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Updated Table of IUESIPS Configuration Entries

The configuration entries describe the modifications made to the IUE Spectral Image Processing System (IUESIPS) software which in some way affect the files contained on the Guest Observer tapes. Detailed descriptions of these changes are contained in references 1 - 3. To assist users in determining which modifications are relevant to their own data, the Regional Data Analysis Facilities (RDAFs) have available an online table of configuration entries which can be accessed by various sorting routines. A description of the RDAF table of configuration entries (called HISTORY.TXT) is given below.

**HISTORY.TXT Format:**

Each configuration entry is allotted at least four lines in the HISTORY.TXT file. These lines contain the configuration number, a description of the entry, a sorting key to determine what type of images were affected by the modifications, and the start and end dates at both Goddard and VILSPA for the time in which processed images were affected by the software configuration.

**Configuration Entry Number:**

The configuration entry number appears in columns 1-5 of each of the 4 lines and describes the chronological order in which the configurations ended at Goddard. Entry numbers are either integer or real numbers (with at most one significant digit past the decimal point) between 1 and 124. Numbers ending in .7, .8 or .9 are special cases that are used to allow additional sorting information to be included in the table. For example, configuration number 87 (data missing from last spectral order) affected LWR and SWP images processed (at Goddard) between 11-10-81 and 5-5-82 but affected LWP images processed between 1-7-82 and 5-5-82. The additional LWP information was therefore listed under the special configuration number 87.7. The few entries with fractions less than .6 are unique configurations, and as such, are listed separately in the references cited below.

**Description Line:**

The first line (of the four used for each configuration entry) is a brief description of the IUESIPS modification. Because the description was limited to one line, it is necessarily brief and only meant as a rough guide for the user.

**Application Line:**

The line immediately following the description line contains 6 fields for describing the class or type of data affected by the modification. Only the

first five fields are currently defined and these are described in Table 1 below. The fields start in column 6, are each 1 character long, and are separated by a blank.

**Goddard Start and End Dates:**

The third line is reserved for the start and end date describing when the particular software configuration affected production image processing at GSFC. The start date always precedes the end date and the following format is used: two numbers for the day of the month, space, three letters for the month, space, and two numbers for the year (e.g. 01 feb 84). Blank entries for both the start and end date imply that the configuration entry did not affect any images processed at Goddard. The remainder of this line (starting in column 26) is reserved for an estimate of the percentage of images processed at Goddard which were affected by the configuration. These entries were generally included only when it was known that a small number of images were affected. Table 2 below lists the configuration numbers according to the year in which the configuration entries were closed.

**VILSPA Start and End Dates:**

The fourth line describes the start and end dates for when the particular configuration affected images processed at VILSPA. The information is in the same format as described for line 3. Blank entries for VILSPA dates can either mean that the entry is not relevant to images processed at VILSPA, or that VILSPA has not yet sent us this information. In cases where we know only the starting date, we have set the end date arbitrarily to 1-1-90. (It should be noted that the RDAF sorting routine ASSESS will not list out entries for which the appropriate start and end dates are blank.)

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Table 1. Key to Application Line Fields

FIELD TITLE	1 CAMERA	2 DISPERSION	3 EXTRACTION	4 REGISTRATION	5 PROCESSING
	0 - all	0 - both/na	0 - all/na	0 - all/na	0 - all/na
	1 - LWP	H - high	S - small ap.	A - automatic	C - current or
	2 - LWR	L - low	L - large ap.	M - manual	standard cal.
	3 - SWP		E - extended		S - special
	4 - LWP & SWP		or trailed		calibration
	5 - LWR & SWP		P - pt. source		L - label or
	6 - LWP & LWR		R - raw image		record 0 only
			F - PI, GPI, GI		X - effect is
			or reseau file		insignificant

(na = not appropriate)

Examples:

- 4 H R 0 L 0 implies that the particular configuration entry affects LWP & SWP high dispersion raw image files. The registration method is not appropriate (na) and only the label or record 0 data is affected. (The last 0 has no current definition.)
- 5 H 0 0 C 0 implies the entry affects LWR & SWP low dispersion images, the extraction and registration method is not appropriate, and it is applicable to all images processed with the current (i.e. standard) calibration techniques.
- 0 H 0 0 X 0 implies that all high dispersion images are affected; however, the effect is considered insignificant.

