CAMS-84
Minutes of the PM-10 telecon

Minutes compiled by
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Agenda

Agenda PM-10 meeting,

9:30-12:30, Monday 29 January 2018 (WebEx)

Agenda

1. Welcome,
2. Announcements by the Service Manager (Jacques):
   reporting, payments, KPIs, news from CAMS SLBs …
   New collaborators in CAMS-84
3. WP 2: planning and overview of status (Jacques, Sander)
4. Status of the WP1 report, SON 2017 (short statement from editors)
5. Presentations by all groups (5 minutes max, see instructions below)
   Short break
   Presentations by all groups (5 minutes max, see instructions below)
6. Status of WP5/6 activities and report (John)
7. Status of the WP7 reanalysis report (Henk)
8. WP 8: development plan for the scoring document (Michael)
9. AOB

Participants

Yves Christophe, BIRA-IASB
Anne-Marlene Blechschmidt, IUP
Michael Schulz, MET-NO
Christos Zerefos, AA
Sander Niemeijer, S&T
Hannah Clark, CNRS-LA
Sara Basart, BSC
Katinka Petersen, MPG
Harald Flentje, DWD
Dimitris Akritidis, AUTH
Henk Eskes, KNMI

Simon Chabrillat, BIRA-IASB
Kaj Mantzius Hansen, AU
Augustin Mortier, MET-NO
John Kapsomenakis, AA
Thorsten Warnecke, UBC
Yasmine Bennouna, CNRS-LA
Annette Wagner, MPG
Yuting Wang, MPG
Bavo Langerock, BIRA-IASB
John Douros, KNMI
Jacques Claas, KNMI

Michel Ramonet (LSCE) could not join the meeting.

Action items and deadlines

- Michael, February 2018: Next steps for development of headline scores and paper.
- Harald: Investigate combined use of ceilometer data from Germany, Norway and the Netherlands.
- Henk, 1 Feb 2018: Inquire with partners about a change in planning for next reanalysis report
- Henk, 29 Jan: send reminder email on what is expected for the e-suite report.

Summary of the meeting

Announcements by the service manager (Jacques):

(Sub)contract status since previous meeting:
- Contract Change Note 1 (CCN1) has still not been signed by CEA-LSCE. CCN1 makes Service Contract 2 (SC2) an applicable document to the existing subcontracts.
  NOTE!! Without a signed CCN1 KNMI cannot pay the 2017 invoices. Please sign the CCN1 asap and send back to KNMI via e-mail.
- Service Contract 3 (SC3), covering the CAMS-84 work for the period Jan-Sep 2018, has been signed by both ECMWF and KNMI.
- CCN2 will be released soon for signature. CCN2 makes SC3 an applicable document to the existing subcontracts.

Invoice process SC2:
- KNMI is still waiting for the 2017/Q1+Q2 invoices from METNO, CNRS-LA, AU and CEA-LSCE. An e-mail request was send on October 30, 2017.
- As soon as KNMI receives the Note of Acceptance from ECMWF for the 2017/Q3+Q4 deliverables, KNMI will start the invoice process. **PLEASE**, wait with sending your invoices till KNMI asks you via e-mail.

Invoice process SC3:
- As defined in Service Contract 3, there will be two payment milestones in 2018: April 30 and September 30 (end of contract).

Reports:
- All SC2 (year 2017) deliverables have been delivered.
- The Quarterly Report 2017/Q4, issue 1.0.0, was released on time on January 17th. Comments from ECMWF were ingested that resulted in the release of a final issue 2.0.0 on October 23rd.
- The Finalized Implementation Plan 2018, issue 1.0.0, was released on time on October 17th.

Programmatic status:
- A Prior Information Notice (PIN) was issued on January 13, announcing the ITT for the next CAMS-84 Framework Contract. The ITT is expected soon. See PIN

KPI status:
- KPI 2: "User Uptake": these numbers are provided by ECMWF on a monthly basis and included in the Quarterly Reports.

The last two validation reports (period 2017/MAM and JJA) have been downloaded several times
- 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": average uptime > 99.5%. All partners are requested/reminded to keep the website content up-to-date.

