

CRC 1502  
DETECT

# ***Newsletter***



**EMS Annual Meeting 2024**  
**Barcelona - impressions  
and reflections**

**DE-I-TECT Summer events**  
**Assertiveness training -  
Workshop insights**



## Back from summer break to climate research

The bath towel is rolled up again, the sun lounge folded up. Time to relax is over (the climate enthusiast becomes a climate researcher again).

Planning for the **DETECT II strategy** continues. Africa, here we come! At the strategy meeting at the beginning of July, we identified possible topics for Phase II, in addition to important action items: land use change, deforestation, desertification, irrigation.

A list of potential partners for Africa has also been prepared.

The first project sketches for the follow-up application should be ready by 15 October.

A **new communication format** of the formerly known Technical Meeting was launched in July on site as **DETECT-JF**. The entire DETECT community is invited to the regular meetings. Frank coordinates the event, which usually takes place in the Kekuléstraße Coordination Office as an on-site hybrid format. The dates can be found in the [CRC calendar on the internal website](#). More about goals and contents will be explained in this newsletter edition.

Recently, many of our team colleagues have attended conferences, presenting results of their ongoing DETECT project work.

Luciana Fenoglio and Jiaming Chen from B01, for instance, report on the **SWOT Science Team Meeting** and '30 years of progress in satellite altimetry', which took place in Montpellier at the beginning of September.

The **EMS 2024 from 2-6 September** was attended by 1068 participants from 46 countries: 996 on-site in Barcelona and 84 online from across the globe. DETECT was also represented there by PI Arianna Valmassoi and PhDs Jane Roque and Till Fohrmann. Till shares his impressions in this Newsletter edition. Don't miss to take a look at the imposing Lecture Hall at University of Barcelona.

**From 16-20 September** the Centre for High-Performance Scientific Computing in Terrestrial Systems (HPSC TerrSys) organised **this year's fall school** at Forschungszentrum Jülich, which was supported by both Geoverbund ABC/J and DETECT.

Jiaming Chen took part in the event and reports on his experience and impressions in this Newsletter.

Besides the first **DE-I-TECT** Lecture with Marieke van den Brink (see report NL#8) and the approval of various funding requests, the DE-I-TECT team, Silke and Dorothee, organised three further events during this summer. Among them were two workshops for women's empowerment to promote women's convincing self-presentation in talks, meetings and interviews and an assertiveness training.

PhD Jane took part in the **Assertiveness Training** and shared her experience in an interview with Dorothee, also published in this newsletter edition.

Due to the positive feedback, the DE-I-TECT team is currently organising an **on-site training event for women researchers** on similar topics, which is scheduled to take place in Autumn. Keep yourselves updated on [sfb1502.de/diversity](https://sfb1502.de/diversity).



Furthermore, the **second DE-I-TECT Lecture** with Prof. Ute Klammer from the University of Duisburg-Essen on the topic of Excellence and Diversity will take place on 2 October.

In these eventful times, the editorial team would like to thank everyone for their contributions, wishing you all success with your project progress, inspiring new project sketches and many colourful autumn days.

Enjoy reading!

Sincerely,

**Jürgen Kusche**  
Speaker

**Silke Hüttel**  
Co-Speaker

**Harry Vereecken**  
Co-Speaker

**Frank Siegismund**  
Scientific Coordinator

**Dorothee Berkle-Müller**  
Administrative Coordinator



## DE-I-TECT summer events

### How strong is your performance? And how do you set boundaries?

An interview with Jane Roque Mamani, PhD in D02

Two DE-I-TECT online workshops for women's empowerment with Sabine Mariss took place in July: „A strong Performance“ and an „Assertiveness Training“.

D02 PhD Jane took part in the Assertiveness Training. She met Dorothee for a short exchange on her impressions and take aways.

Read now more about the training workshop and how Jane has benefited from her participation.

*Hi Jane, hope you are doing well. You were one of four participants in Sabine Mariss' Assertiveness Training. What did you expect from this workshop?*

Hi Dorothee, nice to meet you and thanks for asking.

I registered for the workshop, because I actually wanted to learn how to be more confident in different aspects of my work and daily life.

*I believe strengthening confidence is an important aspect, which concerns us all and offers great potential for development. So how did the trainer structure the workshop, what exactly did she offer and how did you finally train assertiveness?*

Let's say that we had some homework to present before the training day. I had to choose a situation in which I would like to be more assertive and of course, how I would normally behave in this situation.

On the training day, the trainer already prepared a well-structured agenda where each participant had to practice the „high-status body language“.

