

SCI AMACHY Calibration Review

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SCI AMACHY Conclusions

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SCI AMACHY-Conclusions

- ➡ Instrument functionality
- ➡ Instrument optical and radiometric performance
- ➡ Instrument in-flight calibration
- ➡ Ground scene dependent corrections
- ➡ Calibrated Radiance
- ➡ Instrument History/monitoring

SCI AMACHY-Conclusions

Instrument functionality

Full functionality has been proven.

The only problem in the ICU s/w is now understood, a patch is already under test and going to be implemented soon.

Final verification of state parameters (I.e. instrument settings) for scientific states to be performed within September 2002.

Instrument optical and radiometric performance

All science channels behave as expected, with the exception of water ice in channels 7 & 8.

Situation improving since first countermeasures have been taken.

Verification of the validity of on-ground derived "key-parameters" has just started.

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Instrument in-flight calibration

First Leakage and spectral calibration orbits show that SCI AMACHY is a very stable instrument.

Nevertheless, analysis of general orbital variability needs continuation.

Solar irradiance calibration matches theoretical expectations.

Verification/Analysis of etalon correction and pixel to pixel gain factor is in progress.

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Ground scene dependent corrections

Detector memory effect and straylight are looking reasonable, systematic investigation is on-going.

Atmospheric polarisation correction not working yet – investigation is on-going.

Calibrated Radiance

In case of un-polarised input scenarios, the accuracy can be called excellent right now.

Due to the lack in polarisation correction, corresponding errors currently have to be accepted.

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Instrument History/monitoring

This activity could not be started yet due to un-availability of level 1b data, which would be needed to run the official instrument monitoring tools.

For the same reason, not all necessary auxiliary file updates could have been performed.

Therefore it is considered another **major** task to process and distribute consolidated level 1b data from the entire commissioning phase/cal-val.