



BY DAVID KUNKEE

Preparation for Success in 2022

Looking back to my last letter from 2021, I found that I spent most of it recapping 2021 events but not much time describing preparations for 2022. Therefore, this letter may be a continuation from December. First of all, I would like to welcome our new Administrative Committee (AdCom) members beginning three-year terms starting in 2022: Ronny Haensch, chair of the 2021 IEEE Geoscience and Remote Sensing Society (GRSS) Data Fusion Contest and current GRSS e-newsletter editor; Keely Roth, current GRSS publicity and public relations chair; and Mengdao Xing, who has been very active with the GRSS in China. Also returning for another three-year term are Paul Rosen, chair of GRSS Global Activities, and Alejandro Frery, chair of the GRSS Future Publications Committee. I would also like to thank the AdCom for allowing me to serve a second one-year term as president for 2022.

The AdCom's efforts to set the GRSS on a path for continued success have involved many activities and a few changes that I would like to mention. Our goal is to continue to improve the administration of the Society and facilitate our continuously increasing online and web-based activities as well as in-person events that the Society is involved with.

As many of you may know, the number of GRSS initiatives has grown substantially. To better manage resources available to implement the many great ideas and projects proposed this year, and avoid an end-of-year rush to complete projects, GRSS held its first call for 2022 50%-rule projects in November 2021. This was two months earlier than previous years and enabled approved 2022 50%-rule projects to begin in early January. We plan to hold another call for initiatives in March to ensure that our volunteers continue to have opportunities to propose new projects and implement

their ideas in 2022. As always, if you are interested in suggesting a GRSS initiative, contact a GRSS vice president (VP), director, president, EVP, CFO, or past president to discuss and submit your idea.

In addition to our early project proposal timeline this year, GRSS EVP Mariko Burgin has been leading efforts to restructure several administrative processes, including the management of the 50%- and 3%-rule projects. The number of GRSS initiatives has grown to more than 60 in 2021 alone. This is quite a change from just two years ago (the pre-COVID era), in 2019, when the total number of initiatives was fewer than 30. In 2022, we plan to further update the GRSS initiatives process to streamline it, make it more efficient, and adapt it to the increasing demands of a growing Society.

We are evolving GRSS services and support to our Chapters. In December, the GRSS added its 100th Chapter, and, with continued growth, there is also a need to evolve how we coordinate activities and support our Chapters' activities. As a result, the GRSS plans to add volunteers to the Chapters committee to include representatives from at least three regions of the world to help better address the unique perspectives and needs from each region (e.g., North and South America, Europe, and Asia). We may expand the Chapters Committee as needs continue to arise.

We are updating the way we manage GRSS schools. Last year, we changed from "GR4S," which stood for "GRSS Summer Schools" (four Ss) to "GR3S," which stands for "GRSS Schools" (three Ss). This is because we responded to an increased demand with an expanded offering of GRSS schools, which now take place throughout the year. To support the expanded activity, the GRSS is revising the process and timeline required for GRSS sponsorship to ensure the fair consideration of all proposals. Please see <https://www.grss-ieee.org/education/grss-schools/> later this spring for more details.

**I BELIEVE REACT WILL
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We are enhancing membership value. This has been one of the many important and ongoing discussions with the GRSS AdCom. I believe there are many ways of realizing the value of IEEE and GRSS membership through enhancing your network and greater access to an informed community for exchanging ideas on new research. Within the

GRSS, we have been working to improve our conference experience (for virtual conferences these past two years) and online materials to provide additional value for our members. Along these lines, I would also like to let everyone know that the first of two upcoming GRSS-sponsored short courses has been posted to the IEEE Learning Network (ILN) website. The first course is "Reflectometry Using GNSS and Other Sources

of Opportunity (GNSS+R)," and it can be accessed through the public content of ILN: <https://iln.ieee.org/>. I would like to thank Paolo Gamba, Estel Cardellach, and several volunteer speakers for creating, coordinating, and leading the course development. The course is free to GRSS members.

