

CAMS-84

Minutes of the PM6 telecon

Minutes compiled by
Henk Eskes, Jacques Claas
KNMI

Date: 07/02/2017

REF.: CAMS84_2015SC2_PM6_minutes_20170207

Agenda

Agenda WebEx PM6 meeting 7 February 2017, 9:30 - 12:30 CET

1. Welcome (Henk)
2. Announcements by the Service Manager (Jacques):
reporting for SC!, KPIs, news from last CAMS SLBs, CAMS Assembly, actions ...
3. NRT validation report (All partners involved) (WP1 and WP4):
all: prepare 1 or 2 slides (not more) with highlights, developments, status new activities, mention delays if any. Keep it short and mention only new results and developments! 1 slide extra for the editors, if needed. 1 slide extra for the case studies.

(coffee/tea break, 15 mins)

4. Short update status work S&T, WP2 (Sander)
5. Evaluation of regional models (WP5/6) (short status update)
6. 2010 Reanalysis (short status update)
7. WP 8: development plan scoring document (Michael)
8. AOB

Participants

Yves Christophe, BIRA-IASB
Simon Chabrillat, BIRA-IASB
Eleni Katragkou, AUTH
Annette Wagner, MPG
Anne-Marlene Blechschmidt, IUP-UB
Natalia Sudarchikova, MPG
Henk Eskes, KNMI
Jacques Claas, KNMI

Michael Schulz, MET-NO
Sara Basart, BSC
John Kapsomenakis, AA
Harald Flentje, DWD
Kaj Mantzius Hansen, AU
Thorsten Warnecke, UBC
Sander Niemeijer, S&T

Action items and deadlines

- Michael: Initiate next steps for development of headline scores and paper

Summary of the meeting

Announcements by the service manager (Jacques):

(Sub)contract status since previous meeting:

- Service Contract 2: based on the Finalized Implementation Plan 2017 from KNMI, ECMWF has released the CAMS-84 Service Contract (SC2). This contract was signed by KNMI on December 13, 2016.

Reporting:

- The final version of the 2016/Q4 Quarterly Report has been released on January 23, 2017. Comments from ECMWF on an earlier version have been included.
- The final version of Finalized Implementation Plan 2017 has been released on November 30, 2016. Comments from ECMWF on various earlier versions have been included. This document describes all the CAMS-84 work as part of SC2.
- KNMI is preparing the Annual Report 2016 which must be delivered to ECMWF before the end of February.

Invoice process SC1:

- Subcontractor invoice status per 2017, February 6: most of the 2016/Q2+Q3 invoices have been paid by KNMI.
- KNMI is waiting for the ECMWF Note of Acceptance (NoA) for payment 7 (activities by S&T for WP2) and payment 8 (covering all 2016/Q4 activities).
- **NOTE:** only after receiving the NoA, all subcontractors will be asked via e-mail to send their invoices. Please wait for this e-mail before sending your invoices to KNMI!

KPI status:

- KPI 2: "User Uptake": these numbers are provided by ECMWF on a monthly basis and included in the Quarterly Reports.
- KPI 3: "User Satisfaction": this is ongoing work that will be developed CAMS-wide by CAMS-94 (coordinated by Thomas Popp), ECMWF and the other sub-projects.
- KPI 4: "Uptime of validation websites": using the "Uptime Robot" tool, uptime numbers are updated monthly and the results are included in the Quarterly Reports. ECMWF has raised a few questions on the content of various validation websites. KNMI has forwarded these questions (e.g. about out-of-date figures) to the various contact persons. Questions have been answered in the meantime.

CAMS upcoming activities:

- Release of the Validation Report for the period SON 2016 (see section on WP1).
- As a follow-up of the Development Plan from partner S&T, work has started and is still ongoing on the inclusion of the various observational datasets from the CAMS-84

partners (see also section on WP2).

Conferences:

- The 2nd CAMS General Assembly will be held in Warsaw, May 16-18.
==> On Monday 15 May, in the afternoon, a CAMS-84 splinter meeting will be held.

