



(AC)<sup>3</sup> IRTG - Integrated Research Training Group

# Guidelines for Doctoral Researchers

(AC)<sup>3</sup>

Arctic Amplification:  
Climate Relevant Atmospheric and Surface Processes,  
and Feedback Mechanisms



## **Project Leaders**

Susanne Crewell  
[susanne.crewell@uni-koeln.de](mailto:susanne.crewell@uni-koeln.de)

Manfred Wendisch  
[m.wendisch@uni-leipzig.de](mailto:m.wendisch@uni-leipzig.de)

Gunnar Spreen  
[gunnar.spreen@uni-bremen.de](mailto:gunnar.spreen@uni-bremen.de)

## **Coordination**

Christa Genz  
Phone (C): +49 (0)221 – 470 4127  
Phone (L): +49 (0)341 – 97 32840  
[christa.genz@uni-koeln.de](mailto:christa.genz@uni-koeln.de)  
[irtg@ac3-tr.de](mailto:irtg@ac3-tr.de)

**website**  
[ac3-tr.de/phd/](http://ac3-tr.de/phd/)  
[ac3-tr.de/projects/cluster-z/irtg/](http://ac3-tr.de/projects/cluster-z/irtg/)

'Arctic Amplification: Climate Relevant Atmospheric and Surface Processes, and Feedback Mechanisms (AC)<sup>3</sup>' is a collaborative effort of German universities and research institutions to identify, study, and assess the key processes contributing to Arctic amplification. (AC)<sup>3</sup>, also known as SFB/TR 172, is funded by the German Research Foundation (DFG) and is currently in its third and final 4-year phase. The participating institutions in (AC)<sup>3</sup> are

- Leipzig University,
- University of Cologne,
- University of Bremen,
- Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research (AWI) in Bremerhaven (AWI-B) and Potsdam (AWI-P), and
- Leibniz Institute for Tropospheric Research (TROPOS).

22 (AC)<sup>3</sup> projects with 36 Project Leaders (PLs) cover a wide range of topics related to Arctic amplification, and you can get an idea of the different topics by visiting the initiative's website.

Projects are grouped into clusters, identified by the letter 'A' to 'E' in the project name (e.g. B03). In addition, projects from different clusters that address issues within the same broader theme are grouped into Cross-Cutting Activities (CCAs).

Cluster Z 'Service' supports (AC)<sup>3</sup> with central infrastructures like the Central management (Z01), the Integrated Research Training Group (IRTG) as supporting unit for Early Career Researchers (ECRs, both doctoral and postdoctoral researchers), the Data management (INF) and the Modelling infrastructure (Z04).



Welcome to (AC)<sup>3</sup> ..... 1

What you need to know ..... 5

The (AC)<sup>3</sup> IRTG ..... 6

How to join the IRTG ..... 8

Registration with the Faculty ..... 9

Enrollment as doctoral student at the university ..... 10

Supervision and the Thesis Advisory Committee (TAC) ..... 12

Courses/Trainings ..... 13

Internal Grants Program ..... 14

Data management within (AC)<sup>3</sup> ..... 15

Publishing and outreach ..... 16

Finding support: PhD Council and EOB ..... 17

Finding support: Ombudspersons, DocRep & MHFA ..... 18

Checklists ..... 21

- Registration with the IRTG
- Registration with the faculty as doctoral researcher
- Enrollment as doctoral student at the university
- TAC process
- Travel grant
- Data management



## (AC)<sup>3</sup> coordination

Scientific coordinator:	Marlen Brückner	<a href="mailto:mbrueck@rz.uni-leipzig.de">mbrueck@rz.uni-leipzig.de</a>
IRTG coordinator:	Christa Genz	<a href="mailto:christa.genz@uni-koeln.de">christa.genz@uni-koeln.de</a>
INF coordinator:	Matthias Buschmann	<a href="mailto:m_buschmann@iup.physik.uni-bremen.de">m_buschmann@iup.physik.uni-bremen.de</a>
Z04	tbd	

## (AC)<sup>3</sup> website

[www.ac3-tr.de](http://www.ac3-tr.de), [www.ac3-tr.de/phd/](http://www.ac3-tr.de/phd/)

Every (AC)<sup>3</sup> scientist has their contact information (along with a picture, if they wish) listed on the website under their project. Contact Marlen or Christa to add your contact information to your project page.

## (AC)<sup>3</sup> mailing lists

[all@ac3-tr.de](mailto:all@ac3-tr.de), [phd@ac3-tr.de](mailto:phd@ac3-tr.de)

If you are not yet on these mailing lists, please contact Marlen or Christa.

In addition, some clusters and cross-cutting activities have further mailing lists; ask your colleagues directly.

## Access to (AC)<sup>3</sup> mattermost and the internal data sharing portal

To keep in touch and share resources easily, a Mattermost chat server and an internal data sharing portal have been set up. To get an account on these systems, visit <http://www.ac3-tr.de/data/> or contact Matthias Buschmann.

There are several channels on Mattermost (<https://mattermost.ac3-tr.de>), if you want to be added, let one of the PhD representatives know.

On the internal data sharing portal (<https://cloud.ac3-tr.de>) you can find all the IRTG forms, and presentations from past meetings and conferences.

## Calendar and events

Most of the (AC)<sup>3</sup> related events (such as workshops, conferences, lectures) are listed in the calendar on the internal data sharing portal: <https://cloud.ac3-tr.de/index.php/apps/calendar/>.

The PhD representatives\* try to add external seminars, workshops and lectures to the calendar that might be of interest to the (AC)<sup>3</sup> doctoral researchers.

The (AC)<sup>3</sup> General Assemblies (GA), which all (AC)<sup>3</sup> scientists should attend, are held twice a year, usually 6 months apart. They are usually combined with a special PhD workshop or retreat, and occasionally with the (AC)<sup>3</sup> Science Conference, which is a larger scientific event open to researchers outside (AC)<sup>3</sup>.

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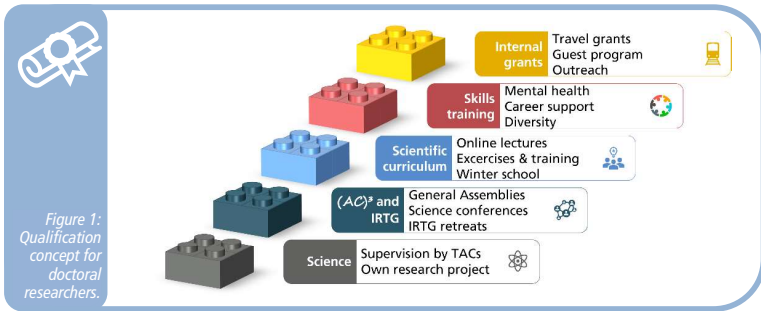
\* The local PhD representatives form the (AC)<sup>3</sup> PhD Council. They are elected once a year, see page 17.