I say that it was well structured because the fact that each participant had a different role at university/work (not only students) created diverse topics to discuss.



organises two on site  
Workshops for Women's Empowerment



**Programme**

**13 November 2024, 9-13.30 - "A strong performance"**  
Convincing self-presentation in talks, meetings and interviews

- Short theoretical inputs on relevant aspects
- Two presentations/role plays by each participant
- Differentiated feedback from the trainer and the other participants
- Video recordings of the two performances, which will be sent to you after the course
- Intensive work on body language, voice, breathing, eye contact
- Improving self-awareness and self-control during the performance
- Dealing with stage fright before and during the performance
- Identifying and transforming obstructive self-beliefs

**14 November 2024, 9-13.30 - "Assertiveness training for women"**  
Pursue your goals and set your boundaries

- Setting boundaries, e.g. interrupting and saying no
- Acting instead of reacting as a proactive attitude
- Exercises on self-confident communication
- Identifying and changing weakening self-beliefs
- Introduction to Marshall Rosenberg's communication model
- Status model according to Keith Johnstone

Both workshops will take place at Kekuléstraße 39a, 53115 Bonn-Poppelsdorf

**Wednesday, 13 November 2024**  
**"A strong performance"**

**Thursday, 14 November 2024**  
**"Assertiveness training for women"**



with Sabine Mariss  
from  
[Mariss Coaching](#)

Registration is open to women researchers in DETECT

**Please register by**  
**3 October 2024 at:**  
<https://terminplaner4.dfn.de/Z1b79WDjKCMhpR6f>



Anyway, before any practice, the trainer explained what high and low status means in communication. Also, we had an extra exercise related to our „inner critic“. I would say that this was a useful lesson to learn a bit more about myself.

I liked that the trainer showed how to use the high and low status in different situations before the participants did it. What was interesting for me from all these exercises was that we not only received feedback from the trainer but also from all participants.

And, as I mentioned, we had different backgrounds and that made it so special. We were a small group, which also helped I guess.

#### *What was your most important „take-away“ / lesson learnt?*

I have learned to be more aware of the group or person I am working with or communicating with. I know that each person has a unique personality, but we can be flexible in how we treat other people depending on the situation and what we want to get in return.

#### *Would you participate in a similar event in the future or recommend others to do so?*

I would! I mean, we had this training online and I enjoyed it. I can imagine that it would be even better as an on-site event.

Thank you, Jane, for sharing these insights and your impressions.

We hope this topic has also aroused the curiosity of many women colleagues.

We, the DE-I-TECT team, are currently planning **two on-site events with Sabine Mariss, which will take place at University of Bonn on 13 and 14 November 2024.**

**Registration** is open to all DETECT women researchers [here](#).

We look forward to seeing many of our women colleagues there. So please save the dates and keep yourselves updated about our DE-I-TECT programme and events [here](#).

## **SWOT Science Team Meeting, June 17-21, Chapel Hill, North Carolina and “30 Years of Progress in Radar Altimetry” Symposium, September 2-7, 2024 Montpellier**

