



FDITORIAL

Dear Reader,

we made it! After an excellent evaluation in September, today DFG gave its final green light for the second phase of our $(AC)^3$ project!



This is really awesome news, and we all can be proud of this major achievement. We have worked so hard in phase 1 and obviously convinced the reviewers and the DFG to continue our program.

To remind us of the milestones within the last four years, this Special Issue of the $(AC)^3$ Newsletter contains a time bar displaying important steps of our work in phase 1 of $(AC)^3$. We thought this would be a nice overview and would provide a convenient transition towards the end of the first phase and into the Christmas holidays, after which we will immediately get back to work with full force again.

It's time to celebrate!



November 2019 Special Issue

TOPICS IN THIS ISSUE

- **Editorial**
- CAMPAIGNS
- MEETINGS
- PhD events
- MEDIA and PUBLICATIONS
- OUTREACH and much more...

Manfred Wendisch, Speaker of $(AC)^3$, Christa Genz, Marlen Brückner, Scientific Coordinators.

Milestones 2015

13 July 2015

Submission of $(AC)^3$ phase I proposal to DFG

08 - 09 September 2015

Review Panel Meeting

20 November 2015

DFG decision

(AC)³ will be funded with 9.176 Mio € starting 01 January 2016



Milestones 2016

01 January 2016

Start of $(AC)^3$

22 scientific projects in 5 clusters, supported by 2 central projects started their work.

16 - 17 February 2016

ACLOUD meeting in Leipzig

Planning of the aircraft campaign ACLOUD from 22 May - 28 June 2017 in Longyearbyen, Svalbard, and start of collaborations within projects, between research areas and with the external partners

30 May - 01 June 2016

(AC)³ Kick-off meeting in Grimma





Modellstudien sollen zudem die Vorhersagen der künftigen arktischen Klimaentwicklung verbessert werden. (Sprecherhochschule: Universität Leipzig, Sprecher: Professor Dr. Manfred Wendisch,

außerdem antragstellend: Universität Bremen, Universität zu Köln)

01 - 02 June 2016

(AC)3-PhD Kick-off meeting

The PhD students of $(AC)^3$ had a get together subsequently to the $(AC)^3$ Kick-off meeting.



01 July 2016



"Sächsische Expedition ins Eis"

Stephan Schön reports in the *Sächsische Zeitung* about the upcoming Polarstern cruise in 2017. He will accompany our scientists in the Arctic during PASCAL.

14 - 17 July 2016

PhD workshop in Leipzig

The workshop gave a short introduction into Linux/Unix and Programming with FORTRAN through exercises and coaching. It was held by PhD students who are experienced users.



18 - 19 October 2016

PAMARCMiP Kick-off meeting in Bremen

08 November 2016

Exhibition "Das Meer beginnt hier" in Berlin

Foyer of the Federal Ministry of Education and Research (BMBF)

The exhibition illustrated how research in the Arctic and Antarctic is possible under extrem conditions.



21 - 22 November 2016

ACLOUD workshop in Bremen

About 30 researchers from Germany and France took part in the workshop. Most of the participants were key international ACLOUD PIs, aircraft instrument scientists and $(AC)^3$ researchers who all actively took part in the ACLOUD campaign or used the data for their research.



01 - 02 December 2016

1st General Assembly in Potsdam

The Early Career Scientist and PIs presented their scientific highlights from the first year. During breakout group discussion, the $(AC)^3$ participants discussed onging collaborations with other Cluster groups and upcoming campaigns.





17 January 2017

Understanding Causes and Effects of Rapid Warming in the Arctic

EOS $(AC)^3$ overview by Wendisch et al., 2017



19 - 25 March 2017

Winter School on the Observation and Modeling of High-latitude and Arctic Clouds

The course topics include: cloud and precipitation observations (cloud radars, lidars, solar and microwave radiometers, in-situ sensors), cloud modeling, precipitation formation, boundary layer modeling.



26 - 28 March 2017

1st (AC)3 Science Conference on Arctic Amplification in Bremen



23 - 28 April 2017

$(AC)^3$ booth at EGU in Vienna

toghether with two other CRC/TR and a Forschergruppe

22 May - 28 June 2017

ACLOUD/PASCAL campaign based in Longyearbyen, Spitzbergen

Helmholtz Polarstern-Blog AWI PS106/1 Wochenberichte ACLOUD Blog, arktis-zeichenblog social media: twitter, instagram, facebook EiSZeit special in Sächsische Zeitung ARD Tagesthemen Spiegel Online Eos Postcards from the field







BMBF article

Deutschlandfunk, MI









02 October 2017

First vernissage of paintings from ACLOUD/PASCAL



04 October 2017

Advanced Training Module (ATM) of Leipzig Graduate School on Polar Mid-Latitude Linkages Caused by Arctic Amplification

05 - 06 October 2017

International workshop on Airborne Activities in the Arctic: Science and Prospects in Leipzig

17 October 2017

SZ-Online: EiSZeit conceptional edition to the PASCAL campaign

Climate research in the Arctic: insights, stories, photographs and videos are online available in a very special 3D edition of the Sächsische Zeitung, including a virtual reality special and a YouTube Trailer.