(AC)<sup>3</sup> provides structured guidance for common standards of supervision for doctoral researchers through the Integrated Research Training Group (IRTG), which should enable the members to complete their dissertation within a reasonable time. Each doctoral researcher is supervised by a doctoral committee - the Thesis Advisory Committee (TAC) - consisting of the academic and scientific supervisor, the scientific advisor and the (optional) mentor as a third member. A supervision agreement is concluded between each doctoral researcher and the respective TAC members, which defines the responsibilities and duties of the doctoral researcher, the supervisor, and the other TAC members.

To allow for a regular exchange among the Early Career Researchers (ECRs), the IRTG organizes annual retreats in combination with the biannual (AC)<sup>3</sup> General Assemblies (GA) and the (AC)<sup>3</sup> Science Conference to minimize travel costs and time as well as climate footprints. The annual retreats initiated by the IRTG serve as a platform for doctoral researchers for scientific discussions and networking. They encourage the direct communication between the IRTG members, and familiarize the ECRs in the individual projects with the methodological approaches taken in (AC)<sup>3</sup>. Furthermore, the PhD council (see page 17) is actively engaged in the scientific planning of (AC)<sup>3</sup> project meetings. The (AC)<sup>3</sup> ECRs in general play an essential role in the (AC)<sup>3</sup> GA and Science Conference, since they contribute the majority of scientific talks and posters, and act as session chairs. They are also encouraged to actively contribute to the (AC)<sup>3</sup> Cross-Cutting Activities (CCAs).

The IRTG provides training opportunities and support to our doctoral researchers in a stimulating, international research environment, see Figure 1: Doctoral qualification concept. Its goal is to train doctoral researchers in inter- and transdisciplinary research on Arctic amplification and to enable them to become independent researchers in academia, or leading collaborators beyond. This includes various lectures and workshops. The IRTG fosters the doctoral researchers to initiate and suggest topics for the scientific program. Thus, they are encouraged to take over an active role in setting the retreat program and create their own learning environment. In close cooperation with the PhD council, specific training needs are identified and the doctoral researchers are engaged in the planning of all IRTG events. In addition, we offer a range of transferable skills training and funding opportunities for travel and networking activities.

The IRTG also serves as a central point of contact for doctoral researchers in case of problems, while maintaining strict confidentiality.





The IRTG has been established under the umbrella of the university wide Graduate Academies of the (AC)<sup>3</sup> institutions:



Graduate Academy Leipzig at Leipzig University



Albertus Magnus Center at University of Cologne



Early Career Researcher Development at University of Bremen

In addition, the IRTG collaborates with the following local graduate schools and research training groups:



Graduate School of Geosciences (GSGS) at University of Cologne



Leipzig Graduate School for Aerosols, Clouds, and Radiation at Leipzig University and TROPOS



Helmholtz Graduate School for Polar and Marine Research POLMAR at AWI



MARUM graduate school GLOMAR at University of Bremen

## How to join the IRTG

Membership in the IRTG is mandatory for doctoral researchers within  $(AC)^3$ , they are enrolled in both the Graduate School of their own university and in the  $(AC)^3$  IRTG. Doctoral researchers, who are not officially part of the  $(AC)^3$  framework, can join the IRTG as associate members. However, the process to become an IRTG member is the same, regardless of your funding source.

Form your Thesis Advisory Committee (TAC) and complete and sign the Supervision Agreement together with all the members of your TAC. Please also prepare a research plan of about 5 pages.

To join the IRTG, please download the registration form from our [IRTG webpage](#), complete it, and return it to the IRTG office together with a copy of your supervision agreement and the research plan.

See also our [» checklist](#) 'Registration with the IRTG'!

In order to begin your doctoral studies, you must register with the faculty of your primary supervisor, the formal start of your doctorate is the acceptance by the doctoral commission of the faculty. This is where you will defend your thesis and receive your degree from.

This step is mandatory, so be sure to check the admission requirements carefully in advance. The faculty has the right to reject your application or require you to attend in preparatory courses if you do not fulfill the required qualifications. You should apply for the registration in good time (i.e. during the first few months of your doctoral studies). Admission requirements are specified in the faculty's doctoral regulations ("Promotionsordnung"). Be aware that your registration as doctoral researcher with the faculty may automatically expire after a certain period of time, or that you may be required to take an interim exam at some point.

The application process varies from faculty to faculty, but in most cases the following documents are required:

### *Documents that you will need for the registration with the faculty*

- ✓ Application form / sometimes via the online portal
- ✓ Curriculum vitae
- ✓ Certified copies of your degree certificates (Bachelor/Master/Diploma + transcript of records)
- ✓ Supervision agreement
- ✓ Project plan
- ✓ Confirmation from supervisor

Please note: If your certificates and transcripts of records are not in German or English, you must include certified translations of these documents.

See also our [» checklist](#) 'Registration with the faculty as doctoral researcher'!

Here you will find the links to the Doctoral Examination Regulations. The links also include contact information for the Dean's Office and all application forms.

*Leipzig University*, Faculty of Physics and Earth System Sciences

<https://www.physes.uni-leipzig.de/forschung/promotion>

*University of Cologne*, Doctoral candidates at the Faculty of Mathematics and Natural Sciences

<https://mathnat.uni-koeln.de/en/doctoral-candidates/how-to-apply>

*University of Bremen*, Doctorate at the Faculty 1: Physics / Electrical Engineering

<https://www.uni-bremen.de/en/fb1/studies/doctorate>

*University of Potsdam*, Doctoral Studies at the Faculty of Science (for AWI-P PhD candidates)

<https://www.uni-potsdam.de/en/mnfakul/research/doctorate-and-post-doctoral-dissertation-habilitation/doctoral-studies>

## Enrollment as doctoral student at the university

While registration with the faculty is mandatory, it is optional to enroll as a doctoral student at most universities (only mandatory at the University of Cologne!). If you choose to enroll, you will receive a student ID card that entitles you to a wide range of financial benefits. The only cost is the semester fee. Note that you must be registered with the faculty as doctoral researcher (» ['Registration with the Faculty'](#)) in order to enroll. You can only enroll as a doctoral student at the university where you are registered as doctoral researcher.

