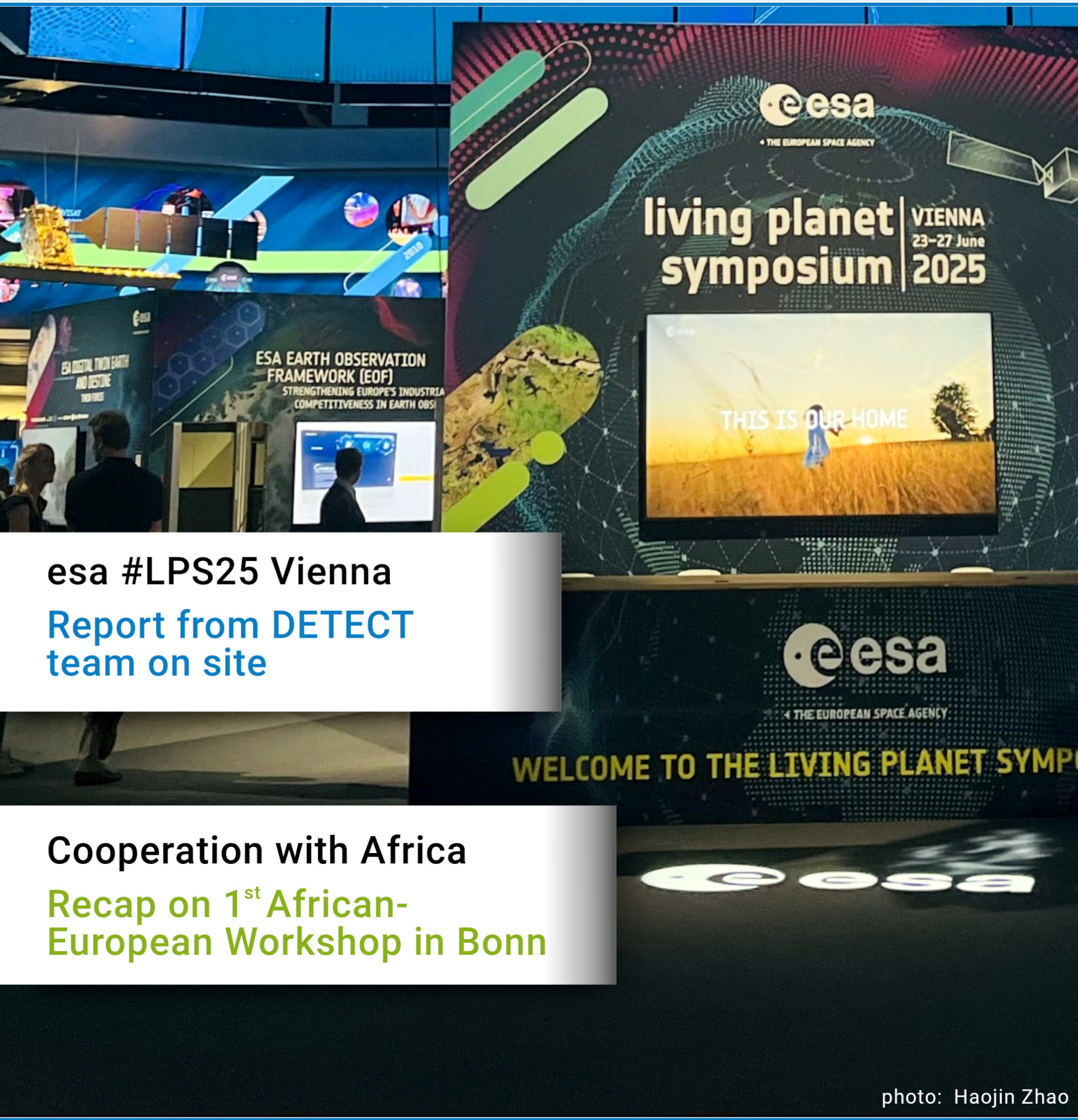
Issue #11 - 2025/2

CRC 1502 DETECT

Newsletter



esa #LPS25 Vienna

Report from DETECT team on site

Cooperation with Africa

Recap on 1st African-European Workshop in Bonn

photo: Haojin Zhao

It's all about cooperation, networking and coordination

DETECT initiated the **1st African-European Workshop on Land Surface and Climate Change** on 13 May, at University of Bonn. This workshop and the **3rd DETECT Retreat** from 14-15 May, were the first encounter with our future cooperation partners from Africa and starting point for joint planning and implementation in DETECT II.

The workshop focused on identifying state-of-the-art and burning regional challenges. Strategies for modeling and sharing regionally available data were discussed during the Retreat in Bad Breisig.

Furthermore, the well-established land and climate seminar is currently also used as a platform to learn more about the challenges faced by our cooperation partners.

As the deadline in November for the **final submission of the second phase proposal** is fast approaching, we are now in the midst of consolidating all ideas and concepts for the second phase of DETECT in line with the relevant framework conditions. The tension rises.

In the meantime, the date for the DFG on-site evaluation has been confirmed: 21–22 January 2026. The concept for conducting the evaluation at University of Bonn in new, climate-friendly and sustainable buildings has just been prepared. Detailed organisational preparations are underway.

Parallel to the application phase, everyday life at DETECT continues just as intensively: most of the PhD theses are entering their final stages and the number of papers published with DETECT acknowledgement is increasing considerably.

DETECT scientists are continiously attending conferences and presenting their projects, networking worldwide, such as at **EGU** and **ESA LPS**, both in Vienna, the **Annual Conference of the Agricultural Economics Society** in Bordeaux, **PrePEP** Conference in Bonn, **Annual Conference on Global Economic Analysis** in Kigali, Ruanda, the **eLTER Science Conference** in Tampere etc. You will find some conference reports of our colleagues in this edition.

The European Association of Agricultural Economists will celebrate its 50th anniversary in Bonn from 26-29 August. An organised panel discussion session as EAAE session jointly with Collaborative Research Centre 1502 DETECT about "Equity and Diversity in Agricultural and Food Economics – where are we?" is on the agenda.

The **DE-I-TECT** Team has established two new workshop formats in their 2025 programme:

„From Bystander to Upstander", to foster a respectful, just and equal culture in the workplace, conducted by Sabine Mariss. A report on the recent workshop is part of this newsletter edition. The next on-site workshop is currently planned to take place in Autumn.

And the new luncheon series on Unconscious Biases with Imke Lode has just started:

Because we all have unconscious biases, the key-issue is how we deal with them. 7 sessions of 30 minutes each: low threshold – high impact.

Read more about upcoming internal and external DETECT-related events on page 35ff. The choice is yours... undoubtedly difficult to prioritise!

With many thanks for the commitment shown by the entire community, the DETECT editorial team wishes you all a relaxing and well-deserved summer break to recharge your batteries. Let's get prepared for the upcoming final sprint. Sunny and warm regards!

Enjoy reading!

Sincerely,

Jürgen Kusche
Speaker

Silke Hüttel
Co-Speaker

Harry Vereecken
Co-Speaker

Frank Siegismund
Scientific Coordinator

Dorothee Berkle-Müller
Administrative Coordinator

Workshop Recap: 1st African-European Workshop on Land Surface and Climate Change

by Hana Mohammed

1st African-European Workshop on Land Surface and Climate Change

source: Sascha Wüst

On Tuesday, May 13, 2025, CRC DETECT hosted the 1st African-European Workshop on Land Surface and Climate Change at the University of Bonn. The workshop brought together ten cooperation partners from six African countries (Benin, Burkina Faso, Cameroon, Ethiopia, Ghana, and Senegal) alongside DETECT members and other interested participants.

The aim of the workshop was to share insights from the African partners on land use, water resource management, and the impacts of climate change in their regions. The invited African participants from various universities and institutions contributed with rich and diverse presentations, highlighting both the challenges and opportunities in their respective regions. The discussions revealed a strong potential for long-term collaboration.

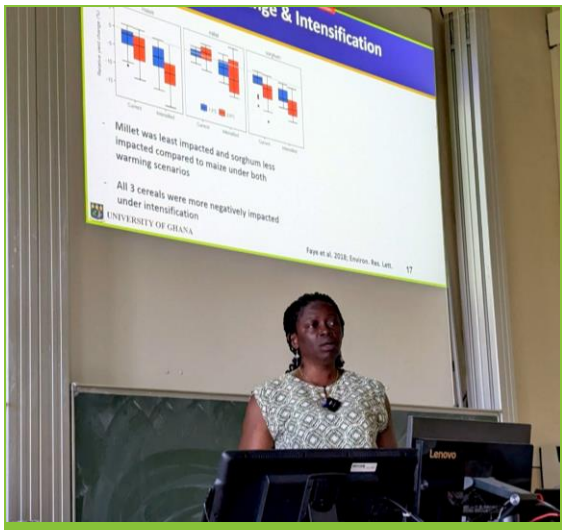
The presentations were distributed between two main sessions, the first on Climate and Land Use Impacts on Hydrology & Water Resources and included the following:

· Cheikh Faye (Université Assane Seck de Ziguinchor, Senegal) - Assessing the Impact of Climate Change on Current and Future Temperatures, Rainfall, and Watershed Flows in Senegal.

· Tadesse T. Kenea (Arba Minch University, Ethiopia) - The Status of Water Budget Study in Ethiopia Amid Land Use and Climate Changes: Progresses, Challenges and Opportunities.

· Leonard K. Amekudzi (KNUST, Ghana) - Climate and Land Use Impacts on Hydrological Processes in Ghana: State of Water Resources and its Management Strategies.

· Djigbo F. Badou (Université Nationale d'Agriculture, Benin) - Impacts of Land Use and Climate Variability on Hydrological Extremes in Benin: Implications for Water Resource Management.



Dilys S. MacCarthy of University of Ghana

source: Sasscha Wüst

In the second session, participants discussed land use and resources management:

· Dilys S. MacCarthy (University of Ghana) - Intensification of Cropping Systems in the Face of Climate Change: The Case of West Africa.

· Yap Loudi (National Institute of Cartography, Cameroon) - Impact Analysis of Recent Hydraulic Dams Construction on Water Storage and Flooding in Cameroon Using GRACE/FO, Satellite GNSS Reflectometry, and In-Situ Measurements.

· Vincent Logah (KNUST, Ghana) - Agro-ecological Zones and Soil/Land Use Types in Ghana: Relevance for the Water Cycle.

· Tazen Fowe (2iE, Burkina Faso) - Overview of 2iE's activities on water monitoring and management of small dams in a multi-use context in Burkina Faso.

· Mamadou A. Sarr (CSE, Senegal) - Earth observation Based Applications for Assessing Natural Resources and addressing Climate change in West Africa.