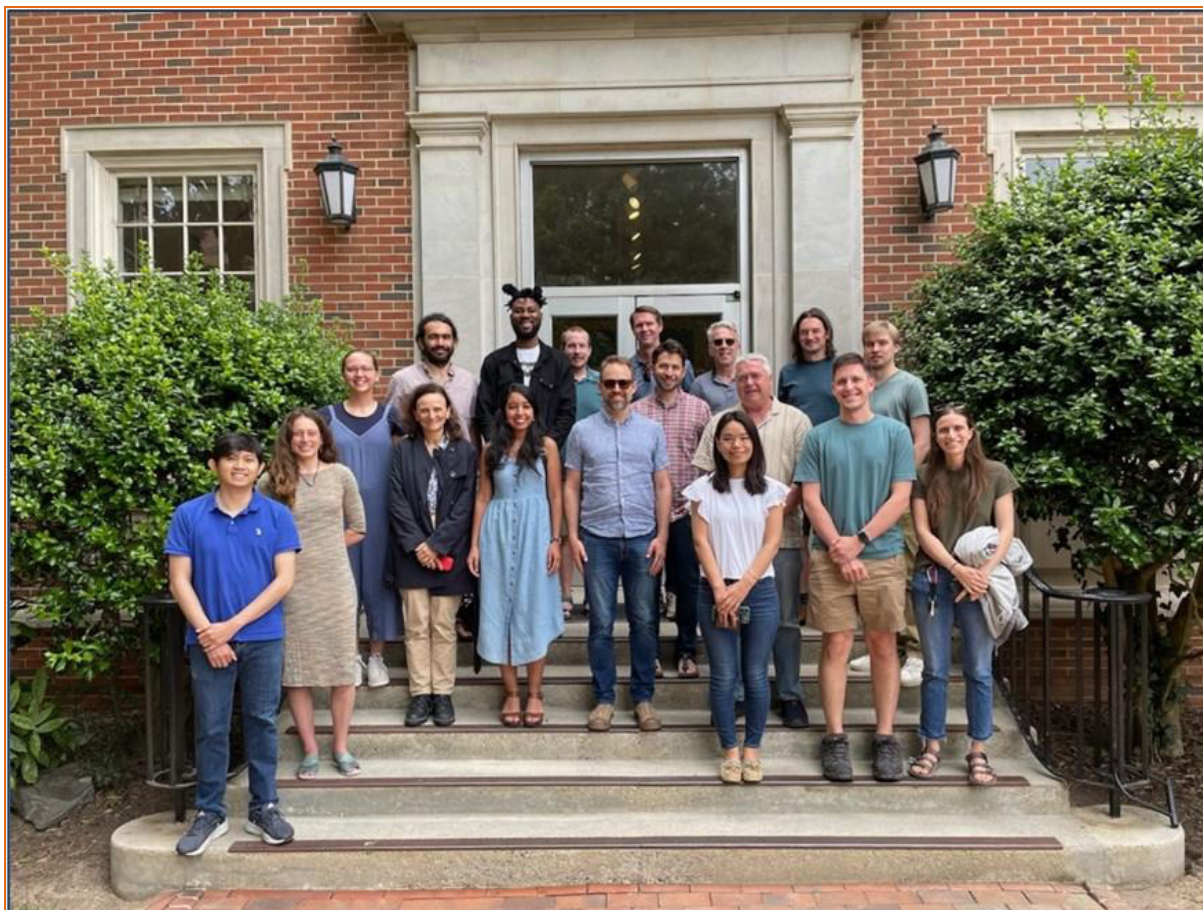
by Luciana Fenoglio and Jiaming Chen

The second SWOT team meeting after the SWOT Launch in 2022 was held in Chapel Hills in June 2024, where exciting new results of the SWOT cal/val were discussed. The SWOT mission brings together communities focused on a better understanding of the world's oceans, its terrestrial surface waters, and the coastal and estuarine environments that lie in between.

Day 1 focused on the potential for future advances from SWOT. On Days 2 and 3, the SWOT Project presented results of its official validation efforts and conveyed the current best understanding of the mission's capabilities relative to its science requirements. Days 4 and 5

were dedicated to results of the Science Team members and organised in plenary sessions. In the Hydrology and Oceanography sessions, B01 PI Luciana Fenoglio had three presentations on the SWOT validation activities over “German rivers”, “estuarine and coastal zones” and “open sea” respectively at the River Working Group, at Deltas, Estuaries and Coastal Working Group and at the Regional Calibration Groups.

In a side meeting before the start of the official conference, members of the Discharge Algorithms Working Group (DAWG) evaluated together a preliminary SWOT discharge product.



SWOT DAWG at Chapel Hills University

These results were finally refined for the early September Symposium “30 Years of Progress in Radar Altimetry” Symposium in Montpellier, organised by European Space Agency ESA, French Space Agency CNES and EUMETSAT to discuss past challenges in altimetry and new perspectives. This event follows the 2006, 2012, and 2018 events that marked the milestones of 15, 20 and 25 years.

B01-DETECT PhD Jiaming Chen and PI Luciana Fenoglio participated with two posters and one oral presentation. In his poster Jiaming described the developed off-nadir altimetry processing and showed an excellent comparison with the SWOT water heights and slopes along the reaches. PI Luciana Fenoglio derives the

river discharge using as input the height, width and slope data from SWOT in a simple equation calibrated with in-situ and model data. Output discharge is stored in the [DETECT database](#).

In an oral presentation Luciana quantified the accuracy of both wide-swath and nadir altimetry against in-situ data in estuaries and open sea.



## Reflections on the EMS Annual Meeting 2024 in Barcelona

by Till Fohrmann



Talk about the climate neutrality goal of EMS in the room Paraninfo of the University of Barcelona.

Source: Till Fohrmann

From 2-6 September 2024, I attended the European Meteorological Society (EMS) Annual Meeting, held this year in Barcelona. Having attended EMS once before, I appreciate the conference for its focus on meteorology, making it a more manageable event compared to broader scientific conferences. It was also nice to come back to Barcelona, which I appreciate greatly for its atmosphere and great food.

### Poster Presentation: Impact of Soil Moisture on the July 2021 Flood Event

At the conference, I presented a poster titled "Impact of Soil Moisture on the Heavy Precipitation During the July 2021 Flood." The research examines the role of land-atmosphere feedbacks in driving the extreme rainfall that led

to the severe flooding in Western Europe. Specifically, the study involves running ensemble forecasts using the ICON model with varying initial soil moisture conditions to assess how these variations influenced the precipitation during the event. This allows us to explore how local soil moisture could act as a key factor in fueling heavy rainfall, in line with the overarching goals of DETECT.

The feedback I received during the poster session was helpful in refining some aspects of the study. In particular, I had insightful discussions with researchers from DWD, ECMWF and the University of Wageningen, who shared useful input on validation, soil moisture sensitivity and moisture tracking, which will help me in the next steps of the project.

