

IVS NEWSLETTER

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Artist's rendition of GRITSS
(credit: Sofia Merkowicz-Bustos)

GRITSS Successfully Launched

Stephen Merkowicz, NASA GSFC

The Geodetic Reference Instrument Transponder for Small Satellites (GRITSS) technology demonstration spacecraft was successfully launched into a low-Earth sun-synchronous orbit from Vandenberg Space Force Base in California on Tuesday, July 7, 2026. GRITSS introduces a novel VLBI time-of-flight observable that aims to improve the accuracy of combining geodetic data from GNSS, VLBI, and SLR ground stations, contributing to the improvement of the International Terrestrial Reference Frame (ITRF). The new signals will be broadcast over the NASA VGOS stations GGAO12M, MACGO12M, and KOKEE12M following the spacecraft commissioning phase.

The GRITSS instrument takes the Global Positioning System (GPS) signals received at the satellite,

upconverts them in real time to S and X band, and transmits them to a VGOS station. The instrument

can also transmit a pseudo-random code that can also be used as a delay observable by the VGOS stations. The new VGOS observables are then combined with GNSS and SLR data to solve for the site ties of co-located stations.

The mission is a collaborative effort between the NASA Goddard Space Flight Center, the University of Massachusetts–Lowell, and Dutch small-satellite manufacturer ISISpace.

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Japanese Analysis Center at GSI

The Geospatial Information Authority of Japan (GSI), formerly the Geographical Survey Institute (until March 2010), created the Tsukuba VLBI Analysis Center back in 2005. The three-to-four-person endeavor was recognized as an IVS Operational Analysis Center on April 7, 2010. The main activity of the group has been the operational processing of the IVS-INT-2 sessions for dUT1 determination. Newsletter editor Hayo Hase held an email interview with the group to learn more about the people involved as well as their activities.

Who is involved in the GSI Analysis Center and what is their background?



The GSI Analysis Center is operated by a team of four staff members from the VLBI group at GSI. In general, rotation of personnel is quite

common at our institution—both within the organization and at times to other government agencies. Except for technical support staff, the members of the Analysis Center tend to change every two to three years.

Because of this, the staff come from a wide variety of backgrounds, and it is fairly common for new members to join from positions unrelated to VLBI. Among the current members, Masafumi and Haruna have spent much of their careers at GSI working primarily on VLBI, including observations, correlation, and analysis. Takehiro, on the other hand, joined GSI as a newcomer after completing a one-year surveying training program last year. Tetsuya has been supporting the team as a technical staff member for more than ten years, which is considerably longer than the tenure of the members in GSI.



The Fab Four of the Japanese Analysis Center at GSI headquarters.

Given this frequent turnover of staff, it is particularly important for us to implement automated correlation and analysis systems, which help ensure stable and consistent results regardless of the experience or expertise of individual staff members.

How does the analysis center fit into the organization of GSI?

The GSI Analysis Center has a shorter history than our station and correlator. In the early days of VLBI activities at GSI, several VLBI

GSI Analysis Center Staff Members:

- Masafumi Ishigaki (VLBI Group Manager)
- Haruna Furui (Chief of Correlation and Analysis Team)
- Takehiro Nishi (Member of Correlation and Analysis Team)
- Tetsuya Hara (Outsourced Support Staff of Correlation and Analysis Team)

antennas were installed and operated across Japan. We have accumulated experience in VLBI observations and correlation. When the IVS was established in 1999, GSI was registered as both a network station and a correlator.

Later, with the goal of providing rapid dUT1 results from GSI, we gathered information from other Analysis Centers and developed the necessary expertise and analysis capabilities. In 2010, GSI was officially recognized as an IVS Operational Analysis Center. Although our analysis center is a small team, it plays an important role within GSI providing VLBI geodetic products and demonstrating the value and impact of GSI's VLBI activities.

Which IVS sessions are you processing? Which software packages do you use?