· Patrick Essien (Environmental Protection Authority, Ghana) - Land Use Contribution to Climate Change: An African Perspective.

The workshop also featured a presentation by Stefan Poll (Research Centre Jülich), who introduced Terrestrial Systems Modelling Platform (TSMP), a key tool used in DETECT for integrated land surface and climate modelling. In addition, Jean-Martial Cohard (Grenoble Alpes University, France / AMMA-CATCH Observatory), contributed with a talk emphasizing the importance of data-model integration for informed water management in West African agriculture.

The 1st African-European Workshop was an important step to exchange the knowledge and experience as well as to strengthen the collaboration between DETECT and its African partners.

The workshop marked the first event involving the African cooperation partners during their visit to Bonn, followed by the annual DETECT Retreat in Bad Breisig, and concluded with a visit to Raspberry Pi Reflector (RPR) sensor sites. These activities contributed to further discussions and shaping ideas for future collaboration.

3rd DETECT Retreat: Towards DETECT II and Cooperation with Africa Change

by Dorothee Berkle-Müller

Flyer 3rd DETECT Retreat Bad Breisig

source: Nicholas Jennrich

This year's 3rd DETECT Retreat took once again place in Bad Breisig, directly adjacent to the Rhine River, from 14-15 May.

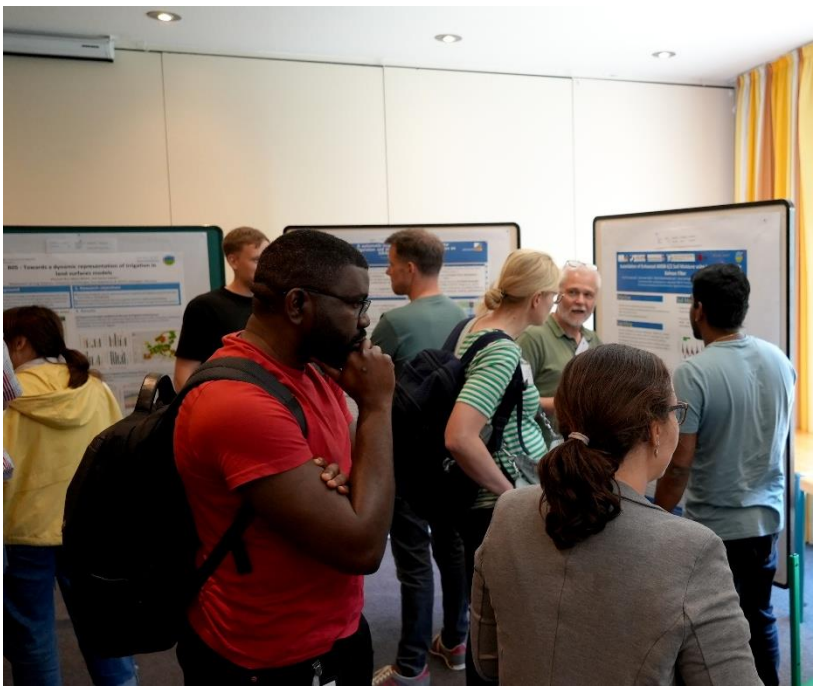
The focus was mainly on the collaboration with Africa and on discussing outstanding issues with respect to the completion of the second phase proposal. It was a very fruitful event, which, just like the Advisory Board Meeting following the Retreat, provided important clarification in terms of the 2nd phase strategy. Due to the multiple constraints to be considered in the overall application, the discussion outcome imposes some rearrangement of individual project proposals for phase II, which will be implemented within the next few weeks, before submitting the pre-proposal to DFG in July.

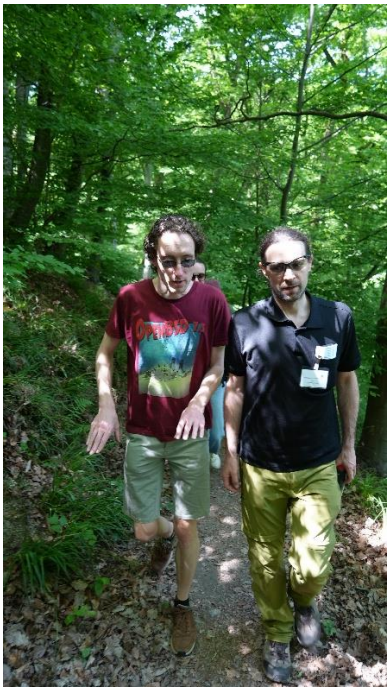
This year, the Retreat agenda provided much space for exchange and networking, beyond an intensive Poster Session, and, last but not least, the hiking event on a small section of the Rheinburgen Weg, organized by Sandra from the Coordination Secretariat.

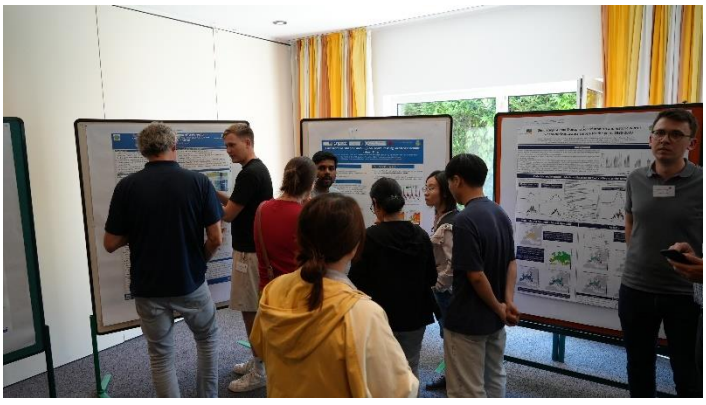
Poster Session

source: Nicholas Jennrich

In the following, there are some impressions of the DETECT Community's joint two days:







Workshop on "Navigating your Thesis Writing" during DETECT PhD-Day

by Kristin Vielberg and Hanna Sänger

Workshop "Navigating your Thesis Writing"Session

source: DETECT Coordination, Nicolas Jennrich

On 13 May, before the official DETECT Retreat started, a PhD-Day, focusing on one of the most challenging phases of the academic journey - writing the dissertation - took place in Bad Breisig. As the DETECT project is now entering its final phase, many of the PhD candidates have recently started - or are about to start - writing their theses. The researchers themselves requested a soft-skill workshop to address this challenging process.

The workshop "*Navigating Your Thesis Writing*" was developed and moderated by geodesist Dr.-Ing. Kristin Vielberg, and M.Sc. Hanna Sänger, certified mental health coach. Together they are working towards increasing the wellbeing of scientists. In this interactive workshop, they combined evidence-based input, practical solution-oriented exercises, and reflective peer exchange.

In the first part of the workshop, key time management concepts were tackled to help the participants prioritize, use their (writing) time efficiently and recover well during breaks. By assessing obstacles that keep one from using their writing time productively, the PhD students explored strategies to overcome procrastination or perfectionism behavior. In the second part, understanding and maintaining motivation through the writing process were on the schedule. As progress is the most effective form of motivation, the students set realistic goals and created their sustainable writing routine.

PhD-Day

source: DETECT Coordination, Nicolas Jennrich

The participants responded very positively and reported to now feel more focused and confident in managing their writing process. The workshop provided valuable support to help them complete their dissertations on time.

For any further information please contact: team@phdpositive.de

DETECT PhD-Day

Interview with Charlotte Hacker

DETECT PhD-Representative

Charlotte, what was your role in the PhD-Day that took place in Bad Breisig on 13 May?

As the PhD representative, it was my responsibility to create a concept and organize the PhD Day. The idea for a workshop on "How to Write and Defend Your PhD Thesis" came from the DETECT PhD students. I initially reached out to Arnim Kuhn and Susanne Plattes to find a related workshop and workshop leader. After some consideration and based on Jürgen's suggestion, I decided to contact Kristin. Kristin is a former colleague who is now becoming a coach specializing in topics related to well-being in academia. Although Kristin and Hanna did not have a pre-existing workshop on PhD thesis writing, they accepted this challenge. Together, we brainstormed ideas, and based on our discussions, they developed a workshop that addressed key topics such as time management, procrastination, perfectionism, and creating productive routines—essential tools for completing a PhD thesis. Once the main event was established, I only needed to create a schedule and gather some information, as the event location had already been determined. At this point, I would like to take the opportunity to thank everyone involved who made the first PhD Day possible.

What were the benefits/take aways from the PhD-Day?

Sometimes, one tends to think that you are the only one struggling with certain aspects of your work life. However, the event helped me realize that I am not alone; we all encounter our own challenges and struggles. I appreciated how Kristin and Hanna designed the workshop, incorporating numerous hands-on exercises. They created a relaxed environment that made it enjoyable to listen and work at the same time.

What would you change, if another PhD-Day would take place tomorrow?

Not much to nothing. From my perspective, everything went smoothly. For a hypothetical other PhD day, I would collect ideas from the group and then try to implement them. For me, this is how my position and responsibility as the PhD representative work. If people want to go for a hike, I'll explore options that work for them. If the group is more interested in a workshop, I will seek one that aligns with their interests. So, instead of asking me, it would be wise to address the PhD group for ideas and wishes.

About Charlotte Hacker

Charlotte is a PhD student at the Geodesy Department of the University of Bonn and part of the C03 project in DETECT.

She studied Geodesy and Geoinformation in Bonn.

Her DETECT projects focus on the interaction between the water and carbon cycles. Currently, she is working on the interaction of water-related variables with total water storage anomalies measured by the GRACE satellite mission.

source: Charlotte Hacker, IGG

BIGS Land and Food

A tribute to Dr. Arnim Kuhn

by Lucie Adenäuer

31.01.1967 - 08.05.2025

We are deeply saddened to share the news that Dr. Arnim Kuhn, scientific coordinator of the BIGS Land and Food, passed away on 8th May 2025 after a short and serious illness.

Dr. Arnim Kuhn joined the University of Bonn in 2001. Since then, his dedication and professional expertise made a lasting impact. With his many years of experience, reliability, and structured approach, he was a valued colleague and contact for many. He reintroduced structure and continuity to the BIGS LF after initial challenges.

His calm nature and his sense for people enriched our team from day one and provided many valuable impulses. Our thoughts are with his family, friends, and all who knew him.

Interim Coordination of BIGS Land and Food

by Susanne Plattes and Lucie Adenäuer

To ensure continuity during this difficult transitional phase, Dr. Lucie Adenäuer and Dr. Susanne Plattes have taken on the role of interim coordinators of the BIGS Land and Food.

Dr. Susanne Plattes

source: Susanne Plattes

Dr. Lucie Adenäuer

source: Lucie Adenäuer

Most of you already know Susanne from her work as Advisor for research and career development.

