IUE Regional Data Analysis Facilities
Bulletin No. 2 - Using the IUESIPS Configuration Entries

The IUE Regional Data Analysis Facilities (RDAF's) maintain an online table of IUESIPS Configuration entries and various software routines for determining which configurations could affect users data. The primary purpose of this software is to make the published detailed descriptions of the IUESIPS configurations more useful to the IUE user and not to replace them. Once RDAF users determine which entries are relevant to their own data, they should refer to the published detailed descriptions for further information. These entries should be of particular importance to users whose analysis involves a comparison of images that were processed at different times or centers. This will help avoid the possibility that discovered differences are due to software modifications and not physical processes.

The following sections contain listings which should complement the published configuration entries and further assist the IUE user in interpreting his or her data.

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Table of Contents

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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 and 2. 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 111. 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 relevent 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.)

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 standard cal.
	2 - LWR	L - low	L - large ap.	M - manual	
	3 - SWP		E - extended or trailed		S - special calibration
	4 - LWP & SWP		P - pt. source		L - label or record 0 only
	5 - LWR & SWP		R - raw image		X - effect is insignificant
	6 - LWP & LWR		F - PI, GPI, GI or reseau file		

(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 & 74
1981	65 - 85	60 - 76
1982	86 - 98	77 - 98
1983	99 - 111	?
1984	?	?

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 - 111 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)

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
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```
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
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```
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
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```
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
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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
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
```

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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
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```
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
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
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```
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
100.7Possible default to mean temperature for correcting calib. files
100.75 H 0 0 0 0
100.719 may 81 24 feb 83 <1%
100.7
101  Non-perpendicular manual registration shift (error insignificant)
101  0 0 0 M X 0
101  21 sep 82 24 feb 83
101
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
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
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
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 01 jan 90
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
107.7Error handling images with > 1 region of microphonic noise
107.72 H 0 0 0 0
107.710 nov 81 25 jul 83 <<1%
107.7
```

```
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
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%
108.7
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%
108.8
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%
108.9
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
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
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
```

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
ALL CAMERA(S)
BOTH DISPERSION(S) BOTH APERTURE(S)
LABEL AND RECORD 0 MODIFICATIONS ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
07	VICAR label lists dispersion constants incorrectly
08	VICAR label does not list processing date
19	Header record may record image sequence no. as 0
23	Header record may list the camera number incorrectly (e.g 13, 23)
31	VICAR label doesn't list extraction OMEGA(90),HBACK(5), DISTANCE(?)
32	VICAR label doesn't list information on automatic registration
36	Some Images processed on the IBM 360 (VICAR label truncated)
38	VICAR label does not list values of manual registration shifts
59.1	Image sequence number in header record missing left-most digit
62	VICAR label missing AUTO/MANUAL message and scheme name
62	VICAR label missing AUTO/MANUAL message and scheme name
65	VICAR label lists DEC of target and SHIFT parameter incorrectly
70	Unused region of VICAR label not filled with blanks
83	Round-off error in header record dispersion constants
86	Redundant end-of-label flag in NSSDC data file labels
88	Possible error in observation date (listed in VICAR label & header)
108	Possible error in calculated observing date (listed in label & header)
108	Possible error in calculated observing date (listed in label & header)
110	No method for identifying modified VICAR label parameters
111	Inaccurate message 'MEAN DC USED' in label of corrected LWP images

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
LWP CAMERA(S)
LOW DISPERSION(S) SMALL APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
15	Data quality flag does not distinguish gross & bkgnd reseaux
22	Registration of spectral orders done manually
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
48	Biweekly dispersion constants used to assign wavelengths
50	Low-dispersion spectrum not given absolute calibration
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ***
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW **
61	Non-perpendicular manual registration shifts used
69	Un-photometrically corrected pixels possibly extracted
76	Potential loss of lines in raw image
78	Preliminary ITF used for LWP
79	Preliminary ITF extrapolation used in photometric correction
85	Possible slight automatic registration errors
96	Dispersion constants based on single image from jun 17 1981
98	No flagging of bright spots
102	Use of jun-80 - aug-82 dispersion constants without temperature corr.
103	Possible corruption of temperature data in VICAR label
109	No absolute calibration used for low dispersion LWP ABNET flux

