

ISPRS SC Summer School: A Global Initiative on Capacity Building and Education Outreach in the Field of Photogrammetry, Remote Sensing and GIS

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Abstract

The ISPRS Student Consortium (ISPRS SC) Summer Schools are one of the fundamental initiatives that ISPRS SC jointly organises with interested institutions to advance education outreach and capacity building in photogrammetry, remote sensing, and geospatial information sciences. Since their start in 2004, these programs have provided students and young researchers with immersive learning opportunities, combining technical lectures, hands-on sessions, and cultural experiences. Grounded in Experiential Learning Theory, the Summer Schools emphasise real-world application, reflective observation, and collaboration. This paper explores their evolution, global outreach, and educational impacts. Drawing on ISPRS SC Summer Schools organised till 2024, the analysis highlights their integration of theory and practice, networking benefits, and transformative cultural exchange. Challenges such as financial barriers and technological gaps are discussed together with recommendations for sustaining and enhancing these initiatives. This study underscores the critical role of ISPRS SC Summer Schools in fostering a global community of geospatial practitioners to address real-world challenges.

1. INTRODUCTION

1.1 Background

The International Society for Photogrammetry and Remote Sensing (ISPRS) Student Consortium, representing the youth and students of the International Society for Photogrammetry and Remote Sensing, was officially founded in 2004 during the XX ISPRS Congress in Istanbul, Turkey (Kanjir et al., 2014). Its establishment followed nearly a decade of discussions, starting in 1996 and reinforcing at the XIII ISPRS Congress in Vienna in 2002, where the introduction of the Best Papers by Young Author Awards marked a pivotal step in recognising the contributions of young professionals (Akkoca et al., 2006). This gradual effort culminated in the formal creation of the SC, solidifying a dedicated platform for students and young researchers within ISPRS. Looking back to the history, ISPRS SC was functioning under TC V, but currently it coordinates directly with ISPRS Council. ISPRS SC Advisory Committee, consisting of 3 ISPRS council members supports the consortium in its activities (ISPRS Student Consortium, 2024a).

The SC Board of Directors (BOD) is responsible for leading, organising, and promoting the activities of the SC, maintaining close contact with the ISPRS SC community. Each BOD serves a four-year term, with the current members elected during the ISPRS General Assembly at the XXIV ISPRS Congress in Nice, France, in June 2022. Their term spans from 2022 to 2026. This diverse board represents a range of geographic, cultural, and academic backgrounds across three continents, and includes both PhD students and early-career researchers (ISPRS Student Consortium, 2022). The BOD is also supported by dedicated volunteers who handle tasks such as graphic design and proofreading for the SC's publications (ISPRS Student Consortium, 2024b).

The SC is free and open to students and young professionals worldwide under the age of 35 who are passionate about photogrammetry, remote sensing, and geospatial information sciences. Its primary mission is to connect individuals from all around the world who share an interest in these fields. Through this network, the SC organises student-specific events and initiatives to enhance the involvement of young researchers and professionals in ISPRS activities, helping them to engage and collaborate on an international scale.

The SC has continuously expanded its activities since the first SC organised Summer School in Istanbul, Turkey, in June 2005, which began a tradition of hosting summer schools in various countries (Jarvinen, 2005; Akkoca et al., 2006). In 2017, the SC co-hosted the MOTIVATE program in Thailand, combining a summer school, hackathon, and student exchange. That same year, it launched the ISPRS SC Webinar Series with Nicholas Wilson's talk on Google Earth Engine. During the COVID-19 pandemic, the SC adapted by creating "The Virtual Rooms" in 2020, a space for online knowledge sharing and networking (Reyes et al., 2021). In 2021, it introduced GeoMixer, a monthly virtual event connecting remote sensing scientists, and co-organised events like the Youth Forum at the ISPRS Congress in Nice and the Digital Forum with UNEP. Another highlight was the virtual Google Earth Engine meetups at the Singapore Geospatial Festival (Reyes & Cruz, 2022). In 2024, it organised ISPRS SC Networking Hour as the event to provide an interacting platform to the students, young professionals and board members of the ISPRS Student Consortium (ISPRS SC) attending the summer school in Philippines, mid-term symposium in Perth, Australia and is planned for the mid-term symposium in Belem, Brazil too. Likewise, ISPRS SC has also announced call for the establishment of ISPRS SC Student Chapters, the local professional or university-level student and young researchers' communities, envisioned to strengthen their networks by providing a platform for their members to meet and share knowledge by organising different events within the area

of interests of ISPRS. It is currently reviewing the applications (ISPRS Student Consortium, 2024d).