She is, among other things, responsible for supporting next generation researchers at the AEI and heads the Postdoc Office and the PostDoc Mentoring Programme.

As a key advisor to the Vice Dean of the AEI Prof. Dr. Niklas Möhring, she contributes to a wide range of project initiatives and plays an active role in the faculty's strategic and conceptual development.

She is happy to contribute with her many years of experience at the University of Bonn and her extensive network.

Lucie studied agricultural science at the University of Bonn and completed her PhD at the Institute of Food and Resource Economics (ILR) in Bonn in the year 2011.

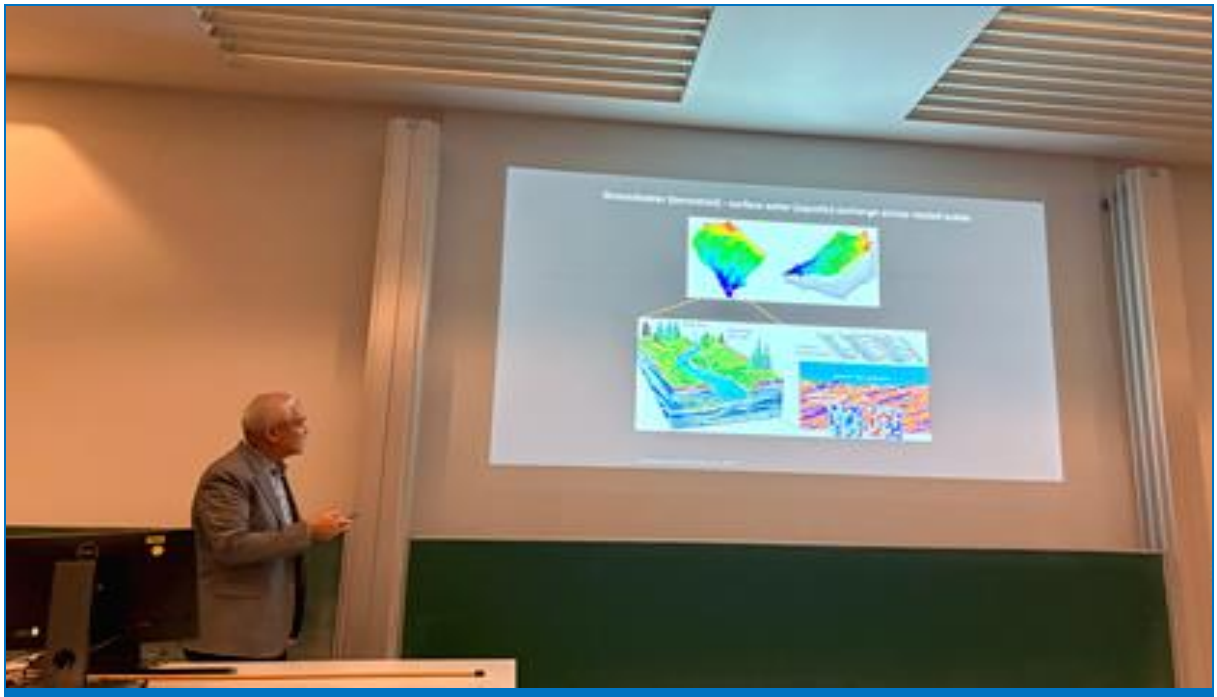
She worked as a PostDoc in agricultural economics at the University of Bonn until 2014, before she moved to Paris with her family. In the last 10 years, she has worked as an assistant professor at the University College Dublin in Ireland, teaching Microeconomics and Econometrics, and as a senior policy analyst at UN SDSN in France. Since August 2024, she and her family are back in Bonn she is working as a PostDoc at the ILR again.

Since June 2025, she has taken on the role of interim coordinator at 20% capacity. On a day-to-day basis, she will be your main point of contact. Lucie is very much looking forward to getting to know you all, offering here support wherever needed.

Please do not hesitate to contact them should you have requests regarding your graduate studies (aie-graduateschool@uni-bonn.de).

Lecture by Prof. M. Bayani Cardenas

by Frank Siegismund

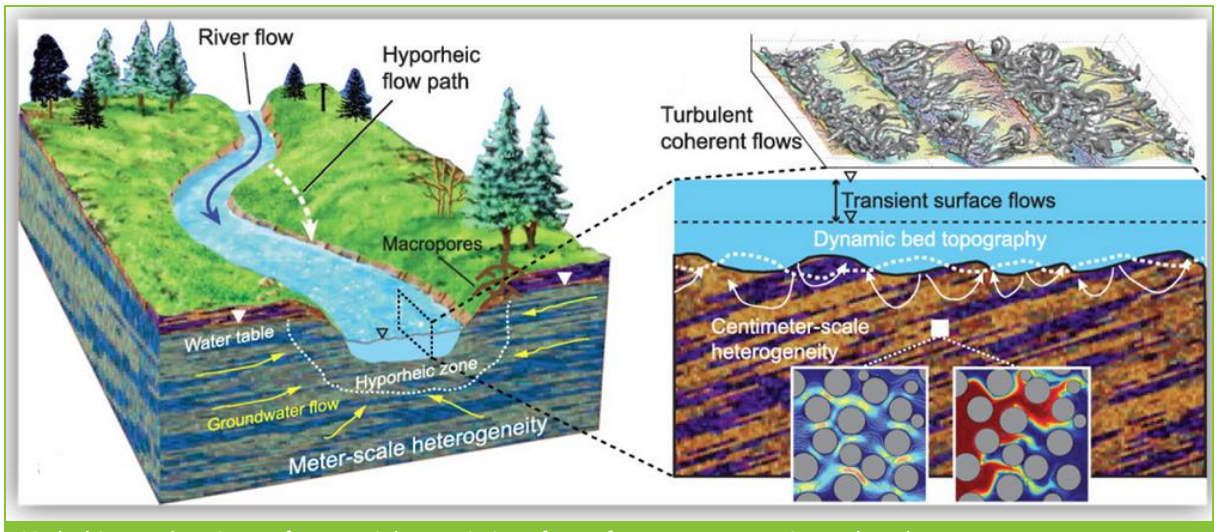


Prof. M. Bayani Cardenas

source: Sami Miaari

On 26 June we have hosted one event of the 2025 Birdsall-Dreiss Distinguished Lecture Series, presented by the Geological Society of America (GSA). This internationally renowned series showcases leading voices in hydrogeology. We have been honoured to welcome Professor M. Bayani Cardenas from the University of Texas at Austin.

In this special lecture, Professor Cardenas has presented on “Hydrobiogeochemistry of terrestrial-aquatic interfaces from pore to continental scales”.

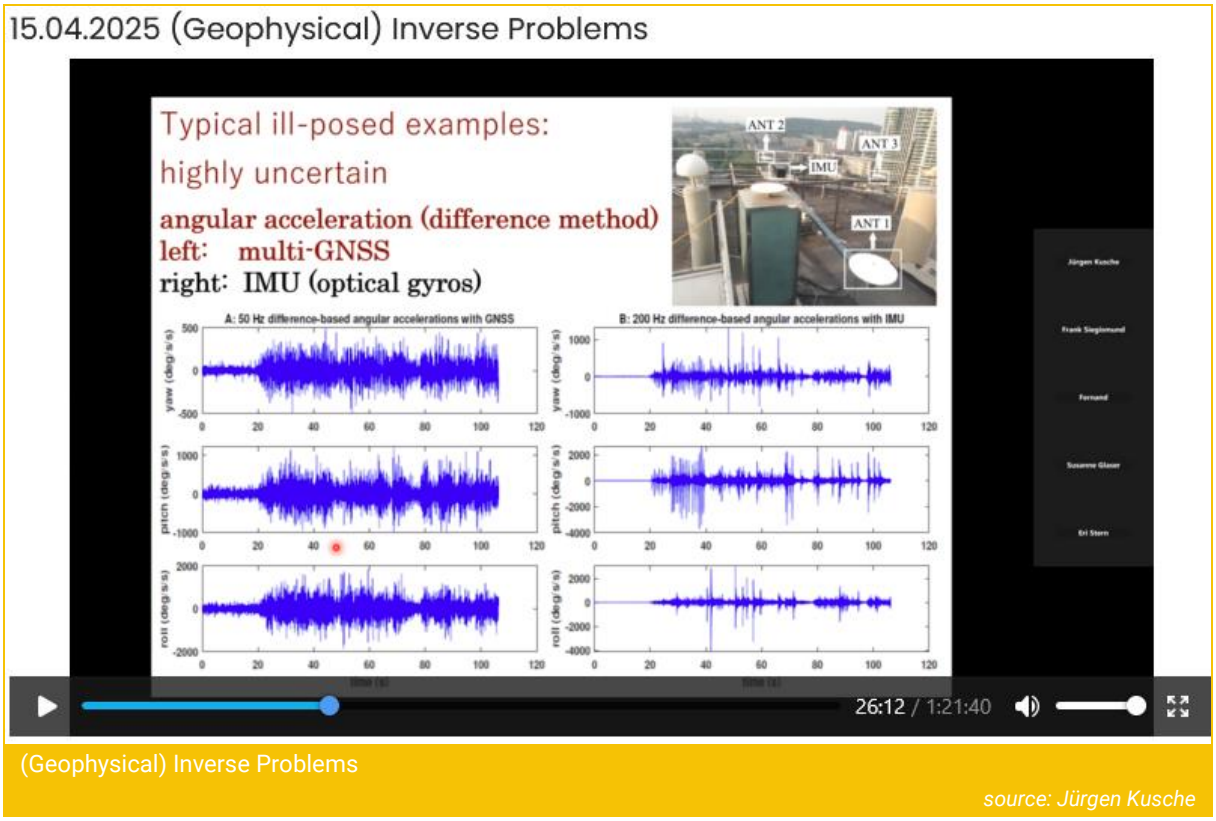


Hydrobiogeochemistry of terrestrial-aquatic interfaces from pore to continental scales

source: University of Texas, Austin

Guest visit from Kyoto

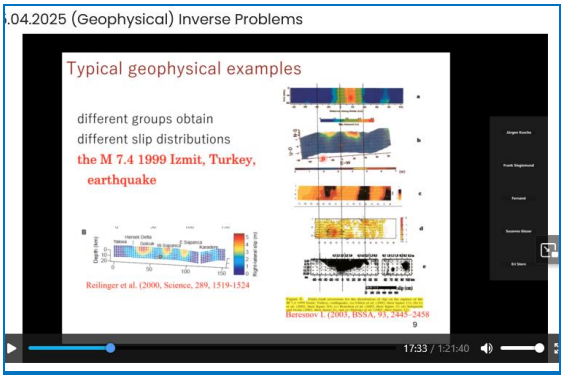
by Frank Siegismund



(Geophysical) Inverse Problems

source: Jürgen Kusche

Assistant Prof. Peiliang Xu, theoretical geodesist from Kyoto University and Editor-in-Chief of Journal of Geodesy has visited APMG for a full month from 10 April-9 May.



