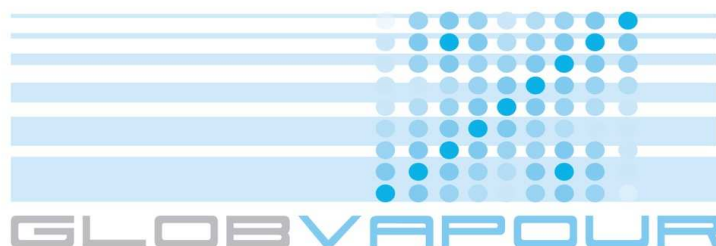




DUE GLOBVAPOUR

Progress Meeting 1

Minutes of Meeting



GLOBVAPOUR

Issue 1 Revision 0

18 November 2010

Project nr: ESRIN/AO/1-6090/09/I-OL

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Participants

[BB] Bojan Bojkov (ESA)	[NS] Nadine Schneider (DWD)
[JF] Jürgen Fischer (FUB)	[MS] Marc Schröder (DWD)
[MG] Michael Grzegorski (MPI-C)	[JS] Jörg Schulz (EUMETSAT)
[CCH] Cintia Carbajal Henken (FUB)	[TS] Theo Steenbergen (DWD)
[RL] Rasmus Lindstrot (FUB)	[MSt] Martin Stengel (DWD)
[RP] Rene Preusker (FUB)	[TW] Thomas Wagner (MPI)

Agenda - first day

- | | | | |
|-----|-------|---------------------------|------------------|
| (1) | 12:30 | Welcome and Opening | Schröder, Bojkov |
| (2) | 12:45 | Actions from last meeting | Schröder |

Status and next steps of development

- | | | | |
|-----|-------|----------------------------|------------------|
| (3) | 13:00 | GOME - SCIAMACHY retrieval | Wagner |
| (4) | 13:30 | SSM/I - MWR retrieval | Stengel |
| (5) | 14:00 | (A)ATSR retrieval | Preusker |
| (6) | 14:30 | MERIS retrieval | Lindstrot |
| | 15:00 | <i>Coffee break</i> | |
| (7) | 15:30 | Combining SSM/I and MERIS | Schröder |
| (8) | 15:45 | SEVIRI - IASI retrieval | Stengel/Schröder |
| (9) | 16:15 | IASI assessment | Stengel |

Promotion

- | | | | |
|------|-------|------------------------------------|-------------------|
| (10) | 16:45 | Newsletter | Schneider |
| (11) | 17:15 | Web (also public, non-public docs) | Schneider/Paperin |

18:00 *Expected end*

19:30 *Dinner at Luise's*

Agenda - second day

Documents

- | | | | |
|------|-------|--|--------------------------------------|
| (12) | 10:00 | Summary on existing algorithms (SVR) | Stengel, all |
| (13) | 10:30 | Ground Data Document (GDD) | Steenbergen, all |
| (14) | 10:45 | Product Validation Plan (PVP)
Diagnostic Data Set (DDS) | Steenbergen, all
Steenbergen, all |
| | 11:15 | <i>Coffee break</i> | |

Meetings & Planning

- | | | | |
|------|-------|-------------------------------------|--------------------------|
| (15) | 11:30 | Status of User Group, User Workshop | Schröder, Bojkov, Schulz |
| | 12:30 | <i>Lunch</i> | |
| (16) | 13:00 | Review of plans | Schröder, Bojkov |
| | | More next steps | |
| | | Next meeting(s), conferences, ... | |
| (17) | 14:00 | AOB | All |
| (18) | 14:30 | Summary: Decisions and actions | All |
| | 15:00 | <i>Expected end</i> | |