### *Financial benefits of enrolling at the university*

- ✓ Discounted local public transport passes
- ✓ Access to inexpensive student housing
- ✓ Reduced canteens prices
- ✓ Reduced admission to cinemas, theaters, etc.
- ✓ Free psychological and legal counseling
- ✓ Inexpensive sports courses at the university
- ✓ Free or discounted childcare on campus

### *Functions of your student ID card (Leipzig, Cologne)*

- ✓ Chip card for university libraries
- ✓ Prepaid card for canteens

### *Functions of your student ID card (Bremen)*

- ✓ Access to library card and Mensacard

Here you will find the links to information on enrollment:

### *Leipzig University*

<https://www.uni-leipzig.de/en/studying/current-students/enrolment-and-academic-induction/enrolment>

### *University of Cologne*

[https://verwaltung.uni-koeln.de/studsek/content/einschreibung/promotion/index\\_ger.html](https://verwaltung.uni-koeln.de/studsek/content/einschreibung/promotion/index_ger.html)

### *University of Bremen*

<https://www.uni-bremen.de/en/studies/orientation-application/enrollment-as-a-doctoral-student>

### *University of Potsdam*

<https://www.uni-potsdam.de/en/studium/application-enrollment/enrollment-doctoral-candidates>

### *Documents generally required:*

- ✓ Application form / via the online portal of the respective university
  - ✓ Certified copies of your degree certificates (Bachelor/Master/Diploma + transcript of records)
  - ✓ Proof of a valid health insurance
  - ✓ Supervision agreement
  - ✓ Copy of letter confirming registration as a doctoral researcher
  - ✓ Passport photo for your student ID card
- International students must also submit
- ✓ Copy of visa or residence permit and copy of your passport
  - ✓ At some universities: Proof of excellent knowledge of English, if the doctorate will be in English (e.g., written confirmation from the supervising professor)
  - ✓ Curriculum vitae

See also our » [checklist](#) 'Enrollment as doctoral student at the university'!

In addition, you may want to or need to register with a local graduate program or graduate academy. This depends on where you work:

### Leipzig

The Leipzig Graduate School for Aerosols, Clouds and Radiation (LGS-CAR) aims to combine the expertise of the partners at the Leipzig University and the Leibniz Institute for Tropospheric Research (TROPOS). Doctoral researchers will be offered an interdisciplinary teaching and research environment focusing on a common scientific field. More information about the LGS-CAR can be found here:

[Leipzig Graduate School for Aerosols, Clouds and Radiation \(LGS-CAR\)](#)

The Graduate Academy Leipzig is the central institution for the support of doctoral researchers and early postdocs at Leipzig University. The GA Leipzig offers a wide range of support for doctoral researchers and postdocs in their orientation phase. You can also register there:

<https://www.ga.uni-leipzig.de/en/graduate-academy-leipzig/membership-1>

### Cologne

When you register as a doctoral researcher at the Faculty of Mathematics and Natural Sciences (» ['Registration at the Faculty'](#)), you automatically also register for one of the graduate programs, for (AC)<sup>3</sup> researchers most likely at the Graduate School of Geosciences (GSGS). More information about the GSGS can be found here:

[Graduate School of Geosciences \(GSGS\)](#)

In addition, you automatically become a member of the central Albertus-Magnus-Center:

<https://portal.uni-koeln.de/albertus-magnus-center>

### Bremen

The MARUM graduate school GLOMAR serves as a central platform for the interdisciplinary training for doctoral researchers in the marine sciences at the University of Bremen and its partner institutions. Information on how to become a member can be found here:

[Admission at GLOMAR](#)

In addition, you automatically become a member of the central graduate center BYRD:

<https://www.uni-bremen.de/byrd>

### AWI

The graduate school POLMAR offers all PhD students at the Alfred Wegener Institute (AWI) a structured qualification program to complement their individual research work. Participation in a structured PhD program is mandatory for all PhD students at AWI. Registration with the AWI PhD Office at the beginning of your PhD project work at AWI includes admission to POLMAR:

[AWI PhD Office](#) (AWI internal link)

# Supervision and the Thesis Advisory Committee (TAC)

In addition to the individual supervision by their primary advisor, (AC)<sup>3</sup> doctoral researchers are co-supervised and mentored by a **Thesis Advisory Committee (TAC)**, which meets at least once a year. The goal of the TAC is to assist the doctoral researcher in working on their dissertation project and in planning their future career in academia and other relevant fields such as industry, politics, education, or government. The doctoral researcher and supervisor jointly select the second (and third) committee members.

The TAC consists of the scientific advisor and, if applicable the academic supervisor, at least one mentor and the doctoral researcher:

- The **Scientific Advisor** (Betreuer\*in des Promotionsvorhabens) is a person usually at the research institution where the doctoral project is being worked on. The scientific advisor is central to the TAC, and should be present at all TAC meetings. He or she will assist the doctoral researcher in forming the TAC.
- In case the scientific advisor does not hold the right to supervise doctoral candidates at the faculty, the **Academic Supervisor** (formale\*r Betreuer\*in) is required as a person who does hold this right in addition to the scientific advisor. This person usually signs the Application for Admission as Doctoral Student (Antrag auf Zulassung als Doktorand).
- A **Mentor** is a person holding a doctorate or PhD degree who joins the TAC alongside the advisor(s), without having an advisor role. Mentors should be active researchers. We encourage mentors from different career stages and institutions/locations within (AC)<sup>3</sup>. At least one of the mentors should represent a different research group/field than both the advisor and the academic supervisor. (AC)<sup>3</sup> encourages interdisciplinary and integrative PhD projects, and it is important to include expertise from different approaches in the TAC. Mentors may come from outside (AC)<sup>3</sup>.

You should meet with your TAC on a regular basis (see the *Schedule of TAC meetings during the PhD* below), at least once every 12 months, to discuss your progress, training needs and any other important issues. All TAC members should be present at each TAC meeting (TAC meetings can be conducted using an online conferencing tool).



In general, TAC meetings are documented in the candidate’s personal TAC status report. This report includes reporting sections for the candidate and the TAC members, and must be signed by all TAC members and the candidate after the meetings.

**!** Note that these procedures may be similar for your local graduate school as well. You can (and should) send the same reports and forms to your graduate school and to the IRTG.

Some practical advice on the TAC meetings is described in more detail in the guideline ‘How to TAC? for doctoral researchers’, available for download on the [IRTG webpage](#). See also our [» checklist](#) ‘TAC process’.

The IRTG training program is unique because of the diverse expertise within the  $(AC)^3$  consortium. With courses offered by  $(AC)^3$  researchers, visiting scientists and external trainers, we are able to respond to different needs and offer the most beneficial course program for everyone. In addition to our courses, we encourage all  $(AC)^3$  PhDs to search for available and relevant courses within the participating institutions. If you cannot find the course you need at a certain point in your scientific progress, it may be offered by one of our partners, see page 6.

### Scientific training

The IRTG scientific training program consists of online lectures, project-specific workshops, and training sessions. The lectures are prepared by  $(AC)^3$  PLs and announced publicly, including in the local graduate schools and in the  $(AC)^3$  community. Streaming and additional material is available afterwards through the  $(AC)^3$  internal data sharing portal. The regular online lectures are also used to introduce new IRTG members to help them get started efficiently.