As an IVS analysis center, we have been responsible for IVS-INT-2 correlation and dUT1 estimation for a long time. Because the sessions are observed on weekends, it was a major requirement to establish a fully automated correlation and analysis system to contribute to the rapid solutions. Thankfully, our predecessors successfully hit this goal with correlation software K5/VSSP (developed by NICT) and analysis software C5++ (developed by NICT, Hitotsubashi University, and JAXA). Recently, we have managed to



Masafumi loves to play musical instruments, especially the violin and piano. On weekends, he often performs with friends and participates in concerts.

process VGOS-INT-B and C sessions using the DiFX+HOPS software for correlation instead of K5/VSSP. Since we are not the assigned analysis center for VGOS-INT-B/C sessions, we are storing the results from the C5++ processing for now. However, thanks to support from NASA, USNO, and other IVS colleagues, we are now preparing to submit a new EOPI file series with both IVS-INT-2 and VGOS-INT-B/C results. This is a great pleasure for us. In addition to our weekly tasks, we have also contributed to the recent ITRF2020-u2025 effort using Calc/Solve and we are motivated to continue this ITRF work.

Could you outline the steps of your Intensive analysis?

After finishing correlation and post-processing, we use both c5++ and nuSolve to check the quality of the correlation results and ensure that the automated c5++ analysis is functioning properly. For IVS-INT-2 sessions, the result files for bandwidth synthesis called KOMB are generated by K5/VSSP software. In the automated system, these KOMB files are fed into a c5++ sequence, where dUT1 is calculated and automatically submitted if the estimated uncertainty is below our submission threshold. On the next workday, we convert the KOMB files into vgosDB format and



Office workspace used by the VLBI group.



Takehiro likes to play video games, often losing track of time when doing so.

process them with nuSolve for comparison purposes and for submission to the IVS.

Given the high level of automation, how important is human intervention in this process?

From my experience, human intervention is still necessary for quality control. As the effects of various sources of RFI continue to increase, manual adjustment is often required for phase calibration. In some cases, we need to go all the way back to the correlation stage to improve fringe detection by adjusting parameters such as clock and sampler delay. To optimize automated systems, we need to continue learning the fundamentals of both correlation and post-processing. There is usually room for further improvement in terms of data quality and processing speed.

In the 1990s, Japan pioneered real-time VLBI with the Keystone Project. What is missing for real-time correlation and analysis?

The current latency for IVS-INT-2 and VGOS-INT-B/C is approximately 5 hours. The main bottleneck is the data transfer to the correlator. In the past, the observed data were sent to the correlator scan by scan, and the data were processed sequentially, starting with the scans that had arrived. Nowadays, we must wait until the end of a session to start the e-transfer. In addition, the volume of

data has increased compared with the past, which may also contribute to longer transfer times.

Where do you publish your analysis results? Do you know who uses your geodetic products?

Regarding dUT1, we submit results from IVS-INT-2 sessions to the IVS via CDDIS through EOPI files. USNO, acting as the IERS Rapid Service/Prediction Center, uses these estimated dUT1 in its daily and weekly Earth Orientation Parameters Solutions. dUT1 estimates from VGOS-INT-B sessions have been also considered in these solutions since 2024. We look forward to submitting our new EOPI series, which will include VGOS-INT-B/C dUT1 results calculated by c5++, and hope that it will be included in future IERS solutions. In addition, we submitted our SINEX files to the ITRF contribution analysis campaign for the first time in 2025.

Do you conduct comparisons between your results with those of other analysis centers?

We are in contact with other analysis centers like NASA and RAEGE, and they have been very helpful for us to improve our analysis skills and quality. We have done some comparison tests with



Tetsuya enjoys traveling, especially visiting places with beautiful scenery, unusual landscapes, and hot springs. He also enjoys taking part in traditional Japanese festivals and playing traditional Japanese drums.

the NASA analysis center using VGOS-INT-B/C sessions and part of the results were presented at the IVS GM2026. Also, we are hoping to participate in the “FCN model test,” but we are not sure if we will be able to allocate manpower to that project.

What do you like in your work with VLBI?

MI: VLBI inherently requires international collaboration. As a result, we are not limited to working within our country but always interacting and working with colleagues from the international community. This is quite unique compared to other work at GSI, and I find it exciting and stimulating.

HF: VLBI is a very complex technique, and there is always something new to learn. Every time I think I have understood one aspect of it, many new questions arise. That continuous process of learning is what makes it so fascinating and keeps me motivated.

TN: I just started working in April this year, so I am not familiar with VLBI. However, I realized that VLBI involves advanced science and technology and requires a lot of knowledge to understand. This motivates me.