We are expanding the GRSS presence at conferences and exhibitions. For the first time this year, the GRSS was a technical cosponsor of IEEE Radio Week, which was held in Las Vegas 16–19 January 2022. (Please see <https://www.radiowirelessweek.org/>.) The GRSS portable booth was present at the event along with GRSS FARS members to inform attendees about remote sensing and the GRSS. Following this event, the GRSS FARS team is also involved with the 2022 Radio-Frequency Interference Workshop to be held online on February 14. Planned future locations of the GRSS booth include the European Space Agency Living Planet exposition, now scheduled for 23–27 May 2022 at the World Conference Center in Bonn, Germany.

Finally, an important activity related to the enhancement of the GRSS's future role in 2022 and beyond is the formation of a new GRSS technical committee (TC), Remote Sensing Environment, Analysis, and Climate Technologies (REACT), which is devoted to "... advancing science, defining requirements for science-driven mission concepts and data products in the domain of cryosphere, biosphere, hydrosphere, atmosphere and geosphere. (Please see <https://www.grss-ieee.org/technical-committees>.) The committee is cochaired by Irena Hajnsek, Subit Chakrabarti, Andrea Donnellan, Ryo Natsuaki, and Carlos Lopez Martinez. From a GRSS perspective, the creation of the REACT TC is an important initiative for the Society because our members are fundamentally involved in defining and ensuring the quality of Earth observation data that are used in climate models and directly or indirectly provide a foundation for policy decisions. I believe REACT

will enhance the GRSS's role in climate science and provide a resource for better understanding uncertainty in Earth observation measurements.

Here, I'd like to mention a few milestones and noteworthy events since the December newsletter. These include the progress of the GRSS Second Student Grand Challenge (SGC). In February, GRSS volunteers supported a critical design review of the Pocket Cube project with its three payloads. As of the writing of this column, the project is set to launch later this year in October. Stay tuned to hear about more GRSS small satellite activities! Also, the third GRSS SGC involving "Techniques for Sensing and Tracking Plastics in Our Oceans" is now progressing, with the first round of reviews being organized for February and March.

In this March "President's Message," I would like to recognize new IEEE Fellows within the GRSS. Accordingly, I'd like to congratulate Dr. Ad Stoffelen, 2022 GRSS IEEE Fellow, cited for "contributions to satellite wind measurement missions." We formally recognize GRSS Fellow elevations in the plenary session of the IEEE International Geoscience and Remote Sensing Symposium (IGARSS) along with the GRSS major award winners. I'd also like to recognize and congratulate GRSS members elevated to IEEE Fellow status through their related work in other IEEE Societies, including Hongsheng Chen and Tommaso Isernia (IEEE Antennas and Propagation Society), Christian Waldschmidt (IEEE Microwave Theory and Techniques Society), and Petros Boufounos (IEEE Signal Processing Society).

With my first letter of the year, I would like to recognize a few of the important contributions to GRSS from AdCom members whose term ended in 2021. In looking to the future, I think it is important to take a moment and consider the positive impact these individuals have had in forwarding the goals of GRSS.

- ▶ Adriano Camps served the GRSS in many roles, including newsletter editor, VP of meetings and symposia, executive VP, and GRSS president in 2017 and 2018. Camps chaired the technical program committee for IGARSS 2007 in Barcelona, was the general cochair of IGARSS 2020, and continues to be one of the driving forces behind our successful GRSS SGC program. The SGC program has directly resulted in several new GRSS Student Branch Chapters and has increased student involvement in the GRSS from multiple IEEE Regions. As GRSS president, Camps championed several activities, including GRSS involvement in *IEEE Journal of Miniaturization of Airborne and Space Systems* and IEEE standards (we have published our first GRSS standard as of 2021), the adoption of IEEE Data Port supporting reproducible publications (journal articles, computer code, and data), and the initiation of regional IGARSS meetings.
- ▶ Irena Hajnsek served as VP of technical activities for four years from 2016 to 2020. She also cochaired the technical program committee for IGARSS 2012 and IGARSS 2019 and chaired the Conference Advisory Committee

after IGARSS 2012. During her tenure as VP of technical activities, the organization and prominence of the GRSS TCs grew steadily. Recently, Hajnsek was a driving force behind the development of the REACT TC in response to the growing needs of our community in this area.

