EDUCE- flagging report for spectral data from Belsk, Poland

Authors/evaluators: J.E. Williams, P.N. den Outer and H. Slaper (RIVM) <u>FP8 : Flagging results for Belsk, Poland:</u>

Measurements details :

Location : Belsk, Poland Elevation (m) : 180 Instrument name : brewer #064 Instrument type : Brewer single monochromator MK II Wavelength range (nm) : 280-325 Lat, Long : 51.83, 20.78 Years of submitted data : 4 complete No spectra (per year) : <u>8994 (1993), 9653 (1994), 7414 (1995), 9546 (1996), 10315 (1997), 10356 (1998)</u> No spectra (total submitted) : 56278 Slit width (FWHM) (nm) :0.54 SHIC version for analysis : 3_093

<u>Special comments</u>: The first four years have a non-critical calibration error associated with the UVB region throughout.

Responsible operator/PI: Janusz Jaroslawski: JanuszJ@igf.edu.pl

Operator comments: No comments received from the operator



	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
flag	%	%	%	%	%	%					-		
Shift1_flagging	0.3	98.6	0.2	0.1	0.9	0	21	8239	17	5	73	0	8355
start_irradiance_flag	99.8	0	0	0.1	0	0	8340	3	4	5	3	0	8355
Spike+local_shape	97.1	2.4	0.4	0.1	0	0	8111	198	36	6	4	2	8357

Comments :

Full annual coverage (approximately 99%); excellent potential value for climatological studies

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

A small number of black flag occur in some of the chosen flagging categories (with red flags < 4%). A large number of yellow flags appear for the shift1 category.

The shift1 flag indicates that a non-critical calibration error occurs for the UVB region of the spectrum, compared with an extraterrestial spectrum across the entire wavelength region and persists throughout the entire dataset.

5(0.1%) spectra with spikes are reported.

<u> 1994:</u>



	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
flag	%	%	%	%	%	%							
Shift1_flagging	0.3	93.8	3.6	0	2.2	0	30	8412	324	1	198	0	8965
start_irradiance_flag	99.5	0.3	0.1	0.1	0.1	0	8922	24	6	7	6	0	8965
Spike+local_shape	96.4	2.7	0.4	0.1	0.3	0.1	8651	242	39	8	25	5	8970

Comments :

Extensive annual coverage (approximately 99%); excellent potential value for climatological studies.

Overall data-quality impression: useful fraction of potential high quality spectra.

A small number of black flag occur in some of the chosen flagging categories (with red flags < 4%). A large number of yellow flags appear for the shift1 category.

The shift1 flag indicates that a non-critical calibration error occurs for the UVB region of the spectrum, compared with an extraterrestial spectrum and persists throughout the entire dataset. No improvement from the previous year.

5 (0.1%) spectra with spikes are reported.



	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
Flag	%	%	%	%	%	%					•		
Shift1_flagging	0.2	97.1	0.3	0	2.4	0	14	6643	23	0	164	0	6844
start_irradiance_flag	99.5	0.2	0.2	0.1	0	0	6811	13	13	7	0	0	6844
Spike+local_shape	94.6	4.4	0.6	0.3	0.1	0	6475	299	43	18	9	3	6847

Comments :

High annual coverage (approximately 80%); high potential value for climatological studies.

Overall data-quality impression: useful fraction of potential high quality spectra.

A small number of black flag occur in some of the chosen flagging categories (with red flags < 1%). A large number of yellow flags appear for the shift1 category.

The shift1 flag indicates that a non-critical calibration error occurs for the UVB region of the spectrum, compared with an extraterrestial spectrum and persists throughout the entire dataset. No improvement from the previous year.

3 (< 0.1%) spectra with spikes are reported.



	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
flag	%	%	%	%	%	%							
Shift1_flagging	19.4	79.4	0.2	0	1	0	1725	7078	20	0	86	0	8909
start_irradiance_flag	100	0	0	0	0	0	8907	1	0	0	1	0	8909
Spike+local_shape	97.3	2.4	0.3	0	0	0	8671	211	24	0	3	2	8911

Comments :

Extensive annual coverage (approximately 97%); excellent potential value for climatological studies.

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

No black flags occur in any of the chosen flagging categories (with red flags < 0.5%). A large number of yellow flags appear for the shift1 category.

The shift1 flag indicates that a non-critical calibration error occurs for the UVB region of the spectrum, compared with an extraterrestial spectrum and persists throughout the entire dataset. No improvement from the previous year.

2 (< 0.1%) spectra with spikes are reported.





	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
Flag	%	%	%	%	%	%					•		
Shift1_flagging	91.7	6.1	1.1	0.2	1	0	8732	583	101	15	93	0	9524
Spike+local_shape	99.7	0.3	0	0	0	0	9492	28	2	0	2	0	9524
start_irradiance_flag	97	2.7	0.2	0	0.1	0	9236	260	20	1	7	2	9526

Comments:

Extensive annual coverage (approximately 97%); excellent potential value for climatological studies.

Overall data-quality impression: useful fraction of potential high quality spectra.

A small number of black flag occur in some of the chosen flagging categories (with red flags < 1.5%).

The shift1 flag indicates that a non-critical calibration error occurs for the UVB region of the spectrum, compared with an extraterrestial spectrum. This occurs for the first part of the database only. A substantial improvement from the previous year.

2 (< 0.1%) spectra with spikes are reported.

The distribution of errors is non-uniform throughout the year, with the majority of flags occurring before Julian day 60. The instrument seems to be re-calibrated after this day.



	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
Flag	%	%	%	%	%	%					•		
Shift1_flagging	99.3	0	0	0	0.7	0	9509	0	0	0	63	0	9572
start_irradiance_flag	99.6	0.4	0	0	0	0	9530	39	3	0	0	0	9572
Spike+local_shape	97.5	2.4	0.1	0	0	0	9336	228	7	0	1	0	9572

Comments:

Extensive annual coverage (approximately 97%); excellent potential value for climatological studies.

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

No black flags occur in any of the chosen flagging categories (with red flags < 0.2%).

The shift1 flag indicates that the instrument is well calibrated for the UVB region of the spectrum, compared with an extraterrestial spectrum. A substantial improvement from the all the previous years.

2 (< 0.1%) spectra with spikes are reported.

The distribution of errors is uniform across the dataset.

<u> 1998:</u>