Some points from the last couple of SLBs:

- DOI's: some progress. Soon ECMWF will be able to issue DOI's.
- CAMS_2* (in-situ) contracts: Most contracts will be signed by 1 April 2017. The DoW of these contracts will be made available, so that we (CAMS-84) know what kind of datasets we may expect, and when. We should adapt the WP 8.1 (observation description) & WP 8.3 (data mining) docs accordingly.
- WMO-GAW and headline scores: Vincent-Henri noted that in GAW there is interest in what we are developing concerning scores / headline scores. Apart from the GAW meeting there will be a GAW-SAG in June, co-organised by VH and Frank Dentener. This could be a good moment to discuss this developments in WP8 on scoring

Action items from last meeting

All actions in grey from the PM3 meeting have been completed:

- Henk, 16 Nov: ECMWF/CAMS-50 emails on dust
- Henk, 16 Nov: Questions to Richard: use of reanalysis data, what is expected for 2010 test run
- Henk, 16 Nov: Add CAMS-50 station files once more to ftp
- Henk, 16 Nov: questions to Vincent on stratospheric NO_x and emission trends
- Michael, 18 Nov: Organise meetings for scoring document

Fifth WP1 (WP4) report: short presentations of all contributions

Editors: Annette Wagner, Michael Schulz, Yves Christophe, Michel Ramonet, Henk Eskes

Summary editors:

Annette: All contributions, also summary, case study by Natalia directly to KNMI

Michael: All received (absorption evaluation still tricky)

Yves: Everything complete

Michel: (Michel is on holiday)

Presentations:

Presentations have been merged to one pdf, available on RedMine:

Documents / Meetings / PM5 presentations

Timeline WP1 report for SON 2016:

- 14 February 2017: release of draft version for review by the modellers and ECMWF
- 28 February 2017: public release of the report

Michael (MET-NO):

- Aengstrom exponent: Size distribution very much unchanged since 2013. This will change with next upgrade of model.
- America: Always low correlation for AOD in Winter (due to snow?). Some indication of improvement over last year.

Harald (DWD):

- Ceilometers show little model skill for very thin layers, but considerable skill for larger dust layers. Assimilation causes "wrong" attribution of increments to various aerosol components., e.g. BB/dust signal attributed to sea salt.
- Harald is considering a "fractional skill score": overlap of plumes.

Sara (BSC):

- DOD for the control bigger than for o-suite. Seems analysis is adjusting other aerosol species as well over dust regions like the Sahara.
- Arabian peninsula looks strange. Maybe source map should be reconsidered.
- New site on Malta
- Case study: Central-East Mediterranean.
- SDS-WAS NAMEE now has extinction profile comparisons on line, with CAMS included.
- Comparisons PM in Med: high sea-salt contributions? Has wet vs dry sea salt issue been accounted for?
- This year the v3 AERONET NRT should become available.

Yves (BIRA):

- ACE-FTS could be included. New processing available. 30-70hPa bias typically < 6%.
- OMPS: larger biases and seasonality observed over polar regions

Hannah (LA):

- (Hannah is on holiday)

Annette (MPG):

- Discussed the vertical model level selection, e.g. related to the higher horizontal resolution of the model since mid 2016. Fine-tuning can improve the results, e.g. improved correlation. Of interest to Sander, Kaj, John.

Anne (IUP):

- NO₂: Differences seen in hotspots, fire signals too large, S. Africa is underestimated significantly in Nov 2016.
- HCHO: Overestimates in N. Australia, Central Africa. Very low GOME-2 over East Asia, which may be related to low CO observed by Natalia.

Michel (LSCE):

- (Michel is on holiday)

Thorsten (UBC):

- Unrealistic short-term variability observed: to be checked (by Bavo, Thorsten) against results from Sebastian Massart.

- Methane in Autumn underestimated, but Reunion quite good. But some inconsistency here with ICOS. Again this may be result of the methods implemented by Bavo?
- CO results: model overestimates. o-suite much improved compared to free model.

