



BACCHUS

Impact of Biogenic versus Anthropogenic emissions on Clouds and Climate: towards a Holistic UnderStanding

Collaborative Project

SEVENTH FRAMEWORK PROGRAMME ENV.2013.6.1-2

Atmospheric processes, eco-systems and climate change

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Summary of results

Internal communication within the BACCHUS project was very successful throughout the project due to the internal networking tools implemented by the BACCHUS project office.

1. Communication with project partners

For the general communication with BACCHUS partners, multiple internal BACCHUS mailing lists were implemented and maintained by the Project Management Office (PMO). Individual groups were set up for:

- All BACCHUS partners (participants),
- Individual work packages (WPs) for WP1-4,
- The PMO containing the project coordinator, manager and administrator,
- The Scientific Advisory Board (SAB) including coordinators from the cluster projects DACCIWA and StratoClim and remaining BACCHUS Scientific Advisors,
- The Steering committee (SC) containing the WP leaders, coordinator and PMO,
- Principal Investigators (PIs) from each partner institute,
- The administrative representatives from project partners for purposes of distribution of administrative information concerning the project reporting formalities,
- Inter-work package groups (e.g. CCN or BACCHUS women group)

The BACCHUS wiki (https://wiki.bacchus-env.eu/; introduced in Deliverable D6.2) acted as a closed platform for participants and administrative BACCHUS personnel. It is a password-protected web space and used as a database for finalized public and non-public deliverables, information on project work and material from Annual Meetings (AMs) as well as information on projects reports. The BACCHUS wiki can be accessed by partners after registration and the members have full editing rights.

The BACCHUS wiki serves as a platform for sharing scientific material within and between WPs. This includes manuscripts close to submission. A list of planned, approved and published articles is accessible through the wiki. The publication process for BACCHUS related papers requires an internal approval process, which is overseen by the coordinator. Authors are required to send (final) manuscripts to the PMO prior to submission or at least at submission in case of an open-access/public-discussion journals. They are then distributed to all BACCHUS partners via email and uploaded to the BACCHUS wiki. The minimum requirement for this process is the full author list including affiliations, title and abstract of the manuscript (if still in preparation). Partners have 20 days to give feedback or raise questions/objections to the manuscripts by contacting the contact author and PMO. No feedback by partners means approval, after which the authors can proceed with submission.

Project deliverables go through a review process prior to final submission to the European Commission (EC). The deliverable process includes a reminder for the responsible scientists and WP leader(s) three months prior to the submission deadline. Responsible scientists collect material from WP members on the respective topics and summarize the report. Another reminder is sent one month prior to the submission deadline and a draft is sent to PMO for internal review by the WP leader(s) and the coordinator. The project manager submits the final deliverable to the EC online system.

Annual Meetings (AMs) were held as three-day meetings in Zurich, Switzerland to which all BACCHUS partners and the SAB were invited. The AM is a platform for discussions between

partners and valuable for communicating recent results, dissemination and outreach activities with all partners. Presentations on the status of each WP and selected scientific oral presentations were given for all topics. Usually two external guests were invited for a solicited presentation in each of the AMs. An additional poster session contained contributions from all remaining participants. Additional workshops allowed for discussions within smaller groups, within each WP or between WPs (e.g., combined workshops for WP 1/2 and WP 3/4).

The Steering Committee met approx. every three months in a video conference. The status of the individual WPs was discussed as well as current topics such conferences and timelines for reporting, planning of the upcoming AM, upcoming events and other issues. SC meeting minutes were made available to all BACCHUS participants through the BACCHUS wiki and those held at AMs as deliverables D7.2, D7.5, D7.8, D7.11 and D7.14.

2. Communication with Scientific Advisory Board (SAB)

The SAB attended the AMs either in person (at least two SAB members each year) or via video conference to give feedback and suggestions to the project work. During the SAB meetings, a summary of the project status was given by the coordinator with contributions from all WP leaders. The protocols of the SAB meetings were reported as deliverables D7.3, D7.6, D7.9, D7.12 and D7.15

3. Communication with EC

The BACCHUS coordinator and PMO communicated with the EC via the project officer(s) and the project partners in all project matters, i.e.

- Amendments due to unexpected internal personal changes (e.g. WP leader)
- Requests from project partners such as shifts of budget or hiring of additional personnel
- Specific questions concerning the periodic and final reporting
- Requests for shifts of deliverables and deadlines

Deliverables, reports, publications and other project material was submitted directly through the ECAS online portal.

Additional project support was given by the EU Grants Access Office (a collaboration between ETH Zurich and University of Zurich.

4. Data management

General project contents were shared and disseminated to the public via multiple tools: An overview of the BACCHUS project and on-going work is shared on the BACCHUS public website http://www.bacchus-env.eu/. It includes a description of the work packages, information on the consortium, an up-to-date list of peer-reviewed publications and public deliverables, outreach activities and recent news and events.