(Geophysical) Inverse Problems

source: Jürgen Kusche

He has published more than 80 papers covering high frequency GNSS, satellite gravity, inverse problems, mathematical geodesy, global optimization, statistics, perturbation theory, mathematical geophysics and seismology.

During his visit Prof. Xu has supported the work in DETECT-C03 on predicting water storage anomalies from observations.

He has provided a presentation on '(Geophysical) Inverse Problems' in the DETECT Land and Climate Seminar and a guest lecture on 'Computerized accelerometer - invention for the next generation of accelerometers'.

DE-I-TECT

New DE-I-TECT Workshop on offer: From Bystander to Upstander

Fostering a culture of respect and equality in the workplace.

by Dorothee Berkle-Müller

On Wednesday, 18 June a new workshop format, **from Bystander to Upstander**, initiated by the DE-I-TECT Team Silke and Dorothee, and conducted by Sabine Mariss, took place on site at University of Bonn.

Content, approach and goals:

Bystanders are those who witness situations where harm, discrimination, or injustice occur.

The workshop participants were provided with both theoretical input to understand what exactly keeps bystanders from standing up in obvious situations of injustice and tools on how to overcome the hurdles and lots of practical experience. Every theoretical section was followed by practical exercises, including body and voice work.

The aim of this workshop was to empower participants to becoming allies instead of bystanders by practicing how to stand up against disrespectful behavior in alignment with creating a respectful and just workplace culture.

Here are the voices and take aways of those who took part in the workshop:

Makan: - „I could only join the workshop for about an hour and a half but what really stuck with me was the five-step process of going from a bystander to an upstander and the "5 D's" of bystander intervention: **D**irect, **D**istract, **D**elegate, **D**ocument and **D**elay. It was super informative and interactive and I'm looking forward to the next one in the fall."

Hana: "I was motivated to join this workshop because I wanted to gain the tools and confidence to effectively intervene and support in situations involving any kind of injustice. The workshop provided very practical strategies for potential interventions - not necessarily direct ones -, and highlighted that even small actions can make a difference. Sometimes, all it takes is the initiative to act. I believe it's very important for the whole community to learn about this, as it would help create more supportive environment for everyone."

Dymphie: "Sabine Mariss is a great trainer and her workshops are very helpful and informative, I feel like there is always something new to learn in her workshops. For example, I did not know that there are so many ways that you can contribute as an ally to a safer and more respectful work environment, and that even some small actions can already make a large impact."

Sandra: „This workshop was very inspiring. Mrs. Mariss has a talent for capturing the participants and getting them actively involved. Awareness was raised and I left the workshop with a good feeling.

Dorothee: „I really appreciate Mrs. Mariss' holistic approach. The dose of theoretical and practical input was just perfect for me. I really liked the body work exercises, like connecting with the ground, voice training etc. Even if such physical exercises are unfamiliar at first, I am convinced that they are very valuable in creating a

good basis for implementing the theoretical knowledge.

I also benefited from the dialogue with the other participants and the resulting community spirit. We are all very busy every day. But if we all invest a little time every now and then in raising awareness and using these tools as good as we can, we are contributing a lot to create a supportive work environment."

One participant also mentioned: „This is such an important and continuously present and often subtle problem. Every one of our community should once take part in this workshop."

As the workshop was very well received and since there were several expressions of interest from DETECT colleagues who couldn't manage to join the workshop on site on 18 June, the DE-I-TECT team has organized a second event.

In Autumn the next Bystander-Upstander-Workshop will take place on 30 September 2025 at University of Bonn, in „Palazzo".

Please register here.

New DE-I-TECT Luncheon Series on Unconscious Biases with Dr. Imke Lode from Lindengruen crossCultural consulting & communication

by Dorothee Berkle-Müller

DETECT is committed to combating unconscious biases. „We all have unconscious biases. The key issue is how we deal with them." The DE-I-TECT Team with the support of the DETECT Executive Board has just established a new low-threshold luncheon series on different topics related to unconscious biases.

The first luncheon session took place on June 26. Overall 7 events are on offer, each of 30 minutes on the following dates.

Registration is open to all DETECT and other interested colleagues and associates.

Please register here.

1. „We all have unconscious bias – the key issue is how we deal with them"

Take part in learning how unconscious bias are created and what it takes to prevent them from turning into stereotypes, prejudices and/or discriminating behaviour.

Thursday, June 26th 2025, 13.00 h: 30 minutes interactive workshop + 10 min. Q & A
Please join us in Zoom

2. "The un/spoken rules of power – un/conscious privileges and discrimination in academia"

How do ideology, institution(alisation), interaction, and internalisation – the 4 "i" of power – in the scientific system interrelate in generating privileges for some, discrimination for others? What can we do to change it?

Thursday, July 10th 2025, 13.00 h: 30 minutes interactive workshop + 10 min. Q & A
Please join us in Zoom (tbc)

3. "Did you grow up with debates on politics or social issues at the dinner table?"

The impact of our family background on scientific careers is significant – and largely not on our radar. Discover its effects and how to create equal opportunities.

Thursday, Aug. 28th 2025, 13.00 h: 30 minutes interactive workshop + 10 min. Q & A
Please join us in Zoom (tbc)

4. "As scientists, we are all equal – as long as we do not become parents, or identify with one or more dimensions of, e.g. being female, or queer, or having psychological or physical limits in our abilities"

Sexism, anti-queer, anti-parental, ableist, or intersectional discriminating behaviour and comments can be subtle or overt. Become sensitized and empowered to recognise, prevent them, and intervene.

Thursday, Sept. 25th 2025, 13.00 h: 30 minutes interactive workshop + 10 min. Q & A
Please join us in Zoom (tbc)

5. "Science is international, of course! Yet, do we have the same expectations regarding collaboration, supervision, or communication?"

Understand our key intercultural imprints, their impact on scientific working relations, and how transcultural bridges can help crossing cultural differences between people.

Thursday, Oct. 30th 2025, 13.00 h: 30 minutes interactive workshop + 10 min. Q & A
Please join us in Zoom (tbc)

6. "Racism? In academia? – The long shadows of the intertwined growth of Modern Sciences and Colonialism"

Find out why un/conscious racism in scientific interaction and research is an issue that concerns us all – today, every day. As an ideology, attitude and practice, institutionalised and personal, all aspects that can be changed.

Thursday, Nov. 20th 2025, 13.00 h: 30 minutes interactive workshop + 10 min. Q &
Please join us in Zoom (tbc)

7. "Yes, you can! How each person in academia can contribute to an anti-bias working culture"

Building an anti-bias, diversity-conscious scientific working environment does not happen overnight. It is a continuous learning process. Gain insights into how DEIB – diversity, equity, inclusion, belonging – become part of your mind and actions for yourself and the people you work with.

Thursday, Dec. 11th 2025, 13.00 h: 30 minutes interactive workshop + 10 min. Q & A
Please join us in Zoom (tbc)

For any questions pleaes contact Dorothee Berkle-Müller.

Dr. Imke Lode

source: Imke Lode

Read more about Dr. Imke Lode here.

DE-I-TECT

Connecting women in science: Reflections from the 4th OWSD Bolivia National Scientific Congress

by Jane Roque Mamani

OWSD Bolivia

source: OWSD Bolivia

At the end of May this year, I had the opportunity to participate in the pre-event and the main sessions of the 4th National Scientific Congress of the Organization for Women in Science for the Developing World (OWSD) – National Chapter Bolivia. Held in Cochabamba, the event brought together women scientists to share their research, discuss shared challenges, and strengthen the women's scientific community. I felt really motivated exchanging with scientists from different disciplines—including natural sciences, technology, engineering, human health, social sciences, and economics. I noticed that this was a space not only to present research but also to reflect on the current state of women in science at a national and broader level. Next, I am writing about some of the presentations and experiences I had during this event.

From Research to Paper: Lessons from the Pre-Event

The pre-event focused on the journey from conducting research to writing a scientific paper. The presenters were looking to motivate the community through their lived experiences. From the different

talks, apart from the technical and scientific focus, I can highlight some messages: (1) The importance of seeking help: in science, there's always someone willing to support you if you ask. (2) The habit of writing should start in early career and not just during postgraduate studies. (3) Achieve what you promise—and if you can, even more. (4) And one that could be obvious, but we often forget: Don't wait for things to happen—go out and make them happen. These kinds of messages encourage more than one would think, and I noticed it in the audience.

Main Event: From urban heat islands to human health

As I mentioned before, this event was also a space to address pressing social issues, particularly those affecting women in academia and research. One of the talks of the first day discussed about barriers that female researchers face in their professional environments, ranging from microaggressions and lack of institutional support to harassment. The researcher Karen Losantos-Ramos explained that many stories of violence in academia are often dismissed as isolated incidents, but the reality is different and there is not much statistical information about it. Therefore, the Colectivo de Investigación sobre Mujeres y Medio Ambiente (Research Collective on Women and the Environment) presented "Launch of the first national study on violence against women in science". This study aims to collect data and reveal hidden patterns of violence, especially those that are part of the institutional culture, laboratories and the academic field. The discussion following the presentation included other people's experiences, including mentioning someone who dropped out of their PhD program due to exposure to these types of violence. This was hard for me to listen to. I know that doing your PhD takes effort and time, so giving up halfway must be a difficult decision. So, I think that collecting this data is a powerful step toward making visible what is usually unspoken.

On the same day, I was interested in a presentation related to "Urban heat islands in the metropolitan area of the department of Santa Cruz". Ana Höhler worked on this topic for the dry season, and different from what I saw before, she used LANDSAT satellite images to show how urban development affects local temperatures. Her work shows how urban development influences local temperature patterns. I believe this type of analysis is valuable for guiding urban planning and environmental management, particularly in regions like Santa Cruz, where extreme heat is becoming more frequent and where both urban and agricultural areas are expanding rapidly.

In a different domain, Leticia Quenta presented "Waste that builds a more sustainable future through the production of agroecological bricks and tiles in the city of El Alto." During her presentation, she showed her passion for the project. We later spoke more about her work, and I learned that she carries out this project in her limited free time, while also working and being a mother. The idea began when she observed the large amounts of construction waste in the Altiplano and explored ways to reuse it, incorporating local materials. After completing the testing phase, she now hopes to expand the initiative to other communities and create job opportunities for local female residents. I still remember how enthusiastically she spoke about her work; she was very proud to share her project at this event.