In addition, a winter school is planned for 2025 in cooperation with the University of Helsinki. The scientific content of the school will follow the scientific topics within  $(AC)^3$ , the lectures and working groups will be prepared by  $(AC)^3$  PLs, the Mercator Fellows, and the program will be complemented by the expertise of our local partners from Helsinki, including a site visit to the Hyttiälä Forestry Field Station.

### Events and networking

In order to facilitate regular exchange, scientific discussion and networking among the doctoral researchers, the IRTG organizes annual retreats in combination with the biannual  $(AC)^3$  General Assemblies (GA) and the  $(AC)^3$  Science Conference. The retreats promote direct communication between the IRTG members, and familiarize the ECRs in the individual projects with the methodological approaches used in  $(AC)^3$ . You as doctoral researchers are encouraged to initiate and propose topics for the scientific program, to take an active role in determining the retreat program, and to create your own learning environment.

Furthermore, the PhD Council (see section 'Finding support: PhD Council and EOB' on page 17) is actively involved in the scientific planning of  $(AC)^3$  project meetings.  $(AC)^3$  ECRs generally play an essential role in the  $(AC)^3$  GA and the Science Conference, as they contribute the majority of the scientific talks and posters, and act as session chairs.

### Skills training

Mental health and diversity issues have recently become more prominent topics of discussion in research in general and among doctoral researchers in particular. Therefore, the  $(AC)^3$  IRTG organizes workshops or provides space for open discussions, accordingly. The workshops organized by the IRTG focus on the needs of natural scientists and are therefore often more efficient for  $(AC)^3$  ECRs than those offered by local graduate schools and/or central graduate academies.



#### Want to get more involved?

As needs sometimes evolve at short notice, we are open to your suggestions. With the support of the PhD Council, specific training needs can be identified and met, and the group of ECRs is encouraged to get involved in the planning of all IRTG events.

An overview of all IRTG events, incl. online lectures and workshops is listed on the [IRTG webpage](#).

The IRTG Internal Grants Program supports networking and enables early career researchers to build up their own scientific network and implement their own ideas. It is open to all IRTG members, who are invited to apply for different IRTG funding opportunities. During the application process, the IRTG members submit their applications, including their motivation and a statement of support from their supervisors, to the IRTG office. The (AC)<sup>3</sup> Scientific Steering Team (SST) makes the final decision based on the review and recommendation of the IRTG coordination team. The successful applicants submit a short report on their activities for the (AC)<sup>3</sup> website. An overview of all approved grants can be found on the [IRTG webpage](#).

### Purpose: Travel, Guests, Outreach

Within the program, the IRTG offers travel grants for conference attendance and for early career researchers to visit an international or national laboratory or research group (short or medium term stays abroad) in order to expand their scientific knowledge and research network. Travel grants for conference attendance generally require active participation in the conference (oral or poster presentation); exceptions should be justified by the supervisor.

In addition, we offer guest grants to invite scientists (from fellow PhDs to internationally renowned researchers) from national and international research institutions for research stays of several weeks at (AC)<sup>3</sup> institutions or to participate in the winter school.

One of the goals of the IRTG is to train early career scientists in science communication and outreach activities, so the IRTG members are encouraged to get involved and can apply for funding for their own activities through the internal grants program. The growing public interest in Arctic-related climate change has been addressed through the development of the (AC)<sup>3</sup> fact sheets, authored by IRTG members.

### Submission and evaluation

Applications can be submitted anytime using the IRTG Grant Application Form, which is available on the [IRTG webpage](#). Applications will be evaluated by the IRTG coordination team based on the following selection criteria: motivation and relevance of the event to the applicant's project or professional development, and feasibility of the proposed activity. The Science Steering Team (SST) will make the final decision on the distribution of funds and the amount of funding awarded to each successful applicant, subject to the availability of funds.

### Reimbursement and reporting

Successful applicants for IRTG travel or guest grants must apply for reimbursement through the UoC Travel Reimbursement Office (*Reisekostenstelle*). The necessary forms are available on the (AC)<sup>3</sup> [data sharing portal](#). All documents, including all travel receipts, must be submitted to the IRTG coordinator in a timely manner. The University of Cologne will only accept applications for reimbursement up to 6 months after return! Direct costs for outreach activities can be reimbursed after the event or paid directly by invoice.

A short written report, preferably with an illustrative photo for publication on the (AC)<sup>3</sup> website, must be submitted to the IRTG four weeks after return or after the event. A template is available on the IRTG webpage.

See also our » [checklist](#) 'Travel grant', available for download on the [IRTG webpage](#).



During your doctoral studies, you will be working with scientific data. It's a good idea to familiarize yourself with some basic requirements and practices in scientific data management. These will also be the subject of a series of presentations organized by the IRTG and the INF project.

Our » [checklist](#) 'Data publication' is intended to give you an overview of the steps necessary and things to think about at the different stages of preparing a scientific article. It can also be used as a general template that is applicable to most research situations.

There are some general rules, when dealing with scientific data. Most research agencies and publishers now require you to submit the data recorded or generated in a project for publication. This is often referred to as "Fair" principles, meaning that the data should be Findable, Accessible, Interoperable and Reusable. Please also review and familiarize yourself with our data policy (<https://doi.org/10.5281/zenodo.7570329>). In general, you are required to publish any data that has not already been published. For example, if you publish a paper, the publisher will require you to cite all data sources, so they must be available.

It is a good idea to treat a data publication like any other scientific publication. The following list is intended to guide you through the data publication process.

### Things to consider before you record or otherwise obtain data

- What data is being collected or generated?
- Who has the right to publish the data? Responsibilities need to be discussed in advance, e.g. with the instrument PI or collaborators.
- How large will the dataset be?
- What format will you use? Often it makes sense to use a consistent data structure that can be published with minimal modifications.
- What metadata is needed to fully understand the data and make it reusable by others? Are there any metadata standards that you can use?

In general, keep the golden rule in mind: If you were a future user of the data, how would you want the data to be prepared? What do you need to be able to reuse and work with the data independently?

If you have any questions, please contact [data@ac3-tr.de](mailto:data@ac3-tr.de).

### Publications/conference contributions/public meetings

The (AC)<sup>3</sup> partners commit themselves to handle the generated scientific data in accordance with the [DFG Guidelines for Safeguarding Good Research Practice](#) and the [FAIR \(Findable, Accessible, Interoperable, Reusable\)](#) principles. The [Data Policy for the Transregional Collaborative Research Center TR 172 \(AC\)<sup>3</sup>](#) specifies the data publication process and provides guidelines for the handling of research data prior to final publication.

#### Authorship

- Co-authorship must follow the [DFG Guidelines for Safeguarding Good Research Practice](#).
- Manuscript for publication in journals and abstracts for presentations at conferences and/or public meetings must be sent to the co-authors prior to submission, with a copy to the PL(s) involved. The lead author must consider substantial comments from the co-authors prior to submission of the manuscript or abstract, and must provide ongoing information on the progress of the review and publication.
- Drafts of journal publications must be circulated within (AC)<sup>3</sup> at least two weeks prior to submission, usually using the [all@ac3-tr.de](mailto:all@ac3-tr.de) mailing list.

