EDUCE- flagging report for spectral data from Hohenpeissenberg, Germany

Authors/evaluators: J.E. Williams, P.N. den Outer and H. Slaper (RIVM) FP6 : Flagging results for Hohenpeissberg, Germany:

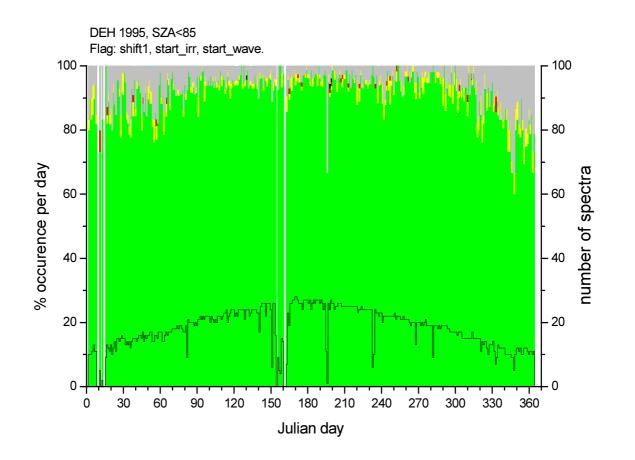
Measurements details :

Location : Hohenpeissenberg, Germany Elevation (m) : 980 Instrument name : brewer #010 Instrument type : SCI-TEC MK III Wavelength range (nm) : 280-325 Lat, Long : 47.804, -11.018 Years of submitted data : 4 complete No spectra (per year) : <u>6643 (1995)</u>, 6733 (1996), 6475 (1997), 6272 (1998) No spectra (total submitted) : 26123 Slit width (FWHM) (nm) : 0.63 SHIC version for analysis : 3_093

Special comments: All datasets have approximately 20% unidentified errors associated with shift1 flag.

Responsible operator/PI: Uwe Feister : <u>Uwe.Feister@dwd.de</u>

Operator comments: The operator submitted a new slit function in response to the initial analysis of the data for this location.



	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
flag	%	%	%	%	%	%							
Shift1_flagging	83.2	0	0	0	16.8	0	5497	1	0	0	1107	0	6605
start_irradiance_flag	99.8	0.2	0.1	0	0	0	6589	10	5	1	0	0	6605
Spike+local_shape	94.7	4.9	0.3	0	0	0.1	6260	324	19	2	0	8	6613

Extensive annual coverage (approximately 98%): excellent potential for use in climatological studies.

Overall data-quality impression : a fraction of spectra is of questionable quality, with 16.8% having undefined errors for the shift1 flag

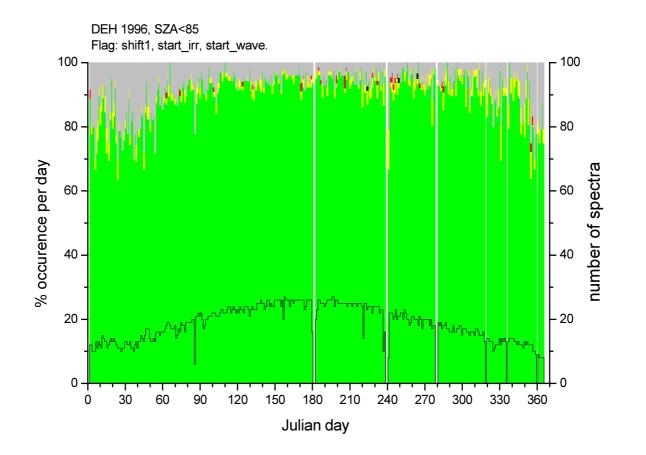
No black flags exist in any of the chosen flagging categories (with red flags < 0.5%).

The shift1 flag indicates that the instrument has some undefined calibration errors in the UVB region of the spectrum compared to an extra-terrestial solar spectrum.

8 (0.1%) spectra with spikes are reported.

The distribution of errors is uniform throughout the year.





	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
Flag	%	%	%	%	%	%							
Shift1_flagging	80.3	0	0	0	19.7	0	5360	0	0	0	1319	0	6679
start_irradiance_flag	99.7	0.2	0.1	0	0	0	6656	14	6	3	0	0	6679
Spike+local_shape	94.6	4.9	0.4	0	0	0.1	6326	327	26	0	0	7	6686

Extensive annual coverage (approximately 98%): excellent potential for use in climatological studies.