While the SC continues to innovate and offer various programs, summer schools remain a cornerstone of its mission, offering young professionals and students hands-on learning experiences and opportunities to network globally. This paper examines the history, characteristics, pedagogical framework, and impacts of the ISPRS SC Summer Schools, with a focus on recent events held in 2024. It also discusses challenges and offers recommendations for future improvements.

1.2 History of ISPRS SC Summer Schools

The ISPRS Student Consortium (SC) Summer Schools have been a central activity of the ISPRS SC since their inception. ISPRS SC has a long history of organising various summer schools and workshops starting from the year 2004 (Akkoca et al., 2006). The aim of the ISPRS SC Summer School is to enable international collaboration and provide opportunities for students and young researchers to develop knowledge and skills in the fields of photogrammetry, remote sensing, and spatial information sciences (ISPRS Student Consortium, 2024c). ISPRS SC normally organises these summer schools in collaborations with various global and local organisations in order to have a major outreach and impact on the knowledge dissemination. For instance, ISPRS SC has a well-established collaboration with the Asian Association of Remote Sensing (AARS) to organise summer school as the pre or post event of the Asian Conference on Remote Sensing (ACRS) since the year 2010. These summer schools are organised once a year in the country hosting ACRS. Figure 2 and Figure 3 represent pictures from such summer schools.

The first event targeted to youths was organised as the ISPRS 2004 Summer Youth Camp in Guzelyali, Canakkale, Turkey from 23 to 29 July 2004 (Akkoca et al., 2006) by the local organising committee of the ISPRS Congress. Since then, ISPRS SC has organised more than 20 summer schools in different themes and in different countries around the world. We recently sponsored the local organising committee of the ACRS to organise Summer School on "The Remote Sensing Application for Agricultural Mapping" at the Education Forest of Hasanuddin University, Indonesia from 1-5 November 2025 as the post conference event of ACRS. Table 1 represents the list of such summer schools organised from July 2022 to November 2025 and are either funded, co-sponsored or supported by the ISPRS SC.

1.3 Characteristics of ISPRS SC Summer Schools

The ISPRS SC Summer Schools are designed to create an immersive environment where students can participate in different academic and socio-cultural activities. They offer a platform for exchanging ideas, discussing research, and networking with peers and experts from all around the world. These summer schools typically last to five days and feature:

Lectures and Practical Sessions: International and local lecturers guide participants through hands-on activities that supplement the theoretical knowledge shared in the lectures.

Technical Demonstrations: These mostly include demonstrations often supported by sponsors to showcase innovative tools and solutions.

Social Events, Recreational and Educational Tours: An essential and interesting aspect of the summer school is the inclusion of cultural and social experiences that allow

participants to connect beyond academic work for a long-term professional relationship. Events like icebreakers, cultural nights, and farewell gatherings are organised to offer informal networking among the participants. Moreover, at least one tour, as the Figure 1 shows, is organised to provide participants with cultural and professional insights from the host country.

Likewise, representatives of the ISPRS SC Board of Directors, if possible, in-person, otherwise virtually deliver a half an hour presentation about the activities of ISPRS SC and benefits of volunteering in such types of professional organisations to students and young professionals.



Figure 1: Participants of the ISPRS SC Summer School at University of Philippines - Diliman taking a picture during their technical tour in Manila.

The ISPRS SC Summer Schools embody Experiential Learning Theory (Kolb, 1984) by providing participants with immersive, hands-on experiences through activities like field excursions, technical workshops, and collaborative ideathons. According to Kolb, (1984), learning occurs through a cyclical process of engaging in experiences, reflecting on them, conceptualising insights, and applying these insights to new situations. This approach aligns seamlessly with the hands-on, collaborative, and problem-solving nature of the Summer Schools, making them a model of effective geospatial education.