TH: I worked in astronomical VLBI for three years before moving to geodetic VLBI in 2013. I find it particularly interesting that the same VLBI technology can be used both to observe astronomical objects and to measure the Earth with great precision. Over the years, I have seen the observation



Haruna loves a wide variety of living things, including mammals, reptiles, birds, amphibians, fish, crustaceans, mollusks, and plants. She loves to visit her parents' house where she is welcomed by the cute and ferocious dog Koppe.

systems continuously improve and the measurement accuracy increase. There are still many things I do not fully understand, but VLBI is a technically deep and fascinating field that continues to hold my interest.

2026 Meetings

28 Sep – 1 Oct 2026	Tracking and Investigating Geodynamics and Earth Rotation (TIGER), Gävle, Sweden
5–7 October 2026	GGOS Days 2026, Gävle, Sweden
7–11 December 2026	AGU Annual Meeting (AGU26), San Francisco, CA, USA

From Fog to Frames in Garmisch-Partenkirchen

Craig Harrison, Geoscience Australia

The 14th IVS General Meeting (GM) was held from 12–17 April 2026 in Garmisch-Partenkirchen, a picturesque town nestled in a valley in the Bavarian Alps of southern Germany. Approximately 130 participants from 23 countries gathered at the Congress

House to discuss recent developments in VLBI and the challenges and opportunities that lie ahead, under the theme Linking the Celestial and Terrestrial Realms.



For many attendees, the meeting was a chance to reconnect with long-standing colleagues and collaborators. At the same time, it brought together a new generation of researchers, including some first-time participants. As a newcomer myself—and notably the sole attendee from Australia—this mix of long-established relationships and fresh voices was particularly striking.

Getting to the meeting, however, proved to be something of an adventure. The conflict in the Middle East had a significant impact on international air travel, particularly for those traveling from Australia. In my case, flights were rebooked several times, and my tickets were only finalized four hours before departure. Unfortunately, I was the only attendee from Australia, with Lucia McCallum and Benjamin Bray from the University of Tasmania forced to cancel.

If the prospect of attending the IVS GM for the first time was new to me, there was also something familiar about returning to Bavaria. More than twenty years ago, during my PhD, I spent a year based at the European Southern Observatory in Garching, working with collaborators and getting to know the region. Coming back for the GM felt like a combination of something entirely new and something comfortably familiar.

The meeting opened with an icebreaker and early registration at the Biohotel Garmischer Hof. I arrived only a short while after the event started, but the function room was already heaving with people. I could feel the air of excitement that comes from good friends reconnecting after some years, possibly since the last General Meeting or longer. It was also a good opportunity for me to reconnect with

Bayerisches Bier und Brezeln, which I gratefully took. I chatted with a few people and appreciated the welcoming attitude that was shown towards me, an obvious newcomer.

Once the meeting was under way, three days of scientific sessions covered the full range of current VLBI research and operations. Organized around six themes—Components, VGOS Technique, Operations, Products, Forefront, and Crossroads VLBI—the program comprised 59 talks and 47 posters. That alone gave a good sense of the breadth of work being undertaken across the IVS, and of the service’s continuing importance to global geodesy. That importance came through clearly in one of the opening presentations by Nicholas Brown—formerly of Geoscience Australia and now Head of Office of the United Nations Global Geodetic Centre of Excellence—who described VLBI’s role within the “global geodesy supply chain” and the ongoing challenge of communicating its value to stakeholders beyond the geodetic community.

The opening day focused on the infrastructure and operational foundations that underpin modern VLBI. Under the Components theme, there were updates on new and upgraded stations in Europe, China, and elsewhere. I was struck by the amount of work going into sustaining and modernizing VLBI infrastructure, and by how often the need for better southern hemisphere coverage came up. I was pleased to present the recent upgrades to the AuScope



After a few days of fog, the weather cleared revealing the magnificent scenery of the Bavarian Alps. (credit: Sergei Bolotin)

VLBI Array and Australia’s plans to further strengthen our operations.

The VGOS Technique session looked closely at the future of broadband VLBI. Talks covered new digital backend developments, evolving frequency configurations, and the growing problem of radio-frequency interference. The discussions on future VGOS observing bands were particularly timely, with spectrum protection emerging as one of the practical issues that the community will need to keep pursuing.