### **Workshop on Mindful Climate Communication**

One of my favorite sessions was the workshop on "Mindful Climate Communication". The workshop explored effective ways of communicating climate issues to the public, with a focus on addressing psychological and social factors that shape how people perceive climate change. Targeted at early-career scientists, the workshop provided input from speakers with diverse perspectives from different fields, making the session especially engaging.

The talks covered topics like cognitive biases, the intersection of science and journalism and the role of climate activism in public communication. One of the key insights from the workshop was the importance of considering the audience's emotional and psychological responses when discussing climate change, as well as how to frame scientific information in a way that encourages constructive engagement without inducing feelings of helplessness. I particularly enjoyed the open discussions with the speakers, where the focus was on common issues for scientists, activists and journalists.

### **EMS Anniversary and Keynote on "AI"**

This year's meeting also marked the 25th anniversary of EMS, with a retrospective on its achievements and future goals. One of the key

points of discussion was the effort to make future conferences climate-neutral.

Another highlight was the keynote presentation by Brigitte Perrin from the World Meteorological Organisation, titled "Scaling up Artificial Intelligence to Fight Mis- and Disinformation on Weather and Climate." The talk addressed the increasing use of "artificial intelligence" in meteorology and climate science, and how it could be leveraged to combat the spread of misinformation about these topics.

This discussion highlighted the challenges faced by scientists and journalists in dealing with climate denialism and misinformation. I liked the idea of turning the tides: Using "AI" to spread accurate information to combat the flood of false information, which is often perpetuated by the same methods.

### **Conclusion**

Overall, the EMS Annual Meeting 2024 provided a valuable platform to present my research, exchange ideas, and gain new insights. The discussions I had during my poster presentation and the input from the sessions on weather extremes were particularly beneficial and I look forward to applying these insights in my ongoing research.

## **HPSC TerrSys Fall School 2024, September 16-20, 2024, Jülich**

by Jiaming Chen and Luciana Fenoglio

The HPSC TerrSys Fall School provides the theoretical and technical context of terrestrial modeling in high-performance scientific computing (HPSC) environments utilizing a stand-alone land surface model, and in combination with a subsurface and atmospheric model. B01-DETECT PhD Jiaming Chen and PI Luciana Fenoglio participated in this Fall School to get knowledge of eCLM and Parflow model info.

Day 1 and 2 focused on setup of eCLM models, and exercise of simulation of water and energy cycles over EUROCORDEX.

Day 3 was dedicated to the coupled TSMP2, simulation of water and energy cycles from groundwater to top-of-atmosphere idealised setup.

Day 4 focused on the introduction to data assimilation and exercise on ensemble data assimilation with eCLM-PDAF. Day 5 was related to the large data management. In the afternoon there was time for further discussions and questions, that we have used to get inside in the use of the eCLM and Parflow model output in our own DETECT projects.



## 6th Workshop on Water Resources in Developing Countries: Hydroclimate Modeling, Information Tools and Simulation Techniques

by Klaus Görden



Early afternoon view from one of the ICTP's Adriatico Guesthouse lecture rooms towards the Adriatic Sea.

Source: Klaus Görden

### **DETECT Contribution to Water Resources Workshop at ICTP**

During the last week of May, members of the DETECT CRC contributed to the "6th Workshop on Water Resources in Developing Countries: Hydroclimate Modeling, Information Tools and Simulation Techniques", which was held at the International Centre for Theoretical Physics (ICTP) in Trieste, Italy. Based on a long-term collaboration within the World Climate Research Programme (WCRP) Coordinated Regional Downscaling Experiment (CORDEX), we were invited by local organiser Erika Coppola from ICTP's Earth System Physics Section to contribute to the two-weeks workshop together with an internal group of lecturers. A very diverse, highly motivated group of about 35 participants were on-site; they had

been selected after an application process and came nearly exclusively from Global South research communities, many from the African continent.

The workshop focused on topics such as hydrologic, climate and coupled modelling, analysis methods, tools, and datasets, that may contribute to research on water resources and freshwater availability in the Earth system, which undergo tremendous changes and constitute a Grand Challenge of the WCRP and the UNESCO programmes. The workshop consisted of lectures in the morning and extensive hands-on sessions in the ICTP computer labs in the afternoons. In addition, participants gave an overview of their own research during poster sessions.

From Forschungszentrum Jülich's Institute of Bio- and Geosciences (Agrosphere, IBG-3) Harrie-Jan Hendricks-Franssen (C01, 02, D03), Stefan Poll (Z04), Theresa Boas, Paul Rigor, and Klaus Goergen (Z04) were on-site at ICTP. Daniel Caviedes-Voulième (Z04) and Ana González-Nicolás, both JSC, gave back-office support during the event and made sure that the lab sessions, which were done remotely on JSC supercomputers, went smoothly. All were involved in the preparation and extensive testing of our material. Lectures and hands-on sessions of the 2nd day were partly based on the well-proven HPSC TerrSys Fall School programme, but for the first day new lectures and hands-on sessions were developed around the eCLM land surface model.