From the SLB:
- The CAMS General Assembly 2018 will be held in Lisbon, June 4-8, plenary part June 5-7.
- CAMS regional air quality bulletins are now presented several times daily on Euronews. Information (Air Quality Index) is now also provided by the Euronews website:
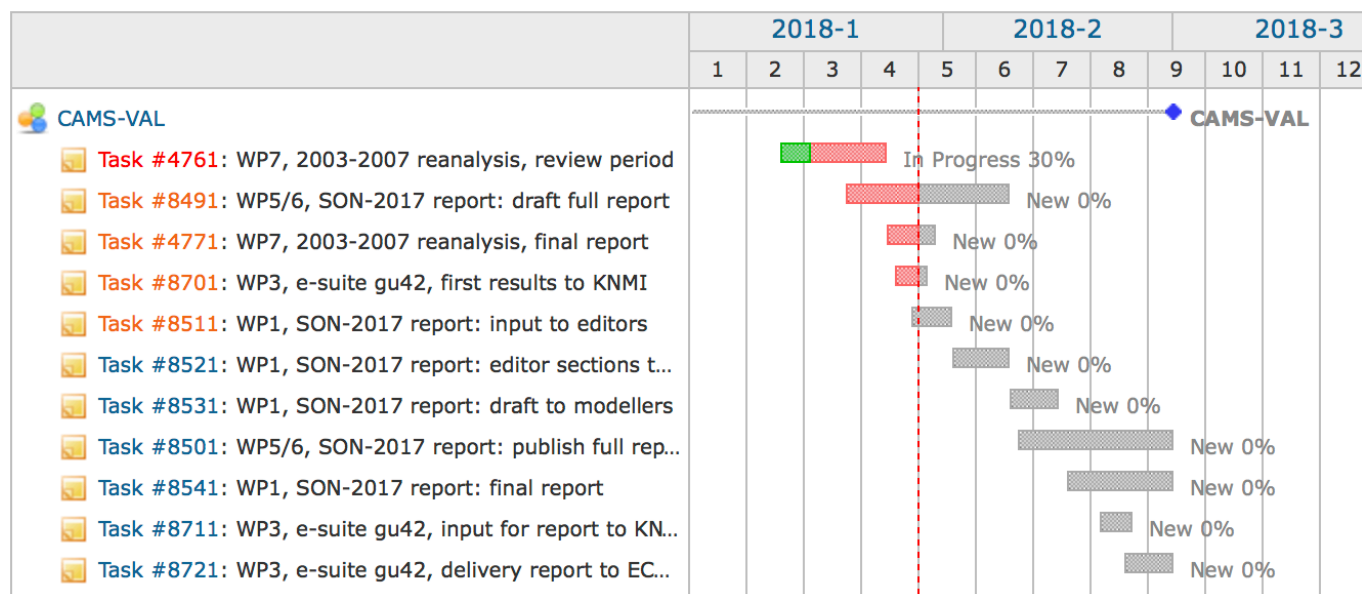

Action items from last meeting

Actions in grey from the PM3 meeting have been completed:

- Jacques (6-11): Schedule further meetings for WP2, starting with meeting on ozone sondes.
- Jacques (10-11): Make quarterly report and implementation plan 2018 available on RedMine.
- Jacques (8-11): Check if the Aeronet time series page is monitored by "Uptime".
- Michael (10-11): Update of scoring document.
- Michael: Next steps for development of headline scores and paper.
  This will be picked up in February.
- All (9-11): Send feedback to Jacques on the WP2 note.
- Annette (13-11), with Yves and Simon: Inform ECMWF on biases found in ozone in the reanalysis for the year 2004.
- Harald (due January 2018): Investigate combined use of ceilometer data from Germany, Norway and the Netherlands.
  Harald had an email exchange with Michael on this, but will follow this up soon.

Schedule and announcements

Schedules (Gantt) for the upcoming activities (Henk)

- WP7: Draft reanalysis report 2003-2007 available, now review period.
- WP5/6: Summary for CAMS-50 delivered. Next: full report.
- WP3: Collecting first results e-suite.
- WP1: Individual groups sending input to editors (due 1 Feb).

WP 2: planning and overview of status

Demo server development (http://cams-dev.stcorp.nl):
- The majority of the S&T effort during 2017, Q3 and Q4 was put into making the configuration of the inter-comparison operations and reporting dynamic. It is now possible to change how a comparison is performed and what plots/tables are shown on the website.
- Another major effort was to optimize the performance of executing the inter-comparisons.
- One final round with the CAMS partners will take place coming weeks to include last comments on the currently provided functionality of the demo server.

Prototype validation server development (http://cams-bira.stcorp.nl):
- S&T, with support from BIRA, has implemented a prototype validation server.
- This server must demonstrate the ability to provide input to the CAMS NRT validation reports.
- In a next phase this prototype server must replace the currently operational NORS server.

Sander (S&T) gave an overview of the WP 2 developments during SC2. He highlighted the difference between the BIRA and S&T servers. Developments: proper inclusion of incremental datasets; Grib conversion to intermediate pre-collocation overpass files; Django dynamical configuration. Sander noted that the S&T budget is nearly used, so we have to prioritise any further developments. An efficient handling of satellite data requires input from (a meeting with) the groups involved. Also the interfaces between observation data and the validation server requires input from the partners.

Jacques gave a short presentation on the WP-2 activities and plans during SC-3 (see the PM10 slides).

WP 1 report

Note: As seen in the Gantt diagram, the deadline for input to the editors for the SON 2017 is 1 February 2018.