Table 2. Processing Years in which Configurations Ended

Year of Processing	Configuration Numbers	
	Goddard Processing	VILSPA Processing (approximate)*
1978	1 - 33	1 - 31
1979	34 - 49	32 - 50
1980	50 - 64	51 - 59, 41, 74
1981	65 - 85	60 - 76, 45, 46, 49
1982	86 - 98	77 - 98, 67, 73
1983	99 - 111	100 - 103, 106, 109
1984	112 - 124	104 - 123
1985	?	124 - ?

\* VILSPA entries with uncertain end dates: 61, 72, 85, & 110

Examples:

An image processed at Goddard in 1981 would not be affected by configuration entries 1 through 64.

An image processed at VILSPA in 1983 would not be affected by entries 1 through 98 (although entries > 99 may be relevant).

References:

- 1) Turnrose, B.E., and Harvel, C.A., "Techniques of Reduction of IUE Data: Time History of IUESIPS Configurations," NASA IUE Newsletter, February 1982, No. 16 (contains configuration entries 1 - 71)
- 2) Turnrose, B.E., Thompson, R.W., and Gass, J.E., "Techniques of Reduction of IUE Data: Time History of IUESIPS Configurations," NASA IUE Newsletter, September 1984, No. 25 (contains entries 1 - 111 with updates to some of those previously published)
- 3) Gass, J.E., and Thompson, R.W., "Techniques of Reduction of IUE Data: Time History of IUESIPS Configurations - 1984 Supplement," NASA IUE Newsletter, December 1985, No. 28 (contains entries 112 - 124)

## IUESIPS Configuration Entries

01 Background spectrum smoothed improperly at ends of orders  
01 0 0 0 0 0 0  
01 03 apr 78 20 apr 78  
01 17 apr 78 14 jun 78  
02 Extracted SWP spectrum limited to 1000-1900 angstroms  
02 3 L 0 0 0 0  
02 03 apr 78 20 apr 78  
02  
03 Extracted spectra contain erroneous negative fluxes  
03 0 0 0 0 0 0  
03 03 apr 78 26 apr 78 20%  
03 17 apr 78 14 jun 78 20%  
04 Region of image processed included target ring  
04 0 0 0 0 0 0  
04 03 apr 78 27 apr 78  
04 17 apr 78 14 jun 78  
05 Wavelength regions where orders overlap were deleted  
05 0 H 0 0 0 0  
05 03 apr 78 08 may 78  
05 17 apr 78 14 jun 78  
06 Echelle ripple correction applied to whole order  
06 0 H 0 0 0 0  
06 03 apr 78 11 may 78  
06 17 apr 78 14 jun 78  
07 VICAR label lists dispersion constants incorrectly  
07 0 0 0 0 L 0  
07 03 apr 78 11 may 78  
07 17 apr 78 14 jun 78  
08 VICAR label does not list processing date  
08 0 0 0 0 L 0  
08 03 apr 78 18 may 78  
08 17 apr 78 14 jun 78  
09 Extraction slit not centered on order (1-pixel error in OBSCRIBE)  
09 0 0 0 0 0 0  
09 03 apr 78 18 may 78  
09 17 apr 78 14 jun 78  
10 Dispersion constants derived by WAVECAL slightly inaccurate  
10 0 0 0 0 0 0  
10 03 apr 78 21 may 78  
10 17 apr 78 14 jun 78  
11 ITF based on single image at each exposure level  
11 5 0 0 0 0 0  
11 03 apr 78 22 may 78  
11 17 apr 78 14 jun 78  
12 Whole image shifted to register orders  
12 0 0 0 0 0 0  
12 03 apr 78 22 may 78  
12 17 apr 78 14 jun 78