Finally, a powerful presentation by Cristina Alonso-Vega, from the Bolivian Society of Immunology, described the Congenital Chagas Program in Bolivia. It was inspiring to see how a research project that started at the local level has grown into a national success story, demonstrating how basic research can evolve into public health policy, and even serve as a model across the South American region. This reminded me that even small, local research efforts can eventually make a broad impact and truly improve people's lives. Despite the program's success, Cristina emphasized several ongoing challenges. One is that trained health workers are often rotated too frequently, which disrupts continuity. Another is that many families are not well-informed, which often results in children not completing the full treatment. These issues make it difficult to achieve the program's ultimate goal. Cristina's presentation was a clear reminder that scientific solutions need long-term support, science communication, and institutional stability to reach and benefit the public effectively.

Final Thoughts

What I take from this congress is a renewed appreciation of the important role of women in science, and the example we set to younger generations, including school and undergraduate students. I also learned more about the efforts that OWSD Bolivia is making across different departments of the country to inspire and support women in continuing their careers in STEM fields. This event also served as a reminder, for me and for many others in the audience, of the value of writing, sharing, and making our research visible across different fields. These actions are just as essential as conducting the research itself. I also had the chance to speak with some undergraduate students, and it was encouraging to hear them already thinking about their next steps. Many expressed a strong interest in continuing postgraduate studies and staying in research.

Raspberry Pi Reflectors shipped to Africa

by Makan Karegar

Karegar and Chen

source: DETECT

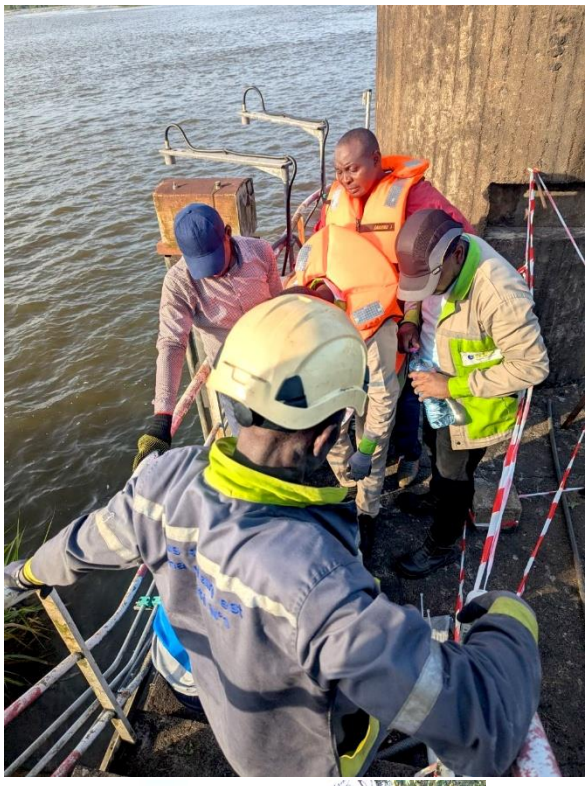
As part of the CAMEO-WAGST ESA EO Africa project, Karegar assembled 10 Raspberry Pi Reflectors (RPRs) at the University of Bonn and shipped them to Yaoundé, Cameroon, to our colleague Dr. Loudi Yap.

Dr. Yap has begun intensive fieldwork and has already installed four RPR GNSS-IR sensors at key locations: Song Mbengué (the site of a planned major hydropower dam), Edea Dam and the Wouri estuary near Douala — a large tidal estuary where several rivers meet.

Four more RPRs are currently being installed along the Gulf of Guinea coastline.

Here are a few photos showing Karegar and Chen with the shipment boxes in front of the Detect building, as well as Dr. Yap and his colleagues in the field, with support from the Cameroon Navy.


ITALIA
CAUTION



Open day at Campus Klein Altendorf, research station for agricultural field- and greenhouse experiments, University of Bonn

by Dymphie Burger

The INRES institute has three research stations where agricultural field experiments are conducted, one of them is the Campus Klein Altendorf, near Rheinbach, research mainly focuses on crop science and horticulture. At the research station, the majority of the studies conducted are focusing the typical Rhineland crops like sugar beet, winter wheat and winter barley, but there is also research on rape seed, potatoes and renewable raw materials as miscanthus. A smaller part of the research works with fruits like apples, pears, cherries and plums. The greenhouse experiments started in 2009, one example of research done here is hydroponic tomato production in greenhouses in order to reduce peat as growing medium.

The institute of soil science is often running field experiments at this location as well, Over the past few years we have studied root-soil contact and the microbial community under different types of Maize (PhenoRob), the effects of strip-wise subsoil loosening and compost injection on crop yield (Soil3, BMBF), the impact and life cycle of plastic in agriculture (Papillon, EU), and different soil sensing techniques and sensors for precision agriculture (PhenoRob, and I4S, BMBF).

On the 15th of June, Campus Klein Altendorf had an open day and everybody who was interested, could get an impression of the research going on at this station. This year, two DETECT members, Sara Bauke (A01, C03) and Dymphie Burger (A01) and some more coworkers from the soil science institute were there to talk about the soil at the station of Klein Altendorf.

The stand of soil science, the soil profile pit horizons

source: D.Burger

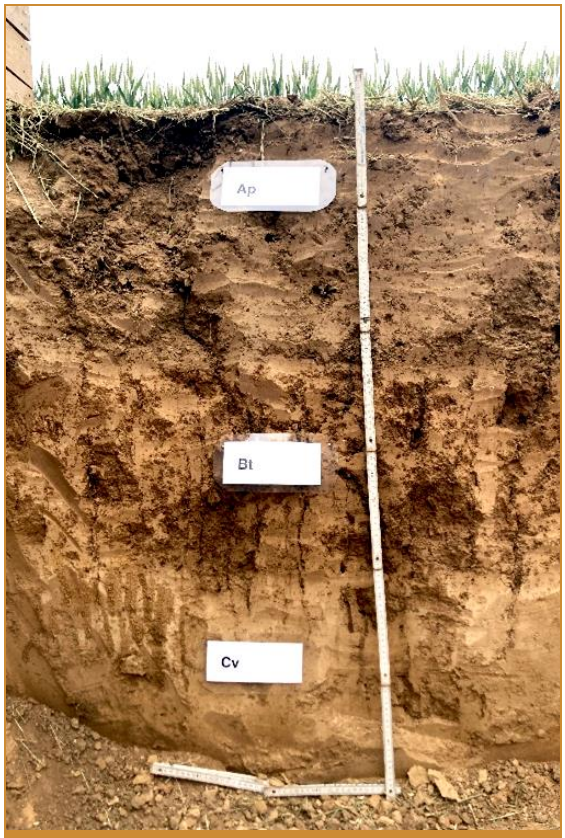
Soil³ technique, strip-wise loosening and compost injection, in action at Klein Altendorf

source: O. Schmittmann

The main attraction was a large profile pit that showed the Luvisol soil type (WRB classification, in German classification Parabraunerde), that showed the three main deterministic soil horizons, Ap, Bt, and Cv, which you can see in the figure, they differ slightly in colour, texture and bulk density.

In this profile, the Ap horizon describes the topsoil, where most of the organic material is located due to plant growth, the p stands for “ploughed” which can be seen by the darker colour, homogeneity of this horizon and a border to the next horizon indicating the ploughing depth. The most deterministic horizon of the Luvisol (or Parabraunerde in German) is that this contains a horizon that is richer in clay than the other horizons, due to illuviation processes, which then also often has higher density than the other horizons, and is given the name Bt. Cv describes a horizon with weathered parent material, in this case Loess. At the side of the profile, we did a small dye tracer experiment to showcase the work that we have been doing in the first phase of DETECT. The dye tracer experiment showed that due to the limited rainfall in the past weeks, and high water-holding capacity of the soil, water infiltration was shallow. Additionally, we showed a simple double ring infiltrometer and had a compilation of images of

how dye tracer experiments can look like on the climate transect that DETECT projects A01 and C03 are working on. These exhibits gave a starting point for very interesting and engaging discussions about the role of soils for the water cycle especially in agriculture in the region, but also in a larger European picture.



The soil profile pit with soil horizons

source: D.Burger

Renewable raw materials from Silphium, Miscanthus, Hellianthus plants

source: A. Hilbig

Other things that visitors of the open day could see and do were the green houses with vertical farming, taste and buy honey, try new types of tomatoes, see different varieties of mint, learn about renewable raw materials like miscanthus and Silphium or go on a tour with a tractor. There was a band playing and a bouncy castle for children. Most of the people visiting were families with young children from Rheinbach and region around, but also farmers and other people interested in agriculture and soil science.

Renewable raw materials, for example Miscanthus

source: A. Hilbig

Bumble bee research

source: A. Hilbig

EGU general assembly 2025

by Juan Baca

At this year's EGU General Assembly, I presented a poster entitled "The significance of plant hydraulic parameters for modeling carbon and water fluxes across European climate zones and PFTs with CLM5" in the Soil-Plant Interactions session (HS8.3.5). The poster format enabled fruitful discussions with researchers working on the integration of plant hydraulics into land surface models, both within the CLM framework and beyond. These exchanges provided valuable input for the next steps of my work, including suggestions on refining sensitivity analyses and improving how model predictions relate to field observations.

One key discussion point was the need for complementary measurements of leaf water potential at ICOS sites to support eddy covariance data and enhance model validation and calibration—particularly to better understand the role of plant hydraulics in stomatal responses under drought. There is clearly growing interest in the community in incorporating plant hydraulics into land surface models, but many challenges remain, especially around parameterizing hydraulic traits and accounting for their variability across plant functional types (PFTs) and climate zones.

As a continuation of this work, I will perform a variance decomposition-based sensitivity analysis to quantify the contribution of individual plant hydraulic parameters to carbon and water fluxes across different PFTs. This analysis is central to one of DETECT's action items aimed at improving CLM performance under climate change scenarios. The feedback and interactions at EGU were instrumental in shaping the direction and priorities of this effort.

Juan Baca

source: Juan Baca

Assessing the performance of pan-European CLM5 simulations in capturing long-term multivariate trends in land surface variables.

Some of the on-going colloboration work between DETECT subprojects C04, C01 and D03 was presented in EGU 2025 as a PICO presentation.