Natalia (MPG):

- MOPITT and IASI show considerable differences. Surprising low CO in SON 2016 compared to 2015
- Case study: Syberian fires. Start episode overestimated, later transport concentrations underestimated.

Kaj (AU):

- New datasets: Ny Alesund, Svalbard. Much lower O3 correlations in o-suite compared to control are striking. DEHM model evaluations will be used for reanalysis.

John (AA):

- ESRL ozone: similar results to previous reports. Changes related to the higher horizontal model resolution and changed orography taken into account.
- Mediterranean: Very good correlations found for O3 and CO.

WP 2: Status work S&T (Sander)

In December, S&T (Sander) has released a report on activities for 2nd half 2016, and plan for 2017. In 2017 we will focus on:

- 1 - Including one by one the datasets of the individual partners
- 2 - Setting up a centralised facility for intermediate model datasets and hosting of the website.

A telecon was held on 24 January with AUTH (John), AU (Kaj) and MPG (Annette), discussing surface in-situ. Details of the verification approaches were discussed. Test case will focus on Autumn 2016. Main issues: level selection, interpolation, unit conversions (wet/dry air).

John, Kaj and Annette have all send the SON2016 observation datasets to S&T. Mainly CSV. A converter to HARP will be written in Python (next week). Conversion to partial columns from pressure bounds now supported. (Fixed gravity may lead to 1-2% differences)

Funding for new server at S&T: new hardware will arrive this week. Progress made on downloading CAMS, data access and on handling GRIB-1 / GRIB-2.

On Thu 9 Feb, 15:00, there will be a teleconference with S&T, BIRA, ECMWF and KNMI to discuss the processing / central website location.

In March: continue with NDACC/TCONN.

WP3 e-suite report: short presentations of all contributions

(WP3 is not discussed this time because there is no e-suite running)

WP 5&6: Evaluation of regional models

Four (!) deliverables were completed in January:

- * The summary of the WP5 and WP6 findings was sent to Météo-France (Matthieu Plu) on 23 Jan. This summary was iterated a few times. It was decided to focus on ozone and NO₂, which reduced the size to a few pages. Météo-France submitted the report to ECMWF before the end of the month.
- * The full draft report of WP5 and WP6 for review by the CAMS-50 regional teams was submitted.

These documents are available on Redmine. John will send an updated contribution with improved unit conversions.

Henk will take the initiative for a scientific paper:

- To show how far we can go in evaluating concentrations of regional models above the surface with independent models, degree of consistency between observations, and document quality of CAMS-regional.

E.g. IAGOS, MAX-DOAS, high-alt AIRBASE, possibly sonde, satellite NO₂, MOPITT and global-regional comparisons could also be published separately individually. Please inform Henk in case there are plans.

WP 7: Reanalysis evaluation

The test reanalysis of 2010 was evaluated by CAMS-84. A preliminary feedback was provided to ECMWF on 21 December. The full report was delivered on 23 January to ECMWF (see redmine).

For Greenhouse gases there was a difference found between the results by Bavo/Thorsten and Sebastian Massart. This is discussed and will hopefully be resolved soon.

For the next report we will work with an editorial team, as agreed before.

The editors are:

- Natalia, Katinka ??: tropospheric reactive gases. Natalia will discuss this internally and inform Henk
- Michael: aerosol (tbd with Sara)
- Yves: stratosphere
- Michel: GHG

Email Richard 3 Feb: "As it looks now we will continue the already started 2003 run, which has almost finished the month of August. On average we produce 8 days/day (this fluctuates and we still hope to increase it a bit), so we can expect to have the full year available towards the end of the month."

Based on this, our 2003 report should be delivered before June 1. The following schedule is proposed:

24 April: Individual contributions to the editors
1 May: editors send sections to KNMI
8 May: draft for modellers
29 May: publish final report

Note: There is a direct overlap with the WP1 report.

WP 8: development plan

A next draft of the scoring document was produced in the first week of January. Now we have to proceed with the planning for the implementation of the scores identified.

Michael will re-launch the process.

AOB

- Natalia Sudarchikova is on maternity leave. Katinka Petersen is taking over her work in the coming months.