13 Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)  
 13 0 L 0 0 0 0  
 13 03 apr 78 22 may 78  
 13 17 apr 78 14 jun 78  
 14 Some error flags for reseaux and sat. pixels displaced by 14 data-pts  
 14 0 0 0 0 0 0  
 14 03 apr 78 01 jun 78  
 14 17 apr 78 01 feb 79  
 14.1 March 1978 reseau grid and disp. constants applied  
 14.1 0 0 0 0 0 0  
 14.1  
 14.1 17 apr 78 14 jun 78  
 14.2 Assigned wavelengths approximately 0.7 Angstroms too short  
 14.2 2 H 0 0 0 0  
 14.2  
 14.2 17 apr 78 15 jun 78  
 15 Data quality flag does not distinguish gross & bkgnd reseaux  
 15 0 L 0 0 0 0  
 15 22 may 78 16 jun 78  
 15 17 apr 78 01 feb 79  
 16 Geometric correction based on erroneous reseau grid  
 16 3 H 0 0 0 0  
 16 03 apr 78 09 jun 78  
 16 17 apr 78 01 feb 79  
 16.7 Geometric correction based on erroneous reseau grid  
 16.7 2 H 0 0 0 0  
 16.7 03 apr 78 01 jul 78  
 16.7 17 apr 78 01 feb 79  
 17 Echelle ripple correction used non-optimal parameters  
 17 2 H 0 0 0 0  
 17 03 apr 78 07 jul 78  
 17 17 apr 78 14 jun 78  
 18 All spectra extracted with HT=9, DISTANCE=8.0  
 18 0 L L 0 0 0  
 18 22 may 78 01 aug 78  
 18  
 19 Header record may record image sequence no. as 0  
 19 0 0 0 0 L 0  
 19 03 apr 78 08 aug 78 20%  
 19 17 apr 78 01 feb 79  
 20 Preliminary line library used for WAVECAL  
 20 2 L 0 0 X 0  
 20 03 apr 78 11 aug 78  
 20 17 apr 78 01 feb 79  
 21 Incorrect offsets from small to large aperture  
 21 2 L L 0 0 0  
 21 03 apr 78 30 aug 78  
 21 17 apr 78 01 feb 79  
 21.7 Incorrect offsets from small to large aperture (-50 km/s error) \*\*  
 21.7 2 H L 0 0 0  
 21.7 03 apr 78 31 aug 78  
 21.7 17 apr 78 01 feb 79

21.1 Wavelength Scale is in error- correction: wave=-20 +1.0158\*wave  
 21.1 3 L 0 0 0 0  
 21.1  
 21.1 15 jun 78 07 sep 78  
 22 Registration of spectral orders done manually  
 22 0 0 0 0 0 0  
 22 03 apr 78 10 sep 78  
 22 17 apr 78 01 feb 79  
 23 Header record may list the camera number incorrectly <e.g 13, 23>  
 23 0 0 0 0 L 0  
 23 02 sep 78 20 sep 78  
 23 06 nov 78 01 feb 79  
 24 Preliminary line library used for WAVECAL  
 24 3 L 0 0 0 0  
 24 03 apr 78 21 sep 78  
 24 17 apr 78 01 feb 79  
 25 Point source (HT=9) spectra extracted with DISTANCE=8 (too small)  
 25 0 L L 0 0 0  
 25 03 apr 78 25 sep 78  
 25 17 apr 78 01 feb 79  
 26 Wavelength coverage restricted by preliminary version of FICOR5  
 26 0 0 0 0 0 0  
 26 02 oct 78 06 oct 78  
 26  
 27 Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas  
 27 0 0 0 A 0 0  
 27 10 sep 78 25 oct 78  
 27  
 28 Vacuum-to-air correction not applied to single-aperture spectra  
 28 2 L 0 0 0 0  
 28 04 nov 78 15 nov 78  
 28  
 29 Entire image photometrically corrected by FICOR  
 29 3 H F 0 0 0  
 29 03 apr 78 10 dec 78  
 29 17 apr 78 07 mar 79  
 30 Entire image photometrically corrected by FICOR  
 30 0 L F 0 0 0  
 30 03 apr 78 13 dec 78  
 30 17 apr 78 07 mar 79  
 31 VICAR label doesn't list extraction OMEGA(90),HBACK(5), DISTANCE(?)  
 31 0 L 0 0 L 0  
 31 22 may 78 13 dec 78  
 31 14 jun 78 05 jun 78  
 32 VICAR label doesn't list information on automatic registration  
 32 0 0 0 A L 0  
 32 10 sep 78 13 dec 78  
 32  
 33 Spectrum contains order 65 (at very edge of tube)  
 33 3 H 0 0 0 0  
 33 03 apr 78 19 dec 78  
 33 17 apr 78 14 feb 79

