EDUCE- flagging report for spectral data from Norrkoping, Sweden

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FP20 : Flagging results for Norrkoping, Sweden:

Measurements details :

Location: Norrkoping, Sweden
Elevation (m): 43
Instrument name: Brewer #006
Instrument type: Brewer MKII
Wavelength range (nm): 290-325
Lat, Long: 58.58, 16.15
Date on which data was extracted: 18.10.02 (*1991, 1992*), 04.10.02 (*1993*), 18.10.02 (*1994, 1995, 1996*)
Date on which slit function was extracted/received: 06.12.02
Years of submitted data: 4 complete, 2 incomplete
No spectra (per year): 1005 (*1991*), 4331 (*1992*), 4026 (*1993*), 4469 (*1994*), 4387 (*1995*), 2144 (*1996*)
No spectra (total submitted): 20362
Slit width (FWHM) (nm): 0.516
SHIC version for analysis: 3.093

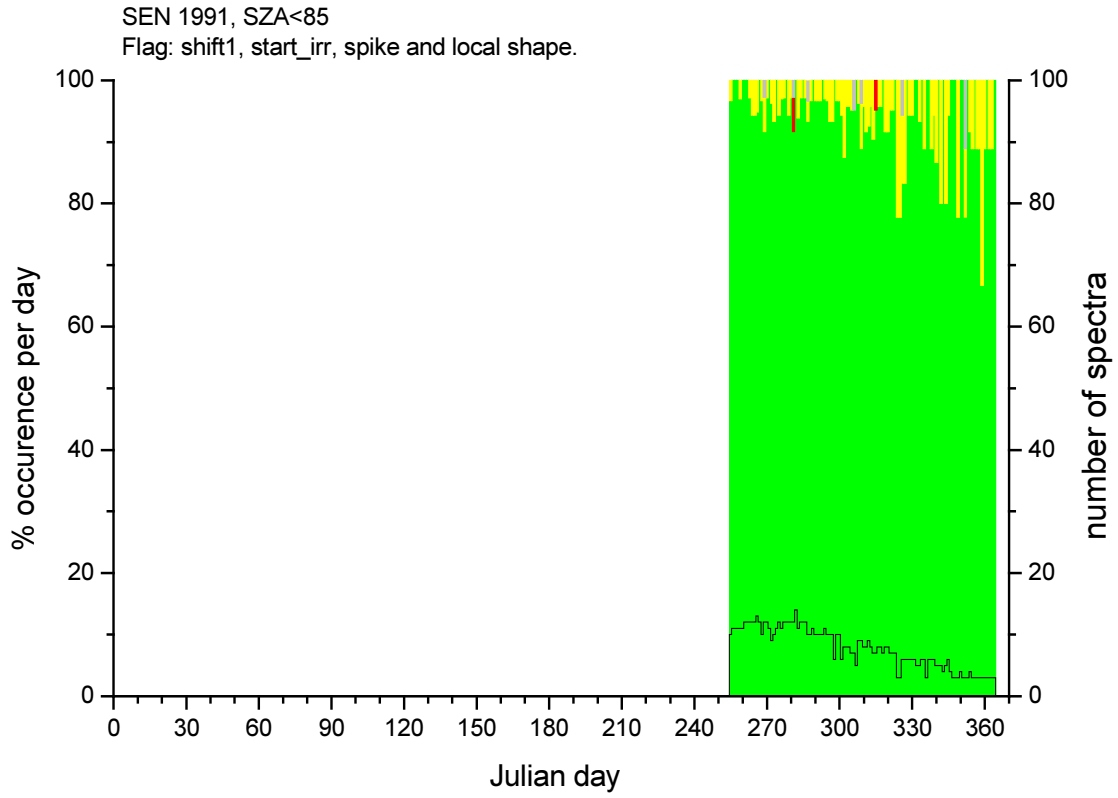
Special comments: The periods at the start and end of each year have only a few hours of sun at this location, resulting in approximately 5 measurements a day (using the SZA<85 filter). In general a high fraction of potential high quality data has been submitted for a number of years.

Responsible operator/PI: Weine Josefsson: Weine.Josefsson@smhi.se

Operator comments: No comments received from the operator.