Top	Issue	Com	Cat	Content	Actionee	Ref.	Status	Deadline
1.	Opening	MS, JF	I	MS and JF opened the meeting and welcomed all participants with a tour de table.		Item 1		
2.	Action Status	MS	I	Discussion of the status of the Actions from RER. All actions closed - one was delayed until 18 June 2010.		Item 2		
3.	Presentation	TW	I	On GOME - SCIAMACHY retrieval RP questions usefulness of albedo analysis over ocean. In the algorithm a fixed value of 3% is used over oceans. In sun glint areas the albedo is significantly larger. RP further mentioned that better albedo maps are available than the maps from Koelemeijer and the HICRU data. Comments are made by JF on the interpolation method used for the aerosol optical thickness. Questions by MS are made on the plans of a generation of a consistent H2O times series. As argued by JS, for the validation not only the collocated radiosondes but all available validation data should be included.		Item 3		
4.	Presentation	MSt	I	On SSM/I - MWR retrieval JF questions the effect of different temperature background information on the product. Such an effect is assumed to be small, but it would be useful to perform a background perturbation experiment. A warning is stated (MSt) for filtering out high values in the SSM/I (any) retrieval, which will have an impact on the averaging. This 'discriminated info' is however still available in the error margin dataset.		Item 4		
5.	Action #1	BB	A	Perform tests with background fields other than ERA-Interim as input to the retrieval, in order to investigate the effect of different temperature profiles.	MSt	Item 4		31.10.2010

Top	Issue	Com	Cat	Content	Actionee	Ref.	Status	Deadline
6.	Presentation	RP	I	<p>On AATSR retrieval</p> <p>According to RP, the usefulness of AATSR water vapour retrieval compared to MWR based retrieval is questionable. The reason is the relatively low information content and sensitivity to TCWV of BT11-BT12.</p>		Item 5		
7.	Presentation	RL	I	<p>On MERIS retrieval</p> <p>According to JF, the advantage is that the Aerosol Optical Thickness description is known accurately. BB mentions that this should be documented.</p>		Item 6		
8.	Presentation	MS	I	<p>On Combining SSM/I and MERIS</p> <p>It is stated in the TSD to provide daily products. This can be either a daily average or a composite. Due to limited coverage of MERIS it was proposed and then decided to produce composites for the combined product. It was proposed to provide 6 hourly composites (MS). However, a final decision was not made.</p> <p>Advantages and disadvantages of Kriging were discussed. The main conclusion is that it is not necessary to apply Kriging if composites and monthly averages are produced. A consequence would be that no gaps will be filled. It was argued that gap filling for clear sky data is not reasonable physically. However user might ask for gap-free data. This issue needs to be discussed with the user community.</p> <p>The MERIS + SSM/I bias is discussed. It was noted that a direct bias correction between MERIS sun glint retrieval and SSM/I is probably superior over an additional intermediate step using MWR. See the Decision for further details. In addition, special</p>		Item 7		

Top	Issue	Com	Cat	Content	Actionee	Ref.	Status	Deadline
				attention is to be paid to the coastal region (BB).				
9.	Decision	MS	D	Daily products for SSM/I - MERIS will be composites. The composite will include day only observations. Kriging will not be applied to SSM/I and MERIS.		Item 7		
10.	Action #2	BB	A	A consequence of TOP 9 is that no gaps will be filled. It was consensus that gap filling should be avoided for MERIS and for consistency reasons also for SSM/I. However, the User Group will be contacted and asked what their opinion about this issue is. If gap filling is considered useful the User Group is asked to propose a method on how gap filling should be done and how uncertainties should be assigned. This will be sent to UKMO (Roger Saunders) for discussion within the User Group.	MS, RS	Item 7		15.07.2010
11.	MWR	MS, BB	D	MWR data will be processed for the prototype month first. It will then be analysed if the MWR data will be used for bias correction of the combined SSM/I+MERIS product. ENVISAT MWR data will be processed if analysis demonstrates the usefulness of sun glint bias correction using MWR as intermediate step. MWR data from ERS will not be processed.		Item 7		
12.	Presentation	MSt	I	On SEVIRI - IASI retrieval An example with SEVIRI+MERIS (same method) is shown, which seems to be afflicted with a bias. This might be due to the bias correction (currently used MERIS data might have a bias) or the anomaly determination (It might be needed to oversample SEVIRI observations for anomaly determination).		Item 8		
13.	Presentation	MSt	I	On IASI assessment		Item 9		