The day concluded with the first Operations talks, where the focus shifted to the practical challenges of running an expanding global network. Automation, data transfer, correlation capacity, and observing strategy all featured prominently. A recurring message was that the community needs to manage increasing data volumes while improving latency and reliability. Taken together, the day gave the impression of a service adapting quickly, both technically and operationally.

The second day centered on turning observations into geodetic products, linking operational performance directly to the quality of the ITRF and Earth orientation products. The remaining Operations presentations dealt with station performance, data management, and observing efficiency. Several talks showed practical efforts to improve data transfer, automate routine processing, and make the VLBI observing network more responsive. There was also clear interest in more structured feedback and performance monitoring for stations across the network.

Most of the day was devoted to the Products theme. Presentations covered progress towards ICRF4, developments in VLBI analysis software, improvements to UT1 estimation, and the long-running challenge of VLBI scale stability. For me, these sessions reinforced VLBI's unique role in defining the terrestrial and celestial reference frames but also showed just how much care is needed in modeling, station performance, and data consistency to reach the millimeter-level goals of GGOS.



The poster sessions were well attended and being located between the refreshments and talks made interacting easy in session breaks. (credit: Dirk Behrend)

From an Australian perspective, several of these discussions were particularly relevant. The continuing challenges associated with southern hemisphere source distribution, network geometry, and reliable southern hemisphere observations all have a direct bearing on the role Australia can play in maintaining globally consistent reference frames.

The final day looked beyond current operations to future applications of VLBI and closer links with the broader astronomical community. The Forefront sessions explored ideas such as VLBI observations of satellites, lunar applications, and ESA's Genesis mission. These talks showed how VLBI is expanding beyond its traditional role, particularly through future space-geodetic missions, inter-technique ties, and the next generation of the ITRF.

The conference concluded with the Cross-roads VLBI theme, which fitted well with the meeting's overarching theme of Linking the Celestial and Terrestrial Realms. Presentations examined the overlap between geodesy, astrometry, and astronomy through source structure, celestial reference frames, source variability, and high-frequency observations. I came away with a stronger appreciation of how astronomical information can improve geodetic products, and how geodetic VLBI can in turn support astronomical applications.

Taken together, the third day gave a forward-looking view of where VLBI may be heading and of the value of keeping the geodetic, astrometric, and astronomical communities talking to each other.

The poster sessions were held at the end of each of the first two days. Their location worked particularly well—between the lecture rooms and the refreshments—which made



Those not attending the Analysis Workshop were taken on a guided tour to a glacier. (credit: Sergei Bolotin)

it easy to stop, talk, and follow up on ideas during the program breaks.

The setting for the GM added its own character to the week. Garmisch-Partenkirchen sits in a valley surrounded by the Bavarian Alps and offers an impressive natural backdrop—although this was not immediately apparent. For much of the meeting it was easy to forget just how dramatic the setting was, because the mountains were often hidden behind fog. When the fog finally lifted, the surrounding peaks suddenly appeared, giving a very different impression of the town.

The social program, including the opening reception and conference dinner, provided valuable opportunities for informal interaction. Again, I was very pleased to be made to feel so welcome, and I enjoyed getting to know people and their backgrounds. These events were an important part of the experience, allowing discussions to continue beyond the formal sessions and reinforcing the collaborative ties within the community.

Alongside the main program, several specialized workshops and meetings were also held, including the Analysis Workshop, VTC, K-band, and IAG SC 1.4 meetings. The IVS Directing Board met on the Friday, bringing a very full week to a close. These meetings addressed the operational and strategic issues needed to keep the global VLBI network coordinated.

Taken together, the 14th IVS General Meeting showed both the maturity of VLBI as a technique and the amount of work still needed to meet future geodetic challenges. It also reinforced the importance of international collaboration across all parts of the technique—from observations and analysis to infrastructure and governance.

I would like to acknowledge the considerable work of the Local Organizing Committee, chaired by Alexander Neidhardt, and thank them for the careful planning and hospitality that made the meeting run so smoothly. Thanks are also due to the Program Committee, chaired by Dirk Behrend, for putting together such a broad, engaging, and well-balanced program.

