC	5	107	111
(**)	360 DAY PROC	5	112	116
(**)	SOC TAPE FILE	7	117	123
(**)	YR/DAY	5	124	128
(**)	RECEIPT	1	129	129
(**)	TO GLENDALE	5	130	134
(**)	PHOTOWRITE TAPE/FILE	11	135	145
(**)	YR/DAY	5	146	150
(**)	RECEIPT	1	151	151
(**)	CALCOMP TAPE FILE	11	152	162
(**)	YR/DAY	5	163	167
(**)	RECEIPT	1	168	168
(**)	GO TAPE/FILE	11	169	179
(**)	YR/DAY	5	180	184
(**)	RECEIPT	1	185	185
(**)	SPECTRA COMPLETE	5	186	190
(**)	RELEASE DATE	5	191	195
(**)	FINAL SHIP DATE	5	196	200
(**)	PHOTWRITE TO NSSDC	5	201	205
(**)	GO ARCHIVAL TAPE	11	206	216
(**)	YR/DAY	5	217	221
(**)	TO NSSDC	5	222	226
(**)	NSSDC INFORMATION	20	227	246
(**)	SEQUENTIAL NUMBER	5	247	251
(**)	CATALOG SOURCE	1	252	252

APPENDIX K

GSFC OBSERVATORY LOG PRINTOUT FORMAT

AND

MERGED LOG PRINTOUT FORMAT