After a data and hydrological model-related programme of week one, we focused on land surface modelling during the first day of the 2nd week with an "Introduction to land surface processes and land surface modelling" by Harrie-Jan, a "Technical Introduction to JSC" by Paul, "Land surface modelling and eCLM" by Harrie-Jan and Lab sessions on "Introduction to eCLM, first test case" and "Running regional cases with eCLM, Analysis of model output" by Theresa and all. During the 2nd day of our

contribution, we took a more holistic view, combining the compartments from groundwater to the atmosphere by looking at the fully coupled TSMP with a lecture "The coupled TSMP, towards a RESM for water cycle research: Features, basic principles, application examples, and current developments" by Klaus and Stefan and lab sessions "Getting started with TSMP1, building TSMP, first experiments" and "TSMP1 pan-European fully coupled real data case" by Stefan and all.

The 2nd week was concluded by work of the participants on their own projects, towards a final presentation at the end of the workshop, for which some of the participants chose to use data or analysis methodologies generated during the eCLM and TSMP hands-on sessions. As with the HPSC TerrSys Fall School, the hands-on session supercomputer accounts stay available for a few more days after the event to continue work.

The focus on Global South communities was especially interesting as it broadened the outreach of our (DETECT-related) training events, and it will stimulate the upcoming HPSC TerrSys Fall School events. It is also this context that the DETECT CRC granted generous travel support, for which we are very grateful.

## Geodesy Day in Bielefeld

by Benjamin Gutknecht

On 2 July 2024, the City of Bielefeld hosted the 3rd NRW Geodesy Day. The annual outdoor event is meant to introduce the broad field of possibilities in geodesy to mid- and high-school students from the region and maybe attract some of them to become geodesy students at the university in the near future.

While the Geodesy Day hosts a whole variety of sub-disciplines like autonomous navigation, general surveying or drone observations, DETECT joined Uni Bonn's Institute of Geodesy



At the Geodesy Day in Bielefeld

source: Benjamin Gutknecht



Ultra-sound sensor over a melting ice block

source: Benjamin Gutknecht

and Geoinformation booth in order to highlight geodetic methods that are used to observe our planet's climate. School groups of different age could learn about how, for instance, re-location of water masses affects the gravity field.

And in an on-site experiment with a satellite mock-up incorporating an ultra-sound sensor over a melting ice block, it was shown how satellite altimetry is used to observe sea level change and retreating ice caps.

## DETECT at Dr. Hans Riegel Academy - 19-22 September 2024

by Anne Springer

Just in time for the start of fall, the Dr. Hans Riegel Academy brought together some 200 students from all over Germany and Austria for an exciting and inspiring scientific programme. Dr. Hans Riegel Foundation is dedicated to promoting young talents in the STEM fields (Science, Technology, Engineering, and Mathematics).

Upon our arrival, the entrance hall of the hotel in Brühl was buzzing with lively conversations. The wide range of topics – from "Arctic Amplification" to the intriguing discussion on the wolf in Europe, as well as "Data Science in Biomedical Research" – aroused a great curiosity among the students.

From DETECT side, Anne Springer gave an overview talk entitled "On the tracks of climate change: Satellite observations, model simulations, and the human factor". The presentation was followed by a lively discussion with many interesting questions.

Jürgen Gall gave a talk on AI for Sustainable Agriculture and Earth Science.

We left the event energized and with a bag of Haribo (Hans Riegel Bonn) as a sweet reminder of the day which we will deliberately share with our DETECT colleagues.



Perks at the Dr Hans Riegel Academy

source: Anne Springer

Read more about the biennial Dr. Hans Riegel Academy at:

<https://www.hans-riegel-stiftung.com/projekte/dr-hans-riegel-akademie>



## SING project

by Jürgen Kusche

SING project: The University of Bonn team with DETECT PIs Jürgen Kusche and Anne Springer will participate in the SING (Studying the impact of the Next Gravity Missions) project, funded by the European Space Agency ESA and kicked-off in September 2024. The SING team involves partners from CNES, TU Munich, Aalborg University, University of Bristol, TU Delft, Alfred Wegener Institut, Aristotle University of Thessaloniki, University of Trieste, CNR-IRPI, and IPGP Paris. It is led by the Earth observation company Magellium, Toulouse.

SING aims to evaluate the impact of the upcoming GRACE-type gravity satellite missions GRACE-C and NGGM (i.e. MAGIC) on scientific applications and operational services. In this context, Level-4 data products will be in the focus, given their ability to extract relevant variables of interest, monitor geophysical processes, and enhance current geophysical models. Level-4 products rely on the assimilation or fusion of data from various sources to allow for a more accurate and reliable representation of a specific target system. They are essential for scientific research, operational forecasting and monitoring services requiring a thorough understanding of geophysical processes.