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
LWP CAMERA(S)
LOW DISPERSION(S) LARGE APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
15	Data quality flag does not distinguish gross & bkgnd reseaux
18	All spectra extracted with HT=9, DISTANCE=8.0
22	Registration of spectral orders done manually
25	Point source (HT=9) spectra extracted with DISTANCE=8 (too small)
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
48	Biweekly dispersion constants used to assign wavelengths
50	Low-dispersion spectrum not given absolute calibration
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ***
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW **
61	Non-perpendicular manual registration shifts used
69	Un-photometrically corrected pixels possibly extracted
76	Potential loss of lines in raw image
78	Preliminary ITF used for LWP
79	Preliminary ITF extrapolation used in photometric correction
85	Possible slight automatic registration errors
94	Non-optimal offsets used from small to large aperture
96	Dispersion constants based on single image from jun 17 1981
98	No flagging of bright spots
102	Use of jun-80 - aug-82 dispersion constants without temperature corr.
103	Possible corruption of temperature data in VICAR label
109	No absolute calibration used for low dispersion LWP ABNET flux

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
LWP CAMERA(S)
HIGH DISPERSION(S) SMALL APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
12	Whole image shifted to register orders
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
22	Registration of spectral orders done manually
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
61	Non-perpendicular manual registration shifts used
74	Background smoothed using only 2 pass 15-pt. running-average filter
76	Potential loss of lines in raw image
77	Non-optimal automatic registration of closely-spaced orders
78	Preliminary ITF used for LWP
79	Preliminary ITF extrapolation used in photometric correction
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH **
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
96	Dispersion constants based on single image from jun 17 1981
97	Noise conditioning filter not used for LWP (high dispersion)
98	No flagging of bright spots
102	Use of jun-80 - aug-82 dispersion constants without temperature corr.
103	Possible corruption of temperature data in VICAR label
108	Possible error in calculated observing date (listed in label & header)

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
LWP CAMERA(S)
HIGH DISPERSION(S) LARGE APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
12	Whole image shifted to register orders
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
22	Registration of spectral orders done manually
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
40	Improper scaling for neg. flux values (where abs(fmin))>abs(fmax))
41	All spectra extracted with HT=5 (no extended-source processing)
61	Non-perpendicular manual registration shifts used
74	Background smoothed using only 2 pass 15-pt. running-average filter
76	Potential loss of lines in raw image
77	Non-optimal automatic registration of closely-spaced orders
78	Preliminary ITF used for LWP
79	Preliminary ITF extrapolation used in photometric correction
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH **
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
94	Non-optimal offsets used from small to large aperture
96	Dispersion constants based on single image from jun 17 1981
97	Noise conditioning filter not used for LWP (high dispersion)
98	No flagging of bright spots
102	Use of jun-80 - aug-82 dispersion constants without temperature corr.
103	Possible corruption of temperature data in VICAR label
108	Possible error in calculated observing date (listed in label & header)

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
LWR CAMERA(S)
LOW DISPERSION(S) SMALL APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
15	Data quality flag does not distinguish gross & bkgnd reseaux
22	Registration of spectral orders done manually
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
28	Vacuum-to-air correction not applied to single-aperture spectra
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
48	Biweekly dispersion constants used to assign wavelengths
50	Low-dispersion spectrum not given absolute calibration
51	ITF truncated at upper limit
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ***
55	Biweekly reseau grid used for geometric corrections
57	Preliminary mean dispersion constants used to assign wavelengths
58	Inaccurate automatic registration used
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW **
61	Non-perpendicular manual registration shifts used
67	Temperature dependence of calibration files not taken into account
68	Photometrically-corrected region slightly off-center
69	Un-photometrically corrected pixels possibly extracted
75	Error in specifying region to be photometrically-corrected
76	Potential loss of lines in raw image
79	Preliminary ITF extrapolation used in photometric correction
80	No flagging of LWR microphonic pings
83	Round-off error in header record dispersion constants
85	Possible slight automatic registration errors
95	Use of mar-79 - jan-81 mean dispersion constants
98	No flagging of bright spots
100	Possible default to mean temperature for correcting calib. files
103	Possible corruption of temperature data in VICAR label
107	Error handling images with > 1 region of microphonic noise