- ▮ Farid Melgani served as GRSS Chapters chair from 2017 to 2019; with the GRSS Conference Advisory Committee during 2020; and, most recently, as GRSS regional symposia chair from 2020 to 2021. Melgani significantly contributed to the success of GRSS regional symposia and GRSS Chapters by improving connections between the Chapter chairs and GRSS AdCom as well as through the development of the ChapNet program.
- ▮ Xiuping Jia has been active in many roles supporting the Society's AdCom, including serving as chair of the GRSS Specialty Symposia and GRSS History Committees. She will be focusing on her role as general cochair of IGARSS 2025, to be held in Brisbane, Queensland, Australia. Jia also serves as an associate editor in chief of *IEEE Transactions on Geoscience and Remote Sensing*.

Regarding the overall success of the GRSS- and IEEE-level activities, I agree with Camps that "it takes more than forward thinking and a lot of time for discussion with all individuals and organizations concerned, but also great teamwork." Great teamwork is what the GRSS has excelled at through the past years to enable the scope of activities we currently have within the Society. The result has been benefits that are available to all of our members. Accordingly, maintaining our open and cooperative environment is one of the most important considerations for helping to ensure the continued success of the GRSS in 2022.

I apologize in advance, knowing that I have likely forgotten to mention some important individual contributions, but, in summary, I want to thank you for your significant commitment to the GRSS over the past years. I look forward to continued engagement from our members to help ensure future successes for our Society! It has been a pleasure and honor serving with you these past years.

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FROM THE EDITOR (continued from p. 6)

The "Technical Committees" column is devoted to the popular Data Fusion Contest run by the Image Analysis and Data Fusion (IADF) Technical Committee. For 2022, the theme of this contest is "Semisupervised Learning," seeking innovative ways to leverage a large amount of input data while relying upon only a small training set. VHR imagery that includes a wide variety of land cover types (countryside, residential areas, industrial zones, forests, seashores, and so on) is provided from a number of different sources.

We have five Chapter columns in this issue. The first is from the Student Chapter at Universidad Distrital Francisco José de Caldas in Colombia, which was reactivated in 2016. It has hosted two international conferences and several tutorials as well as conducted educational outreach. The second one comes from the Student Branch Chapter hosted at the Federal University of Mato Grosso do Sul in Brazil. The third is a "Women in GRSS" column describing formation of a Chapter in Cameroon, part of a broader initiative to establish a GRSS presence in Africa. The Turkey Chapter, which is fourth, has been active during the pandemic, hosting webinars, speakers, and the Earth Observation Applications Summer School online, attracting a worldwide audience. Finally, the IEEE Geoscience and Remote Sensing Society (GRSS) Brazil Chapter has conducted various virtual activities and distinguished lectures were, some in

collaboration with other organizations. Links are provided for many of the online activities of these Chapters.

Our two-stage review process is now fully implemented and operating smoothly. All authors interested in publishing a feature article should first submit a short (5 pages or fewer) white paper. These will then be reviewed by associate editors and/or peer reviewers. Following a positive review of the white paper, authors may be invited to submit a full manuscript, which will then undergo a complete peer review.

Contributions to our regular columns—"Chapters," "Space Agencies," "Women in GRSS," "Education," "Software and Data Sets," and "Conference Reports"—are always welcome. White papers, columns, and invited manuscripts should be submitted through manuscript central at <http://mc.manuscriptcentral.com/grsm>. Proposals for special issues should be sent to me directly at jl@ieee.org.

Finally, this will be my last year as editor-in-chief. It has certainly been a great learning experience for me. I am very proud of the quality and scope of the articles that we have been able to publish in the *Magazine* and the increasing rates at which they are cited. Now, it is time for the GRSS to look for my replacement. If you are interested in serving as the next editor-in-chief, please see the advertisement on page 360.

Please continue to stay safe.

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