The first objective of SING aims to generate a database to evaluate the performance of the

GRACE-C, NGGM, and MAGIC mission scenarios for science and applications. Simulated ground truth will represent mass changes in the atmosphere, ocean, hydrosphere, cryosphere, and solid earth over a wide range of time and space scales. Level 2 and Level 3 products will be derived with a closed loop simulator, able to evaluate the observability of the “true” geophysical processes for different mission configurations including the GRACE-C, NGGM, and MAGIC orbital parameters.

Other objectives will be evaluating the impact of NGGM and MAGIC in hydrology, ocean, cryospheric, climate, solid Earth and geodesy applications. For each field, Level-4 products will be generated based on data assimilation or data fusion schemes using the simulated Level 2 or Level 3 products, in combination with additional earth observation products. These will then be used to evaluate the feasibility of scientific applications and prepare their integration into relevant operational services.

The SING team will compile recommendations in a roadmap, aimed at preparing the distribution of Level 3 and Level 4 products, as well as, operational services. Requirements for operational services regarding dissemination latencies, temporal and spatial resolution, and data accuracy will be compiled.

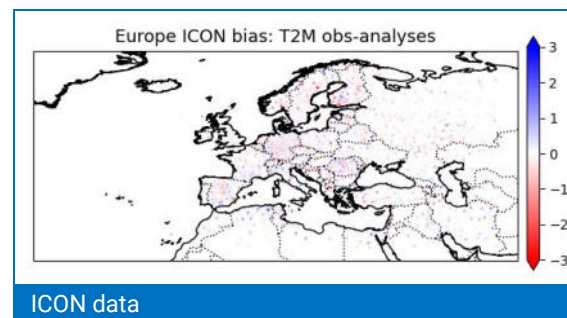


## Notes from the DETECT coordination office

### DETECT Jour Fixe started

On 11 July 2024 a new meeting format was launched: DETECT Jour fixe serves as a platform for addressing and overcoming challenges in current project work. The main focus is on issues that affect many working groups together or the cooperation between the working groups, projects and clusters. The new format includes all topics that were previously dealt with in the bi-weekly technical meeting.

Central topics of the first meetings were 1) the use of Geonetworks as a central source of information for DETECT data, and 2) tools and data sets for the evaluation of ICON and CLM output.



DETECT Jour Fixe takes place every four weeks on Thursday at 13:00 as a hybrid event: on-site at Kekuléstr. 39a, Bonn and online via zoom. Topics that are central to DETECT should be discussed in the first hour, i.e. until 14:00.

**Validation toolbox**

This python-based validation toolbox will be available to all DETECT project and enables to:

- validate model output from CLM and ParFlow against (independent) observation-based data sets for selected variables (in particular those that are essential for testing the central hypothesis of DETECT)
- compare the performance of different model versions against observation-based data sets
- visualize model performance in a way that results are easy to interpret

**List of available validation data sets**

Validation data sets are listed with complete meta data information here: <https://detect-z03.geoinformation.net/geonetwork/>. All data sets used in the toolbox are stored centrally in the DETECT data central data base on JURECA: XXXlinkXXX. Validation data sets will be added continuously. An overview on the model variables that can be validated and the validation data sets that are available can be found here: <https://docs.google.com/spreadsheets/d/1ej-UNw1PL0IGk52Yx9I6W-ZDjy838hHEV1t1QgA5rqY/edit?usp=sharing>. Validation protocols described by <https://lpvs.gsfc.nasa.gov/> shall be considered (not applied yet). Please use issue [detect/detect\\_z03\\_z04/discussions#44](#) to suggest further products that should be included in the toolbox.

Currently the validation toolbox is used by the following projects: C01

The following variables are currently included in the validation toolbox:

- total water storage
- in situ soil moisture at different soil levels
- river discharge
- evapotranspiration

The Validation toolbox

Otherwise, it is an open-ended event and the room and the zoom meeting can be used after the event, if required, e.g. for meetings of working groups. Additional dates can be arranged outside the four-weekly rhythm if required.