1.4 Application, Approval and Funding Process

The process for organising ISPRS SC Summer Schools involves structured application and review stages to ensure alignment with the initiative's objectives and quality standards. Interested organisers should submit an application form available on the summer school webpage to the ISPRS SC President (ISPRS SC P), with a copy to the ISPRS Vice President (ISPRS VP). This proposal includes the event theme, location, dates, a budget proposal, and a list of potential lecturers. The venue must meet logistical requirements, and dates should avoid conflicts with academic or ISPRS schedules. The ISPRS SC P performs an initial review to ensure the application aligns with the Summer School's objectives, including its accessibility and potential impact. Following this:

- The ISPRS SC P shares the application forms with the SC BODs for evaluation.
- The BOD's recommendation is submitted to the ISPRS VP.
- If supported by the ISPRS VP, the proposal is forwarded to the ISPRS Secretary General for official approval. Approval or rejection decisions with

reasoning are informed to the applicants through the ISPRS SC P.

Applications are assessed on their potential impact, alignment with ISPRS objectives, and inclusivity, with preference given to underrepresented or economically disadvantaged regions. While self-funding is highly encouraged, organisers can request financial assistance by providing a detailed budget and justification. Funding decisions depend upon resource availability and are reviewed by the ISPRS SC and ISPRS Council in cooperation with the ISPRS Travel Foundation (TIF). Approved organisers have the benefits of promoting events through ISPRS calendar and social media of ISPRS SC. They can use the ISPRS SC name and logo to promote the event. Once the event is completed, organisers must submit narrative and financial reports for reimbursement approval (ISPRS Student Consortium, 2024c). This concise process ensures that ISPRS SC Summer Schools maintain high standards while supporting accessibility and inclusivity. The blue colour coded summer schools in the Table 1 represent the ISPRS SC sponsored schools that received partial funding support, whereas the orange colour coded summer schools represent the ISPRS SC co-sponsored summer school that have not received other supports, but not funding and then the rest of the summer schools in the table represent summer schools that are supported by ISPRS SC as a promotional partner or supporting organisation.

2. DISCUSSIONS

2.1 Analysis of Feedback from ISPRS SC Summer School 2023-2024

The ISPRS Student Consortium (SC) Summer Schools, held between 2023 and 2024, received overwhelmingly positive feedback from participants, who praised the strong academic content, practical learning experiences, and meaningful cultural and professional exchanges. These programs successfully connected young researchers and students worldwide who share interests in photogrammetry, remote sensing, and spatial information sciences, offering not only advanced technical training but also valuable opportunities for collaboration, networking, and personal growth through well-organized educational, networking, and cultural activities. From the ISPRS SC Summer School 2023 at National Cheng Kung University to the three 2024 programs: the BUCEA International Summer School on Smart Cities at Beijing University of Civil Engineering and Architecture; the ISPRS TC V Summer School on AI for Geospatial Applications at the University of the Philippines Diliman; and the ISPRS SC Summer School at the Sri Lankan Institute of Surveying and Mapping, these events provided hands-on learning, exposure to emerging technologies, and the opportunity to engage with both local and international experts.

At National Cheng Kung University, participants described the summer school as an exceptional blend of theory and practice. Each day combined morning lectures and afternoon hands-on sessions on topics such as Synthetic Aperture Radar SAR, LiDAR, water quality analysis, chlorophyll fluorescence, and Mobile Laser Scanning MLS. Delivered by dedicated experts, the lectures deepened participants' understanding of both fundamental and advanced concepts. The program's excellent organization, smooth logistics, and engaging cultural activities such as museum visits and night market tours fostered camaraderie among attendees. One participant from the Philippines reflected that the 2023 ISPRS SC Summer School in

Taiwan was both academically enriching and personally rewarding, praising the clear instruction, interactive exercises, and warm hospitality of the organizers.

Participants at the BUCEA Summer School expressed deep appreciation for the enriching academic and cultural experiences, highlighting insightful lectures by industry professionals and opportunities to explore Beijing's architectural and historical heritage. Beyond technical learning, they valued the connections formed with peers from diverse backgrounds and the warm support from BUCEA's faculty and volunteers (Figure 6). For many, the experience not only expanded their professional expertise but also deepened their appreciation for Chinese culture, reinforcing a sense of global connection.