34 Entire image photometrically corrected  
34 2 H F 0 0 0  
34 03 apr 78 04 jan 79  
34 17 apr 78 07 mar 79  
34.1 Geometric/wavelength processing used GSFC 23-May-78 calib. files  
34.1 0 0 0 0 0 0  
34.1  
34.1 15 jun 78 01 feb 79  
34.2 Geometric/wavelength processing used GSFC 08-Aug-78 calib files  
34.2 3 L 0 0 0 0  
34.2  
34.2 07 sep 78 01 feb 79  
35 G.O. tape written incorrectly -- all known images reprocessed  
35 0 L 0 0 X 0  
35 19 jan 79 01 feb 79  
35  
36 Some Images processed on the IBM 360 (VICAR label truncated)  
36 0 H 0 0 L 0  
36 25 apr 78 06 feb 79 75%  
36  
37 Original IUESIPS file management system used -- not to worry  
37 0 0 0 0 X 0  
37 03 apr 78 09 feb 79  
37 17 apr 78 05 jun 79  
38 VICAR label does not list values of manual registration shifts  
38 0 0 0 M L 0  
38 03 apr 78 05 apr 79  
38 17 apr 78 01 feb 79  
39 Images designated as "do not process" were not processed !  
39 0 0 0 0 X 0  
39 03 apr 78 30 apr 79 2%  
39 17 apr 78 01 jan 90  
40 Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))  
40 0 0 0 0 0 0  
40 03 apr 78 07 jun 79 5%  
40 17 apr 78 12 jul 79  
41 All spectra extracted with HT=5 (no extended-source processing)  
41 0 H L 0 0 0  
41 03 apr 78 14 jun 79  
41 17 apr 78 10 jan 80  
42 Redundant raw image of Pt spectrum written to tape  
42 0 0 R 0 X 0  
42 03 apr 78 19 jun 79  
42  
43 G.O. tape does not contain header file  
43 0 0 0 0 X 0  
43 03 apr 78 02 jul 79  
43  
44 20% exposure level of ITF was incorrect \*\*\*\* use SWPFIX  
44 3 0 0 0 0 0  
44 22 may 78 07 jul 79  
44 14 jun 78 07 aug 79



45 Non-optimal offsets from small to large aperture (lambda error)  
45 5 0 L 0 0 0  
45 03 apr 78 08 jul 79  
45 17 apr 78 10 mar 81  
46 Large aperture offset changed (no wavelength error)  
46 5 0 L 0 X 0  
46 03 apr 78 06 aug 79  
46 17 apr 78 10 mar 81  
46.7 Large aperture offset changed (no wavelength error)  
46.7 2 L L 0 X 0  
46.7 20 sep 79 29 oct 79  
46.7 17 apr 78 10 mar 81  
47 WAVECAL image files contain gpi file  
47 0 0 F 0 0 0  
47 03 apr 78 09 oct 79  
47  
48 Biweekly dispersion constants used to assign wavelengths  
48 0 L 0 0 C 0  
48 03 apr 78 29 oct 79  
48  
49 Version-I line library used for wavelength calibration  
49 0 H 0 0 X 0  
49 03 apr 78 23 nov 79  
49 17 apr 78 10 mar 81  
50 Low-dispersion spectrum not given absolute calibration  
50 0 L 0 0 0 0  
50 03 apr 78 09 jan 80  
50 17 apr 78 12 jul 79  
51 ITF truncated at upper limit  
51 5 0 0 0 0 0  
51 03 apr 78 08 jan 80  
51 17 apr 78 01 feb 80  
52 DISTANCE parameter for EXTLOW procedure specified incorrectly \*\*\*  
52 0 L 0 0 0 0  
52 22 may 78 01 mar 80  
52 14 jun 78 06 mar 80  
53 Absolute calibration based on Bohlin et al. (Astr. Ap., 1980)  
53 5 L 0 0 0 0  
53  
53 12 jul 79 02 apr 80  
54 Version-II line library used for wavelength calibration  
54 0 H 0 0 X 0  
54 23 nov 79 18 apr 80  
54  
55 Biweekly reseau grid used for geometric corrections  
55 5 0 0 0 C 0  
55 03 apr 78 18 jul 80  
55  
56 Biweekly dispersion constants used to assign wavelengths  
56 5 H 0 0 C 0  
56 03 apr 78 18 jul 80  
56