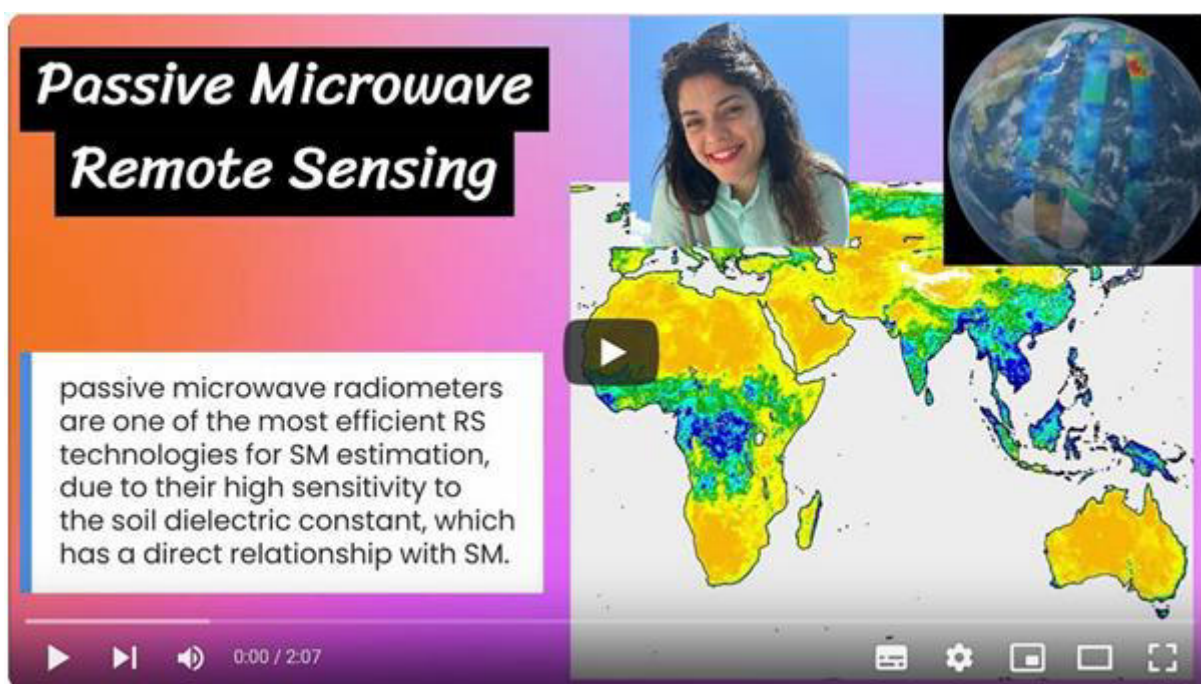
The next regular date would be on October 3, which is a Public Holiday in Germany. According to current plans, the alternative date is two

weeks later, on 17 October. The official invitation will follow soon.

The format depends on the active participation of the entire DETECT team. Anyone can add topics to the agenda for the next DETECT Jour Fixe or submit topics directly to Frank by emailing to [siegismund@geod.uni-bonn.de](mailto:siegismund@geod.uni-bonn.de).

### My paper in 140s

Within the new series “[My paper in 140s](#)”, scientists from @CRC1502 present syntheses of their project work that have been published in peer-reviewed papers. In this issue, Farzane Mohseni explains the implementation of a procedure for estimating soil moisture at a 1 km spatial resolution by fusing various remote sensing data.



Watch the video on the [SFB website](#) or on [Youtube](#).



## Recent and Upcoming Events

**AGU annual meeting 9 – 13 December 2024**

**American Geophysical Union (AGU)**  
**What's next for science?**



Each year, AGU's annual meeting, the largest gathering of Earth and space scientists, convenes 25,000+ attendees from 100+ countries to share research and connect with friends and colleagues. Scientists, educators, policymakers, journalists and communicators attend AGU24 to better understand our planet and environment, opening pathways to discovery, opening greater awareness to address climate change, opening greater collaborations to lead to solutions and opening the fields and professions of science to a whole new age of justice equity, diversity, inclusion and belonging.

This December, AGU24 returns to Washington, D.C. with the theme "What's Next for Science." We can't wait to see you there.

More info [here](#).

DETECT will also be represented there by some of our colleagues. We look forward to your news reporting.

**8 to 12 September 2025**

**EMS Annual Meeting 2025**



European Meteorological Society

The next EMS Annual Meeting 2025 will be held from 8 to 12 September 2025 at the Cankarjev dom congress center of Ljubljana, Slovenia.

Read more about EMS [here](#).

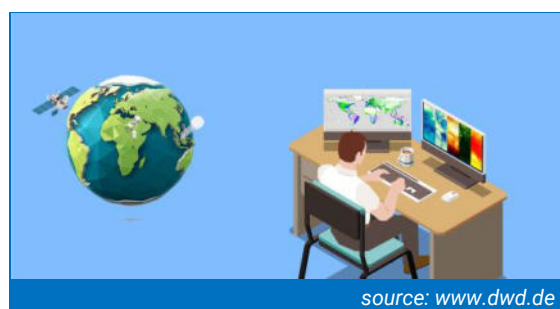
**17th DWD Climate Conference on 23 October 2024**

**German contributions to international climate monitoring – climate data centres for a wide range of applications**

**Deutscher Wetterdienst**  
Wetter und Klima aus einer Hand



The DWD Climate Conference 2024 will provide an overview of the German contributions to international climate observation in the atmosphere and the water cycle and discuss the application areas and benefits of these activities with the conference participants.



source: [www.dwd.de](http://www.dwd.de)

Participation in the Climate Conference is free of charge in person or via video conference.

