

Interactive comment on “MIPAS Level 1B algorithms overview: operational processing and characterization” by A. Kleinert et al.

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Received and published: 14 December 2006

Definitions of LOS and NESR should appear the first time they are introduced in the text.

In p10675 - 6 (Introduction) it is written that MIPAS nominal sequence starts at 66km and descend to 3km. Should not this be 68 to 6km? It is written that this nominal mode is for the high resolution. It is important to mention that there is a reduced resolution mode, and why. Just a brief sentence. And I think is more used the term Full resolution instead of high resolution.

In 10676 -4 (level 1B algorithms), In the LOS calibration part, what does the absolute LOS pointing value mean? Absolute tangent altitude?

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In equation 2, is S_c the same as S_d s used in equation 1?

In 10678 -7 it is said that the remaining elevation error, obtained from LOS calibration measurements (are the last ones made on flight?)

In 10686 -17. What does the NESR0 to achieve in the respect band assuming high spectra resolution is given in table 5. Should it say the expected NESR or the specifications NESR.

In 10691 -7, what does irradiated mean?

Now, some questions. Does the spectral calibration take into account the variation in Doppler shift due to the earth's rotation? This is supposed to be known so could be applied independently of the calibration. How is the NESR computed, with the imaginary part of the spectra or with the deep space measurements. Should NESR0 and NESR be the same, I mean the imaginary part of the spectra should be comparable to the deep space measurements. What is the main reason of the forward and reverse offset differences. What is the tangent height for deep space measurements, I read that it was above 150km but in ACVE-3 you specified something like 230km.

In section 2.4.1, I think it is important to mention that the decimation produces spikes at fixed wavelength in the L1B spectra. Also it would be nice to have a reference, regarding the the complex interferogram, where an explanation can be found.

In section 4.1.2, it would be nice to have an estimate of the temperature error corresponding to the 1% accuracy.

Interactive comment on Atmos. Chem. Phys. Discuss., 6, 10673, 2006.

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