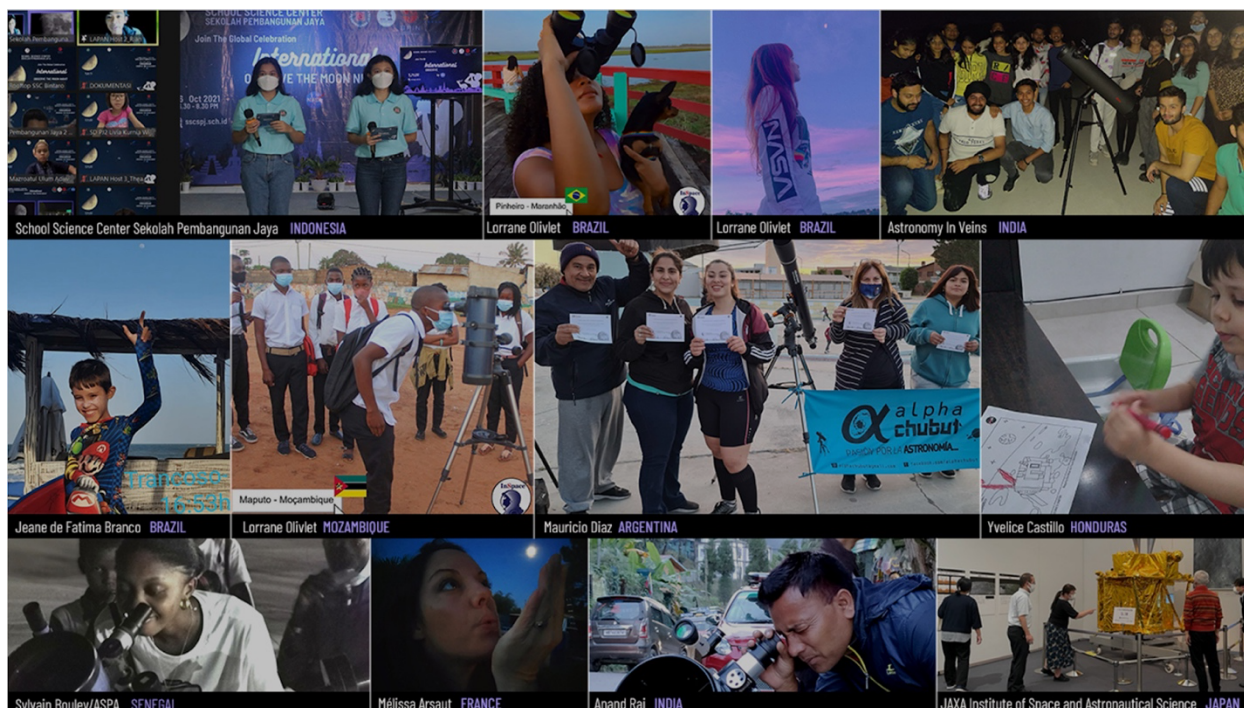


EVERYONE, EVERYWHERE, EVERY YEAR: HIGHLIGHTS FROM INTERNATIONAL OBSERVE THE MOON NIGHT 2021. C. Barry^{1,2}, A. Jones¹, M. Wasser^{1,2}, S. L. Tiedeken^{1,2}, S. Buxner³, M. Bakerman³, E. Joseph⁸, A. Shaner⁴, V. White⁵, J. Fooshee⁶, B. H. Day⁷, P. Gay³, C. Cokinos⁸, G. Beaudoin⁴, V. Nguyen^{1,9}, and T. Vogel^{1,9}, ¹NASA's Goddard Space Flight Center (caela.e.barry@nasa.gov), ²ADNET Systems, Inc., ³Planetary Science Institute, ⁴Lunar and Planetary Institute, ⁵Astronomical Society of the Pacific, ⁶The University of Edinburgh, ⁷NASA's Ames Research Center, ⁸University of Arizona, ⁹ASRC Federal



Collage of images submitted by International Observe the Moon Night 2021 participants, assembled by graphic designer Vi Nguyen (NASA/ASRC Federal). Browse the complete collaborative gallery at <https://www.flickr.com/groups/observethemoon2021/>.