As the host of the 15th IVS General Meeting, Australia will have the chance to continue this momentum. The Garmisch-Partenkirchen meeting gave me a much clearer sense of both the scientific priorities and the community expectations that underpin a successful General Meeting. The strong participation, broad scientific scope, and careful balance between formal sessions and informal interaction set a high benchmark. Australia now has the opportunity to build on this success, further strengthen the global VLBI community, and support the continued development of VLBI within the international geodetic community.

IVS Analysts Double-Dipping in Bavaria

Benedikt Soja, ETH Zurich

Early 2026 has been a busy and productive period for the IVS. As the IVS Analysis Coordinator, I had the privilege of managing our delegation to the Unified Analysis Workshop (UAW) in Munich and organizing our subsequent IVS Analysis Workshop (AW) at the spectacular Zugspitze. It turns out that if you want to solve Earth's most complex puzzles, Bavaria was the place to be in early 2026!

Bridging Techniques at the UAW in Munich

Our journey began in Munich at the Landessamt für Digitalisierung, Breitband und Vermessung (LDBV) for the GGOS/IERS Unified Analysis Workshop 2026 (<https://geodesy.science/events/munich2026/>). Held every few years, this iteration was co-located with the REFAG 2026 conference, bringing together experts from across all geometric services of the International Association of Geodesy (IAG).

This year featured a radical structural shake-up. Instead of each IAG service retreating into its individual sessions, the organizers scheduled overarching thematic sessions designed to address cross-cutting challenges that concern all services. The format was highly collaborative and dynamic: introductory presentations set the stage, followed by deep-dive panel discussions and open-floor debates. At the conclusion of the workshop, the session chairs synthesized the key takeaways into actionable recommendations.



Participants of the IVS Analysis Workshop.

As Analysis Coordinator, I represented the IVS on two panels: (1) Challenges in the New ITRF Operational Updates and (2) Resilience of IAG Scientific Services. These discussions underscored the critical need for inter-technique consistency and operational redundancy across global geodetic infrastructures (keyword: geodetic supply chain). One takeaway was that establishing a second IVS Combination Center could improve our resilience, a strategy that other IAG services have successfully adopted.

Beyond the main thematic sessions, all three open sessions were driven by the IVS:

Gravitational Deformation. Cornelia Eschelbach addressed the ongoing challenge of radio telescopes deforming under gravity. She advocated for advanced modeling strategies (including azimuthal effects) and emphasized the need to measure and model a broader selection of telescopes.

Atmospheric Turbulence. I convened this session, which focused on physical correlations in tropospheric parameter estimation. It became evident that this topic is still not thoroughly accounted for across many IAG

services. The IVS community is more proactive in considering these correlations, as highlighted, for example, by a presentation by Hana Krásná.

Increased Automation. In this session, I explored autonomous workflows to reduce product latencies. While routine automation is standard practice for data-rich techniques like GNSS, it remains a challenge for the IVS due to our highly individual sessions and unique operational complexities. Moving forward, new developments in the field of AI could be the catalyst driving this automation.

Reaching New Heights at the IVS Analysis Workshop

A month later, the focus shifted to the broader community, as all IVS analysts were invited to gather in Garmisch-Partenkirchen for the IVS Analysis Workshop, following the IVS General Meeting. The workshop took place at an unforgettable venue: the Environmental Research Station Schneefernerhaus, perched high on the flanks of Germany's highest peak, the Zugspitze.



Benedikt Soja opening the IVS Analysis Workshop.

With the alpine air clearing our minds, we could focus intensely on the most pressing issues and developments in IVS analysis:

ITRF2020-u2025 Reprocessing Campaign. We reviewed the full reprocessing effort of the entire VLBI history up to 2026.0, which saw a record number of contributions from 15 Analysis Centers (ACs). Furthermore, it featured K-band data alongside standard S/X and VGOS for the very first time.

UAW Recommendations. We discussed the recommendations from the Munich workshop, exploring how ACs can integrate turbulence-based stochastic troposphere modeling, complete non-tidal loading, and azimuth-dependent gravitational deformation into their workflows. We also deepened the discussion on the prominent UAW topic of resilience to ensure product reliability, guided by a presentation by IAG President Richard Gross.

Working Groups. The community received important progress updates from WG 7 (Satellite Observations) and WG 9 (Scale). While the scale group has delivered significant findings that addressed scale issues to a large extent—potentially allowing for its finalization and closure—the satellite group is looking to expand its activities. In light of upcoming satellite missions relevant to the IVS, they extended an invitation for new participants to engage with WG 7.