#### Acknowledgement

The (AC)<sup>3</sup> project must be acknowledged in scientific publications with the following sentence: We gratefully acknowledge the funding by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) - Projektnummer 268020496 - TRR 172, within the Transregional Collaborative Research Center "Arctic Amplification: Climate Relevant Atmospheric and SurfaCe Processes, and Feedback Mechanisms (AC)<sup>3</sup>"

#### Funding

Funding for publication fees should first be evaluated internally. University libraries support Open Access publications through publication funds or framework agreements with specific publishers. Information can be found here:

Leipzig University: <https://www.ub.uni-leipzig.de/en/open-science/open-access-funds/>

University of Cologne: <https://ub.uni-koeln.de/en/research-publishing/publishing>

University of Bremen: <https://www.ub.uni-leipzig.de/en/open-science/open-access-funds/>

If sufficient support from the university library is not available, project funding should be used. In case of serious funding problems, please contact the scientific coordinator or the IRTG coordinator to find alternative solutions.

#### Outreach

All project scientists are encouraged to actively promote their research to the public. Early career researchers can apply for funding for specific activities within the IRTG Internal Grants Program.

If you carry out certain outreach activities under the umbrella of the (AC)<sup>3</sup> framework, please make sure to inform the scientific or IRTG coordination office. Please also contact us in case of any uncertainties.

In order to make your engagement visible on our (AC)<sup>3</sup> website, please keep us informed about your activities, especially if you use your (AC)<sup>3</sup> affiliation.

## The PhD Council

In order to represent our doctoral researchers also in the management of (AC)<sup>3</sup>, we have established our PhD Council, which consists of local PhD representatives at each site. They are elected once a year, usually during one of the (AC)<sup>3</sup> General Assemblies or PhD retreats. The council represents the concerns and ideas of the PhDs and is their voice in the Scientific Steering Team (SST) meetings. The SST meets on a more or less monthly basis to discuss the direction of the project. The SST consists of the Speaker, Deputy Speakers and Cluster Speakers of (AC)<sup>3</sup>, representatives of the institution, leaders of the Cross-Cutting Activities (CCAs), representatives of the central projects (Z01, IRTG, INF, Z04) and representatives of the doctoral and postdoctoral researchers. If there is something you would like to bring up at the meeting, please contact your local or the main PhD representative or the IRTG coordinator.

The council works as a team on general issues. Feel free to contact your local representative at any time. A constantly updated list including contact details is available on the [IRTG webpage](#).

The PhD Council meets regularly to discuss various issues. All PhDs are welcome to attend if they want to discuss something, or just help out. The dates - and zoom link - of the meetings can be found in the [calendar](#) on the internal data sharing portal.

Of course, you can always contact the council if you have any problems during your doctoral studies. Your concerns will be kept confidential. However, for serious issues, ombudspersons have been established within (AC)<sup>3</sup>; more information can be found in the following section and on the [\(AC\)<sup>3</sup> website](#).



### Want to get more involved?

The Council meets once a month via Zoom to discuss ideas: How do we want to organize? What should we propose to the Scientific Steering Team (SST)? All doctoral researchers are very welcome to attend the meetings or to contact the council members with new ideas or just out of curiosity.



### Anything you are concerned about?

Contact the Council's [Anonymous suggestion / comment / concern box](#) ("Kummerkasten").

## The Equal Opportunities Board (EOB)

The (AC)<sup>3</sup> Equal Opportunity Board was established during phase I and has been continued to evolve during phase II. It is always open to suggestions from the entire (AC)<sup>3</sup> community. It has successfully implemented several measures aimed at complementing the variety of support and measures provided by the universities and research institutions in (AC)<sup>3</sup>.

- Support for family services during (AC)<sup>3</sup> workshops and conferences or field campaigns
- Encouraging female researchers or researchers from underrepresented groups to take on leadership roles within (AC)<sup>3</sup>, for example by supporting coachings, networking workshops or leadership training
- (AC)<sup>3</sup> mentoring program
- Increase the visibility of role models by inviting senior female Arctic researchers to (AC)<sup>3</sup> workshops, winter schools and conferences
- Active role in STEM outreach activities for school children
- Initiate of a 'Person of Trust (PoT)' during field campaigns



### Want to get more involved?

Contact the EOB via [eob@ac3-tr.de](mailto:eob@ac3-tr.de)

While working on your dissertation or postdoctoral project, disagreements and tensions may arise between you and your advisors or other parties for a variety of reasons. Possible causes of conflict include interpersonal differences, excessive demands on a person's time, or violations of the supervision agreement. Cases of abuse of power, insults and humiliation, and scientific misconduct may also occur during the academic career development phase.

In such cases, talk to your supervisor immediately and describe the situation. Misunderstandings or unspoken expectations are often the cause of tense situations. If specific conflicts have arisen due to differing views, it may be helpful to consult an ombudsperson as a neutral party to discuss the issue.

### Within (AC)<sup>3</sup>

*IRTG team:* <http://www.ac3-tr.de/projects/cluster-z/irtg/>

- Graduate School Coordinator  
Christa Genz, [christa.genz@uni-koeln.de](mailto:christa.genz@uni-koeln.de), [irtg@ac3-tr.de](mailto:irtg@ac3-tr.de)
- PLs of the IRTG  
Susanne Crewell (Cologne), [susanne.crewell@uni-koeln.de](mailto:susanne.crewell@uni-koeln.de)  
Manfred Wendisch (Leipzig), [m.wendisch@uni-leipzig.de](mailto:m.wendisch@uni-leipzig.de)  
Gunnar Spreen (Bremen), [gunnar.spreen@uni-bremen.de](mailto:gunnar.spreen@uni-bremen.de)

*Your local PhD representatives* ([» Council](#))

### Local external contacts

#### *Leipzig University*

- Conciliators for Conflict Mediation for doctoral and postdoctoral researchers at Leipzig University  
<https://www.uni-leipzig.de/en/quality-development/conflict-mediation-for-doctoral-and-postdoctoral-researchers>
- Ombudpersons for good scientific practice  
<https://www.uni-leipzig.de/en/research/research-service/office-of-ombudpersons>
- The PhD Candidates' Council at Leipzig University  
<https://www.prorat.uni-leipzig.de/en/>

#### *University of Cologne*

- University's conciliators at your own or any other Faculty  
<https://portal.uni-koeln.de/en/albertus-magnus-center/doctoral-phase-r1/support-information-service/ombudpersons>
- Ombudsperson for good scientific practice  
<https://portal.uni-koeln.de/en/research/scientific-integrity/safeguarding-good-scientific-practice>
- Doctoral representatives at the University of Cologne  
<https://portal.uni-koeln.de/en/albertus-magnus-center/doctoral-phase-r1/support-information-service/doctoral-candidate-representatives>