Short statement of editors on the WP1 report , SON 2017:
- (GRG) Annette: Part of the input received. No problems/delays expected.
- (AER) Michael: Input from Sara and Anne received. Harald will send his contribution soon.
- (GHG) Michel: (Michel could not join the meeting) TCCON evaluation was sent to Michel.
- (Stratosphere) Yves received the inputs. No delay expected.

Presentations from the partners

On RedMine the slides presented at the meeting are available (merged to 1 pdf). There were presentations by the persons listed below. Focus on:
- Quick-look results for the e-suite, when available
- New developments in analysis approach, measurements used, other new aspects
- Major (unexpected) results for the SON 2017 NRT report,
- New development or unexpected results for the WP5/6 report
- Aspects related to the evaluation of the reanalysis
- Other results, e.g. case studies

A special event during SON-2017 was the hurricane moving to Ireland and the transport of **dust** (Sahara) and **fire smoke** (Portugal) to central Europe on 16 October, see e.g. news item CAMS website. Several partners studied this event, see the slides.

The following partners gave a presentation. The topics are briefly indicated. For more details we refer to the slides which are made available.

Michael Schulz, Augustin Mortier (MET-NO): Aerosols; reanalysis, NRT, e-suite, WP5.

Dimitris, Eleni (AUTH): Global-regional comparisons, WP6, October event analysis.

Sara, Emilio (BSC). Dust; reanalysis, NRT, e-suite, Mediterranean, October event.

Yves & Simon (BIRA). Stratosphere; e-suite, reanalysis.

Yasmine, Hannah (CNRS-LA). IAGOS; NRT, reanalysis, October event.

Annette (MPG). GAW, sonde; e-suite WP5, reanalysis.

Katinka (MPG). CO; WP5.

Anne (IUP). NO2, HCHO, satellite and MAX-DOAS; e-suite, NRT, reanal, WP5.

Thorsten (UBC), Bavo (BIRA). CO2, CH4 and CO; NRT.
Michael commented that this shows the strength of showing multi-year time series. The o-suite upgrades should be marked in these time series.

Kaj (AU). Arctic; reanalysis, e-suite.

Harald (DWD). Ceilometer: NRT, dust event October.
Henk asked a question how the verification with Earlinet (WP5, METNO) compares to the Ceilometer profile comparisons.

John & Christos (AA). ESRL, EMEP, Airbase; NRT, reanalysis, WP5, Mediterranean.

Yuting Wang (MPG): Aircraft evaluation of the reanalysis.

WP 5-6

WP5-6 report: Summary for CAMS-50 Ensemble report, SON-2017 period, was delivered (26 Jan). John Douros (KNMI) is editor of this document. John presented a few slides with the main results.

Next on the list is the full report, due in February.

In this SON-2017 report we have evaluated also profile information from the **analyses**, an activity which started for the JJA-2017 report. John mentioned that the good results from July-August are confirmed by SON-2017 results. One model shows a clear degradation

WP 7, evaluation of the CAMS reanalysis

In the past 3 months we worked on the 2003-2007 5-year reanalysis report. The draft of this report was delivered to ECMWF and the modelling teams on 22 January 2018.

One major new item, and new section, is the inclusion of the evaluation against aircraft campaign data (by Yuting Wang). This e.g. includes an evaluation of OH and HO2.

The reanalysis report contains sections on reactive gases and aerosols. The greenhouse gases (with involvement from LSCE, UBC, BIRA) was discussed with ECMWF in the past month. The plan is to publish a separate GHG reanalysis validation report. After consulting

the GHG teams, we confirmed to ECMWF that this is OK. Comment from Richard Engelen (16 Jan) on this:

The GHG run is progressing well now with much better results and has processed just over 2 years. It will take a bit of time to process the 5-year period. We also need to restart a forecast-only run for GHG that is consistent with this new reanalysis run. As discussed, we will provide the GHG reanalysis as a separate data set with its own validation reports. We'll keep you up-to-date with the progress of these two runs (currently running at about 11 days/day). In order to get confidence in the output relatively quickly, we suggest we'll wait for the first 3 years to complete for you to write the a first GHG validation report.

Remark Richard (16 Jan) on progress AER+GRG reanalysis:

The main reanalysis has now processed 2003 - 2010 and 2013 - June 2014. We expect to produce the full period 2003 - 2016 by May. This would allow you to do (most of) the validation before the summer, so we can release the data set asap. If anything changes in this schedule, we'll let you know (it depends to some extent on how busy the HPC is).

Henk will send an email to the CAMS-84 partners to ask if they are in favour of a change in schedule for the next reanalysis report.

WP 8: development plan for the scoring document

Scoring document update:

Michael Schulz is co-ordinating the next steps to arrive at a full set of headline scores. These steps, including a meeting and schedule, will be organised by Michael in February.

AOB

Henk: As reminder: A set of guidelines for providing text for the reports has been added to Redmine, Wiki. Re-formatting of text in practice takes quite some time, and can be partly avoided if the guidelines are followed.