The ISPRS TC V Summer School in the Philippines generated strong enthusiasm among participants eager to explore artificial intelligence in geospatial applications. The program featured hands-on courses on earth observation, geohazard analysis, machine learning, and natural language processing. While mastering tools such as Python, MATLAB, and AI frameworks posed challenges, participants found the sessions highly rewarding. The concluding ideathon encouraged creative applications of AI for social and environmental solutions, leaving participants with a sense of accomplishment and purpose.

Feedback from the Sri Lanka Summer School emphasized its success while offering constructive suggestions for improvement. Participants praised the well-structured technical sessions, UAV and SAR workshops, and ample networking opportunities. They appreciated the excellent organization and engaging social activities but suggested extending Q&A sessions, incorporating more interactive group work, and providing access to recorded materials to support continued learning. Overall, attendees agreed that the program strengthened their technical knowledge, collaborative spirit, and global perspective.

From Taiwan to China, the Philippines, and Sri Lanka, the ISPRS Student Consortium Summer Schools from 2023 to 2024 consistently demonstrated their value in advancing geospatial education and fostering international collaboration. Each event successfully blended academic rigor with cultural understanding, equipping participants with new skills, insights, and international connections. Collectively, these programs not only enhanced participants' professional competence but also inspired a shared vision of using geospatial technologies to address global challenges and promote sustainable development. We are yet to receive reports and written feedback from the organisers for the summer schools organised in the year 2025, however the participants highly appreciated the informal learning environment and networking opportunities the activities within the summer schools provided to them during the closing ceremony of these events.

| Name of Summer School | Venue | Dates | Organisation |
|--|---|-----------------------------------|---|
| ISPRS SC Summer School during the 46th Asian Conference on Remote Sensing (ACRS) | Hasanuddin University (UNHAS) Educational Forest, Indonesia | 1 - 5 Nov., 2025 | ISPRS SC, AARS, Indonesian Society of Remote Sensing and Hasanuddin University |
| Regional Capacity Building Training Program on Applications of Satellite Data (Remote Sensing) for Flood Disaster Management | Windhoek, Namibia | 8 - 12 Sep., 2025 | ISPRS Inter Commission Working Group (ICWG) V/IV, ISPRS SC |
| Earth Sensing Summer School | San Vito di Cadore - Italy - Dolomite Mountains | 7-13 Sep., 2025 | Earth Sensing Lab CIRGEOL, ISPRS, Dipartimento Territorio e Sistemi Agro-Forestali, and SIFET (Società Italiana di Fotogrammetria e Topografia) |
| ISPRS/BUCEA International Summer School on Smart Cities | Beijing, China | 3 - 12 Jul., 2025 | ISPRS, ISPRS SC, Beijing University of Civil Engineering and Architecture (BUCEA), Belt and Road Architectural University International Consortium (BRAUIC) |
| International Capacity Building Training Program: Geospatial Technology for Urban Development and Management (GT4UDM) | Ahmedabad, India | 16-20 Jun., 2025 | ISPRS ICWG V/IV |
| ISPRS SC Summer School on Spatial Technology and Enhanced Spatial data services for Sustainable Development | Diyatalawa, Sri Lanka | 17-21 Nov., 2024 | ISPRS, ISPRS SC, ACRS and Institute of Surveying and Mapping-Diyatalawa. |
| SUNRISE Summer School | Porto Cesareo, Italy | 8 - 14 Sep., 2024 | Italian Society of Photogrammetry and Topography (SIFET), ISPRS, CIPA |
| ISPRS SC Summer School on AI for Geospatial Applications | Quezon City, Philippines | 9 - 13 Aug., 2024 | ISPRS SC, ISPRS TC V, University of the Philippines |
| ISPRS SC-BUCEA International Summer School on Smart Cities | Beijing, China | 14 - 22 Jul., 2024 | BUCEA, BRAUIC, ISPRS TC V, and ISPRS SC. |
| ISPRS SC Summer School 2023 Taiwan: Remote Sensing for Sustainable Environment: From Land to Water | National Cheng Kung University, Taiwan | 3 - 8 Nov., 2023 | ISPRS SC, National Cheng Kung University, Taiwan |
| IEEE GRSS Young Professionals (YP) & ISPRS Student Consortium (SC) Summer School (SS), 2022- 2023 | Hybrid - Brazil | Various dates throughout the year | UDESC, UNOCHAPECO, ISPRS, ISPRS SC, IEEE GRSS, PUC RIO, UFMG, UFPR, UNESP, UNOESTE, IGVEC |
| International Summer School: Modern Surveying Techniques for Cultural Heritage Documentation | Telč, Czech Republic | 17 - 23 Sep., 2023 | ISPRS Working Group V/6 |
| ISPRS SC International Summer School on Smart Cities | Beijing, China | 3 - 9 Jul., 2023 | BUCEA, ISPRS, ISPRS SC and BRAUIC |
| SUNRISE Summer School | Ragusa, Sicily, Italy | 3 - 9 Sep., 2022 | ISPRS SC, SIFET |
| Virtual Summer School on Resilient Cities | Online | 25 - 29 Jul., 2022 | BUCEA in collaboration with ISPRS TC III and ISPRS Student Consortium |