Click to read the abstract:

Presentation at EGU, Vienna by Christian Poppe

PrePEP – Conference: Precipitation Processes –Estimation and Prediction

16-21 March 2025, Bonn

by Julian Giles, Silke Trömel

Silke Trömel welcoming the participants of the conference

source: Julian Giles

The PrePEP-Conference started on 16 March 2025 with Short Courses followed by keynotes and oral presentations from 17 to 21 March, a poster session on 18 March and an excursion to Ahr valley on 19 March. PrePEP took place in the auditorium (Aula) in the main building of the University of Bonn, the former electoral palace in the heart of Bonn, which is reached via the magnificent baroque arcaded courtyard. Presentations and material of the authors who have given their consent can be found in the weekly schedule on the conference homepage (https://indico.scc.kit.edu/e/prepep). PrePEP offered 84 oral presentations including 9 invited keynotes and 42 poster presentations.

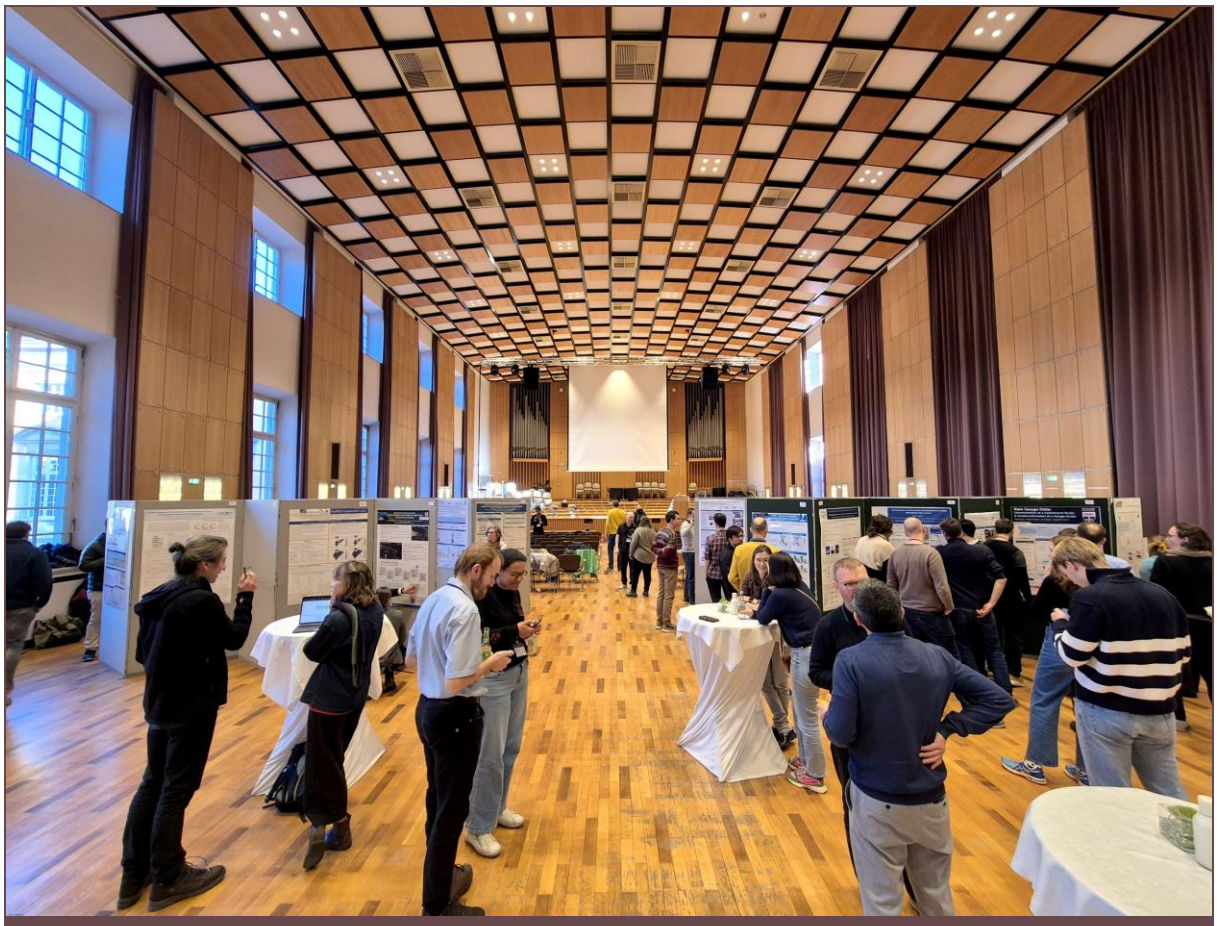
Julian Alberto Giles, PostDoc researcher from DETECT's project A04, contributed as instructor to the short course “Open Radar – Open Source Software Tools for Radar Data Processing” together with Kai Muehlbauer. The course discussed the principles of open science and provided an overview of the most mature and existing software packages available for radar data processing (eg. wradlib, PyART, tbc) and how they connect with the scientific software stack.

The course provided hand-on lessons to understand workflows for different aspects of weather radar data processing.

Later in the week, Julian presented the progress made in the A04 project with an oral presentation entitled “From Cloud Tops to Surface: Statistical Insights into Stratiform Microphysics over Germany and Türkiye”. The presentation statistically compared radar quantities between a large database of radar sites in Germany and Türkiye as well as reference values from past studies. Values extracted from this database showed an improvement in quantitative precipitation estimation in a partner presentation given by Raquel Evaristo. The presentations are freely accessible in the conference's website for anyone interested.

Julian Giles presenting

source Julian Giles



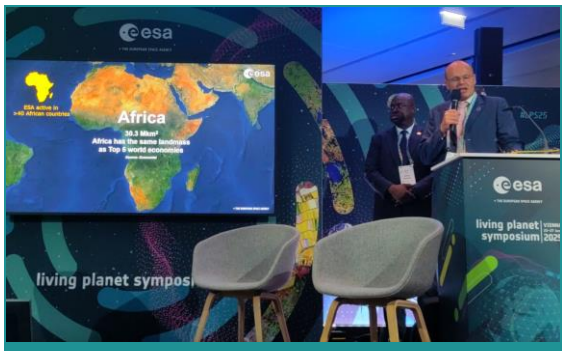
Poster session

source: Julian Giles

Reflection of ESA Living Planet Symposium

by Jürgen Kusche

On Monday June 23, I attended the EO AFRICA Session. EO AFRICA stands for African Framework for Research Innovation, Communities and Applications in Earth Observation; this ESA-African Union framework is meant to facilitate and foster the sustainable adoption of the Earth Observation and related space technology in Africa. The session had two parts, a panel discussion and a presentation of African-European tandem research projects funded under a recent research call.



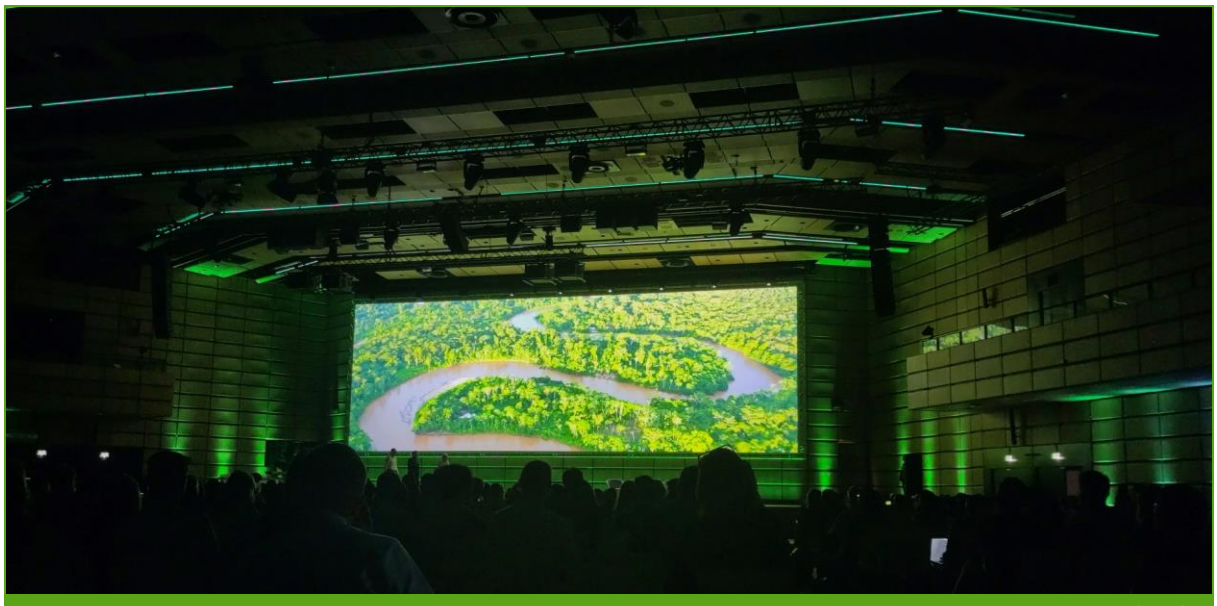
Focusing on Africa

source: Ben Gutknecht

The focus of the panel discussion was about African-European collaboration in remote sensing. It was introduced by a brief overview on the EO AFRICA activities, including the EO AFRICA Innovation Lab platform meant for supporting projects with cloud computing facilities, easy data access, and code sharing, and the EO AFRICA Space Academy which focuses on face-to-face and online training courses and capacity building, which in turn is implemented as an ESA R&D facility.

Discussions revolved around the need to attract young (in particular women) talent, implementing the „training the trainers"- strategy, and the necessity to involve planning of potential impact on government decisions, policy support, ownership, and in general stakeholder engagement early in collaborative projects, and of course the need for rising awareness to the data sharing issue. The panel also commended to the recent establishment of the African Space Agency, AfSA.

This was then followed by short presentations from the currently ten running tandem projects under the 2024 funded call, incl. CAMEO-WAGST which is implemented by DETECT's B01 team jointly with researchers from the National Institute of Cartography, Cameroon. However, several other projects covered topics relevant for DETECT such as maize yield estimation with machine learning from Sentinel-2 data in Ghana, or new drought indicators and new evapotranspiration estimates from EO data. The focus in all projects under EO AFRICA is clearly on implementing data pipelines and automated platforms, often facilitated by cloud computing.



source: Ben Gutknecht

DETECT at the esa Living Planet Symposium 2025 in Vienna

by Ben Gutknecht

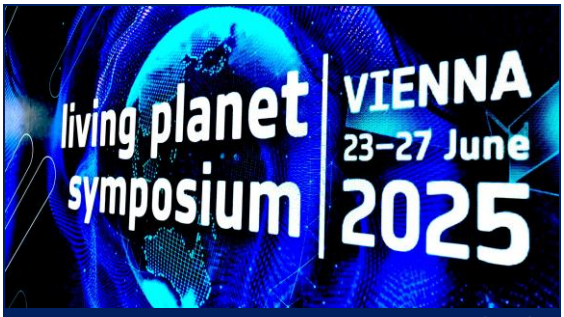
LPS 25, Vienna International Center (VIC), Vienna, Austria

source: Haojin Zhao

A team of CRC 1502 DETECT members participated in the Living Planet Symposium 2025 during the week 23—27 June 2025. This Earth-observation oriented conference is organised by the European Space Agency (esa) every three years at varying location. This time, Vienna hosted more than 6500 participants from almost 120 countries, with the motto themed "From observation to climate action and sustainability for Earth".