Analysis-Related Technical Topics. Several other technical matters were tackled during the AW. These included implementing software fixes for ionosphere data in older vgosDB files, establishing guidelines for station names used for hardware testing, and optimizing VGOS workflows to reduce product latency for EOP generation.

(continues p. 13)

Mishaps Happen

Alex Burns with Mike Poirier,
MIT Haystack Observatory

Radio telescopes are complex, electro-mechanical systems that require constant care and attention. Even the best-laid plans of mice and men, can go awry. Despite diligent maintenance and a team of motivated individuals, pieces and parts break, sometimes with catastrophic consequences. A recent example is the sequence of events at NASA's Deep Space Station 14 (DSS-14) outlined in a *June 2026 communication*: "On Sept. 16, 2025, the DSS-14 antenna over-rotated while actively tracking the Juno mission, placing excessive stress on cabling and associated structural supports. Water lines tied to the antenna's fire-suppression system also were damaged, causing significant flooding in the facility. There were no injuries."

Some more background from the report: The antenna had troubles with its limit switches in azimuth, which were bypassed during troubleshooting, and a fail-safe system that was hydraulic had also malfunctioned and was bypassed over a decade earlier. The point is: things break! We know this will happen. So, if something should break, in a complex system like your antenna safety PLC, and your most junior employee is on staff at that time, how good is your documentation? Are there clear steps to follow based on the failure-mode, or does it rely on institutional knowledge?

At Westford, we have (as I'm sure the DSS-14 folks had) different manuals from different epochs. Our antenna system is over 60 years old and was originally custom-built from surplus military parts. Whatever system-diagram or operator's manual exists, which may have been part of the mission in 1960, no longer applies today. The system has changed many times since then! So, who is responsible for making the 'Operator Manual' in this case? You are! We can all contribute, either

by writing down what institutional knowledge is already inside your head, or by reading the existing documents and asking questions, thereby making them clearer. We have had spring-cleaning How-To articles before on your equipment, so let's have a 'summer reset' this year of our procedures. Let's go through why this matters for safety, failure recovery, and future documentation.

For safety, whether it be personnel or system, having both documentation and training can save a life. These systems are big and have a lot of electrical wiring and connections. There are times when the system can fail in a way that stores potential energy. Having the right procedures for automatic and manual de-energizing are needed. And then, when the failure does eventually happen, what are the recovery steps? What power needs to be turned off before entering the flooded antenna base? What needs to be checked when the limit



NASA DSS-14 (credit: NASA/JPL).

(cont. from p. 11)

For the full program, presentations, and outcomes of the IVS AW, please visit <https://unlimited.ethz.ch/spaces/ivsaco/pages/435652042/AW+26+Garmisch-Partenkirchen+2026>

Ultimately, these back-to-back workshops demonstrated that whether we are working at close to sea level or nearly 3,000 meters up in the clouds, the IVS community remains deeply committed to advancing global geodesy through rigorous collaboration.



Participants of the Unified Analysis Workshop.

switches are tripped during antenna operations? Can there be physical dangers when the antenna is moved again? These can be documented but must also be a part of the training. Signage can be another useful tool on the structure itself.

Recovering from failures is a normal part of operations. Sometimes it can be easy, like restarting a computer process. Often with the telescope, it is not as simple. Having procedures for as many failures as possible can help when multiple things fail all at once. If the goal is to return to operations, having a plan for failures that is clear and easily followed by anyone responsible for operating the telescope is critical. Especially important are sections in the troubleshooting manual where it is not possible to continue without assistance! These are physically large structures, and there may be a procedure that involves one person visually inspecting a cable wrap, while another is operating a control. These directions are important to follow and should not be bypassed. Everyone wants to be a

hero when recovering from a failure, but it must be done safely and correctly.

Future documentation will always be needed. This does not give us a reason to operate with poor documentation today. The better you start with, the easier it will be to add sections later or to incorporate new technologies as they are installed into your system. Your electrical schematics being up to date is another critical step that helps in both safety and failure recovery. Keeping these schematics up to date will make it easier for future changes.