57 Preliminary mean dispersion constants used to assign wavelengths  
57 5 L 0 0 C 0  
57 29 oct 79 18 jul 80  
57  
58 Inaccurate automatic registration used  
58 5 0 0 A 0 0  
58 09 sep 78 18 aug 80  
58 25 jan 79 30 dec 80  
59 Version-III line library used for wavelength calibration  
59 0 H 0 0 X 0  
59 18 apr 80 29 aug 80  
59  
59.1 Image sequence number in header record missing left-most digit  
59.1 3 0 0 0 L 0  
59.1 03 sep 80 18 sep 80  
59.1 03 sep 80 30 sep 80  
60 Image processing used outdated procedures GEOM, FICOR, and EXTLOW \*\*  
60 0 L 0 0 0 0  
60 22 may 78 04 nov 80  
60 14 jun 78 10 mar 81  
61 Non-perpendicular manual registration shifts used  
61 0 0 0 M 0 0  
61 22 may 78 04 nov 80  
61 14 jun 78 01 jan 90  
62 VICAR label missing AUTO/MANUAL message and scheme name  
62 0 H 0 0 L 0  
62 03 apr 78 04 nov 80  
62 17 apr 78 30 jan 81  
62.7 VICAR label missing AUTO/MANUAL message and scheme name  
62.7 0 L 0 0 L 0  
62.7 03 apr 78 04 nov 80  
62.7 17 apr 78 10 mar 81  
63 Non-perpendicular manual registration shifts used  
63 3 0 0 M 0 0  
63 04 nov 80 26 nov 80  
63  
64 Copy of RAW image sent to NSSDC has incorrect ss, sl in VICAR label  
64 0 0 R 0 L 0  
64 10 dec 79 22 dec 80  
64  
65 VICAR label lists DEC of target and SHIFT parameter incorrectly  
65 0 L 0 0 L 0  
65 04 nov 80 16 jan 81  
65 10 mar 81 17 jun 81  
66 Automatic registration of images in error by up to .4 pixels  
66 0 0 0 A X 0  
66 18 aug 80 19 jan 81  
66 30 dec 80 17 jun 81  
67 Temperature dependence of calibration files not taken into account  
67 5 L 0 0 C 0  
67 03 apr 78 03 mar 81  
67 17 apr 78 11 mar 82

68 Photometrically-corrected region slightly off-center  
68 5 L 0 0 0 0  
68 04 nov 80 03 mar 81  
68 10 mar 81 17 jun 81  
69 Un-photometrically corrected pixels possibly extracted  
69 0 L 0 0 0 0  
69 04 nov 80 05 mar 81  
69 10 mar 81 17 jun 81  
70 Unused region of VICAR label not filled with blanks  
70 0 L 0 0 L 0  
70 04 nov 80 06 mar 81  
70 10 mar 81 05 may 81  
71 Geometric/wavelength calibration used GSFC 13-Nov-78 calib. files  
71 5 0 0 0 0 0  
71  
71 01 feb 79 10 mar 81  
72 Use jun-79 - jun-80 mean dispersion constants  
72 5 H 0 0 C 0  
72 18 jul 80 30 apr 81  
72 10 mar 81 01 jan 90  
73 Temperature correction of calibration files not applied  
73 5 H 0 0 C 0  
73 03 apr 78 19 may 81  
73 17 apr 78 11 mar 82  
74 Background smoothed using only 2 pass 15-pt. running-average filter  
74 0 H 0 0 0 0  
74 03 apr 78 11 jun 81  
74 17 apr 78 30 dec 80  
75 Error in specifying region to be photometrically-corrected  
75 5 L 0 0 0 0  
75 10 jul 81 24 jul 81  
75  
76 Potential loss of lines in raw image  
76 0 0 0 0 0 0  
76 03 apr 78 14 aug 81 <<1%  
76  
77 Non-optimal automatic registration of closely-spaced orders  
77 0 H 0 A 0 0  
77 10 sep 78 28 aug 81  
77 01 feb 79 11 mar 82  
78 Preliminary ITF used for LWP  
78 1 0 0 0 0 0  
78 17 aug 81 03 nov 81  
78  
79 Preliminary ITF extrapolation used in photometric correction  
79 0 L 0 0 0 0  
79 08 jan 80 10 jul 81  
79 01 feb 80 11 mar 82  
79.7 Preliminary ITF extrapolation used in photometric correction  
79.7 0 H 0 0 0 0  
79.7 08 jan 80 10 nov 81  
79.7 01 feb 80 11 mar 82

