IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1) Space Education Outreach and Workforce Development for Emerging Communities (IPB)

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CONNECTING THE WORLD THROUGH THE APRSAF ONLINE AND ONSITE STARGAZING EVENT

Abstract

The Space Education for All Working Group (SE4AWG), which is part of the Asia-Pacific Regional Space Agency Forum (APRSAF), aims to inspire Asia-Pacific students to dream of space, science, technology and to advance their careers in STEM through our projects. For developing countries in the Asia-Pacific region, it is often difficult to inspire individuals to follow a career path in this field due to financial limitations and educational outreach opportunities.

SE4AWG co-hosted by the National Research and Innovation Agency (BRIN) and Japan Aerospace Exploration Agency (JAXA), organized online and onsite stargazing events in 2023. The online stargazing event, targeting elementary to junior high school students and educators in the Asia-Pacific region, had three main objectives: fostering passions for space and having careers in STEM, understanding how the sky and stars appeared differently at different latitudes and longitudes, and promoting international exchange through simultaneous observations from six observatories worldwide.

In collaboration with the National Astronomical Observatory of Japan (NAOJ) and local astronomers, SE4AWG broadcasted the skies from Indonesia, Japan, Australia, the United States, Chile, and Australia, engaging 200 participants from six countries and one region. Notably, 73% of our registrations were elementary and junior high school students, and 10% were educators. The event featured interactive elements like emoji reactions, fostering engagement, and prompting 97 participant questions and comments, all answered by speakers.

To help the participants prepare for the event, SE4AWG provided original educational videos and homework in English and Japanese. This encouraged children to explore constellations visible from their homes and understand the global differences during the stargazing event. Developed by JAXA in collaboration with NAOJ and the IAU Office for Astronomy Outreach, these materials enriched the educational experience.

In addition to the online event, an onsite stargazing event at the Jakarta Planetarium during the APRSAF annual meeting attracted diverse attendees in Indonesia. Activities included planetarium shows in which visitors could observe the star constellations, and learn about the universe and stargazing parties, with 320 free tickets given out in ten minutes. The overwhelming response led to a highly successful event, covered by local media.

Analyzing questionnaires and responses, SE4AWG found that 87% of online attendees were very satisfied or satisfied. Participants appreciated viewing stars from different countries simultaneously through various telescopes. Also, we will explain how we organized this event (i.e., how we made effective student educational materials) and discuss how we can improve the event planned for 2024.