



Transregional Collaborative Research Center on Arctic Amplification

(AC)³ **Newsletter**

EDITORIAL

Dear Readers of our (AC)³ Newsletter, What fantastic news we received on the evening of November 23rd - the DFG approved our application for a third and final phase of (AC)³!

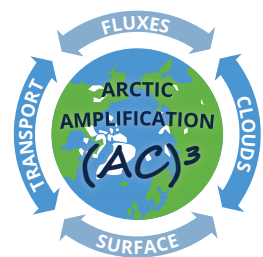
It seems to have become a tradition that the last (AC)³ newsletter at the end of a phase of our project summarizes the milestones of the previous phase. In keeping with this tradition, we have listed our activities and achievements over the last four years during Phase II in this newsletter. This compilation clearly demonstrates how hard we have worked together to make great progress in our research.

At the General Assembly (GA) in Leipzig, many important results of our work during Phase II were highlighted, mainly achieved by our very active and bright Early Career Researchers (ECRs). The PhD students planned, organized, and chaired the scientific sessions during the GA. Thanks and congratulations

to the ECRs on that! Thus, we all enjoyed attractive and exciting oral and poster presentations as well as useful discussions on specific issues. The second part of the General Assembly was dedicated to the results of the HALO-(AC)³ campaign. Again, mainly our ECRs presented the major results of the campaign obtained so far, together with additional contributions from the HALO community. And of course there was also something to celebrate during the GA, therefore we organized and enjoyed a nice party in the new building of the LIM!

With that, we would like to wish everyone a few relaxing days in between the years. We are looking forward to further exciting research within the framework of (AC)³!

Manfred Wendisch,
Speaker of (AC)³,
Marlen Brückner, Scientific
Coordinator.



December 2023
Special Issue #16

TOPICS IN THIS ISSUE

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

Milestones 2019

- 5 July 2019 • **Submission of (AC)³ phase II proposal to DFG**
- 11 - 12 September 2019 • **Review Panel Meeting**
- 22 November 2019 • **DFG decision**
(AC)³ phase II will be funded starting 01 January 2020

Milestones 2020

- 1 January 2020 • **Start of (AC)³ phase II**
20 scientific projects in 5 clusters, supported by 3 central projects.
- 2 March 2020 • **IRTG coordination meeting in Cologne**
IRTG and local graduate school coordinators synchronize and organize supervision of (AC)³ PhD students.
- March/April 2020 • **Cancellation of MOSAiC-ACA winter campaign in Longyearbyen**
Svalbard had been closed due to Corona pandemic, therefore the MOSAiC airborne campaign with Polar 5 & 6 in Longyearbyen had to be cancelled.

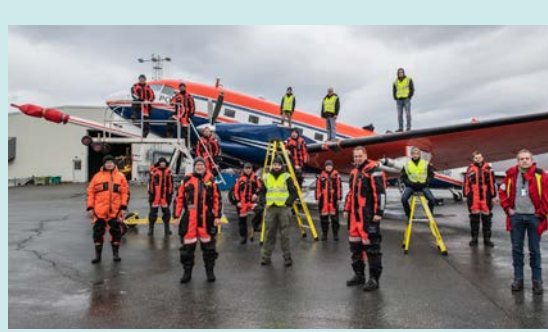
HALO Scientific Advisory Board decides to postpone HALO-(AC)³ campaign
HALO-(AC)³ campaign had to be postponed by one year to Spring 2022 due Corona pandemic.

- 8 June 2020 • **MOSAiC expedition continues**
After the change of plans due to the Corona situation, the exchange of crew and scientists in the fjord of Longyearbyen with the research vessels MS Merian and FS Sonne takes place and Polarstern can successfully continue the MOSAiC expedition.

- 16 June 2020 • **DFG Exkurs talk by Susanne Crewell**
As part of the DFG Exkurs series, Susanne Crewell gave a talk on "Die Arktis verschwindet! Wie wir der Eisschmelze auf die Spur kommen".

- July 2020 • **Start of IRTG online lectures for PhDs**
(AC)³ PIs present fundamentals of research on Arctic amplification in regular online lectures. A total of 28 lectures were held and documented in phase II.

27 August-17 September 2020



MOSAiC-ACA airborne campaign in Longyearbyen (AC)³ partners from Unis Leipzig, Cologne, and Bremen, from AWI, and Deutsches Zentrum für Luft- und Raumfahrt (DLR) are involved. The only flying research aircraft during the pandemic while others were grounded.