80 No flagging of LWR microphonic pings  
80 2 L 0 0 0 0  
80 03 apr 78 28 sep 81  
80 17 apr 78 11 mar 82  
80.7 No flagging of LWR microphonic pings  
80.7 2 H 0 0 0 0  
80.7 03 apr 78 10 nov 81  
80.7 17 apr 78 11 mar 82  
81 Microphonics flagged in VICAR label of raw image file  
81 2 L R 0 L 0  
81 28 sep 81 10 nov 81  
81  
82 Image processing used outdated procedures GEOM, FICOR and DATEXTH \*\*  
82 5 H 0 0 0 0  
82 03 apr 78 10 nov 81  
82 17 apr 78 11 mar 82  
82.7 Image processing used outdated procedures GEOM, FICOR and DATEXTH \*\*  
82.7 1 H 0 0 0 0  
82.7 03 apr 78 07 jan 82  
82.7 17 apr 78 11 mar 82  
83 Round-off error in header record dispersion constants  
83 5 L 0 0 0 0  
83 03 nov 80 16 nov 81  
83 10 mar 81 11 mar 82  
83.7 Round-off error in header record dispersion constants  
83.7 1 L 0 0 L 0  
83.7 17 aug 81 16 nov 81  
83.7 10 mar 81 11 mar 82  
84 Reseau file does not contain camera and image sequence number  
84 0 0 F 0 L 0  
84 03 apr 78 23 nov 81  
84  
85 Possible slight automatic registration errors  
85 0 0 0 A 0 0  
85 10 sep 78 24 nov 81  
85 01 feb 79 01 jan 90  
86 Redundant end-of-label flag in NSSDC data file labels  
86 0 0 0 0 L 0  
86 10 dec 79 29 apr 82  
86  
87 Data missing from last extracted spectral order  
87 5 H 0 0 0 0  
87 10 nov 81 05 may 82  
87 11 mar 82 07 jul 82  
87.7 Data missing from last extracted spectral order  
87.7 1 H 0 0 0 0  
87.7 07 jan 82 05 may 82  
87.7 11 mar 82 07 jul 82  
88 Possible error in observation date (used in helio. velocity corr.)  
88 0 H 0 0 0 0  
88 10 nov 81 05 may 82 2%  
88 11 mar 82 07 jul 82

88.7 Possible error in observation date (listed in VICAR label & header)  
 88.7 0 L 0 0 L 0  
 88.7 04 nov 80 06 may 82 2%  
 88.7 10 mar 81 07 jul 82  
 89 Error in handling negative declination values  
 89 0 H 0 0 0 0  
 89 10 nov 81 05 aug 82 50%  
 89 11 mar 82 19 oct 82 50%  
 90 Error in scaling net ripple-corrected fluxes  
 90 0 H 0 0 0 0  
 90 10 nov 81 05 aug 82  
 90 11 mar 82 16 jul 82  
 91 Photometric correction not limited to partial read boundaries  
 91 5 L F 0 X 0  
 91 04 nov 80 27 aug 82  
 91 10 mar 81 19 oct 82  
 91.7 Photometric correction not limited to partial read boundaries  
 91.7 1 L F 0 X 0  
 91.7 17 aug 81 27 aug 82  
 91.7 10 mar 81 19 oct 82  
 92 Photometrically-corrected region not centered between apertures  
 92 5 L F 0 X 0  
 92 04 nov 80 27 aug 82  
 92 10 mar 81 19 oct 82  
 92.7 Photometrically-corrected region not centered between apertures  
 92.7 1 L F 0 X 0  
 92.7 17 aug 81 27 aug 82  
 92.7 10 mar 81 19 oct 82  
 93 Old echelle ripple correction used to calculate ABNET flux  
 93 0 H 0 0 0 0  
 93 03 apr 78 27 aug 82  
 93 17 apr 78 19 oct 82  
 94 Non-optimal offsets used from small to large aperture  
 94 1 0 L 0 0 0  
 94 17 aug 81 21 sep 82  
 94 10 mar 81 19 oct 82  
 95 Use of mar-79 - jan-81 mean dispersion constants  
 95 5 H 0 0 C 0  
 95 30 apr 81 21 sep 82  
 95  
 95.7 Use of mar-79 - jan-81 mean dispersion constants  
 95.7 5 L 0 0 C 0  
 95.7 03 mar 81 21 sep 82  
 95.7  
 96 Dispersion constants based on single image from jun 17 1981  
 96 1 0 0 0 C 0  
 96 17 aug 81 21 sep 82  
 96 11 mar 82 19 oct 82  
 97 Noise conditioning filter not used for LWP (high dispersion)  
 97 1 H 0 0 0 0  
 97 10 nov 81 11 oct 82  
 97 11 mar 82 19 oct 82

