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NASA Hyperwall and Remote Sensing Outreach in Japan

uring a student-oriented presentation at the 2019 IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2019) in Yokohama, Japan, Dr. Gail Skofronick-Jackson shared NASA satellite remote sensing examples. A program manager at NASA headquarters, Science Mission Directorate, Dr. Skofronick-Jackson provides scientific expertise and management support for the Research and Analysis Weather Focus Area. She was assisted by an interpreter, Mami Sugaya of the Remote Sensing Technology Center of Japan (RESTEC), who relayed eager questions from the students in addition to translating Skofronick-Jackson's message into Japanese. Eighty 10-15-year-old local area students and their parents were challenged to envision the NASA contributions to, and use of, remote sensing techniques (Figure 1).

Skofronick-Jackson'a student-oriented presentation made extensive use of the NASA Hyperwall system. NA-SA's Hyperwall is a high-resolution video wall ($5,760 \times 3,240$ pixels) capable of displaying multiple data images simultaneously across an arrangement of screens. The Hyperwall is used to help explain phenomena, ideas, or examples of world change.

Prof. Fang Shang of the University of Electro-Communications, Tokyo, planned and organized this special presentation for IGARSS 2019, and it was co-organized by Doug Bennett, a senior outreach specialist with NASA. At the conclusion of the Hyperwall presentation, NASA backpacks were distributed to each student.

Education cochairs, Prof. Chinatsu Yonezawa and Dr. Aya Yamamoto, and Outreach chair, Prof. Shang, led the successful education outreach event. In addition to the NASA Hyperwall lessons, Yonezawa and Shang organized a classroom setting for participants where they were engaged in hands-on activities including assem-

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Yamamoto first introduced the fundamentals of remote sensing, and the lesson was followed by hands-on activities during which the students made small globes using printed paper and Styrofoam balls (Figure 2). While the students were concentrating on their work, mascot characters from the city of Yokohama, including Mizukii (the girl with the magic flower) and Kanagawa Kintaro



FIGURE 1. Students interacting with the NASA Hyperwall presented by Dr. Gail Skofronick-Jackson during IGRSS 2019.



FIGURE 2. A hands-on student workshop.



FIGURE 3. The workshop welcomed two special guests.



FIGURE 4. (From left): Dr. Josée Levesque, director of education, GRSS, and Dr. Linda Bailey Hayden, Elizabeth City State University.

(the golden child), surprised them by quietly joining the activity. These education programs were strongly supported by the City of Yokohohama Culture and Tourism Bureau.

The IEEE Geoscience and Remote Sensing Society (GRSS) High School and Undergraduate Student Outreach Program is a new initiative proposed by Dr. Paolo Gamba, president of the GRSS, and is housed under the GRSS Education Committee. According to Dr. Josée Lévesque, Education Committee chair (Figure 4), "Increased educational activities and content at IGARSS conferences fosters the engagement of our next generation of remote sensing professionals." Congratulations to the Yokohama Education and Outreach Committee!

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