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
LWR CAMERA(S)
LOW DISPERSION(S) LARGE APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
15	Data quality flag does not distinguish gross & bkgnd reseaux
18	All spectra extracted with HT=9, DISTANCE=8.0
21	Incorrect offsets from small to large aperture
22	Registration of spectral orders done manually
25	Point source (HT=9) spectra extracted with DISTANCE=8 (too small)
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
28	Vacuum-to-air correction not applied to single-aperture spectra
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
45	Non-optimal offsets from small to large aperture (lambda error)
48	Biweekly dispersion constants used to assign wavelengths
50	Low-dispersion spectrum not given absolute calibration
51	ITF truncated at upper limit
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ***
55	Biweekly reseau grid used for geometric corrections
57	Preliminary mean dispersion constants used to assign wavelengths
58	Inaccurate automatic registration used
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW **
61	Non-perpendicular manual registration shifts used
67	Temperature dependence of calibration files not taken into account
68	Photometrically-corrected region slightly off-center
69	Un-photometrically corrected pixels possibly extracted
75	Error in specifying region to be photometrically-corrected
76	Potential loss of lines in raw image
79	Preliminary ITF extrapolation used in photometric correction
80	No flagging of LWR microphonic pings
83	Round-off error in header record dispersion constants
85	Possible slight automatic registration errors
95	Use of mar-79 - jan-81 mean dispersion constants
98	No flagging of bright spots
100	Possible default to mean temperature for correcting calib. files
103	Possible corruption of temperature data in VICAR label

107 Error handling images with > 1 region of microphonic noise

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
LWR CAMERA(S)
HIGH DISPERSION(S) SMALL APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
16	Geometric correction based on erroneous reseau grid
17	Echelle ripple correction used non-optimal parameters
22	Registration of spectral orders done manually
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
40	Improper scaling for neg. flux values (where abs(fmin))>abs(fmax))
51	ITF truncated at upper limit
55	Biweekly reseau grid used for geometric corrections
56	Biweekly dispersion constants used to assign wavelengths
58	Inaccurate automatic registration used
61	Non-perpendicular manual registration shifts used
72	Use jun-79 - jun-80 mean dispersion constants
73	Temperature correction of calibration files not applied
74	Background smoothed using only 2 pass 15-pt. running-average filter
76	Potential loss of lines in raw image
77	Non-optimal automatic registration of closely-spaced orders
79	Preliminary ITF extrapolation used in photometric correction
80	No flagging of LWR microphonic pings
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH **
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
95	Use of mar-79 - jan-81 mean dispersion constants
98	No flagging of bright spots
100	Possible default to mean temperature for correcting calib. files
103	Possible corruption of temperature data in VICAR label
107	Error handling images with > 1 region of microphonic noise
108	Possible error in calculated observing date (used in helio. vel. corr.)

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
LWR CAMERA(S)
HIGH DISPERSION(S) LARGE APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
16	Geometric correction based on erroneous reseau grid
17	Echelle ripple correction used non-optimal parameters
21	Incorrect offsets from small to large aperture (-50 km/s error) **
22	Registration of spectral orders done manually
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
41	All spectra extracted with HT=5 (no extended-source processing)
45	Non-optimal offsets from small to large aperture (lambda error)
51	ITF truncated at upper limit
55	Biweekly reseau grid used for geometric corrections
56	Biweekly dispersion constants used to assign wavelengths
58	Inaccurate automatic registration used
61	Non-perpendicular manual registration shifts used
72	Use jun-79 - jun-80 mean dispersion constants
73	Temperature correction of calibration files not applied
74	Background smoothed using only 2 pass 15-pt. running-average filter
76	Potential loss of lines in raw image
77	Non-optimal automatic registration of closely-spaced orders
79	Preliminary ITF extrapolation used in photometric correction
80	No flagging of LWR microphonic pings
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH **
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
95	Use of mar-79 - jan-81 mean dispersion constants
98	No flagging of bright spots
100	Possible default to mean temperature for correcting calib. files

103 Possible corruption of temperature data in VICAR label
107 Error handling images with > 1 region of microphonic noise
108 Possible error in calculated observing date (used in helio. vel. corr.)