98 No flagging of bright spots  
 98 0 0 0 0 0 0  
 98 03 apr 78 19 nov 82  
 98 17 apr 78 19 oct 82  
 99 MICRO entry in VICAR label of SWP and LWP raw images  
 99 4 L R 0 L 0  
 99 28 sep 81 31 jan 83  
 99  
 99.7 MICRO entry in VICAR label of SWP and LWP raw images  
 99.7 4 H R 0 L 0  
 99.7 10 nov 81 31 jan 83  
 99.7  
 100 Possible default to mean temperature for correcting calib. files  
 100 5 L 0 0 0 0  
 100 03 mar 81 24 feb 83 <1%  
 100 11 mar 82 31 may 83  
 100.7 Possible default to mean temperature for correcting calib. files  
 100.75 H 0 0 0 0  
 100.719 may 81 24 feb 83 <1%  
 100.711 mar 82 31 may 83  
 101 Non-perpendicular manual registration shift (error insignificant)  
 101 0 0 0 M X 0  
 101 21 sep 82 24 feb 83  
 101 19 oct 82 31 may 83  
 102 Use of jun-80 - aug-82 dispersion constants without temperature corr.  
 102 1 0 0 0 C 0  
 102 21 sep 82 12 apr 83  
 102 19 oct 82 11 oct 83  
 103 Possible corruption of temperature data in VICAR label  
 103 0 0 0 0 0 0  
 103 03 apr 78 09 may 83 <<1%  
 103 17 apr 78 20 sep 83  
 104 Automatic registration without avoiding microphonic noise (>1 region)  
 104 2 0 0 A X 0  
 104 24 nov 81 19 may 83 <<1%  
 104 11 mar 82 27 apr 84  
 105 Automatic registration without avoiding microphonic noise (1 region)  
 105 2 0 0 A X 0  
 105 31 jan 83 19 may 83 <10%  
 105  
 106 Background mean filter width of 30 data pts used (instead of 31)  
 106 0 L 0 0 X 0  
 106 04 nov 80 22 jul 83  
 106 10 mar 81 11 oct 83  
 107 Error handling images with > 1 region of microphonic noise  
 107 2 L 0 0 0 0  
 107 28 sep 81 21 jul 83 <<1%  
 107 11 mar 82 27 apr 84  
 107.7 Error handling images with > 1 region of microphonic noise  
 107.72 H 0 0 0 0  
 107.710 nov 81 25 jul 83 <<1%  
 107.711 mar 82 27 apr 84

