



## Minutes of the 4th German SCIAMACHY validation team (GSVT) meeting

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Date: 25th November 2003

Location: Institute of Environmental Physics, University Heidelberg

### Agenda items of the 4<sup>th</sup> German Validation Team Meeting

- Opening of the meeting by Ulrich Platt and John Burrows
- Information for the validation teams (Klaus Bramstedt)
  - SCIAMACHY Data distribution and delivery to the validation community
  - Scientific Products
- Individual contributions of the validation groups, concerning proposals for publications in *Atmospheric Chemistry and Physics* (ACP)

### Summary

During the 3<sup>rd</sup> GSVT meeting in Bremen in July 2003 it was suggested to publish the work of the teams in two special issues in ACP. One will contain the results of the validation of SCIAMACHY products, the other one collects scientific results of the projects besides the validation tasks itself. On the 4<sup>th</sup> German validation team meeting now the individual validation groups presented first ideas for publications of additional results. In summary, an interesting and promising list of anticipated publications has been collected, demonstrating the productivity of the team despite the delays of official SCIAMACHY products.

## Schedule for operational products

Presented was the current plan for delivering operational products, as defined on an ESA/DLR/NIVR management meeting Nov, 18<sup>th</sup> 2003. Most important dates are:

- First (re-) processing of the validation reference set (~3000 states) to Level 2 products will start end of December 2003.
- Next update of operational processors will be January 2004, OL processor will be fully operational in February 2004

A list of maintainers of scientific products can be found on the SCIAVALIG web-page:

[http://www.sciamachy-validation.org/sv/reindex.html?products/science\\_list.html](http://www.sciamachy-validation.org/sv/reindex.html?products/science_list.html)

## Scientific Publications in ACP

The following table is showing scientific publications which will be submitted in ACP from the German SCIAMACHY validation community. The date for the submission of the manuscripts was determined at **2 April 2004**. All attendees agreed to this deadline.

**Table 1:** List of scientific publications in ACP; S = Publication is sure, P = Publication is possible, ? = has do be checked

<b>DLR Project Nr.</b>	<b>Tentative first author</b>	<b>Publication Title</b>	<b>status</b>
<b>Falcon</b>			
No DLR Nr.	Andreas Fix	Overview about the Falcon activities	<b>S</b>
No DLR Nr.	Andreas Fix	Ozone and aerosols in the vortex edge	<b>P</b>
50 EE 0022	Jayan Kuttippurath	Comparison with a chemical transport model (CTM_B)	<b>S</b>
50 EE 0024	Klaus-Peter Heue	Format campaign: AMAX-DOAS measurements of formaldehyde in the photochemical plume of Milan City	<b>P and ?</b>
50 EE 0024 and 50 EE 0023	Klaus-Peter Heue Ping Wang	Tropospheric NO <sub>2</sub> from the AMAX-DOAS aboard the falcon	<b>P</b>
50 EE 0023	Ping Wang	Validation of SCIAMACHY OCIO measurements	<b>P</b>
<b>Satellite</b>			
50 EE 0025	Jochen Skupin	Solar irradiance compared with Kurusz, Solspec, Solstice and Susim	<b>S</b>