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
SWP CAMERA(S)
LOW DISPERSION(S) SMALL APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
02	Extracted SWP spectrum limited to 1000-1900 angstroms
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
15	Data quality flag does not distinguish gross & bkgnd reseaux
22	Registration of spectral orders done manually
24	Preliminary line library used for WAVECAL
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
44	20% exposure level of ITF was incorrect **** use SWPFIX
48	Biweekly dispersion constants used to assign wavelengths
50	Low-dispersion spectrum not given absolute calibration
51	ITF truncated at upper limit
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ***
55	Biweekly reseau grid used for geometric corrections
57	Preliminary mean dispersion constants used to assign wavelengths
58	Inaccurate automatic registration used
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW **
61	Non-perpendicular manual registration shifts used
63	Non-perpendicular manual registration shifts used
67	Temperature dependence of calibration files not taken into account
68	Photometrically-corrected region slightly off-center
69	Un-photometrically corrected pixels possibly extracted
75	Error in specifying region to be photometrically-corrected
76	Potential loss of lines in raw image
79	Preliminary ITF extrapolation used in photometric correction
83	Round-off error in header record dispersion constants
85	Possible slight automatic registration errors
95	Use of mar-79 - jan-81 mean dispersion constants
98	No flagging of bright spots
100	Possible default to mean temperature for correcting calib. files
103	Possible corruption of temperature data in VICAR label

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
SWP CAMERA(S)
LOW DISPERSION(S) LARGE APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
02	Extracted SWP spectrum limited to 1000-1900 angstroms
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
15	Data quality flag does not distinguish gross & bkgnd reseaux
18	All spectra extracted with HT=9, DISTANCE=8.0
22	Registration of spectral orders done manually
24	Preliminary line library used for WAVECAL
25	Point source (HT=9) spectra extracted with DISTANCE=8 (too small)
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
40	Improper scaling for neg. flux values (where abs(fmin))>abs(fmax))
44	20% exposure level of ITF was incorrect **** use SWPFIX
45	Non-optimal offsets from small to large aperture (lambda error)
48	Biweekly dispersion constants used to assign wavelengths
50	Low-dispersion spectrum not given absolute calibration
51	ITF truncated at upper limit
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ***
55	Biweekly reseau grid used for geometric corrections
57	Preliminary mean dispersion constants used to assign wavelengths
58	Inaccurate automatic registration used
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW **
61	Non-perpendicular manual registration shifts used
63	Non-perpendicular manual registration shifts used
67	Temperature dependence of calibration files not taken into account
68	Photometrically-corrected region slightly off-center
69	Un-photometrically corrected pixels possibly extracted
75	Error in specifying region to be photometrically-corrected
76	Potential loss of lines in raw image
79	Preliminary ITF extrapolation used in photometric correction
83	Round-off error in header record dispersion constants
85	Possible slight automatic registration errors
95	Use of mar-79 - jan-81 mean dispersion constants
98	No flagging of bright spots
100	Possible default to mean temperature for correcting calib. files

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
SWP CAMERA(S)
HIGH DISPERSION(S) SMALL APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
16	Geometric correction based on erroneous reseau grid
22	Registration of spectral orders done manually
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
33	Spectrum contains order 65 (at very edge of tube)
40	Improper scaling for neg. flux values (where abs(fmin))>abs(fmax))
44	20% exposure level of ITF was incorrect **** use SWPFIX
51	ITF truncated at upper limit
55	Biweekly reseau grid used for geometric corrections
56	Biweekly dispersion constants used to assign wavelengths
58	Inaccurate automatic registration used
61	Non-perpendicular manual registration shifts used
63	Non-perpendicular manual registration shifts used
72	Use jun-79 - jun-80 mean dispersion constants
73	Temperature correction of calibration files not applied
74	Background smoothed using only 2 pass 15-pt. running-average filter
76	Potential loss of lines in raw image
77	Non-optimal automatic registration of closely-spaced orders
79	Preliminary ITF extrapolation used in photometric correction
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH **
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
95	Use of mar-79 - jan-81 mean dispersion constants
98	No flagging of bright spots
100	Possible default to mean temperature for correcting calib. files
103	Possible corruption of temperature data in VICAR label
108	Possible error in calculated observing date (used in helio. vel. corr.)