Table 1: List of Summer schools organised during the tenure of the current BODs (July 2022- November 2025).

2.2 Educational and Technical Impacts

One of the most profound impacts of the ISPRS SC Summer Schools is their ability to advance participants' technical skills and theoretical knowledge. By focusing on contemporary topics, these programs ensure that participants are well-equipped to contribute to the rapidly evolving geospatial sciences field. The hands-on activities, such as those featured in the 2024 Summer

School in the Philippines, empower attendees to use advanced tools and methods effectively, bridging the gap between classroom learning and professional application.

The ISPRS SC Summer Schools exemplify the principles of Experiential Learning by immersing participants in practical, real-world applications of geospatial technologies. Participants

reflect on their activities, identify challenges, and conceptualise strategies for applying their insights in professional contexts. This iterative process not only enhances technical skills but also cultivates critical thinking and problem-solving abilities, which are essential for addressing global challenges like urbanisation and disaster risk management.



Figure 2: Lecturer giving theoretical insights during the ISPRS SC Summer School in National Cheng Kung University, Taiwan in 2023.



Figure 3: Participants engaged in practical exercise during the ISPRS SC Summer School in Indonesia in November 2025.

Likewise, ISPRS SC also delivers a presentation about the activities of the consortium and ways of getting involved in its activities in every summer school. This practice has helped in promoting the ISPRS SC, presenting about its initiatives and increasing membership. Figure 4 is an example of such presentation.



Figure 4: Laxmi Thapa, President of the ISPRS SC taking pictures with the participants of the ISPRS SC Summer School

in Sri Lanka after presenting about the activities of the ISPRS SC.

2.3 Cultural and Social Exchange

An equally important dimension of these programs is their focus on cultural exchange. Participants often highlight the value of engaging with peers from diverse backgrounds, which broadens their understanding of global perspectives. Activities such as cultural nights and city tours provide informal settings where participants can bond beyond their academic pursuits. This focus on interpersonal connections fosters collaboration and mutual respect, essential qualities in addressing global challenges collectively. Figure 5 shows an example of such activities organised in the past.



Figure 5: Cultural performances during ISPRS SC Summer School in Diyatalawa, Sri Lanka, 2024.

2.4 Networking and Career Development

Another critical strength of the ISPRS SC Summer Schools lies in their ability to provide networking and mentorship opportunities. Participants are introduced to leading experts, who often serve as mentors, offering guidance on academic and career development. Collaborative projects, such as ideathons, allow participants to work closely with peers, fostering teamwork and creativity.

These connections often lead to long-term professional relationships, with participants citing the Summer Schools as pivotal in shaping their careers. The emphasis on mentorship, combined with opportunities for practical collaboration, prepares attendees for leadership roles and encourages innovation within the geospatial sciences community.



Figure 6: Participants in ISPRS SC Summer School at BUCEA expressing their impression about the summer school together with the bond they form with their group members.

2.5 Challenges and Limitations

Despite their many successes, the ISPRS SC Summer Schools face challenges, particularly in terms of accessibility. Financial constraints remain a significant barrier, especially for participants from economically disadvantaged regions. Even though the registration fees are low, we have been receiving many requests for travel grants to attend these summer schools. Likewise, The TIF has been generous in providing partial funding support to 2-3 summer schools every year. However, the amount for the funding has mostly been the same irrespective of the geographical locations of the summer schools and varying living expenses different countries have. Collaborators from the academic background have been reaching out to us to organise summer schools yearly in their institutions with our funding support. However, ISPRS SC has been strategic to provide funding for global outreach with no repetition of funding in the same country – same hosting institution for consecutive years. We have been advising such collaborators to find alternative funding sources while maintaining our affiliations through co-sponsorship in the form of promotion or technical support. But some collaborators have been organising the event independently or collaborating with other sponsors.