#### *University of Bremen*

- Services on Campus  
<https://www.uni-bremen.de/en/byrd/services-on-campus-1>
- Anti-Discrimination and Conflict Management Office (ADE)  
<https://www.uni-bremen.de/en/ade>

- Ombudspersons for good scientific practice at the university  
<https://www.uni-bremen.de/rechtsstelle/service/wissenschaftliches-fehilverhalten.html>

#### *University of Potsdam*

- Ombudspersons  
<https://www.uni-potsdam.de/de/senat/ombudspersonen>
- Potsdam Graduate School (PoGS) PhD Representatives  
<https://www.uni-potsdam.de/en/poqs/about-us/phd-representatives>

#### *AWI*

- Ombudspersons for good scientific practice  
<https://www.awi.de/en/science/good-scientific-practice.html>
- Support in case of conflict (POLMAR)  
<https://www.awi.de/en/work-study/out-of-university/graduate-school-polmar.html>

#### *TROPOS Leipzig*

- Internal bodies, incl. ombudsperson for good scientific practice  
<https://www.tropos.de/en/institute/organisation-of-the-institute/internal-bodies>

You can also find all this contact information on the (AC)<sup>3</sup> website. They are summarized here:

[http://www.ac3-tr.de/wp-content/uploads/2022/05/ombudsperson\\_202205.pdf](http://www.ac3-tr.de/wp-content/uploads/2022/05/ombudsperson_202205.pdf)

### **Mental Health First Aiders (MHFA)**

#### *What is MHFA?*

MFHA is the German version of the Australian Mental Health First Aid Program which is spread over 26 countries. The German network is operated by the "Zentralinstitut für Seelische Gesundheit". More information about the German and international program can be found » [here](#) and » [here](#).

#### *Why MHFA?*

Almost everyone knows someone who suffers or has suffered from mental health problems. (AC)<sup>3</sup> actively promotes trained MHFA as contacts for employees who are also able to actively approach people and offer support. The earlier affected people get help, the better their chances of recovery.

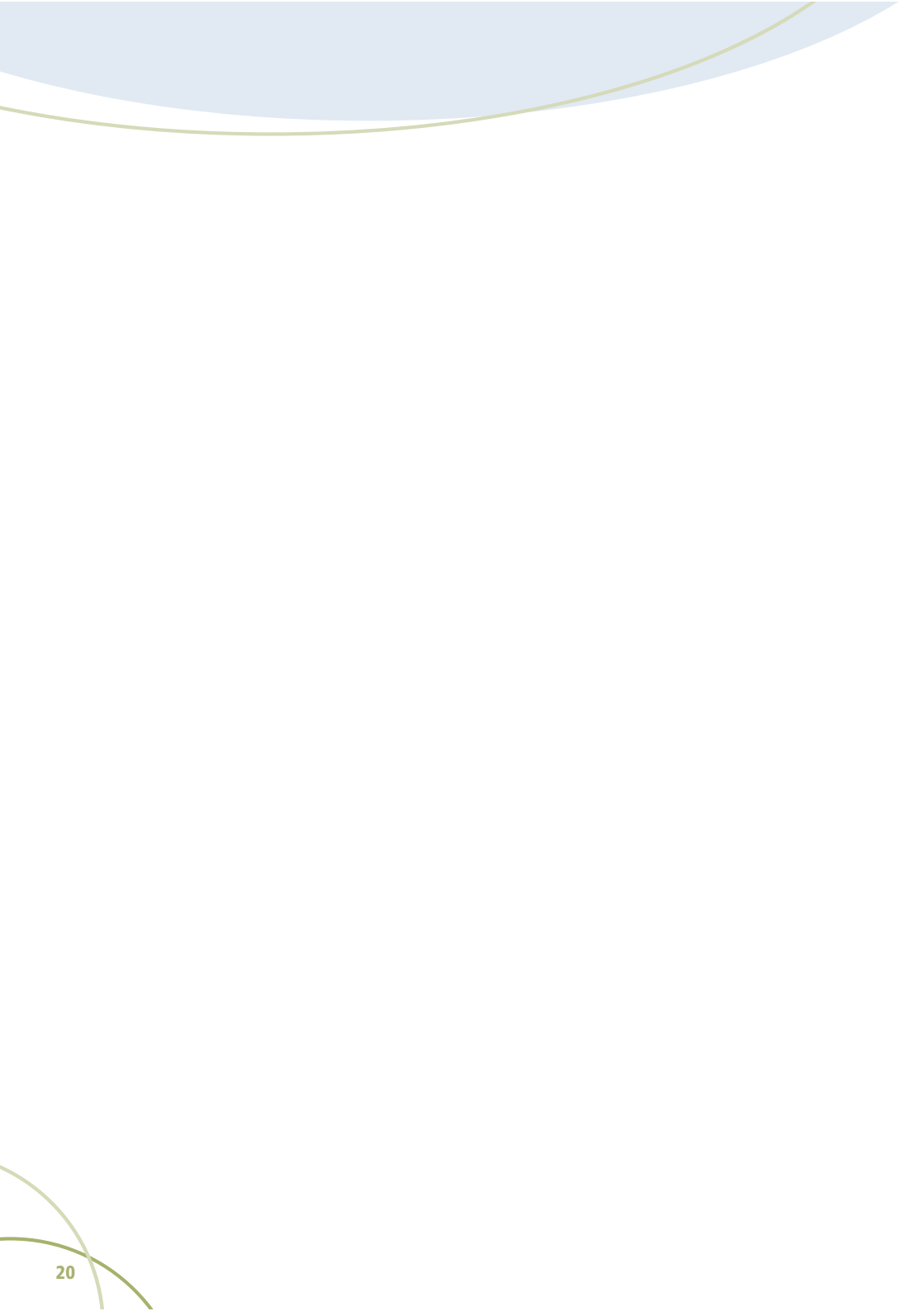
#### *What to expect?*

The (AC)<sup>3</sup> MFHA provide first aid counseling for emerging mental health issues and acute mental health crises. Any member of (AC)<sup>3</sup> can take advantage of this support.

#### *Our (AC)<sup>3</sup>MFHA*

Christa, [christa.genz@uni-koeln.de](mailto:christa.genz@uni-koeln.de)

Marlen, [mbrueck@rz.uni-leipzig.de](mailto:mbrueck@rz.uni-leipzig.de)





# Checklists





## Registration with the IRTG

- Application form filled
- TAC formed
- Supervision Agreement, signed by all TAC members and the doctoral researcher\*
- Project Plan (~ 5 pages) finalized
- Acceptance as doctoral candidate at the faculty received
- All documents mentioned above submitted to the IRTG office

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\*(AC)<sup>3</sup> funded doctoral researchers are required to submit a signed copy of the IRTG supervision agreement. For associate membership of externally funded doctoral researchers, any supervision agreement of a local graduate school is sufficient.



