

# Plenary Discussion #2

## Thoughts on: How do we present uncertainties?

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## Uncertainty table example, Dobson total column ozone measurements

- Product description
- Uncertainty description: incl brief description of the formula/procedure
- Table with all components

Field name of uncertainty	Associated quantity
Total uncertainty (all parameters below)	1.7%
Wavelength registration $\pm 0.025$ nm	0.1%
Noise of detector /Calibration /ND filter Dead-time /linearity/ Instr. Temperature $\pm 0.1\%$	0.06%
Strat. Temp Bass-Paur: 213K-243 K	1.2%
Strat. Temp Bremen: 213K-243 K	0.6%
Cross-Section Bass-Paur: $\pm 5\%$	1.2%
Extra-terrestrial: $\pm 5\%$	0%
Ozone air mass variation	liner
AOD/SO <sub>2</sub>	Not determined yet



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- Requirements on how to provide this to the VO user:  
Short & precise but at the same time straight forward to understand & standalone, all-inclusive & complete
- In some cases, the uncertainty depends e.g. on latitude or solar zenith angle (SZA), so the uncertainty might be rather a function than just one value.
- Table is an efficient and simple way of providing the uncertainties ..... BUT having also some visualization tools (error bars) is certainly also very valuable for the user.
- Start with a simple approach but – if time and resources allow – provide additionally more in-depth information



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