Organising summer schools on virtual platforms, especially during the COVID-19 pandemic had been quite challenging as the technical domain like ours sometimes needed software that not everyone has access to. Participants from low-resource settings often struggle with limited internet connectivity and low hardware configuration, which can hinder their engagement in online activities.

3. CONCLUSIONS AND RECOMMENDATIONS

ISPRS SC Summer Schools have become a cornerstone of geospatial education, combining technical training, cultural exchange, and global collaboration. By grounding their activities in experiential learning theory, these programs foster practical skills, team collaboration, cultural awareness, problem-solving and critical thinking skills of participants. These schools have had a profound and lasting impact across a wide spectrum of students and young professionals from all around the world. Aside from the technical benefits such as knowledge capacity building, there have also been numerous social benefits. For example, participants have had the opportunity to meet new friends and

interact with peers from diverse backgrounds. The interactions have also fostered cultural exchange and the strengthening of networks and lifelong connections. More importantly, the summer schools have created a forum for participants to explore potential career paths and interests in the field of remote sensing, photogrammetry and spatial information sciences. Participants have benefitted through mentorship and career guidance from renowned lecturers.

However, to ensure the sustainability and inclusivity of ISPRS SC Summer Schools, providing enhanced financial support is essential to address the varying costs across host countries. Expanding sponsorships, especially for travel grants, would greatly benefit participants from low-income regions, enabling equitable access to these transformative programs. While in-person summer schools remain the primary focus, incorporating well-structured virtual formats could provide an alternative for those unable to afford travel, thereby broadening participation and facilitating wider knowledge dissemination. For virtual events, minimising digital disparities is a crucial consideration. Although challenges like unreliable internet connectivity may be beyond direct control, adopting open-source software and leveraging cloud-based platforms can enhance accessibility for participants with limited resources. These approaches ensure that technological barriers do not hinder participation, thereby promoting inclusivity and maximising the program's impact.

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REFERENCES

- Akkoca, G., Tatli, P., Celik, R.N., 2006. Organisation and Future of ISPRS Student Consortium. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Science*, Volume XXXVI, Part 6, Tokyo Japan 2006.
- ISPRS Student Consortium. (2022a). ISPRS SC Board of Directors. Retrieved from <https://sc.isprs.org/about/Board/>.
- ISPRS Student Consortium. (2024a). ISPRS SC Statues. Retrieved from <https://sc.isprs.org/about/statutes/>.
- ISPRS Student Consortium. (2024b). ISPRS SC Volunteers. Retrieved from <https://sc.isprs.org/about/volunteers/>.
- ISPRS Student Consortium. (2024c). ISPRS SC Volunteers. Retrieved from https://sc.isprs.org/summer_schools/ss_guidelines/.
- ISPRS Student Consortium. (2024c). ISPRS SC Volunteers. Retrieved from <https://sc.isprs.org/members/isprs-sc-student-chapter/>.
- Jarvinen, J., 2005. ISPRS Student Consortium – First Summer School. *ISPRS Highlights*, Vol.10, No.3, pp. 27-28.

Kanjir, U., Detchev, I., Reyes, S. R., Akkartal Aktas, A., Lo, C. Y., Miyazaki, H. (2014). The ISPRS student consortium: From launch to Tenth Anniversary. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 40(6), 43–48. <https://doi.org/10.5194/isprsarchives-XL-6-43-2014>.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

Reyes, S. R., Cruz, C., Üstüner, M., Jjuuko, C., Guliyeva, S. (2021). Creative strategies in navigating the new normal: Advancing the contributions of the ISPRS Student Consortium as an international organization. *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, 5(5), 23–30. <https://doi.org/10.5194/isprs-annals-V-5-2021-23-2021>

Reyes, S. R. C., Cruz, C. A. (2022). Forging ahead and adapting to change: A review of the initiatives of the ISPRS Student Consortium. *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences - ISPRS Archives*, 43(B5-2022), 37–43. <https://doi.org/10.5194/isprs-Archives-XLIII-B5-2022-37-2022>.