## Registration with the faculty as doctoral researcher

- Application form / sometimes via the online portal
- Curriculum vitae
- Certified copies of your graduation certificates  
(Bachelor/Master/Diploma + transcripts of records)  
Please note: In case your certificates and transcripts of records are not issued in German or English, you need to include authorized translations of the respective documents.
- Supervision agreement
- Project plan
- Confirmation of supervisor



## Enrollment as doctoral student at the university

(not mandatory at all universities!)

### Generally required documents

- Application form of the respective university
- Certified copies of your graduation certificates  
(BA/MA/Diploma + transcripts of records)  
Please note: In case your certificates and transcripts of records are not issued in German or English, you need to include authorized translations of the respective documents.
- Proof of a valid health insurance
- Supervision Agreement
- Copy of confirmation letter of registration as a doctoral researcher
- Passport photo for your student ID card

### International students additionally have to hand in

- Copy of visa or residence permit
- Copy of your passport
- At some universities: Proof of excellent knowledge of English, if the doctorate will be in English (e.g., written confirmation from the supervising professor)
- Curriculum vitae



## TAC process

- Directly after joining (AC)<sup>3</sup>: Form your Thesis Advisory Committee (TAC)
  - Prompt all supervisors to sign the supervision agreement
  - Submit supervision agreement to the IRTG coordinator
  
- Within **three months** after joining (AC)<sup>3</sup>: Convene your TAC team for initial “Project Plan” meeting
  - Fix a date for the “Project Plan” meeting with your TAC team: \_\_/\_\_/\_\_
  - Prepare meeting by completing the TAC status report
  - Prepare a detailed research plan and a time schedule
  - Prepare a short presentation to update your TAC on your progress
  - Update research plan and timeline after meeting, complete the meeting minutes
  - Submit updated and signed TAC status report form, updated research plan and updated time schedule to IRTG coordinator
  
- Within **one year** of joining (AC)<sup>3</sup>: Convene your TAC team for a meeting to assess the progress made
  - Fix a date for the progress meeting with your TAC team: \_\_/\_\_/\_\_
  - Define required documents together with your TAC:  

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  - Prepare meeting by completing the TAC status report
  - Prepare the required documents, update your timeline
  - Prepare a short presentation to update your TAC on your progress
  - Update research plan and timeline after meeting, complete the meeting minutes
  - Submit updated and signed TAC status report form, updated timeline and any other documents to IRTG coordinator

- Second progress meeting **within the second year** of joining (AC)<sup>3</sup>
  - Fix a date for the progress meeting with your TAC team: \_\_/\_\_/\_\_\_\_
  - Define required documents together with your TAC:  

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  - Prepare meeting by completing the TAC status report
  - Prepare the required documents, update your timeline
  - Prepare a short presentation to update your TAC on your progress
  - Update research plan and timeline after meeting, complete the meeting minutes
  - Submit updated and signed TAC status report form, updated timeline and any other documents to IRTG coordinator
  
- Third and last progress meeting **within the third year** of joining (AC)<sup>3</sup>
  - Fix a date for the progress meeting with your TAC team: \_\_/\_\_/\_\_\_\_
  - Define required documents together with your TAC:  

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  - Prepare meeting by completing the TAC status report
  - Prepare the required documents, update your timeline, especially with regard to thesis writing
  - Prepare a short presentation to update your TAC on your progress
  - Update research plan and timeline after meeting, complete the meeting minutes
  - Submit updated and signed TAC status report form, updated timeline and any other documents to IRTG coordinator



## Travel grant

### Application

- Application form, incl. supervisor's statement and both signatures
- Conference abstract, if applicable
- Travel authorization request at own institution
- Application Advance Payment for Travel Expenses, if applicable

### Reimbursement

- Statement of Travel Expenses, incl. IBAN, address & own signature
- Appendix - Table of Travel Costs, if applicable
- Receipts as one digital document

### Reporting

- Report for publishing on the IRTG webpage
- Picture



## Data publication

This list is intended to guide you through the data publishing process.