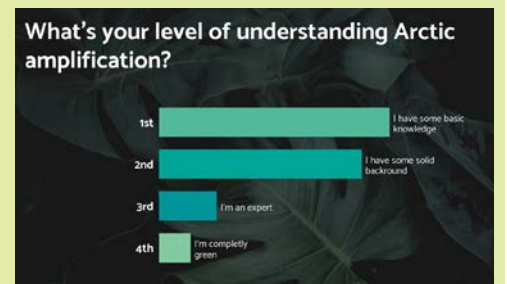
7 & 9 October 2020

PhD "Get Together & Team Building" workshop in Cologne



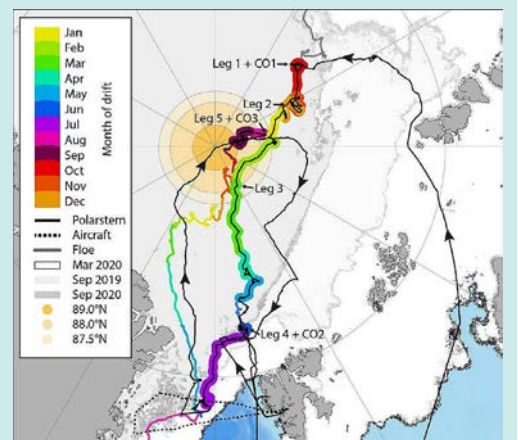
8 October 2020

(AC)³ online Kick-off meeting



12 October 2020

MOSAiC expedition successfully completed after a year in the ice



3 - 4 December 2020

ACLOUD/AFLUX/ACA online data meeting

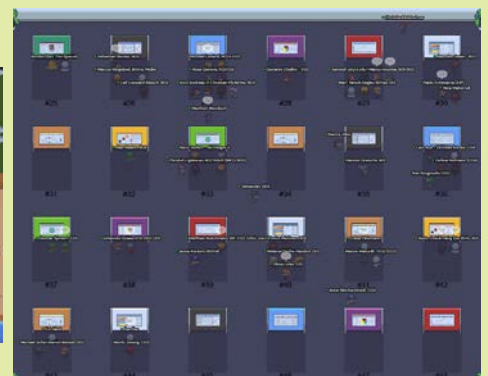
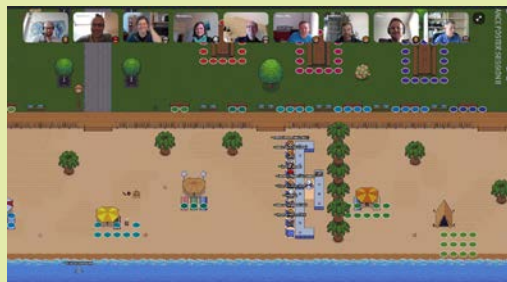
9 December 2020

Approval of B08 - A new (AC)³ project

Milestones 2021

8 - 9 March 2021

(AC)³ online General Assembly



15 - 17 March 2021

Advanced Training Module (ATM) of Leipzig Graduate School on lapse rate feedback

22 - 26 March 2021

HALO-(AC)³ Dry Run

An intensive dry run was performed between 22 - 26 March to practice the coordination of the flights and test the communication.

	Week 1							Week 2							Week 3							
	08.03.	09.03.	10.03.	11.03.	12.03.	13.03.	14.03.	15.03.	16.03.	17.03.	18.03.	19.03.	20.03.	21.03.	22.03.	23.03.	24.03.	25.03.	26.03.	27.03.	28.03.	
CAO																						
WAI																						
P 5/6																						

	Week 4							Week 5							Week 6							
	29.03.	30.03.	31.03.	01.04.	02.04.	03.04.	04.04.	05.04.	06.04.	07.04.	08.04.	09.04.	10.04.	11.04.	12.04.	13.04.	14.04.	15.04.	16.04.	17.04.	18.04.	
CAO																						
WAI																						
P 5/6																						

24 - 25 March 2021
29 & 31 March 2021

Online workshop for PhDs + Postdocs/PIs on "Conflict management"

31 May 2021

"Mias Klimatagebuch" goes online

Mia and her cuddly toy Mika are investigating questions of climate change, the Arctic and the research project (AC)³. Behind the 10-year old Mia there are more than 100 researchers within (AC)³ answering her questions and try to explain "their" research topics to kids and interested adults.

<https://mias-klimatagebuch.de>



13 September -
17 November 2021

BELUGA winter balloon campaign in Ny-Ålesund

First two-month measurement period with the tethered balloon system BELUGA at AWIPEV station in Ny-Ålesund.



25 - 27 October 2021

3rd (AC)³ Science Conference on Arctic Amplification



First major joint meeting of the (AC)³ members in person since the start of phase II. In addition to our 7 international Scientific Advisory Board members, also other high-level international experts in the field of Arctic research were invited.

28 October 2021

(AC)³ PhD workshop in Potsdam

Improvisation instead of irritation



23 - 24 November 2021

HALO-(AC)³ online workshop

14 December 2021

First fact sheet released

Fact Sheet on interesting aspects on Arctic Amplification on <http://www.ac3-tr.de/outreach/fact-sheets/>.