The BACCHUS ice nucleation data base (INDB) can be accessed through the public website. It is a repository for BACCHUS ice nucleation data and respective auxiliary measurements (see Deliverable D1.4 for more information on the INDB).

Access is restricted and contributed data are legally protected by the data protocol (see Appendix A). Acceptance of the protocol is a pre-requisite to accessing the INDB and is part of the BACCHUS Grant Agreement, thus access is given to all BACCHUS project partners. Externals may contribute and access data after accepting the agreement of the data protocol.

<u>Summary</u>

The BACCHUS project with all participants has a well-established network for communication of project related information, data management and to disseminate BACCHUS results to the public. An inter-journal special issue between Atmospheric Chemistry and Physics, Atmospheric Measurement Techniques and Geoscientific Model Development was setup to combine BACCHUS related publications in the respective journals (https://www.atmos-chem-phys.net/special issue911.html). It is open to all submissions acknowledging the project and summarizes published articles as well as articles in the respective discussion journals.

Changes with respect to the DoW

No changes occurred with respect to the DoW.

Appendix A: BACCHUS Data Protocol

BACCHUS INTERNAL DATA PROTOCOL (BACCHUS DP)

(Final version, as of 10 February 2015 – updated 06 September 2016)

The BACCHUS Internal Data Protocol aims to uphold the rights of individual scientists while encouraging the rapid dissemination of the scientific results, by regulating data delivery, data exchange and storage, and the interaction between measuring participants. This protocol is additive to the BACCHUS Consortium Agreement (CA) signed July 4th, 2013, and no regulation in this protocol may contradict the rules set forth in the CA.

1. General

- i. The ultimate owner of measurement data is the data originator, even after the end of the BACCHUS project.
- ii. Unauthorised redistribution of measurement data to non-approved users is not allowed.
- iii. Documentation of the measurement data must be described in specific metadata files at the BACCHUS wiki, but the BACCHUS users are highly recommended to consult the data PIs on the specifics of their use of the data.
- iv. It is the responsibility of the lead author on all publications and presentations to have the explicit agreement of all co-authors and data contributors prior to submission. The data owner explicitly retains the right to veto the appearance of their data in a publication, including to delay publication until his/her own dissemination of that work.
- v. It is the lead author's responsibility to ensure that the data used in publications are the best available at that time, and BACCHUS users are strongly recommended to consult the data PIs on the specifics of their use of the data.
- vi. During active phases (e. g. field campaigns) of BACCHUS, each PI involved is obliged to submit a weekly report of half to one page length to the Coordinator and the Project Management Office (PMO) describing activities carried out during the last week. This report will be made available at the BACCHUS wiki.
- vii. Any disputes about the use of other Partners' or external data stored by BACCHUS, particularly with respect to publications of any kind, are to be resolved by the BACCHUS Steering Committee or failing that by the General Assembly.
- viii. A registry of the BACCHUS data users will be kept at the internal project wiki wiki.bacchus-env.eu. BACCHUS scientists will formally get access to data from the BACCHUS project when they have signed and submitted the BACCHUS Data Protocol.
- ix. Following Sec 8.3 of the CA, prior notice of any planned peer-review publication must be given to the other BACCHUS Parties at least 30 days before submission of the manuscript as stated in the CA. The lead author must send the proposal to the PMO including the Coordinator. The PMO will disseminate the publication plan to the other Parties and make the proposal available at the project wiki in the folder "PublicationsforApproval". All Partners have the right to raise objections within 20 days after receipt of notice. Any objection to the planned publication shall be made in writing to the Coordinator, the PMO and to any Party concerned. If no objection is made within the time limit stated above, the publication is permitted by the Parties, and at the wiki, the proposal is moved to the folder "Approved Publications".
- x. All BACCHUS publications must acknowledge funding from the EU: "EU FP7 project BACCHUS (project number 603445) is acknowledged for financial support."

2. BACCHUS-related field campaign data

These recommendations concern BACCHUS related field campaigns, including those which are not financed by BACCHUS but the results of which are used in BACCHUS. Where data are created through additional funding sources (e.g., national funding agencies), additional rules may apply that will be specified in the documentation of the individual datasets.