<b>DLR Project Nr.</b>	<b>Tentative first author</b>	<b>Publication Title</b>	<b>status</b>
50 EE 0025	Jochen Skupin	Solar MG II index compared to GOME	<b>S</b>
50 EE 0025	Astrid Bracher	NO <sub>2</sub> modelling used for the comparison of NO <sub>2</sub> satellite measurements at different Solar Zenith Angles	<b>S</b>
50 EE 0025	Astrid Bracher	Global validation of SCIAMACHY Ozone and NO <sub>2</sub> columns with GOME	<b>P</b>
<b>Ground-based</b>	<b>and ship</b>		
50 EE 0009	K.H. Fricke	Clouds in stratosphere and mesosphere	<b>???</b>
50 EE 0009	K.H. Fricke	Temperature at top and above ECMWF altitudes	<b>???</b>
50 EE 0009	K.H. Fricke	Wave dynamics	<b>S</b>
50 EE 0012	Wolfgang Hoyningen-Huene	MERIS aerosol retrieval results with BEAR and its validation	<b>S</b>
50 EE 0012	Wolfgang Hoyningen-Huene	First attempt to SCIAMACHY aerosol optical thickness (AOT)	<b>P</b>
50 EE 0010	Mathias Palm	Comparison of O <sub>3</sub> -profiles retrieved by the Sciamachy instruments and ground based microwave radiometry	<b>S</b>
50 EE 0011	Gerhard Kopp	Mixing process and early ozone loss observed by microwave Kiruna	<b>S</b>
50 EE 0008	Thomas Blumenstock	Time series of profiles of trace gases at Izaña and comparison with model calculation (KASIMA)	<b>S</b>
50 EE 0005	Sixten Fietkau	One year of ground-based BrO columns in the tropics	<b>S</b>
50 EE 0005 50 EE 0007	Andreas Richter Ralf Sussmann	Validation of SCIAMACHY total NO <sub>2</sub> with the German ground-based DOAS and FTIR measurements	<b>S</b>
50 EE 0005	Thomas Medeke	Validation of SCIAMACHY tropospheric NO <sub>2</sub> with BREDOM	<b>P</b>
50 EE 0015	Barbara Dix	Latitudinal cross sections of stratospheric and tropospheric trace gases derived from MAX-DOAS Measurements during different Polarstern traverses	<b>S</b>
50 EE 0006 already submitted in another journal	Udo Friess	Tropospheric IO in the Antarctic Coastal Region –Observations by Multi-Axis DOAS	<b>S</b>
50 EE 0006 already submitted in another journal	Udo Friess	Absolute concentration measurements by DOAS at "ZeroVisibility"	<b>S</b>

DLR Project Nr.	Tentative first author	Publication Title	status
50 EE 0013	Thorsten Warneke	CO <sub>2</sub> distributions over the Atlantic retrieved from ground based near IR solar spectra	<b>S</b>
<b>Balloon-borne</b>			
50 EE 0017 and 55 EE 0018	Katja Grunow Susanne Rohs	Matching aircraft and balloon-borne measurements with ENVISAT observation	<b>P</b>
50 EE 0019	Wolfgang Gurlit	Improvements or corrections of the Kurucz solar spectrum	<b>S</b>
50 EE 0020	Hermann Oelhaf	Denitrification /Renitrification left over	<b>P</b>
50 EE 0018 Will be submitted in another journal	Susanne Rohs	Stratospheric trend of CH <sub>4</sub> (1977-2002)	<b>S</b>
50 EE 0018 and 50 EE 0017	Fred Stroh Marcel Dorf	Balloon-borne measurements of stratospheric BrO	<b>P and ?</b>
50 EE 0016 and 50 EE 0017 and 50 EE 0019	Andreas Engel Katja Grunow Wolfgang Gurlit	Observation of mesospheric air in the stratosphere	<b>P and ?</b>
50 EE 0017	Frank Weidner	Balloon-borne scanning LIMB UV/vis measurements	<b>S</b>
50 EE 0017	Andre Butz	Intercomparison of stratospheric O <sub>3</sub> , NO <sub>2</sub> , and OCIO measurements	<b>S</b>
50 EE 0017	Claude Camy Peyret	Measurements of stratospheric CO and CH <sub>4</sub>	<b>P</b>

Besides the planned publications listed in the table above, additional publications are already published, submitted or planned for other journals. For details: <http://www.iup.physik.uni-bremen.de/gcvos/> and then publications.

#### Any other business

- The validation community was reminded of the fact that they have to fulfil the obligation to transfer their campaign data to the NILU database.
- The next GSVT meeting should take place in the first weeks in April. The venue must be still determined. It was suggested to think about a new date, if the ESA ACVE-2 meeting will be postponed to a later date. All participants agreed.

Berit Kirchhoff and Klaus Bramstedt

List of participants in alphabetical order:

- Beirle, Steffen, IUP, University Heidelberg
- Blumenstock, Thomas, IMK, Research Center Karlsruhe
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