(AC)³ scientists explain key facts in an easy and comprehensive language to interested adults illustrated by drawings from Kerstin Heymach. A total of 5 fact sheets were published together with further literature during phase II.



Milestones 2022

24, 26 & 28 January 2022

Online workshop for female PhDs + Postdocs on "Self-presentation & Networking"

8 - 10 February 2022

(AC)³ Hackathon

Online workshop in Gathertown to prepare data products and develop quicklook products for HALO-(AC)³ campaign



7 March -
14 April 2022

HALO-(AC)³ campaign in Kiruna & Longyearbyen

Polar 5 & 6 in Longyearbyen:

- 200 flight hours
- 13 research flights



HALO in Kiruna:

- 150 flight hours
- 17 research flights
- 347 dropsondes released



- 8 collocated research flight missions

Combined with BELUGA measurements at AWIPEV station in Ny-Ålesund:



Outreach to the public during HALO-(AC)³

Washington Post

Özden Terli, ZDF Wetter

Alexander Gerst auf Expedition "Ins Herz der Arktis"

Filmhaus Berlin

Sächsische Zeitung

10 - 11 May 2022

(AC)³ PhD workshop

Resilience and stress management

11 - 13 May 2022

(AC)³ General Assembly in Bad Honnef



14 - 15 July 2022

HALO-(AC)³ data meeting in Hamburg



19 - 21 September 2022

PI planning meeting for the third phase of (AC)³ in Leipzig

22 September 2022

BAMS paper [Wendisch et al., 2022](#) published online

21 - 25 November 2022

(AC)³ General Assembly in Bremerhaven



23 - 25 November 2022

(AC)³ PhD workshop

Career perspectives and media communication



7 - 8 December 2022

(AC)³ PhD workshop

Academic Writing

8 December 2022

Submission of Preproposal for (AC)³ phase III to DFG

Milestones 2023

12 - 18 March 2023

(AC)³ Winter School in Hyytiälä



14 - 15 June 2023

Rehearsal of the evaluation of (AC)³ phase III

27 - 28 June 2023

Review Panel Meeting of (AC)³ phase III

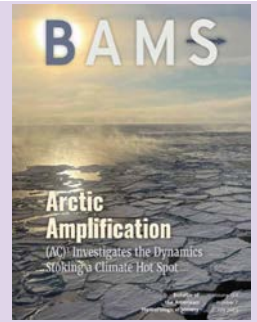


15 July 2023

(AC)³ researchers' findings make BAMS cover story

[BAMS cover story](#) about (AC)³

A publication on early results from the Collaborative Research Centre (CRC) on climate change in the Arctic has made it onto the cover of the prestigious Bulletin of the American Meteorological Society (July issue).



11 - 13 September 2023

4th International Summer Snowfall Workshop in Leipzig



23 November 2023

DFG decision to continue (AC)³

The third phase of (AC)³ will be funded by DFG starting 01 January 2024

4 - 5 December 2023

PhD Alumni Day in Leipzig

(AC)³ alumni from phase I gave insights and experiences from their path to (AC)³.



5 - 7 December 2023

General Assembly & HALO-(AC)³ Meeting in Leipzig





ACKNOWLEDGEMENTS

The TRR 172 $(AC)^3$ project is funded by the German Research Foundation (DFG, Deutsche Forschungsgemeinschaft) - Projektnummer 268020496.

DFG Deutsche
Forschungsgemeinschaft

CONTACT US

SPEAKER:

Prof. Dr. Manfred Wendisch
University of Leipzig
Leipzig Institute for Meteorology (LIM)
Stephanstr. 3
04103 Leipzig
Germany

E-MAIL:

m.wendisch@uni-leipzig.de

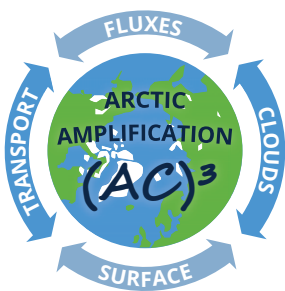
ac3-tr.de

$(AC)^3$ NEWSLETTER

EDITORS:

Manfred Wendisch (LIM)
Marlen Brückner (LIM)
Simone Lindemann (LIM)

admin@ac3-tr.de



$(AC)^3$ PROJECT PARTNERS



UNIVERSITÄT
LEIPZIG



UNIVERSITÄT
ZU KÖLN



Universität
Bremen

TROPOS
Leibniz Institute for
Tropospheric Research

AWI ALFRED-WEGENER-INSTITUT
HELMHOLTZ-ZENTRUM FÜR POLAR-
UND MEERESFORSCHUNG