Tables of flagging statistics:

1991:



flag	Green %	Yellow %	Red %	Black %	Grey %	Cor. %	Green	Yellow	Red	Black	Grey	Cor.	Num
Shift1_flagging	99.2	0	0	0	0.8	0	849	0	0	0	7	0	856
start_irradiance_flag	100	0	0	0	0	0	856	0	0	0	0	0	856
Spike+local_shape	87.3	12.3	0.4	0	0	0.1	748	105	3	0	0	1	857

Comments :

Limited annual coverage (approximately 25%): some potential for use in climatological studies.

Overall data quality impression : a very high fraction of potential high quality spectra.

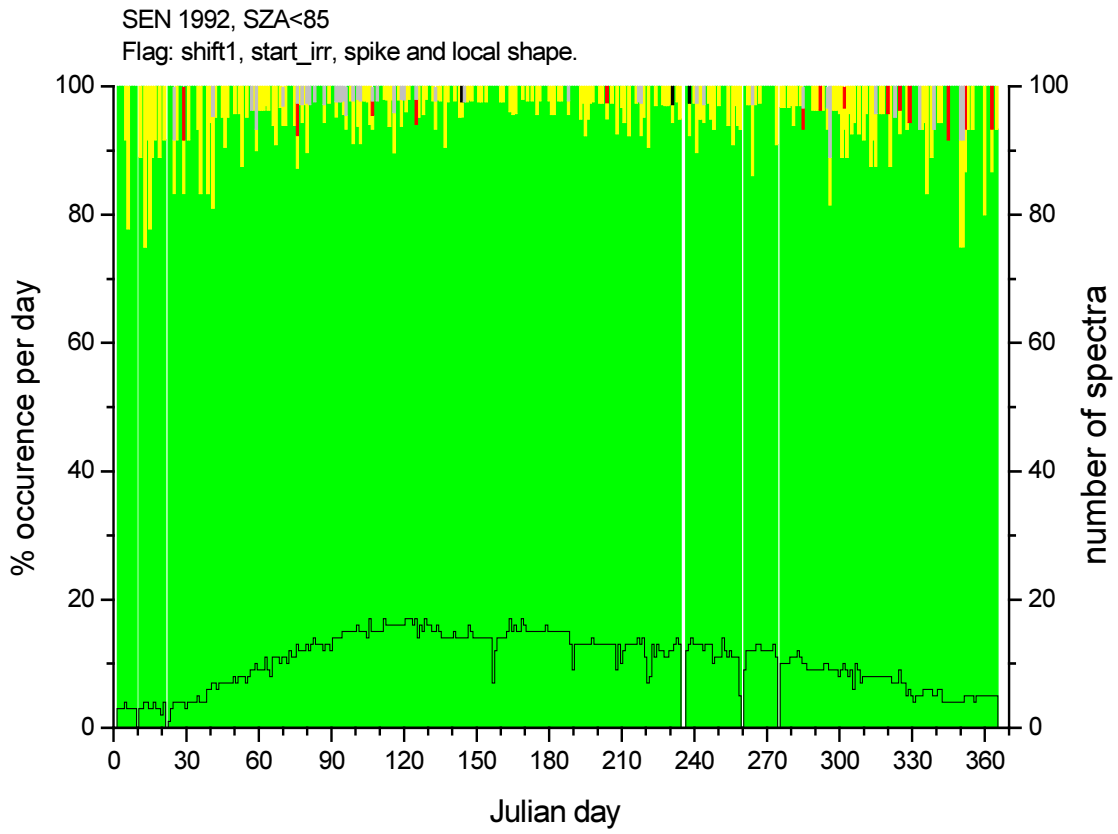
No black flags exist in any of the chosen flagging categories (with red flags < 0.5%). The percentage grey flags is 0.8% for the Shift1 flag.

The shift1 flag indicates that the instrument is well calibrated in the UVB region of the spectrum compared to an extra-terrestial solar spectrum.

1 (0.1%) spectrum with a spike is reported.

The distribution of errors is fairly uniform throughout the dataset, although there is a higher incidence of yellow flags towards the end of the dataset.

1992:



flag	Green %	Yellow %	Red %	Black %	Grey %	Cor. %	Green	Yellow	Red	Black	Grey	Cor.	Num
Shift1_flagging	98.7	0	0	0	1.3	0	3703	0	0	0	47	0	3750
start_irradiance_flag	99.9	0.1	0	0	0	0	3747	2	1	0	0	0	3750
Spike+local_shape	91.8	7.8	0.4	0.1	0	0	3441	291	15	3	0	0	3750

Comments :

Extensive annual coverage (approximately 99%): excellent potential for use in climatological studies.