CONFIGURATION ENTRIES BELOW SELECTED FOR:
GODDARD
SWP CAMERA(S)
HIGH DISPERSION(S) LARGE APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
16	Geometric correction based on erroneous reseau grid
22	Registration of spectral orders done manually
26	Wavelength coverage restricted by preliminary version of FICOR5
27	Automatic registration (DSPCON) used only 6 (vs. 12) sampling areas
33	Spectrum contains order 65 (at very edge of tube)
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
41	All spectra extracted with HT=5 (no extended-source processing)
44	20% exposure level of ITF was incorrect **** use SWPFIX
45	Non-optimal offsets from small to large aperture (lambda error)
51	ITF truncated at upper limit
55	Biweekly reseau grid used for geometric corrections
56	Biweekly dispersion constants used to assign wavelengths
58	Inaccurate automatic registration used
61	Non-perpendicular manual registration shifts used
63	Non-perpendicular manual registration shifts used
72	Use jun-79 - jun-80 mean dispersion constants
73	Temperature correction of calibration files not applied
74	Background smoothed using only 2 pass 15-pt. running-average filter
76	Potential loss of lines in raw image
77	Non-optimal automatic registration of closely-spaced orders
79	Preliminary ITF extrapolation used in photometric correction
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH ***
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
95	Use of mar-79 - jan-81 mean dispersion constants
98	No flagging of bright spots
100	Possible default to mean temperature for correcting calib. files

103 Possible corruption of temperature data in VICAR label
108 Possible error in calculated observing date (used in helio. vel. corr.)

CONFIGURATION ENTRIES BELOW SELECTED FOR:
VILSPA
ALL CAMERA(S)
BOTH DISPERSION(S) BOTH APERTURE(S)
LABEL AND RECORD 0 MODIFICATIONS ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
07	VICAR label lists dispersion constants incorrectly
08	VICAR label does not list processing date
19	Header record may record image sequence no. as 0
23	Header record may list the camera number incorrectly (e.g 13, 23)
31	VICAR label doesn't list extraction OMEGA(90),HBACK(5), DISTANCE(?)
38	VICAR label does not list values of manual registration shifts
59.1	Image sequence number in header record missing left-most digit
62	VICAR label missing AUTO/MANUAL message and scheme name
62	VICAR label missing AUTO/MANUAL message and scheme name
65	VICAR label lists DEC of target and SHIFT parameter incorrectly
70	Unused region of VICAR label not filled with blanks
83	Round-off error in header record dispersion constants
88	Possible error in observation date (listed in VICAR label & header)

CONFIGURATION ENTRIES BELOW SELECTED FOR:
VILSPA
LWP CAMERA(S)
BOTH DISPERSION(S) BOTH APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
14.1	March 1978 reseau grid and disp. constants applied
15	Data quality flag does not distinguish gross & bkgnd reseaux
22	Registration of spectral orders done manually
25	Point source (HT=9) spectra extracted with DISTANCE=8 (too small)
34.1	Geometric/wavelength processing used GSFC 23-May-78 calib. files
40	Improper scaling for neg. flux values (where abs(fmin))>abs(fmax))
41	All spectra extracted with HT=5 (no extended-source processing)
50	Low-dispersion spectrum not given absolute calibration
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ***
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW **
61	Non-perpendicular manual registration shifts used
69	Un-photometrically corrected pixels possibly extracted
74	Background smoothed using only 2 pass 15-pt. running-average filter
77	Non-optimal automatic registration of closely-spaced orders
79	Preliminary ITF extrapolation used in photometric correction
79	Preliminary ITF extrapolation used in photometric correction
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH **
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
94	Non-optimal offsets used from small to large aperture
97	Noise conditioning filter not used for LWP (high dispersion)
98	No flagging of bright spots

CONFIGURATION ENTRIES BELOW SELECTED FOR:
VILSPA
LWR CAMERA(S)
BOTH DISPERSION(S) BOTH APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
14.1	March 1978 reseau grid and disp. constants applied
14.2	Assigned wavelengths approximately 0.7 Angstroms too short
15	Data quality flag does not distinguish gross & bkgnd reseaux
16	Geometric correction based on erroneous reseau grid
17	Echelle ripple correction used non-optimal parameters
21	Incorrect offsets from small to large aperture
21	Incorrect offsets from small to large aperture (-50 km/s error) **
22	Registration of spectral orders done manually
25	Point source (HT=9) spectra extracted with DISTANCE=8 (too small)
34.1	Geometric/wavelength processing used GSFC 23-May-78 calib. files
40	Improper scaling for neg. flux values (where abs(fmin))>abs(fmax))
41	All spectra extracted with HT=5 (no extended-source processing)
45	Non-optimal offsets from small to large aperture (lambda error)
50	Low-dispersion spectrum not given absolute calibration
51	ITF truncated at upper limit
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ***
53	Absolute calibration based on Bohlin et al. (Astr. Ap., 1980)
58	Inaccurate automatic registration used
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW **
61	Non-perpendicular manual registration shifts used
67	Temperature dependence of calibration files not taken into account
68	Photometrically-corrected region slightly off-center
69	Un-photometrically corrected pixels possibly extracted
71	Geometric/wavelength calibration used GSFC 13-Nov-78 calib. files
72	Use jun-79 - jun-80 mean dispersion constants
73	Temperature correction of calibration files not applied
74	Background smoothed using only 2 pass 15-pt. running-average filter
77	Non-optimal automatic registration of closely-spaced orders
79	Preliminary ITF extrapolation used in photometric correction
79	Preliminary ITF extrapolation used in photometric correction