These points are not intended to disparage the team at DSS-14 or any other site which has had critical failures. Things break! Plenty of things have broken at Westford, and we have made our mistakes when trying to recover operations. It seems there is never enough time to devote to documenting things, until there is a problem. Let this article remind you, there is no better time than right now.

Meet GGOS IberAtlantic: A Regional Affiliate of GGOS

Mariana Moreira, University of Alicante

GGOS IberAtlantic (GGOS-IA) is a regional affiliate of the Global Geodetic Observing System (GGOS), bringing together institutions involved in geodesy across the Iberian Peninsula and the Atlantic region. The collaboration involves national agencies, observatories, universities, and geodetic infrastructure initiatives such as IGN Spain, DGT Portugal, Royal Observatory of the Spanish Navy (ROA), Yebes Observatory, and the RAEGE Azores Association, among others. The initiative fosters cooperation among its partners and contributes to the broader objectives of GGOS by promoting the visibility and recognition of geodetic activities across the region.

The IberAtlantic region hosts a diverse range of geodetic infrastructure, and by strengthening communication and cooperation among these communities, GGOS-IA aims to facilitate new partnerships and support the long-term development of geodetic infrastructure and services. The IVS community plays an important role in the global geo-



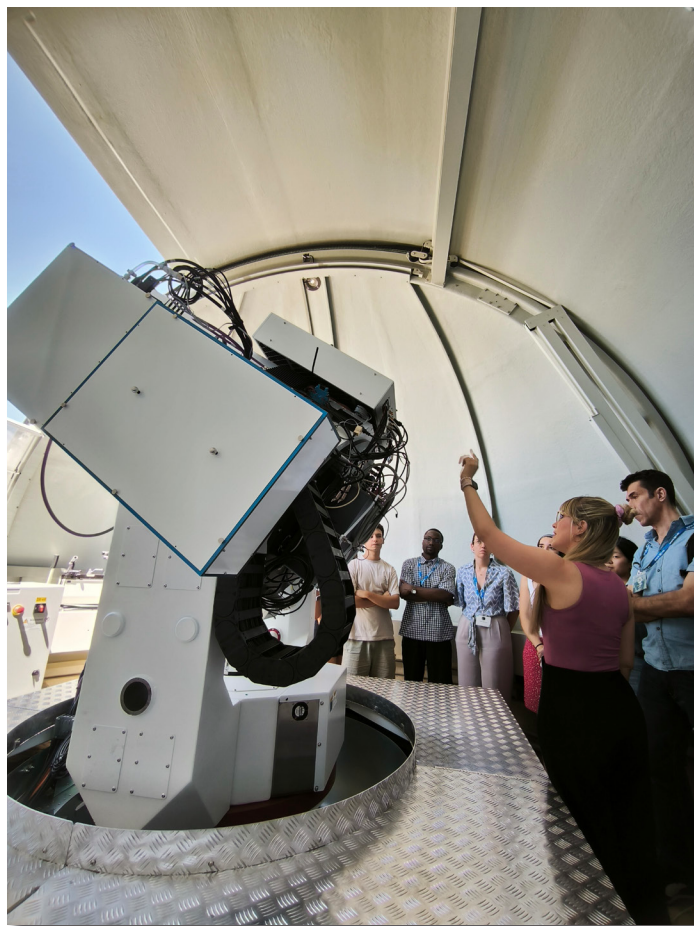
GGOS
Global Geodetic
Observing System

detic effort, with several IVS stations and institutions contributing to geodetic activities worldwide. Within the IberAtlantic region, the RAEGE project represents a major GGOS-IA partner, operating VLBI stations in the Azores and Spain and directly contributing to the objectives of GGOS-IA. With the support of all partners, Yebes, one of the RAEGE stations, hosted the First GGOS-IA Summer School in July 2025. During this intensive one-week training program, university students had the opportunity to learn about a wide range of geodetic techniques and gain insights into current developments in the field.

To further support the visibility and outreach of geodetic activities within the region,



RAEGE stations of Santa Maria (left) and Yebes (right).



First GGOS-IA Summer School, Yebes Observatory, July 2025.

GGOS-IA has recently launched its first newsletter and updated its website, providing new opportunities for the community to stay informed and connected. The newsletter features news on activities, workshops, and initiatives from across the IberAtlantic region. It is intended to become a central communication channel for sharing developments and promoting interaction between the geodetic community.