Overall data quality impression : a very high fraction of potential high quality spectra.

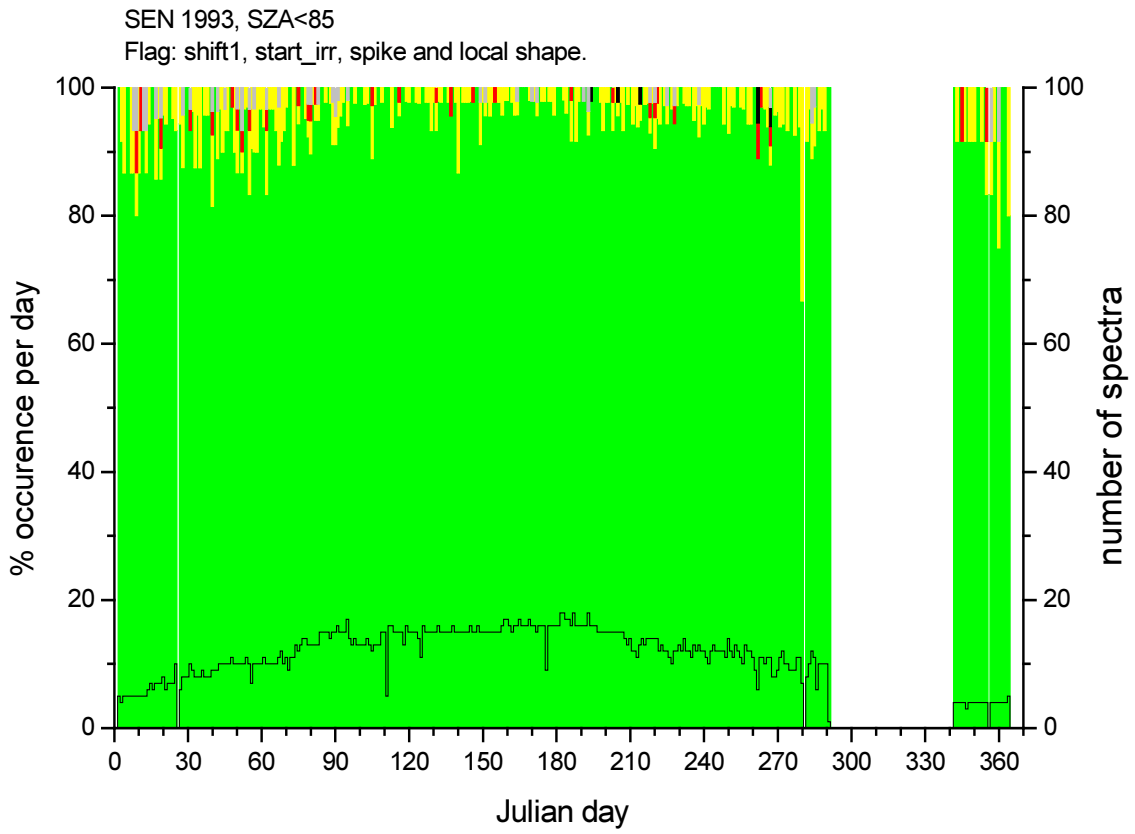
A few black flags exist in the spike + local shape flagging category (with red flags < 0.5%). The percentage grey flags is equal to 1.3% for the Shift1 flag.

The shift1 flag indicates that the instrument is well calibrated in the UVB region of the spectrum compared to an extra-terrestial solar spectrum.

No spectra with spikes are reported.

The distribution of errors is fairly uniform throughout the dataset, although the incidence of red flags increases towards the end of the dataset.

1993:



flag	Green %	Yellow %	Red %	Black %	Grey %	Cor. %	Green	Yellow	Red	Black	Grey	Cor.	Num
Shift1_flagging	98.5	0.2	0	0	1.2	0	3564	7	0	1	45	0	3617
start_irradiance_flag	99.8	0.1	0.1	0	0	0	3610	2	4	1	0	0	3617
Spike+local_shape	91	8.1	0.8	0.1	0	0.1	3294	292	28	3	0	2	3619

Comments :

High annual coverage (approximately 85%): high potential for use in climatological studies.

