EDUCE- flagging report for spectral data from Offenbach, Germany

Authors/evaluators: JE Williams, PN den Outer and H Slaper (RIVM) **FP23 : Flagging results for Offenbach, Germany:**

Measurements details :

Location: Offenbach, Germany

Elevation (m): 124

Instrument name: DM 15-1420 Instrument type: Bentham 1420 Wavelength range (nm): 280-325

Lat, Long: 50.005, 8.651

Date on which data was extracted: 18.10.02 (2001)

Date on which slit function was extracted/received: 27.11.02

Years of submitted data: 1 incomplete No spectra (per year): 19968 (2001) No spectra (total submitted): 19968 Slit width (FWHM) (nm): 1.36 SHIC version for analysis: 3 093

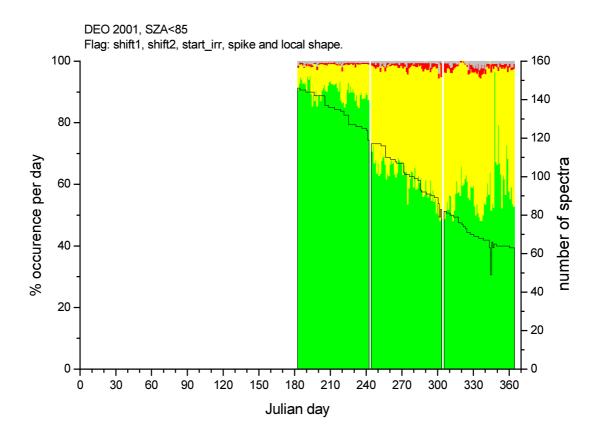
Special comments: Only half a year of data is currently submitted for this site but the number of spectra taken each day is very high.

Responsible operator/PI: Manfred Steinmetz; msteinmetz@bfs.de

Operator comments: No comments received from the operator.

Tables of flagging statistics:

2001:



	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
flag	%	%	%	%	%	%							
Shift1_flagging	65.8	32	0.3	0	2	0	12034	5849	48	0	358	0	18289
Shift2_flagging	36.4	61.4	1.1	0	1.1	0	6664	11227	200	0	198	0	18289
start_irradiance_flag	99	0.1	0.9	0	0	0	18103	19	165	2	0	0	18289
Spike+local_shape	93.5	4.9	1.6	0	0	0	17108	893	287	1	0	6	18295
Transmission_2	98.1	1.8	0.1	0	0	0	17949	324	16	0	0	0	18289

Comments:

Moderate annual coverage (approximately 50%): medium potential for use in climatological studies.

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

A very small number of black flags occur in a few of the chosen flagging categories (with red flags < 2.0%).

The shift1 and shift2 flags indicate that the instrument has some undefined calibration errors in both the UVA and UVB region of the spectrum for nearly the entire dataset compared to an extra-terrestial solar spectrum.

6 (< 0.1%) spectra with spikes are reported.

The distribution of errors is non uniform throughout the dataset, with a higher incidence of yellow flags between Julian Days 240 and 350, suggesting that the calibration of the instrument becomes worse over this period. Approximately 50% of the dataset is corrected for spikes suggesting a low signal to noise ratio on the measurements.