Participants not only revealed their latest findings in more than 4200 scientific presentations (talks and posters), but also had room to discuss common issues like the demand for continuous data access and uncertainties, but they could also learn about new mission concepts and get first insights into the latest data streams, e.g. the first picture from the recently launched BIOMASS mission.

From DETECT, on Tuesday 24th Benjamin Gutknecht (D07) started with a general overview into the CRC hypothesis and showed a first comprehensive comparison of various DETECT model outputs aggregated over selected European river catchments. This included the discussion of (1) variation in continental P-E net fluxes from D02 ICON regional models (Francis)



source: Ben Gutknecht

LPS 25, Vienna International Center (VIC), Vienna, Austria

source: Ben Gutknecht

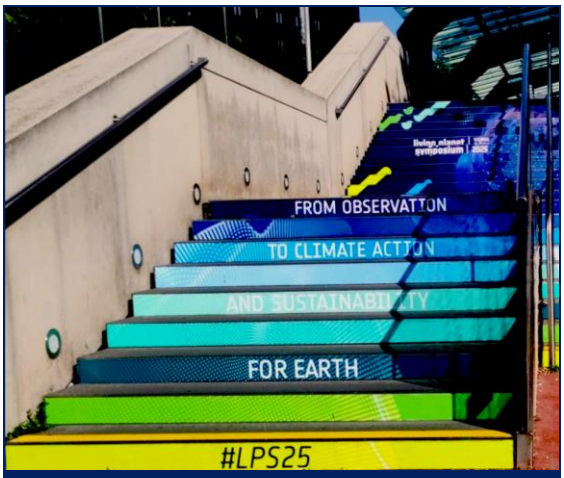
as a response to different sea surface temperatures and their comparison to observed components in the terrestrial water budget; and it included differences in monthly accumulated precipitation from (2) D03 ICON Irrigation experiment (Jane); and from (3) the D02 fully-coupled model runs (Yikui) with and without anthropogenic water use based on Wada et al. and Siebert et al. (B05).

On Wednesday 25th, Anne Springer (C01) presented work about integrating future satellite gravimetry missions with regional land surface models and capturing water storage and fluxes under extreme conditions.

Thursday 26th saw no less than three simultaneous DETECT contributions: Charlotte Hacker (C03) showed in an innovative way to visualise how well we can explain GRACE/-FO-derived Terrestrial Water Storage variability, deficits/droughts, and trends in Europe.

Next, based on results from TSMP assimilation runs at JSC, Yorck Ewerdwalbesloh (C01) discussed how GRACE/-FO data assimilation can enhance our understanding of anthropogenic effects on the hydrological system in Europe.

Finally, Johannes Leonhardt (B03) presented his research on climate-aware land cover classification, which was conducted in a collaboration with D05. The work demonstrates how integrating climatic context into predictive and generative neural networks improves their accuracy and generalizability.



source: Ben Gutknecht

And on Friday 27th, Haojin Zhao (D03) presented results about improving land surface reanalysis by assimilating soil moisture and evapotranspiration into eCLM over the EURO-CORDEX region.

All research contributions provided by the presenters will be made publicly available by esa in due time.

99th Annual Conference of the Agricultural Economics Society in Bordeaux, April 2025

by Josef Baumert

In April, Josef Baumert presented some of the work of project B04 at the 99th Annual Conference of the Agricultural Economics Society in Bordeaux.

His presentation, entitled “Probabilistic data fusion for the estimation of production function parameters and for modelling agricultural supply at field-level”, was part of the contributed paper session on spatial approaches in agricultural economics. Josef described a novel approach to estimate how crop types, crop yields, and variable inputs are distributed in space, and how this spatial distribution is impacted by climatic or economic changes.

Importantly, the developed method requires only data that is publicly and frequently available, which makes it suitable for large-scale applications, also potentially outside of Europe. The approach links economic theory and novel probabilistic data science techniques to model how farmers’ decisions are driven by exogeneous conditions. It thereby allows to quantify the impact of the environment on land use, information that is also crucial for quantifying the reverse effect, i.e., how land use management decisions impact the environment, as posed by the central hypothesis of DETECT. The discussions with other agricultural economists at the conference revealed the general interest of the community in linking structural equations modelling and probabilistic programming. This indicates that the approaches developed in B04 specifically for the context of DETECT can also contribute to the toolbox of agricultural economists beyond land use modelling applications.

source: Josef Baumert

Land and Climate Seminar

by Frank Siegismund

Our DETECT Seminar ‘The land surface in the climate system’ serves as a platform for scientists from our CRC to present the progress and challenges of their project work, but also for external scientists to inform us about their work and results in the context of our CRC.

Each of our scientific projects in DETECT has now reported on its work in the Land and Climate Seminar. The focus is now on presentations by external scientists, especially cooperation partners of the CRC. These presentations also serve to deepen the partnerships and can provide valuable input for the second phase of the CRC. Proposals for presentations, both from external scientists and on new results of the project work in DETECT, are very welcome!

Upcoming events of the Land and Climate Seminar:

14.07.25, 10:15-11:30	Johannes Schultz: The DIEGOSat satellite mission
13.10.25, 10:15-11:30	Shin-Chan Han: Alternative use of GRACE for examining rapid surface mass change including flood and flash drought

Poster presentation at the eLTER Science Conference in Tampere, Finland (23.-27.06.2025)

by Fernand Eloundou

Land surface models (LSMs) struggle to capture the tightly intertwined water and carbon cycles, leaving us with large uncertainties in predicting plant–soil feedbacks under a changing climate.

In Central Germany's DE-HoH beech forest (Luvisol; mean annual temperature 9.1 °C; mean annual precipitation 563 mm), we tested an iterative Ensemble Smoother with Multiple Data Assimilation (ES-MDA) on the enCore Community Land Model (eCLM). We assimilated soil moisture (SM) at 10 cm, 20 cm, and 50 cm depths (tuning parameters like saturated hydraulic conductivity or organic matter density), and assimilated in a subsequent experiment also evapotranspiration (ET) data and estimated parameters which influence photosynthesis and stomata control.

In a final step, we assimilated SM, ET, and net ecosystem exchange (NEE) observations for 2015–2016 (calibration) and validated for the years 2017 and 2018 with a 96-member ensemble. SM-only runs reduced soil moisture biases by 65–89 % yet barely improved ET. Joint SM+ET assimilation reduced soil moisture bias by ~60 % (at 50 cm depth) and slightly reduced ET bias by 4 %, while including NEE further reduced ET errors by up to 15 % (though the simulation of NEE hardly improved).

These initial experiments demonstrate that fine-tuning soil-hydraulic parameters is essential for accurately simulating soil moisture, but generating reliable predictions of water and carbon land surface fluxes requires simultaneously calibrating both soil and plant-physiology parameters—laying the groundwork for applications across diverse eLTER/ICOS measurement sites and plant functional types and the addition of respiration-sensitivity (Q10) parameter to better close the carbon budget.

source: Fernand Eloundou

We presented this work at the eLTER conference in Tampere (Finland) which was focused on integrated applications across the geosphere, biosphere, hydrosphere, atmosphere and anthroposphere. Many presentations were focused on analyzing measurement data from measurement infrastructures like eLTER, and the use of these types of data in model simulations, for example for verification of results or for model-data fusion activities. eLTER will become a critical European research infrastructure, where the IBG-3 institute in Jülich is heavily involved.

DFG on site evaluation of DETECT II at University of Bonn

by Dorothee Berkle-Müller

On 21-22 January 2026 the DFG on site evaluation of the second phase proposal of DETECT will take place at University of Bonn.

The organising team has chosen the university's new Rotationsgebäude as a suitable venue for the presentation of the second phase proposal. It is a friendly, bright building which will be equipped with the latest technology.

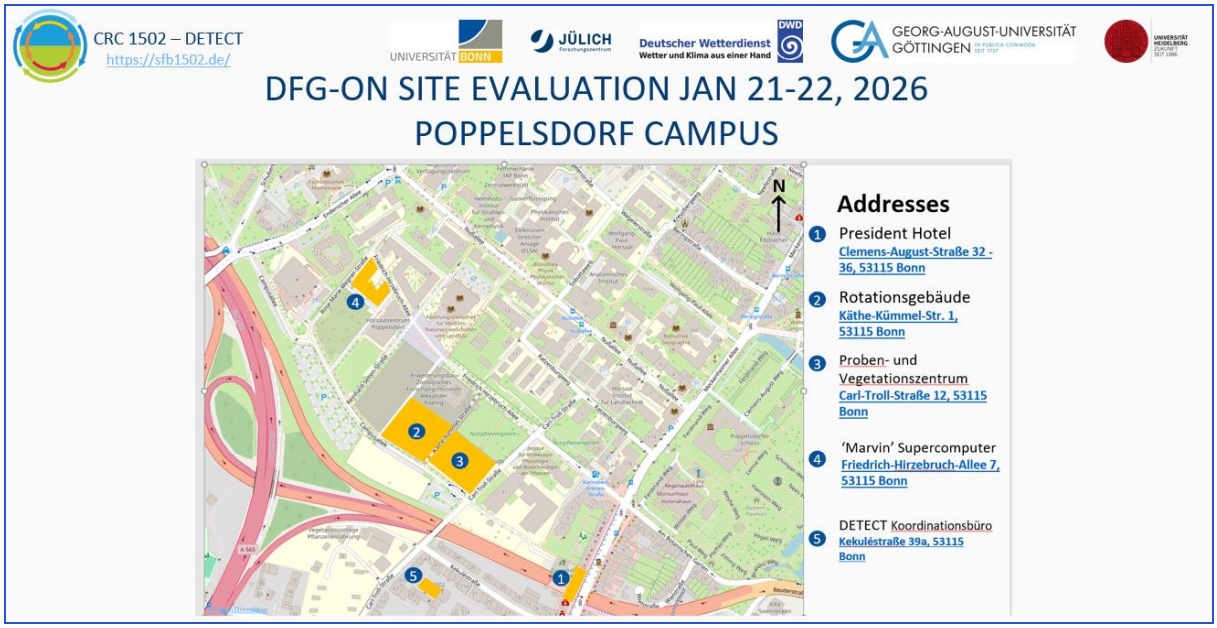
The poster defense will take place in the new Proben- und Vegetationszentrum on Carl-Troll-Straße. Here we have a 300 square metre-hall at our disposal.