Overall data quality impression: a very high fraction of potential high quality spectra.

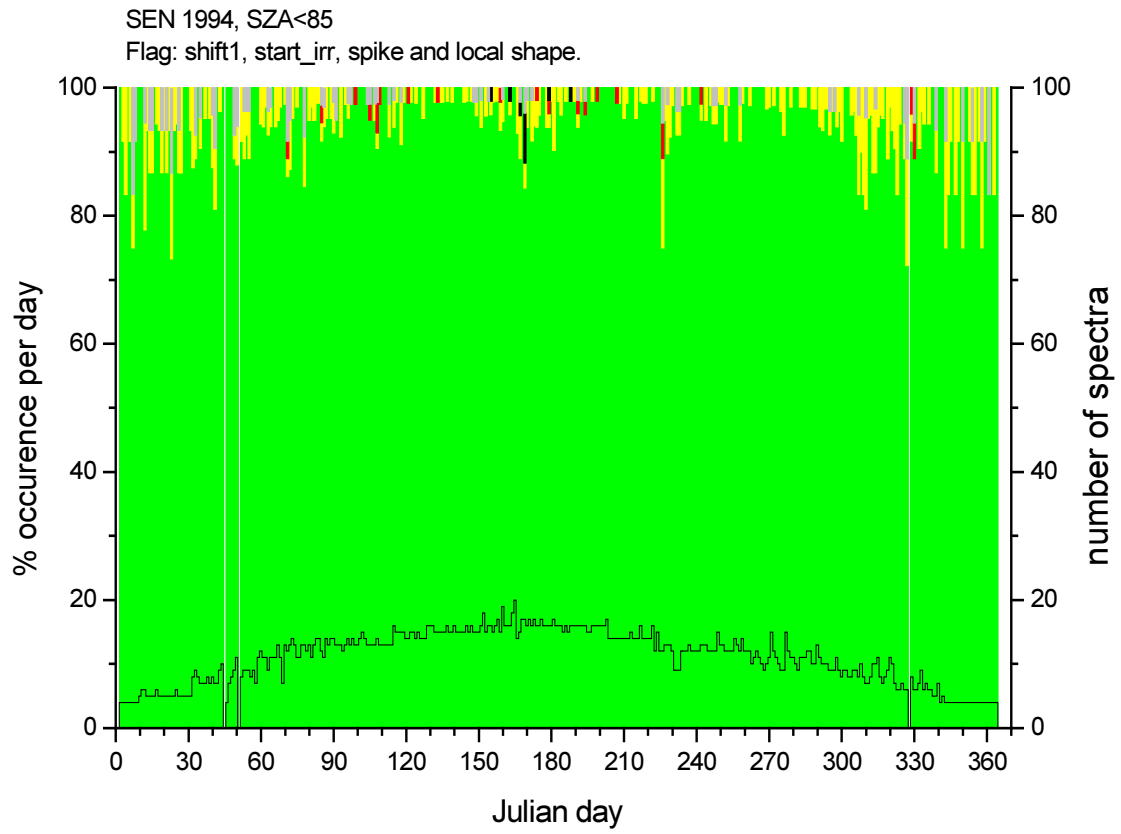
A few black flags exist in all of the chosen flagging categories (with red flags < 1%). The percentage grey flags exceeds 1% for the Shift1 flag.

The shift1 flag indicates that the instrument is well calibrated in the UVB region of the spectrum compared to an extra-terrestial solar spectrum.

2 (0.1%) spectra with spikes are reported.

The distribution of errors is fairly uniform throughout the dataset.

1994:



flag	Green %	Yellow %	Red %	Black %	Grey %	Cor. %	Green	Yellow	Red	Black	Grey	Cor.	Num
Shift1_flagging	97.8	0	0	0	2.1	0	3924	2	0	1	85	0	4012
start_irradiance_flag	99.7	0.2	0	0.1	0	0	4000	7	2	3	0	0	4012
Spike+local_shape	91.8	7.4	0.5	0.1	0	0.1	3689	299	19	5	0	5	4017

Comments :

Extensive annual coverage (approximately 99%): excellent potential for use in climatological studies.

Overall data quality impression: a high fraction of potential high quality spectra.