The redesigned website offers easier access to information about GGOS-IA, and a new leaflet, which is available for download, presents an overview of the collaboration and its role within the GGOS framework. These new communication resources provide an opportunity to strengthen links between the VLBI and the broader geodetic community. Readers interested in following

GGOS IberAtlantic activities are invited to *subscribe to the newsletter*, *explore the updated website*, and *download the new GGOS-IA leaflet*.



EVGA2027 to Be Held in Finland

Nataliya Zubko, National Land Survey of Finland

The 28th European VLBI Group for Geodesy and Astrometry (EVGA) Working Meeting will be held in Finland from June 6 to 11, 2027. EVGA is a subgroup of the IVS, bringing together European scientists who work in or support VLBI for geodetic and astrometric applications. EVGA promotes and represents European geodetic and astrometric VLBI within the wider international scientific community and welcomes scientists from around the world to participate in its meetings.

The next EVGA meeting will be hosted by the National Land Survey of Finland (NLS), Finnish Geospatial Research Institute (FGI). NLS is a government agency responsible for Finland's land surveying, mapping, and spatial data infrastructure. FGI is one of its divisions and is a leading Finnish research organization specializing in geospatial sciences and Earth observation. VLBI research is carried out within the Space Geodesy

Research Group of the Geodesy and Geodynamics Department.

The Metsähovi Geodetic Research Station is operated by the NLS and located in Kirkkonummi, near Helsinki. The station is Finland's fundamental geodetic observatory, hosting a VGOS-capable VLBI antenna alongside co-located GNSS, SLR, and other geodetic instrumentation.

The meeting will take place at the FGI premises in Otaniemi, Espoo, part of the Helsinki metropolitan area. FGI has been in Otaniemi since 2022, having moved from Masala, which may be familiar to participants of the 21st EVGA meeting and the 1st IVS Training School held in 2013. Otaniemi is well known as a research and development hub. It offers excellent public transport connections, including metro, tram, and bus services, and is easily accessible. The area also features a wide range of restaurants and cafés to suit different tastes.



Metsähovi Geodetic Research Station (credit: Noel Gustafsson)

Finland in June offers an ideal setting for meetings and scientific exchange, with long daylight hours and mild summer weather creating a pleasant and energetic atmosphere. Temperatures are typically comfortable, and in southern Finland the days are especially long, with the sun setting late in the evening. Nature is at its most vibrant, with green landscapes, nearby forests, and access to the sea, providing opportunities for outdoor activities alongside the meeting program.

Laajalahti is a scenic coastal bay and nearby residential area close to Otaniemi, known for its natural surroundings and birdlife, and easily accessible from FGI.

The EVGA meeting will begin with an icebreaker event on the evening of Sunday, June 6. The main program will consist of three days of sessions, including oral presentations, poster sessions, and splinter meetings. Participants will have the opportunity to visit the Metsähovi Geodetic Research Station during one of the days. This will be followed by the IVS Analysis Workshop on June 10 and the IVS Directing Board Meeting on June 11.

Local Organizing Committee for EVGA2027 consists of: Hannu Koivula (Head of Geodesy and Geodynamics Department), Nataliya Zubko (Research Manager, Space Geodesy Research Group), Niko Kareinen (Senior Researcher), Jingdong Zhang (Postdoc Researcher), and Eliisa Nylén (Project Coordinator). All inquiries regarding the meeting may be directed to Nataliya Zubko. The meeting webpage is currently under preparation; it is expected to be available in the autumn of this year and will be announced via the IVS mailing list.

The EVGA Scientific Organizing Committee (SOC) will be formed by EVGA Chair Susana Garcia Espada and EVGA Secretary Maria Karbon. The EVGA program will be developed by the SOC and announced at a later stage.



Laajalahti coastal area, Otaniemi, Espoo (credit: Jingdong Zhang)

Important dates:

15 February 2027	Registration opens
15 March 2027	Registration closes
15 March 2027	Abstract submission closes



Finnish Geospatial Research Institute FGI, Otaniemi (credit: Jingdong Zhang)

The IVS Newsletter is published three times annually, in April, August, and December. Contributed articles, pictures, cartoons, and feedback are welcome at any time.

Please send contributions to the General Editors; the deadline is one month before the publication date. The editors reserve the right to edit contributions.

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