**Registration is required.**

You will find more information [here](#).

We look forward to your reports on this event.

**EGU General Assembly 27 April – 2 May 2025**

**European Geosciences Union (EGU)**  
**General Assembly**



The EGU General Assembly 2025 brings together geoscientists from all over the world to one meeting covering all disciplines of the Earth, planetary, and space sciences. The EGU aims to provide a forum where scientists, especially early career researchers, can present their work and discuss their ideas with experts in all fields of geoscience.

Please read more [here](#).

**10 - 14 March 2025****International Spring School NEROGRAV**

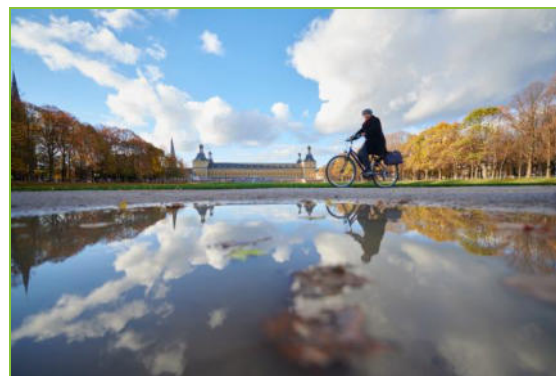
The spring school “New Refined Observations of Climate Change from Spaceborne Gravity Missions (NEROGRAV)” will educate on March 10-14, 2025, in Neustadt an der Weinstrasse, Germany, a group of 31 PhD students and junior scientists in state-of-the-art GRACE and GRACE-FO data processing (e.g. spherical harmonic analysis, filtering /de-stripping, global / regional analysis of grid data) and applications of mass transport data in Earth system sciences related with the global water cycle, the oceans, or the cryosphere. A look into the future of satellite gravimetry missions completes the program. Lectures and practical sessions will be held by members of the DFG (German Research Foundation) funded Research Group NEROGRAV and other external key experts.

**Applications** for participation must be submitted **by 1 December 2024**.

Both, the program according to current plans, prerequisites for the participation, the application procedure and further information including a flyer are available [here](#).

**PrePEP conference 2025**

**Registration is open now and abstract submission deadline is 31 October 2024**



University of Bonn, main building

*copyright: Volker Lannert / University of Bonn*

The international conference on ‘**Precipitation Processes - Estimation and Prediction (PrePEP)**’ to be held **16-21 March 2025 in Bonn, Germany**, will bring together scientists contributing with new approaches to improve the monitoring, understanding, nowcasting and prediction of precipitation processes. This includes advancements in integrated multi-sensor observations, their exploitation for parameterization developments, classical or AI-based Nowcasting techniques, microphysical retrieval development, data assimilation, the blending with numerical weather prediction, hydrological flood forecasts and warning strategies.

Please visit the conference website [here](#) for more information.



## Announcements – save the date!

### Activities within DETECT

DETECT Land & Climate Seminar		Mondays at 10:15 ( <a href="#">zoom-link</a> )
14. Oct	Julian Klaus: <b>'How landscape characteristics drive catchment'</b>	
04. Nov	Ana Meijide: <b>'Carbon dioxide and methane gas fluxes at the Rur reservoir - preliminary analysis'</b>	
08. Nov	Patricia de Rosnay: <b>'ECMWF land data assimilation activities and plans – exceptionally on Friday –'</b>	
18. Nov	Sebastian Buschow and Svenja Szemkus: <b>'Wavelet-based insights into the spatial and temporal structure of precipitation'</b>	
25 Nov	Susanne Glaser: <b>'Space geodetic techniques for Earth system monitoring'</b>	
02. Dec	Daniel Hermann: <b>'Policy approaches to foster climate change mitigation in agriculture'</b>	

University of Bonn on 13 and 14 November 2024

**On-site events with Sabine Mariss**

Registration is open to all DETECT women researchers [here](#).

We look forward to seeing many of our women colleagues there. So please save the dates and keep yourselves updated about our DE-I-TECT programme and events [here](#).



### All-cluster meetings scheduled for 2024:

Please enter in your calendar!

**20–21 November 2024**

**All Status meeting**

Changed date!

### All-cluster meetings scheduled for 2025:

Please enter in your calendar!

**14–15 May 2025**

**Retreat, venue tbc.**

**4 June 2025**

**General Assembly, via Zoom**

**26 - 27 November 2025**

**All Status meeting**

**Date tbc**

**DETECT Conference 2025**





## Other announcements

Kristine Larson, associated DETECT member, has been elected new member of the American Academy of Arts & Sciences.

See more information [here](#).

Congrats, Kristine!

## Publications

...are published on our website

<https://www.sfb1502.de>



UNIVERSITÄT **BONN**



**Deutscher Wetterdienst**  
Wetter und Klima aus einer Hand



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