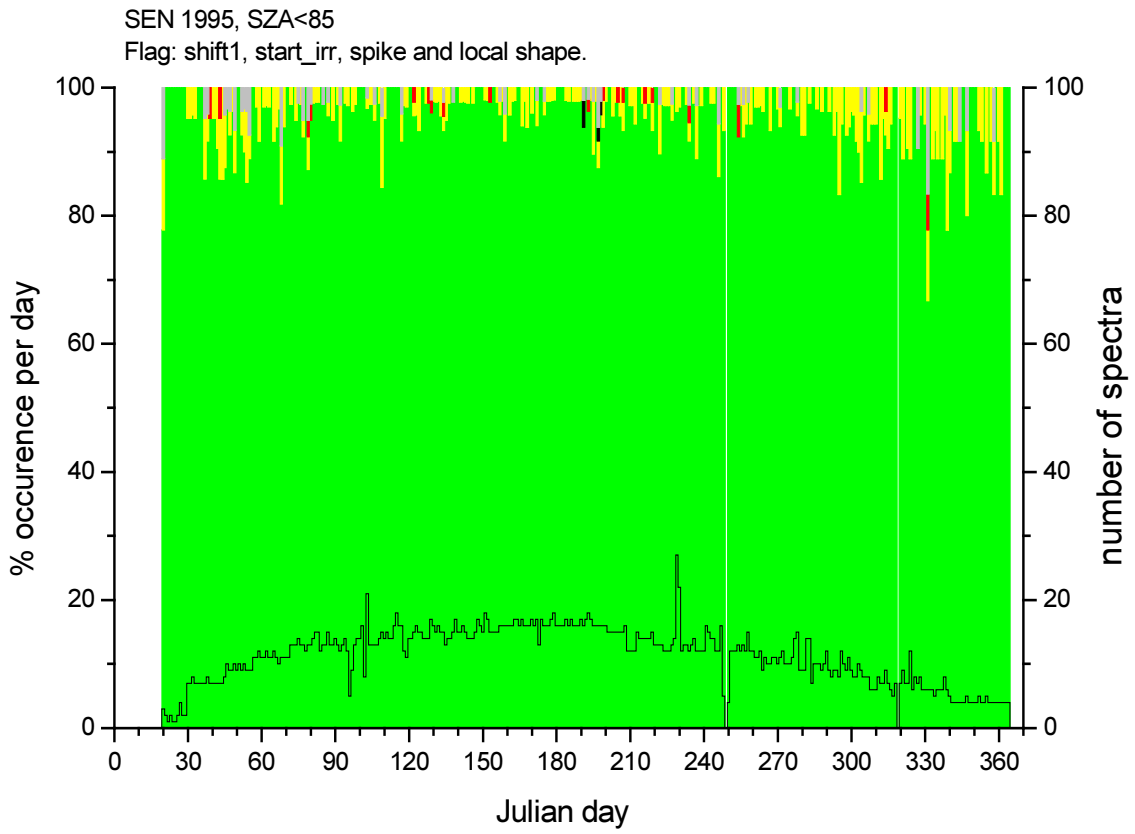
A few black flags exist in all of the flagging categories (with red flags < 0.5%). The percentage grey flags exceeds 2% for the Shift1 flag.

The shift1 flag indicates that the instrument is relatively well calibrated in the UVB region of the spectrum compared to an extra-terrestial solar spectrum.

5 (0.1%) spectra with spikes are reported.

The distribution of errors is fairly uniform throughout the dataset, although the black flags occur during the summer.

1995:



flag	Green %	Yellow %	Red %	Black %	Grey %	Cor. %	Green	Yellow	Red	Black	Grey	Cor.	Num
Shift1_flagging	98.2	0.1	0	0	1.7	0	3838	3	0	0	67	0	3908
start_irradiance_flag	99.8	0.1	0.1	0.1	0	0	3902	2	2	2	0	0	3908
Spike+local_shape	92	7.4	0.5	0.1	0	0.1	3599	288	18	2	1	4	3912

Comments :

High annual coverage (approximately 95%): high potential for use in climatological studies.

Overall data quality impression: a very high fraction of potential high quality spectra.