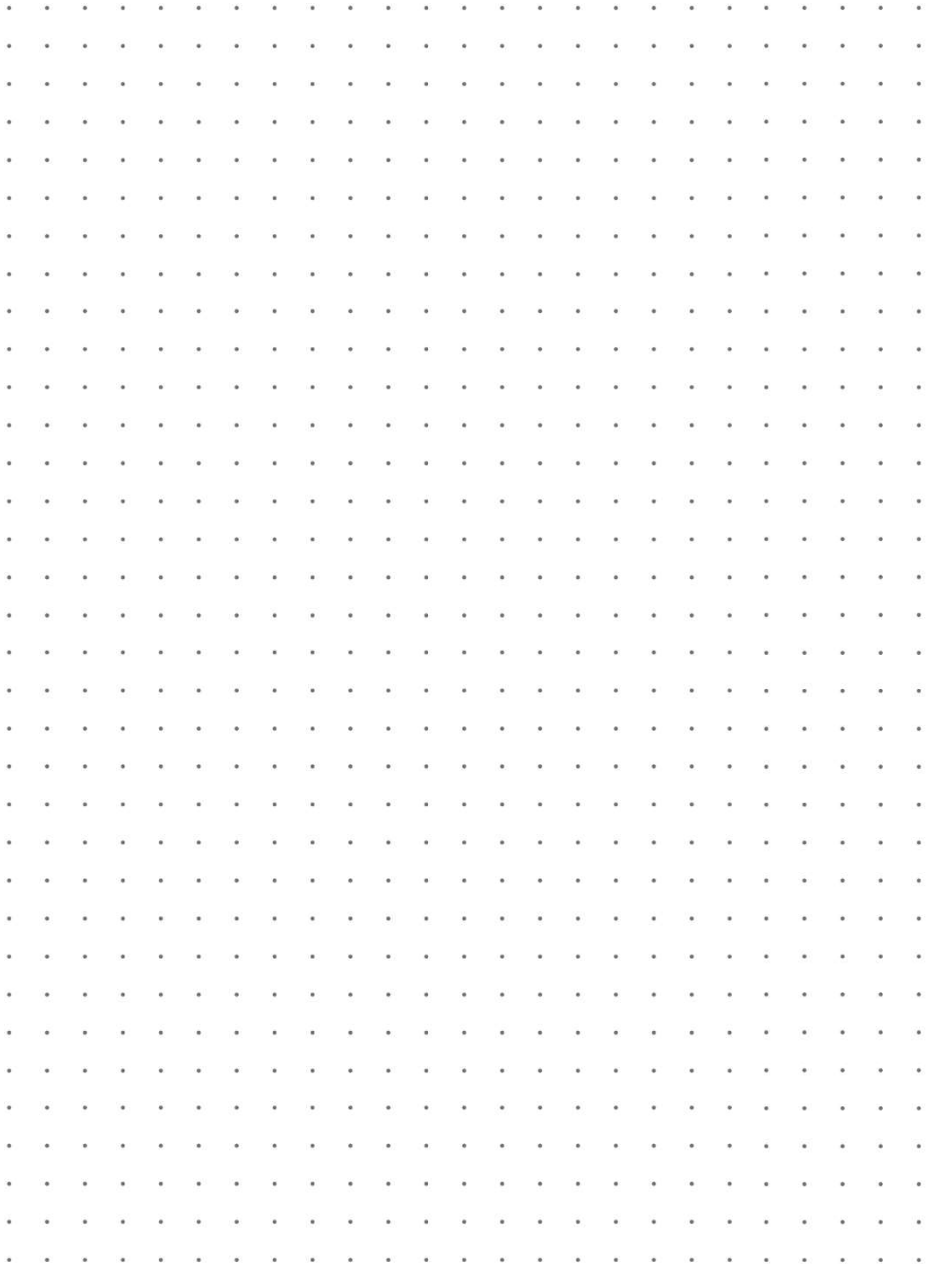
### Before data publication

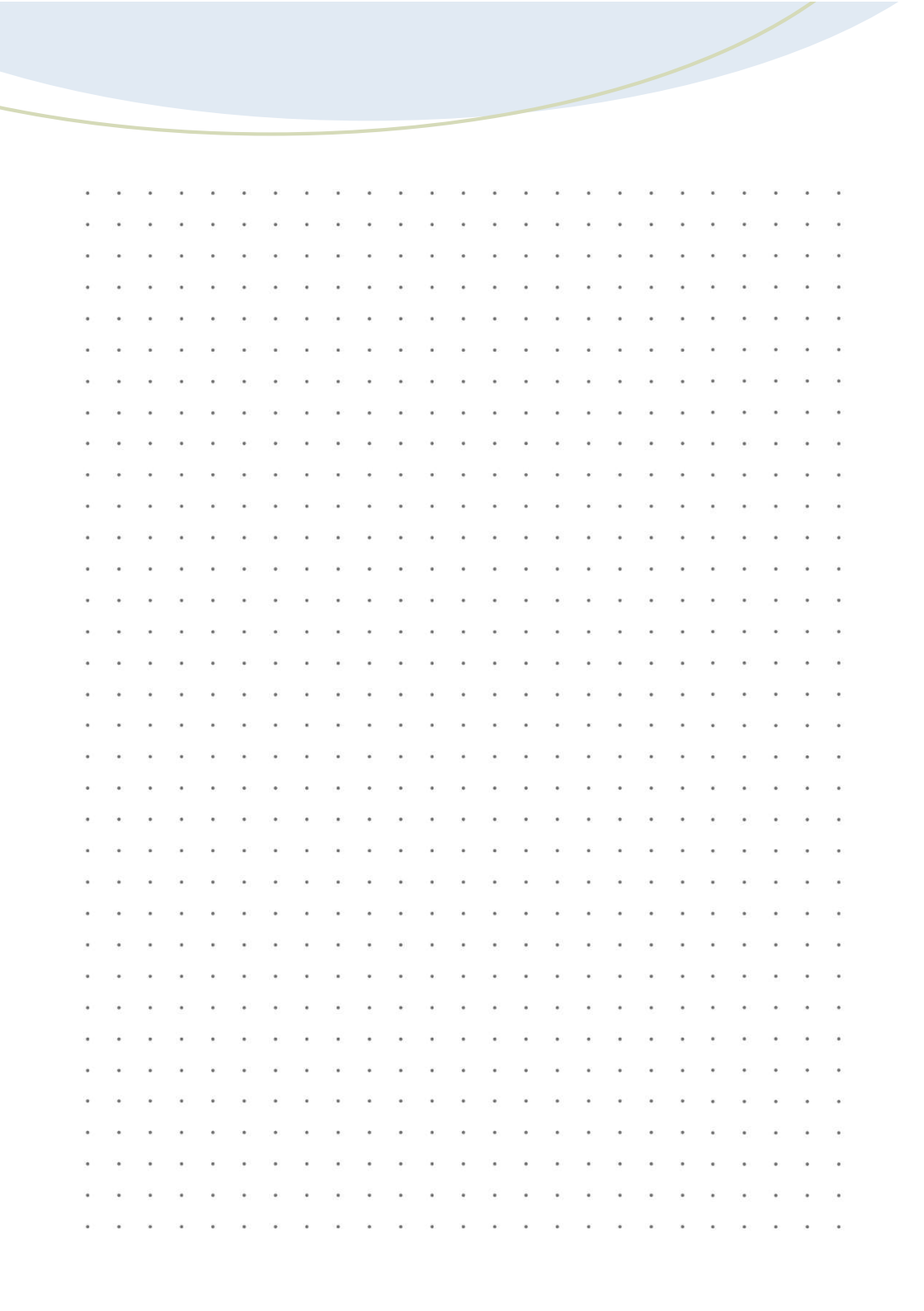
- Where will the data be published? E.g. PANGAEA, Zenodo or (in special cases) maybe as supplementary material in a paper.
- Does the repository meet the requirements for long-term archiving of scientific data?
- Do you need to register or create a user account with the repository?
- Does the repository have any requirements for format or metadata selection?
- What is the granularity of the dataset? Depending on the size and/or structure of the data, it may make sense to split a large dataset into smaller parts.
- When will the data be published? Some repositories take some time to issue DOIs and publish the data; this needs to be considered if, for example, the data are to be used in a publication and therefore need to be available at a certain time.
- How should the data be licensed? The recommendation is Creative Commons - Attribution (CC-BY), but other options are available.
- Write an abstract that briefly describes the dataset and methods used, or cite relevant sources for understanding the dataset.
- Decide and discuss co-authorship of the dataset with collaborators.
- Review and double-check the dataset before submission. In PANGAEA there is an opportunity for proofreading after submission.

### After data publication

- Send a notification about the new dataset to [data@ac3-tr.de](mailto:data@ac3-tr.de)
- Feel free to promote your new dataset, e.g. on social media and link the DOI to your ORCID or any publication tracking service.
- We have a Github repository, where we collect Jupyter Notebooks with examples of how to use the dataset. You are welcome to contribute.







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### **Responsible:**

Dr. Christa Genz

IRTG Graduate School Coordinator CRC/TR 172 (AC)<sup>3</sup>

Institute for Geophysics and Meteorology, University of Cologne

Albertus-Magnus-Platz, 50923 Cologne, Germany

[www.ac3-tr.de](http://www.ac3-tr.de)

[www.ac3-tr.de/projects/cluster-z/irtg](http://www.ac3-tr.de/projects/cluster-z/irtg)

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