27 October 2017

Climate feedbacks in the Arctic

As a contribution to the science year 2016*17 "Seas and Ocean" of the Federal Ministry for Education and Research (BMBF), the "KlimaTaucher" presents DFG funded projects on climate and marine research.



06 - 08 November 2017

Workshop on Arctic snow and sea ice properties and interactions with atmosphere (PAMARCMIP) in Bremen

20 - 21 November 2017

Crosscutting Activity Workshop: Modeling - Observation data from ACLOUD/PASCAL

27 - 28 November 2017

$2^{nd} (AC)^3$ General Assembly meeting in Cologne



29 - 30 November 2017

(AC)³ PhD workshop

Improvisation instead of irritation







06 - 08 March 2018

3rd General Assembly in Leipzig



10 March - 08 April 2018

PAMARCMiP campaign based in Greenland









12 March 2018

Surveying the Arctic: Tracking down carbon particles

AWI press release



15 March 2018

"Climate Recordings" presented at the Leipziger Buchmesse

Rector of University of Leipzig, Prof. Schücking, presented the book also the SMWK minister Eva-Maria Stange.

22 June 2018

(AC)³ @ "Lange Nacht der Wissenschaften" in Leipzig







28 June 2018

03 - 04 July 2018

$HALO-(AC)^3$ planning meeting

PI planning meeting for the second phase of $(AC)^3$



12 August 2018

Arctic Ocean 2018 - ODEN reaches the North Pole MOCCHA campaign with contributions from $(AC)^3$







21 September 2018

Ice Surveys and Neckties at Dinner: Here's Life at an Arctic Outpost

<u>Article in the New York Times</u> with photographs by Esther Horvath



09 - 10 October 2018

UNIS course in Ny-Ålesund

The Arctic Geophysics course "The Middle Polar Atmosphere" (AGF-210) from UNIS in Longyearbyen made an excursion to Ny-Ålesund, to the Sverdrup and AWIPEV stations.







14 -17 October 2018

PhD workshop in Cologne

Proposal writing and writing retreat







29 October 2018

Role of air-mass transformations in exchange between the Arctic and mid-latitudes

Nature Geosciences paper by <u>Pithan et al.</u> online available



01 November 2018

Aufbruch ins Eis

For four weeks, science journalist Stephan Schön signed in as a research assistant on board the icebreaker Polarstern. Why he went to the Arctic and what is shown in this multimedia essay.









12 - 14 November 2018

$2^{nd} (AC)^3$ Science conference on Arctic amplification









15 - 16 November 2018

(AC)³ PhD workshop Statistical methods for the analysis of climate data





Milestones 2019

15 - 17 January 2019

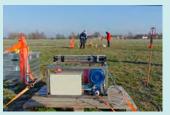
PI meeting and 4th General Assembly for the planning of $(AC)^3$ phase II in Bremen

January / February 2019

Melpitz training for MOSAiC







05 March 2019

Submission of the preproposal for $(AC)^3$ phase II to DFG

15 March - 16 April 2019

AFLUX campaign based in Longyearbyen, Spitzbergen













16 - 17 May 2019

PhD workshop in Leipzig

"What to do with a PhD? Professionel orientation for PhD students"







03 - 05 June 2019

International workshop on Airborne Activities in the Arctic: Science and Prospects in Bremen

05 July 2019

Submission of the proposal for $(AC)^3$ phase II to DFG

September 2019

At this Arctic science base, life is anything but lonely

<u>National Geographic</u> article with photographs by Esther Horvath

In Greenland, researchers from around the world document the warming arctic - and share a sense of community.



05 - 06 September 2019

Rehearsal of the evaluation of $(AC)^3$ phase II









11 -12 September 2019

Review panel meeting of $(AC)^3$ phase II









20 September 2019

Start of MOSAiC

Follow Polarstern in the WebAPP: https://follow.mosaic-expedition.org/

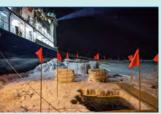












21 September 2019

eingefroren

Exhibition in the Kunst- & Literaturforum Amalienpark Berlin with works from Martin Enderlein, Ellen Fuhr, Günter Fuhr, Annette Gundermann, Kerstin Heymach, Dorothee H. Jacobs, Julika Müller, Thomas K. Müller



25 September 2019

Ein Jahr eingefroren in der Arktis

BMBF article about MOSAiC

Trapped in the Arctic ice, research vessel Polarstern will spend one year drifting through the Arctic Ocean. Goal of the mission are fundamental insights that are key to better understand global climate change.



22 November 2019

DFG decision to continue $(AC)^3$

The second phase of $(AC)^3$ will be funded by DFG with 11.5 Mio € starting 01 January 2020

27 - 28 November 2019

PAMARCMiP workshop in Potsdam

02 - 04 December 2019

ACLOUD workshop in Cologne

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Follow MOSAiC in the WebAPP: https://follow.mosaic-expedition.org/



















(AC)3 PROJECT PARTNERS











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