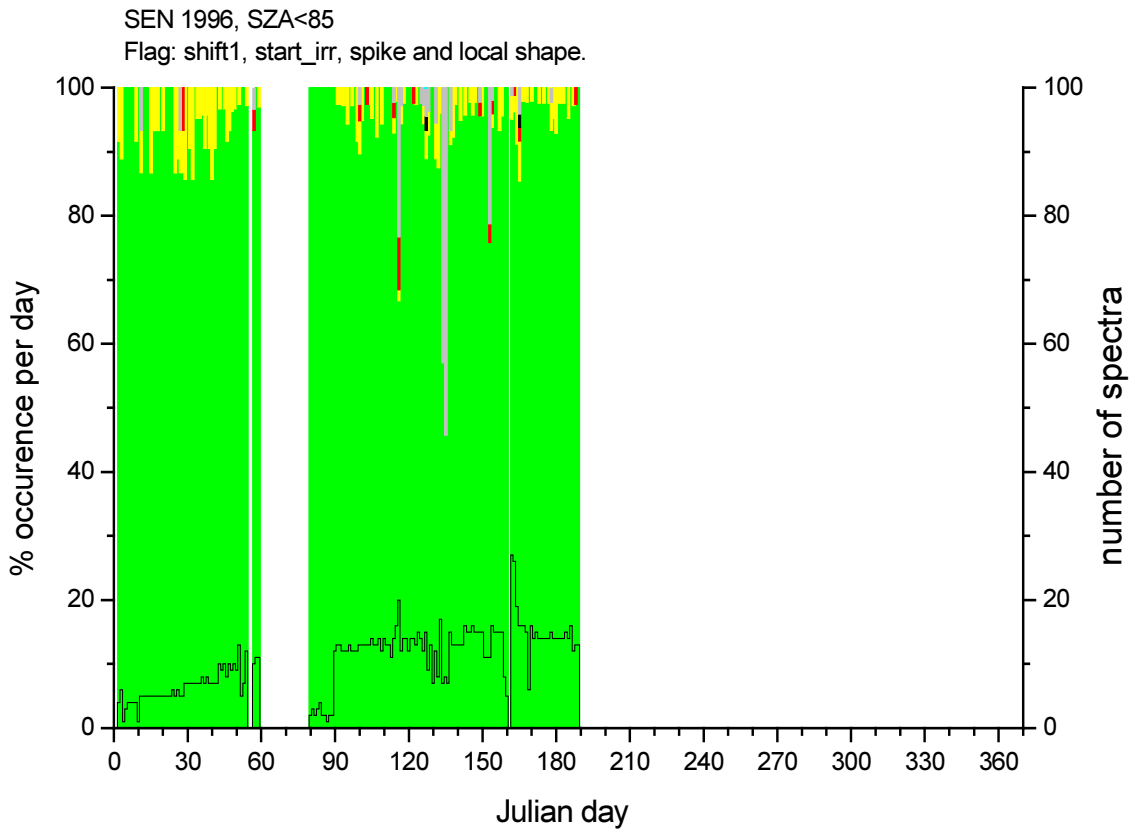
A few black flags exist in some of the flagging categories (with red flags < 0.5%). The percentage grey flags exceeds 1.5% for the Shift1 flag.

The shift1 flag indicates that the instrument is well calibrated in the UVB region of the spectrum compared to an extra-terrestial solar spectrum.

5 (0.1%) spectra with spikes are reported.

The distribution of errors is fairly uniform throughout the dataset, although the black flags occur during the summer.

1996:



flag	Green %	Yellow %	Red %	Black %	Grey %	Cor. %	Green	Yellow	Red	Black	Grey	Cor.	Num
Shift1_flagging	97.6	0	0	0.1	2.3	0	1689	0	0	1	40	0	1730
start_irradiance_flag	99.3	0.1	0.1	0	0.5	0	1718	1	2	0	9	0	1730
Spike+local_shape	89.3	8.1	0.9	0.1	0.9	0.8	1557	141	15	1	16	14	1744

Comments :

Moderate annual coverage (approximately 45%): medium potential for use in climatological studies.

Overall data quality impression: a high fraction of potential high quality spectra.

One black flag exists for some of the flagging categories (with red flags < 1.0%). The percentage grey flags exceeds 2% for the Shift1 flag.

The shift1 flag indicates that the instrument is relatively well calibrated in the UVB region of the spectrum compared to an extra-terrestial solar spectrum.

14 (0.8%) spectra with spikes are reported.

The distribution of errors is fairly uniform throughout the dataset, although the grey flags occur are clustered around a few specific days.