Top	Issue	Com	Cat	Content	Actionee	Ref.	Status	Deadline
				IASI L2 validation data for Jul/Aug 2007 were in pre-operational status and could therefore not be obtained from EUM. A request for reprocessed data and/or collocations could be made to EUM. BB suggests to use Lidar data for additional validation, in particular from specific Campaigns, e.g. from researchers at MOL.				
14.	Presentation	NS	I	On Newsletter & Website The presented Newsletter and Website is well received. ESA comments will be forwarded separately (BB).		Item 10, 11		
15.	Decision	MS	D	A subset of downloadable documents will be made available through the website: RBD, TSD, ATBD, PVR, SEP, PUG, GDD, SVR.		Item 11		
16.	Action #3	BB	A	Provide input to website in order to have updated webpage ready until ESA Living Planet Symposium.	All			18.06.2010
17.	Presentation	MSt	I	On SVR		Item 12		
18.	Presentation	TSt	I	On GDD, PVP, DDS		Item 13, 14		
19.	Action #4	BB	A	Provide Lidar NDACC data.	BB	Item 13		15.07.2010
20.	Decision	BB	D	Include NDACC microwave data for profile validation.		Item 13		
21.	Decision	BB	D	Gome-2 data will be removed as validation dataset.		Item 14		
22.	Decision	BB	D	The ground-based and satellite data for validation will be joined into one document, the "Validation Data Document" which replaces the GDD.		Item 13, 14		
23.	Decision	BB	D	The GlobVapour User Workshop will be carried out		Item 15		

Top	Issue	Com	Cat	Content	Actionee	Ref.	Status	Deadline
				together with the GEWEX Radiation Panel Meeting in Frascati on 8-10 Mar 2011.				
24.	Information	JS, MS, BB		MS and JS made short presentations related to the joint workshop. It was made clear that feedback from the user community to the GV project shall be an essential part of the meeting. However, it was also agreed that the GEWEX visibility and role can be dominant. JS will submit a concept and planning paper to the GEWEX Radiation Panel chair to consolidate the workshop. The working title for the workshop is "GEWEX/ESA DUE GlobVapour workshop on long term water vapour data sets and their quality assessment".		Item 15		
25.	Decision	MS	D	The next PM will at MPI in Mainz on 9-10 Nov 2010.		Item 16		
26.	Decision	MS	D	Publically available documents will be generated per product. In case of the combined SSM/I and MERIS product the documents will be provided per instrument retrieval plus a document for L3 processing.		Item 16		
27.	Action #5	RP	A	Send the formula for calculation of sun-glint affected areas to MPI-C.	RP	Item 16		18.06.2010
28.	Action #6	BB	A	Provide comments to the DUE GlobVapour website.	BB	Item 16		18.06.2010
29.	Decision	BB	D	A combined MPR for Jul/Aug will be delivered.		Item 16		

Conclusions

The project had a very productive and successful meeting at FU Berlin on 10+11 June 2010. The status of the processor development is in general ongoing; currently no major delays are expected. However, the following issues had been raised. First, a retrieval scheme for MWR is currently under development. The product will be generated for the prototype months only. Further processing is envisaged only if the product will be needed for the combined SSM/I and MERIS product. Second it is likely that the quality of the (A)ATSR product will be low. Third, several comments were made that questioned the quality of the GOME-like products. Finally, it was agreed to provide composite SSM/I and MERIS products with the consequence that the application of Kriging is not required.

The set of deliverables (SVR, PVP, GDD and DDS) has been discussed and reviewed. Minor comments were given so that their release is expected early July 2010. Note that it was decided to rename the GDD into VDD (validation data document).

The promotion of the project and its interim results is well advanced. The webpage has been largely extended and improved and the first issue of the GlobVapour Newsletter has been released.