# EDUCE flagging report for spectral data from Zugspitze, Germany

Authors/evaluators: JE Williams, PN den Outer and H Slaper (RIVM) FP24: Flagging results for Zugspitze, Germany:

#### Measurements details :

Location: Zugspitze, Germany

Elevation (m): 2965

Instrument name: Zugspitze Bentham

Instrument type: Bentham Instruments, DTM 300

Wavelength range (nm): 280-325

Lat, Long: 47.42, 10.98

Date on which data was extracted: 02.01.03 (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): 0.72 SHIC version for analysis: 3 093

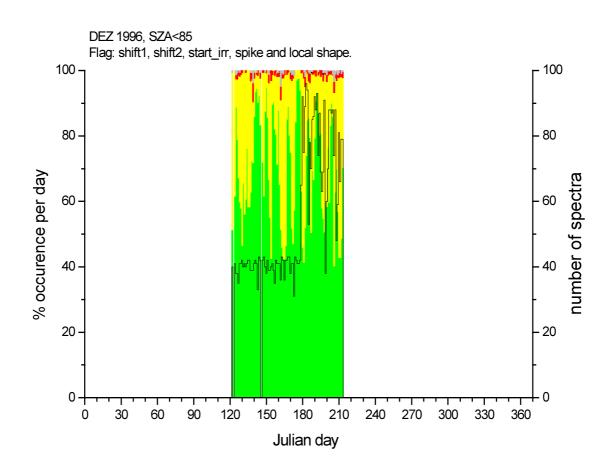
**Special comments:** Only a third of a year is currently available. More datasets for consequetive years are to be submitted to the database in the near future.

Responsible operator/PI: Gunther Seckmeyer: <u>Seckmeyer@muk.uni-hannover.de</u>

**Operator comments:** No comments received from the operator.

## Tables of flagging statistics:

### **1996:**



	Green	Yellow	Red	Black	Grey	Cor.	Green	Yellow	Red	Black	Grey	Cor.	Num
flag	%	%	%	%	%	%							
Shift1_flagging	47.9	50.4	0.1	0	1.7	0	2354	2474	3	0	82	0	4913
Shift2_flagging	56.9	42.9	0	0	0.1	0	2795	2110	1	0	7	0	4913
start_irradiance_flag	100	0	0	0	0	0	4911	0	1	1	0	0	4913
Spike+local_shape	72.7	22.6	4.5	0	0	0.2	3577	1114	220	1	1	9	4922
Transmission_2	75.1	23.7	1.2	0	0	0	3689	1162	60	0	2	0	4913

### **Comments:**

Moderate annual coverage (approximately 30%): 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 < 5.0%).

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 a significant fraction of the dataset compared to an extra-terrestial solar spectrum.

9 spectra with spikes are reported.

The distribution of errors is fairly uniform throughout the dataset, with a high incidence of yellow flags throughout.