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Atmospheric Measurement Techniques Discussions

Interactive comment on "The design and development of a tuneable and portable radiation source for in situ spectrometer characterisation" *by* Marek Šmíd et al.

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The responses to the comments received from Anonymous referee #1 are submitted below in the form of a pdf sheet including responses comment-by-comment and a png file including newly added Table 3: The evaluation of standard uncertainty of the TuPS wavelength scale.

Please also note the supplement to this comment:
https://amt.copernicus.org/preprints/amt-2020-244/amt-2020-244-AC1-supplement.pdf

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Discussion paper

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Discussion paper

		uncertainty contributions	units	type	distribution	sensitivity coeff.	standard uncertainty (k=1) [nm]
u_{cal}	calibration uncertainty	0,01	nm	B	rectangular	1	0,006
u_{rep}	repeatability	0,005	nm	A	normal	1	0,003
u_{lin}	linear fitting residuals	0,005	nm	B	rectangular	1	0,003
u_g	grating angular rotation resolution	0,008	nm	B	rectangular	1	0,004
u_{peak}	peak position evaluation	0,005	nm	B	rectangular	1	0,003
u_{temp}	temperature dependence	1	°C	B	rectangular	0,007	0,004
u_t	temporal stability	0,025	nm	B	rectangular	1	0,014
u	**Total standard uncertainty (k=1)**						**0,017**

Fig. 1. Table 3: The evaluation of standard uncertainty of the TuPS wavelength scale.