Overall data-quality impression : a fraction of spectra is of questionable quality, with 19.7% having undefined errors for the shift1 flag.

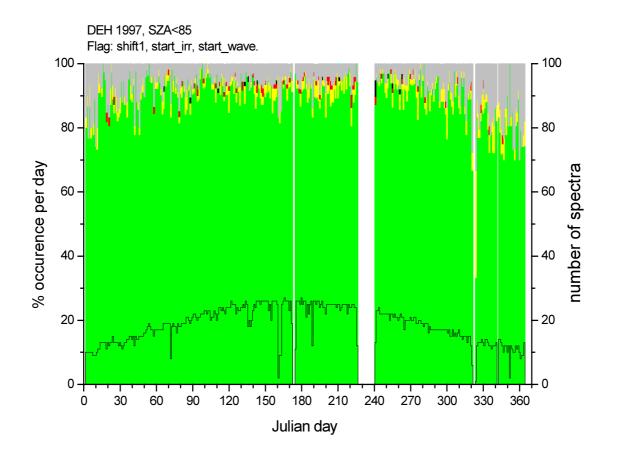
No black flags exist in any of the chosen flagging categories (with red flags < 0.5%).

The shift1 flag indicates that the instrument some undefined calibration errors in the UVB region of the spectrum compared to an extra-terrestial solar spectrum. No real improvement on the previous year.

7(0.1%) spectra with spikes are reported.

The distribution of errors is fairly uniform throughout the year, with slightly more undefined errors (grey flags) occurring at the start of the year





	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
Flag	%	%	%	%	%	%							
Shift1_flagging	80.4	0	0	0	19.6	0	5151	0	0	2	1253	0	6406
start_irradiance_flag	99	0.5	0.3	0.2	0	0	6344	34	18	10	0	0	6406
Spike+local_shape	91.9	7.1	0.9	0	0	0	5889	455	59	3	0	2	6408

Extensive annual coverage (approximately 95%): excellent potential for use in climatological studies.

Overall data-quality impression : a fraction of spectra is of questionable quality, with 19.6% having undefined errors for the shift1 flag.

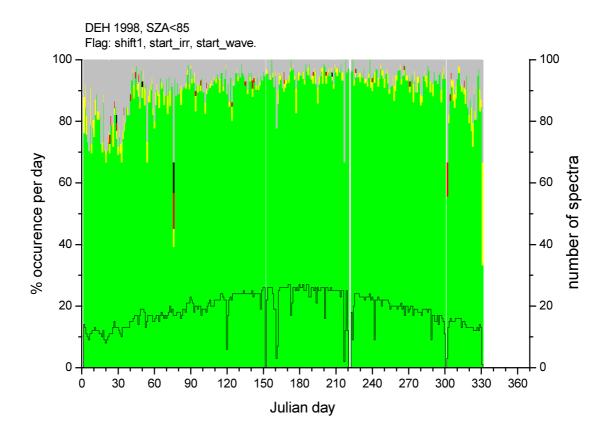
No black flags exist in any of the chosen flagging categories (with red flags < 1%).

The shift1 flag indicates that the instrument has some undefined calibration errors in the UVB region of the spectrum compared to an extra-terrestial solar spectrum. No real improvement on the previous year.

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

The distribution of errors is non-uniform throughout the year, with more yellow and grey flags at the start and end of the dataset.





	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
Flag	%	%	%	%	%	%							
Shift1_flagging	78.8	0	0	0	21.2	0	4871	0	0	0	1308	0	6179
start_irradiance_flag	99.5	0.3	0.1	0	0	0	6150	20	7	2	0	0	6179
Spike+local_shape	94.8	4.3	0.5	0.1	0	0.3	5876	269	28	6	0	17	6196

High annual coverage (approximately 90%): high potential for use in climatological studies.

Overall data-quality impression : a fraction of spectra is of questionable quality, with 21.2% having undefined errors for the shift1 flag.

A few black flags exist in some of the chosen flagging categories (with red flags < 0.5%).

The shift1 flag indicates that the instrument some undefined calibration errors in the UVB region of the spectrum compared to an extra-terrestial solar spectrum. No real improvement on the previous year.

15 (0.2%) spectrua with spike are reported.

The distribution of errors is fairly non-uniform throughout the year, with more yellow and grey flags at the start of the dataset.