80	No flagging of LWR microphonic pings
80	No flagging of LWR microphonic pings
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH ***
83	Round-off error in header record dispersion constants
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
98	No flagging of bright spots

CONFIGURATION ENTRIES BELOW SELECTED FOR:
VILSPA
SWP CAMERA(S)
BOTH DISPERSION(S) BOTH APERTURE(S)
CONFIGURATIONS AFFECTING DATA PORTION OF FILES ONLY

CONFIG	DESCRIPTION OF CONFIGURATION
01	Background spectrum smoothed improperly at ends of orders
03	Extracted spectra contain erroneous negative fluxes
04	Region of image processed included target ring
05	Wavelength regions where orders overlap were deleted
06	Echelle ripple correction applied to whole order
09	Extraction slit not centered on order (1-pixel error in OBSCRIBE)
10	Dispersion constants derived by WAVECAL slightly inaccurate
11	ITF based on single image at each exposure level
12	Whole image shifted to register orders
13	Spectrum extracted by preliminary programs (SPIN,ROTATEH, COMPARE)
14	Some error flags for reseaux and sat. pixels displaced by 14 data-pts
14.1	March 1978 reseau grid and disp. constants applied
15	Data quality flag does not distinguish gross & bkgnd reseaux
16	Geometric correction based on erroneous reseau grid
21.1	Wavelength Scale is in error- correction: wave=-20 +1.0158*wave
22	Registration of spectral orders done manually
24	Preliminary line library used for WAVECAL
25	Point source (HT=9) spectra extracted with DISTANCE=8 (too small)
33	Spectrum contains order 65 (at very edge of tube)
34.1	Geometric/wavelength processing used GSFC 23-May-78 calib. files
34.2	Geometric/wavelength processing used GSFC 08-Aug-78 calib files
40	Improper scaling for neg. flux values (where abs(fmin)>abs(fmax))
41	All spectra extracted with HT=5 (no extended-source processing)
44	20% exposure level of ITF was incorrect **** use SWPFIX
45	Non-optimal offsets from small to large aperture (lambda error)
50	Low-dispersion spectrum not given absolute calibration
51	ITF truncated at upper limit
52	DISTANCE parameter for EXTLOW procedure specified incorrectly ****
53	Absolute calibration based on Bohlin et al. (Astr. Ap., 1980)
58	Inaccurate automatic registration used
60	Image processing used outdated procedures GEOM,FICOR, and EXTLOW ***
61	Non-perpendicular manual registration shifts used
67	Temperature dependence of calibration files not taken into account
68	Photometrically-corrected region slightly off-center
69	Un-photometrically corrected pixels possibly extracted
71	Geometric/wavelength calibration used GSFC 13-Nov-78 calib. files
72	Use jun-79 - jun-80 mean dispersion constants
73	Temperature correction of calibration files not applied
74	Background smoothed using only 2 pass 15-pt. running-average filter
77	Non-optimal automatic registration of closely-spaced orders
79	Preliminary ITF extrapolation used in photometric correction

79	Preliminary ITF extrapolation used in photometric correction
82	Image processing used outdated procedures GEOM, FICOR and DATEXTH **
83	Round-off error in header record dispersion constants
85	Possible slight automatic registration errors
87	Data missing from last extracted spectral order
88	Possible error in observation date (used in helio. velocity corr.)
89	Error in handling negative declination values
90	Error in scaling net ripple-corrected fluxes
93	Old echelle ripple correction used to calculate ABNET flux
98	No flagging of bright spots
