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

Grant agreement no: 603445

Deliverable number:	**D7.13**
Deliverable name:	Fourth annual meeting
WP number:	7
Delivery date:	Project month 54 (31/05/2018)
Actual date of submission:	04/05/2018
Dissemination level:	PU
Lead beneficiary:	ETHZ
Responsible scientist/administrator:	U. Lohmann
Estimated effort (PM):	1
Contributor(s):	M. Burkert (ETHZ)
Estimated effort contributor(s) (PM):	1
Internal reviewer:	

Summary
The BACCHUS Fourth Annual/Final Meeting took place on 24-26 April 2018 in Zurich, Switzerland. Minutes as well as abstracts of oral and posters presentations have been made available at the project wiki (wiki.bacchus-env.eu), for which access is restricted to BACCHUS members. The conference program including the list of participants is also available on the BACCHUS wiki.

Agenda of Final Meeting:

Day 1, Tuesday, 24 April 2018

Welcome address (U. Lohmann/ETHZ)
Highlights of WP 1-7
WP1 (A. Ansmann/TROPOS)
WP2 (M. Kanakidou/UOC)
WP3 (P. Stier/UOXF)
WP4 (R. Makkonen/UHEL)
WP5-7 (M. Burkert/ETHZ)
Poster session
WP3 oral presentations
Stevens, Robin (ULEEDS, remote) A Model Intercomparison of CCN-Limited Tenuous Clouds in the High Arctic
Vergara-Temprado, Jesús (ULEEDS) Global simulation of ice-nucleating particles and implications for cloud radiative effects
Heikenfeld, Max (UOXF) The propagation of aerosol perturbations in convective cloud microphysics
Eirund, Gesa (ETHZ) Sensitivity of Arctic low-lying mixed-phase clouds to surface forcing and aerosol perturbations
Connolly, Paul (UMAN) A novel model closure study of CCN in a case study over Cyprus
Labbouz, Laurent (UOXF) - Aerosol effect in ECHAM-HAM simulations with two different convective parametrisations
General Assembly

Day 2, Wednesday, 25 April 2018

Annica Ekman (Stockholm University, solicited) Formation and persistence of mixed-phase clouds in the summer- and wintertime Arctic
WP4 presentations
Fiedler, Stephanie (MPI-M) How does the anthropogenic aerosol pattern affect the global mean effective radiative forcing?
Neubauer, David (ETHZ) MPI-ESM1.2-HAM: Setup, tuning and evaluation for BACCHUS WP4
Lohmann, Ulrike (ETHZ) The importance of mixed-phase clouds for climate sensitivity in the global aerosol-climate model ECHAM6-HAM2
Sporre, Moa (UIO) - Summary of upcoming deliverable D4.4 BVOC-cloud-climate feedbacks investigated using NorESM
Huang, Katty (ETHZ) - Summary of upcoming deliverable D4.5 How will aerosol-cloud interactions change in the future?

Gilgen, Anina (ETHZ) - Summary of upcoming deliverable D4.5 Sea-salt versus ship emissions - what matters more in a future Arctic summer/autumn?
Peter Knippertz (KIT, solicited) The DACCIWA Project: Dynamics-Aerosol-Chemistry-Cloud Interactions in West Africa
WP1 presentations
Thomson, Erik (UGOT) The current state and future fate of the INP database
Welti, André (TROPOS) Ship based observations of INP concentrations in different parts of the world
Workshops and Plenary for Community Assessment (D5.9)
Joint SAB-SC Meeting

Day 3, Thursday, 26 April 2018

WP2 presentations
Kanakidou, Maria (UOC) Robustness of global CCN simulations and implication for droplet formation: A BACCHUS and AEROCOM intercomparison
Ovadnevaite, Jurgita (NUIG) Nascent Marine Aerosol Acting as Ultra-Efficient Cloud Nuclei
Decesari, Stefano (CNR-ISAC) Biogenic sources of organic nitrogen in aerosols in the Antarctic ocean
Kanakidou, Maria (UOC) Influence of the organic mass to the cloud condensation nuclei
WP1 presentations (continued)
Schmale, Julia (PSI) Overview of the 'Study of Preindustrial-like-Aerosol Climate Effects' during the Antarctic Circumnavigation Expedition (ACE-SPACE)
Fossum, Kirsten/Ovadnevaite, Jurgita (NUIG) Summertime Primary and Secondary Contributions to Southern Ocean Cloud Condensation Nuclei
Stratmann, Frank (TROPOS) Study of cloud condensation nuclei and ice nucleating particles in the Southern Ocean
Calmer, Radiance (CNRS-GAME) Aerosol-Cloud Closure Study using Remotely Piloted Aircraft Measurements during the BACCHUS field campaign in Cyprus
Rosenfeld, Daniel (HUJI) Smaller particles than CCN can enhance substantially convection and precipitation
General discussion
Final remarks

The Final Meeting consisted of the following main parts:

- The work package leaders presented overviews of the highlights of their work packages on the first meeting day;
- Scientific presentations highlighted the project work done in the 2017 and 2018 in the respective work packages in more detail. Summaries on the upcoming deliverables were given for further discussion at the meeting. Oral presentations by BACCHUS participants accounted for 23 talks.
- A poster session with 15 posters was held to allow all partner institutes/participants to present their work.

- Further scientific presentations were given by two invited guests: Prof. Annica Ekman from the Stockholm University, Sweden gave a very stimulating talk and visited the entire meeting as a scientific guest. Also Prof. Peter Knippertz from Karlsruhe Institute of Technology (KIT), Germany joined the meeting to give a talk on the highlights in the DACCIWA project, the partner project in the aerosol-climate cluster and to learn more about the outcome of BACCHUS.
- A workshop on the upcoming deliverable on "Community assessment of the importance of biogenic versus anthropogenic emissions for cloud formation and climate" was held in small sub-groups with all participants. Results were summarized in a plenary and are presented in deliverable D5.9.
- The General Assembly was held on Tuesday, 24 April 2018. No topics had to be discussed and voted upon.
- A general discussion session on Thursday, 26 April 2018 allowed for feedback from partners, some final statements on the project and discussion on future work needed in the field.

Prof. Peter Knippertz from Karlsruhe Institute of Technology, Germany from the SAB attended the project meeting. The main purpose of the SAB member to attend the meeting was to learn about the final results of the BACCHUS project and to discuss with the consortium partners the scientific outcome. For this purpose, a joint SC and SAB meeting was carried out on Wednesday, 25 April 2018, as a videoconference. Two additional members of SAB, Dr. Paul J. DeMott from Colorado State University, USA and Prof. Athanasios Nenes from Georgia Institute of Technology, USA, joined the meeting on this occasion. Dr. Markus Rex from Alfred Wegener Institute (AWI) and Prof. Graham Feingold from National Oceanic and Atmospheric Administration (NOAA), USA had to excuse themselves. Results of this discussion are summarised as Deliverable D7.15 (dissemination level RE) and, the document are made available at the BACCHUS wiki. In addition, the BACCHUS Steering Committee (SC) met on Wednesday, 25 April 2018 to discuss the final scientific status of the project as well as upcoming reporting with respect to the project end. Minutes of this meeting are provided as Deliverable D7.14 (dissemination level RE) and are available at the BACCHUS wiki.

Changes with respect to the DoW

No changes occurred.