108 Possible error in calculated observing date (used in helio. vel. corr.)  
 108 5 H 0 0 0 0  
 108 10 nov 81 12 jul 83 <5%  
 108 11 mar 82 27 apr 84  
 108.7Possible error in calculated observing date (listed in label & header)  
 108.75 L 0 0 L 0  
 108.704 nov 80 27 jul 83 <5%  
 108.710 mar 81 27 apr 84  
 108.8Possible error in calculated observing date (listed in label & header)  
 108.81 H 0 0 0 0  
 108.807 jan 82 12 jul 83 <5%  
 108.811 mar 82 27 apr 84  
 108.9Possible error in calculated observing date (listed in label & header)  
 108.91 L 0 0 L 0  
 108.917 aug 81 27 jul 83 <5%  
 108.911 mar 82 27 apr 84  
 109 No absolute calibration used for low dispersion LWP ABNET flux  
 109 1 L 0 0 0 0  
 109 03 apr 78 19 oct 83  
 109 17 apr 78 11 oct 83  
 110 No method for identifying modified VICAR label parameters  
 110 0 0 0 0 L 0  
 110 03 apr 78 19 oct 83 <1%  
 110 17 apr 78 01 jan 90  
 111 Inaccurate message 'MEAN DC USED' in label of corrected LWP images  
 111 1 L 0 0 L 0  
 111 12 apr 83 09 nov 83  
 111 11 oct 83 17 oct 84  
 112 TFL00D reseau used in wavelength calibration procedure  
 112 1 0 0 0 X 0  
 112 21 sep 82 20 jun 84  
 112 17 apr 78 17 oct 84  
 112.7TFL00D reseau used in wavelength calibration procedure  
 112.75 0 0 0 X 0  
 112.718 jul 80 20 jun 84  
 112.717 apr 78 17 oct 84  
 113 Incomplete VICAR labels for history replay images  
 113 0 0 0 0 L 0  
 113 09 aug 78 06 apr 84 <<1%  
 113 17 apr 78 01 jan 90 <<1%  
 114 Spurious characters in dispersion constants listed in label  
 114 0 L 0 0 L 0  
 114 04 nov 80 09 may 84  
 114 10 mar 81 17 oct 84  
 115 Non-optimum omega angle used for LWP low dispersion spectra  
 115 1 L 0 0 0 0  
 115 22 may 78 20 jun 84  
 115 14 jun 78 17 oct 84  
 116 Non-photometrically corrected 255 DN pixels possibly extracted  
 116 0 L 0 0 X 0  
 116 04 nov 80 20 jun 84  
 116 10 mar 81 17 oct 84

117 Inaccurate 'MEAN DC USED' message in VICAR label  
 117 1 H 0 0 L 0  
 117 12 apr 83 20 jun 84  
 117 11 oct 83 17 oct 84  
 118 Time correction not applied to DC's if no THDA in VICAR label  
 118 5 L 0 0 C 0  
 118 03 mar 81 20 jun 84 <10%  
 118 11 mar 82 17 oct 84  
 118.7Time correction not applied to DC's if no THDA in VICAR label  
 118.75 H 0 0 C 0  
 118.719 may 81 20 jun 84 <10%  
 118.711 mar 82 17 oct 84  
 119 Use of jan-80 - aug-82 mean dispersion constants  
 119 5 0 0 0 C 0  
 119 21 sep 82 20 jun 84  
 119 19 oct 82 17 oct 84  
 120 Use of jun-80 - mar-83 mean LWP dispersion constants  
 120 1 0 0 0 C 0  
 120 12 apr 83 20 jun 84  
 120 11 oct 83 17 oct 84  
 121 Minor errors in PBI fluxes  
 121 0 L F 0 X 0  
 121 04 nov 80 11 jul 84  
 121 10 mar 81 17 oct 84  
 121.7Minor errors in PBI fluxes  
 121.75 H F 0 X 0  
 121.710 nov 81 11 jul 84  
 121.711 mar 82 17 oct 84  
 121.8Minor errors in PBI fluxes  
 121.81 H F 0 X 0  
 121.807 jan 82 11 jul 84  
 121.811 mar 82 17 oct 84  
 122 Extrapolated pixels possibly handled incorrectly in PHOTOM  
 122 0 L 0 0 0 0  
 122 04 nov 80 11 jul 84  
 122 10 mar 81 17 oct 84  
 122.7Extrapolated pixels possibly handled incorrectly in PHOTOM  
 122.75 H 0 0 0 0  
 122.710 nov 81 11 jul 84  
 122.711 mar 82 17 oct 84  
 122.8Extrapolated pixels possibly handled incorrectly in PHOTOM  
 122.81 H 0 0 0 0  
 122.807 jan 82 11 jul 84  
 122.811 mar 82 17 oct 84  
 123 Possible extraction of uncorrected 0 DN pixels for background  
 123 5 H 0 0 X 0  
 123 10 nov 81 11 jul 84  
 123 11 mar 82 17 oct 84  
 123.7Possible extraction of uncorrected 0 DN pixels for background  
 123.71 H 0 0 X 0  
 123.707 jan 82 11 jul 84  
 123.711 mar 82 17 oct 84



124 Non-optimum echelle ripple correction used  
124 1 H 0 0 0 0  
124 27 aug 82 17 dec 84  
124 11 mar 82 10 jun 85