- i. During active BACCHUS field campaigns the PI(s) of the involved BACCHUS partner(s) is (are) obliged to submit a short weekly report to the Coordinator and the Project Management Office (PMO) describing activities carried out during the last week. This report will be made available at the BACCHUS wiki.
- ii. All datasets must be documented. Documentation is at the responsibility of the work package leader and is to be placed at the BACCHUS wiki.
- iii. Preliminary data (quality-control (QC) level 0) should be made available to other BACCHUS scientists. During field campaigns, QC level 0 data should be made available within three months after campaign end
- iv. Any corrections / amendments to the preliminary data should be made as soon as possible (QC level 1).
- v. Data which have undergone final quality-control (QC level 2) should be submitted to the appropriate database within 12 months. Specifically, CCN and aerosol data should be submitted to the ACTRIS database notifying GASSP. IN data should be submitted to the BACCHUS IN database (to be set up). The appropriate data protocols for external databases should also be accepted (GASSP: gassp.org.uk; ACTRIS: http://actris.nilu.no/Content/Documents/DataPolicy.pdf).
- vi. Involvement in BACCHUS must not conflict with other commitments or the use of existing data networks. Data from such networks stored in BACCHUS file spaces will be subject to the BACCHUS DP in addition to any Data Protocol specified by these networks. Any data from external networks must be clearly delineated from data obtained for BACCHUS. Data produced as part of BACCHUS intended for an external network in the future that resides in the BACCHUS data space before provision (e.g., during QC-process) is covered by the BACCHUS DP before provision, and both the BACCHUS and external Protocols after provision. In case of a conflict between the BACCHUS DP and the Protocol of an external network, the external network Data Protocol will take precedence. The Coordinator of BACCHUS must be informed about the conflict.

3. BACCHUS IN Database

- i. The BACCHUS IN database will be based upon the structure of the Global Aerosol Synthesis and Science Project (GASSP) and will be hosted at ETH Zürich.
- ii. All scientists involved in the use of the BACCHUS IN database are to have equal and complete access to the IN measurement data, produced or collected during the BACCHUS project, and stored in the BACCHUS IN database.
- iii. As a condition for complete access, all BACCHUS users of the BACCHUS IN database must agree upon and sign data protocols for the external data used within the project where existing.
- iv. Accuracies, uncertainties, detection limits and other special comments or caveats are described in the MetaData Matrix Array (MDMA) tags of any data stored in the BACCHUS IN database, but the BACCHUS users are strongly recommended to consult the data PIs on the specifics of their use of the data.
- v. All external scientists who use BACCHUS IN data have to sign the BACCHUS IN Database Protocol, which is attached as Appendix 1 to the BACCHUS DP, and abide by its conditions. In addition, all external scientists wishing to use IN data stored in the BACCHUS IN database are to provide a short written description of what they wish to do. The appropriate work package leaders will consider this proposal, and the SC will make a final decision. A registry of any such database users will be kept at the BACCHUS wiki.

Appendix 1

BACCHUS IN DATABASE PROTOCOL FOR EXTERNAL USERS

(Final version 1, as of 10 February 2015 – updated 06 September 2016)

The BACCHUS (Impact of Biogenic versus Anthropogenic emissions on Clouds and Climate: towards a Holistic UnderStanding) project is a collaborative project under the EU FP7, coordinated by Ulrike Lohmann at ETH Zürich (ulrike.lohmann@env.ethz.ch). The project is described at www.bacchus-env.eu. One aim of BACCHUS is to create a database of global Ice Nuclei (IN) observations to facilitate the understanding of ice nucleation processes.

The aims of the BACCHUS IN Database Protocol are (a) to define the acceptable use of data by external users; (b) to protect the data ownership of the contributing scientists; (c) recognise the contribution made by other scientists in terms of data processing (data synthesis, merging, etc); (d) define and regulate how the datasets will be managed and stored. This protocol may be superseded by existing data protocols of the data providers, which the users of the data will sign.

The undersigned of the BACCHUS IN Database Protocol agrees to the following rules:

- i. Data will be stored at ETH Zürich where it will be subject to the data disclosure rules of this agreement. Data submission to the BACCHUS IN database will be performed by staff at ETH Zürich.
- ii. Data ownership remains with the data originator, also after the end of the BACCHUS project.
- iii. Data access is limited to the BACCHUS project and external users, who have signed the data protocol. Any transfer of data stored in the database to scientists not signatory to this BACCHUS IN database must be approved by the data providers on a case-by-case basis.
- iv. A list of approved BACCHUS IN database scientists will be maintained at the BACCHUS wiki (https://wiki.bacchus-env.eu/).
- v. When data are used in publications, joint authorship must be offered and intellectual input must be discussed with the data owner and scientists who have contributed substantially to data processing (such as synthesis or merging of datasets in addition to that carried out by the data provider). This implies that the lead author should inform the data owner and other relevant scientists about planned publications early in their preparation, but at least 30 calendar days before submission.
- vi. Each data owner has the right to refuse to allow his/her work to be used in a publication, until he has protected or published it.
- vii. Users of data must not redistribute these data to third parties without explicit written permission of the data owner.

The undersigned agrees to the conditions of the BACCHUS IN Database Protocol:

Name	:
Address	:
	:
	:
	:
E-mail	:
Place, Date	<u></u>
Signature	:
5151141410	

Please submit the BACCHUS IN Database Protocol (filled in and signed) to:

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BACCHUS Project Management Office
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