The construction of this building was based on the concept of „sustainability at the University of Bonn“, which is linked in a general sense to the objectives of CRC1502.

An important part of this concept is that sustainability should be comprehensively integrated into research, teaching and operations. The concept for this new building was developed to achieve maximum sustainability at the lowest possible additional cost.

Both venues are located in the immediate vicinity of the DETECT coordination office, its headquarters.

Both, the preparation of content-related and organisational implementation for this important event are already underway.

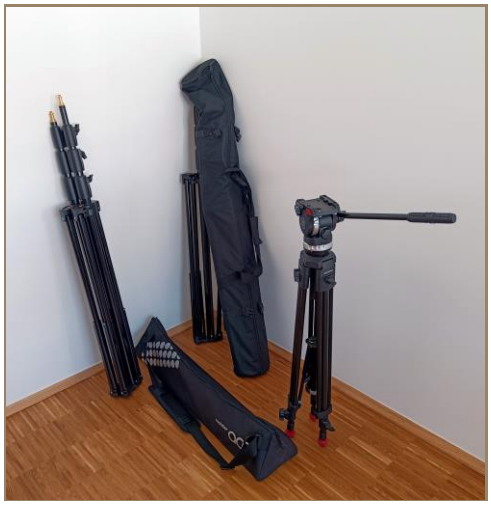


Fostering DETECT's external visibilities

How to shoot your scientific video at the DETECT Coordination Office

by Dorothee Berkle-Müller

In order to keep producing a DETECT video at the lowest possible threshold and to promote DETECT's external visibility, a video installation has been made available in the DETECT coordination office



The coordination team will provide you with maximum support for implementation.

We look forward to your contributions!

The Guidelines on how to produce your video are available on the DETECT internal Web pages, here:

https://sfb1502.de/internal-area/application-for-funds/prerequisites-for-funding
(access with former member login only)

and, of course, on SCIEBO, here!

DETECT coordination staff

Introduction of Zulfikar Adlan Nadzir

by Dorothee Berkle-Müller, Zulfikar Adlan Nadzir

Starting 1 September 2025, Zulfikar Adlan Nadzir will be supporting coordination as a WMA. Zulfikar has already gained experience as a WHK in DETECT coordination and now – whilst finishing his doctorate - aims to deepen his knowledge of research network management and, in particular, will become more involved in public relations work, among others to increase the number of followers for BlueSky and support DETECT Coordination with continuous Website updates.

For any texts to be updated at https://sfb1502.de or posts on BlueSky please do not hesitate to get in contact with Zulfikar.

source: Zulfikar Adlan Nadzir

Zulfikar is from Magelang, Indonesia, where he was born in December 1993. His academic journey began there, culminating in a bachelor thesis on ocean wave detection using SAR data. In 2015, he moved to Germany to further pursue education and research in Geodesy. He completed his master's degree in Space Science at the Technical University of Munich (TUM), focusing on regional sea-state bias correction for coastal altimetry datasets.

After a brief period as a lecturer in Indonesia, he began his doctoral research in October 2021. His current work integrates satellite altimetry, tide gauges, and GNSS reflectometry to monitor regional sea-level changes and geoid variations in Indonesia. He is excited to contribute to SFB-1502, not only to deepen his research on sea-level change but also to engage more actively in scientific communication and interdisciplinary collaboration within the DETECT community.

In his spare time, he enjoys playing table tennis and volleyball. He lives in Germany with his family and is a proud father of two children.

2025 IEEE International Geoscience and Remote Sensing Symposium
Brisbane, Australia
3 – 8 August 2025

The International Geoscience and Remote Sensing Symposium (IGARSS) is the flagship conference of the IEEE Geoscience and Remote Sensing Society (GRSS).

The theme of IGARSS 2025 is One Earth. IGARSS 2025 will address the threats to our Earth and promote collaborative global solutions using remote sensing technology. The event will provide an excellent experience for IGARSS attendees through strong technical and social programs, and opportunities for collaboration regionally and globally.

More information:
https://www.2025.ieeeigarss.org/

EMS Annual Meeting 2025
Ljubljana, Slovenia & online
7 – 12 September 2025

European Meteorological Society

The Annual Meetings of the EMS aim at fostering cross-fertilisation of ideas, feedback between science and applications, and the involvement of all the diverse actors in the fields of weather, climate, water and the environment. The session programme will offer many opportunities for collaboration across the entire weather and climate enterprise (public, private, academic, users, and NGOs) to benefit societies in Europe and worldwide.

More information: https://ems2025.eu/

AMS "41st International Conference on Radar Meteorology"
Toronto, Canada
25-29 August 2025

More information:
https://www.ametsoc.org/ams/meetings-events/ams-meetings/41st-international-conference-on-radar-meteorology/

European Association of Agricultural Economists celebrating its 50th anniversary
26th – 29th August 2025

Food system transformation in challenging times

The XVIII EAAE Congress will take place in Bonn from 26th – 29th August 2025

Venue:
Lecture halls (Hörsaalzentrum) at Friedrich-Hirzebruch-Allee 5, 53115 Bonn
on the **Poppelsdorf Campus**.

For more information please refer to:
EAAE 2025

DBG 2025
University of Tübingen
13 – 18 September 2025

#HealthySoilsClimateProtection

The Annual Meeting of the German Soil Science Society (DBG) 2025 will take place at the University of Tübingen from 13 to 18 September 2025. This traditional event will once again provide a dynamic platform for scientific exchange and networking in soil science.

The motto of the conference is #HealthySoilsClimateProtection. Soils cover almost all of the Earth's surface, produce more than 90% of our food, host a quarter of the planet's biodiversity, purify our drinking water and help regulate our climate. They are one of the most complex biogeosystems in nature, containing a vast array of solid, liquid and gaseous compounds. Interacting with a myriad of organisms, our soils are part of and contribute to the global cycles of life on Earth. Healthy soils therefore provide us with answers to the four great challenges of our time: food, biodiversity, water and climate. They are the foundation of our civilisation and demand our special attention and responsibility.

More information:
https://www.dbg2025.de/en/

CLM community assembly
Graz, Austria
23 – 26 September 2025

The Climate Limited-area Modelling Community is an open international network of scientists who are applying and developing the COSMO and de ICON model in climate mode. The aim of the assembly is to provide all members with an overview of the current stage of model development and of model applications and to provide a forum for discussion and debate on the modelling tool and the modelling results. In addition, it is planned to jointly assess new model components, to achieve agreements on new model standards, to coordinate further developments of the modelling systems, and to advance the structures of the community. It is the most important decision-taking meeting of the community.

More information:
https://clm2025.uni-graz.at/en/

AI4EO
Two-day workshop on AI in Earth Observation, organised by the ML4Earth Consortium
24. – 25. September 2025

Challenges, Solutions, and Future Directions

When: 24.09.2025, starting 12pm – 25.09.2025, ending 2:30pm

Where: Universitätsclub Bonn e.V., Konviktstr. 9, 53113 Bonn

No registration fee.

More information:
https://ml4earth.de/workshop_2025/

3rd Ozcar Tereno International Conference
Paris
29.09.-02.10.2025

More information:
https://ozcartereno2025.sciencesconf.org/

AGU annual meeting
New Orleans, Louisiana
15 – 19 December 2025

AGU25 Theme: Where Science Connects Us

Each year, AGU comes up with a unique theme for the Annual Meeting. It starts as a brainstorm among interested parties, and then our design team takes themes and common threads from that brainstorm, and unites it with visuals that we can translate to graphics and signage for the meeting.

More information:
https://www.agu.org/annual-meeting

Activities within DETECT

DETECT Land & Climate Seminar	Mondays at 10:15 (zoom-link)
14 July	Johannes Schultz: **The DIEGOSat satellite mission**
13 Oct	Shin-Chan Han: **Alternative use of GRACE for examining rapid surface mass change including flood and flash drought**

All-cluster meetings scheduled for 2025:

Please enter in your calendar!

10 July – 28 Aug – 25 Sep – 30 Oct – 20 Nov – 11 Dec

DE-I-TECT unconscious bias lunch series

Please register here.

Summer 2025 (final dates to be announced):

EFI Science Communication Workshops

30 September

DE-I-TECT on-site workshop at UBN "From Bystander to Upstander"

Please register here

30 October 2025

General Assembly – Approval of 2nd phase proposal

26-27 November 2025, from lunch to lunch

All-Status Meeting

until 15 Dec 2025

DE-I-TECT individual coaching kompakt with Sabine Mariss

Read more

All-cluster meetings scheduled for 2026:

8 January 2026, 1-4pm

Online Rehearsal 2nd phase DFG Evaluation

9 January 2026, 9-12am

Online Rehearsal 2nd phase DFG Evaluation

14 January 2026, 1-4pm

On site Rehearsal 2nd phase DFG Evaluation

15 January 2026, 2-5pm

On site Rehearsal 2nd phase DFG Evaluation

21-22 January 2026

On site DFG 2nd phase Evaluation

10-11 June 2026

Retreat at Hotel Vier-Jahreszeiten in Bad Breisig

Publications

New CRC1502-publication in "NatureFood" journal
by Thomas Gaiser

Water logging is a serious threat to crop production. It causes oxygen deficiency in the root zone due to saturation of the soil pore system with water and consequently total yield failure depending on timing and duration of the water logging event. With changing climate, soil waterlogging is a growing threat to food security. Despite this, contemporary approaches employed in crop models to simulate waterlogging are in their infancy. Critical deficiencies persist in accurately simulating the soil processes, which lead to soil water logging as wells as the consequences in crop phenological development and yield formation. Advanced crop modelling analytics will enable scenario analysis and, with time, farming systems adaptation to climate change and increasing frequency of crop failure due to waterlogging.

Link to paper: https://doi.org/10.1038/s43016-025-01179-y

Contact: Thomas Gaiser (tgaiser@uni-bonn.de)

GEWEX Quarterly

Satellite Gravity Missions and GEWEX: Water Cycle Applications Perspective
"Opportunities for water cycle research with new and future gravimetry satellite missions"

A brief news article was published in the recent GEWEX Quarterly
Vol. 35, No. 1 | Quarter 1 2025

Link to article: https://www.gewex.org/gewex-content/uploads/2025/04/Q12025.pdf

by Jürgen Kusche, Ilias Daras, John T. Reager und Luca Brocca, see page 14.

Find more publications published on our website:

https://www.sfb1502.de

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Deutscher Wetterdienst
Wetter und Klima aus einer Hand

DWD

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