Introduction: International Observe the Moon Night is an annual, worldwide public engagement program. Each autumn, everyone on Earth is invited to take part in celestial observations, learn about lunar science and exploration, and honor cultural and personal connections to the Moon. Participants are encouraged to interpret the term “observe” broadly and to engage with the Moon in any way(s) they choose—including via the unaided eye, observing equipment, virtual resources, artwork, songs, and stories. [1]

Program goals:

- 1) Unite people across the globe in a celebration of lunar observation, science, and exploration.
- 2) Provide information, a platform, and resources in order to:
 - a. Raise awareness of NASA's lunar science and exploration programs.
 - b. Empower people to learn more about the Moon and space science and exploration,

using Earth's Moon as an accessible entry point.

- c. Facilitate sharing of Moon-inspired stories, images, artwork, and more.
- d. Inspire continued observation of the Moon, the sky, and the world around us.

Historical Context: International Observe the Moon Night has been held annually since 2010. The program is led by the Lunar Reconnaissance Orbiter (LRO) and NASA GSFC Solar System Exploration Division public engagement teams, with many contributors and supporters. Participation has grown each year, including a particularly notable expansion in 2020 as the program transitioned into virtual/hybrid mode during the COVID-19 pandemic. [2]

International Observe the Moon Night 2021 preserved historically successful features (ex. flexible event scheduling, local community leadership, virtual programming on the primary date) and incorporated new aspects (ex. additional core programming in ad-

vance of the primary date, establishment of a Code of Conduct for all event hosts and participants).

Community Leadership: Local community events are at the heart of International Observe the Moon Night. In 2021, 1,609 such events were registered worldwide, including virtual, in-person, and hybrid offerings. Event scope ranged from private/household observing activities to Moon parties hosted by astronomy clubs, libraries, and museums. Providing resources and support to meet local event hosts' varied needs is a key function of the International Observe the Moon Night Coordinating Committee.

Resources for Event Hosts: International Observe the Moon Night resources, including event how-tos, multimedia galleries, and curated hands-on activities, are available year-round on the program website [3]. Each year, NASA's Night Sky Network leads a webinar designed specifically for event hosts. In 2021, the Coordinating Committee also hosted a virtual Global Moon Party one week before the main program date. This public live stream featured over 20 presenters sharing poetry, science presentations, demonstrations, and stories with attendees, some of whom were preparing to host International Observe the Moon Night events of their own. [4]

Flexible Scheduling and Registration: The Coordinating Committee recognizes that some individuals and groups may wish to participate but be unable to do so on the primary date. For this reason, the event registration system accommodates entries scheduled up to one week before and after International Observe the Moon Night.

Observers who are interested in officially marking their participation, but are not affiliated with an event, can register independently. This registration pathway was first introduced in 2020. 2,032 individual observers registered in 2020, and 2,363 registered in 2021.

Online Community: Each year, observers are encouraged to browse and contribute to a collaborative Flickr gallery illustrating the many ways in which participants around the world observe the Moon. Many also interact on their preferred social media platforms using #ObserveTheMoon. [5]

Code of Conduct: International Observe the Moon Night is for everyone. In support of this philosophy, the registration process now includes agreement to a Code of Conduct comprised of the following elements [6]:

- Statement of expected behavior.
- Description of unacceptable behavior.
- Planned recourse in the event of inappropriate behavior.
- Grounding in NASA anti-harassment policy [7].

This Code of Conduct is intended to set baseline expectations, act as a resource for local event hosts, and serve as a reference in case an event requires removal from the International Observe the Moon Night database. To the authors' knowledge, it is the first Code of Conduct to be implemented in a NASA outreach program of this scale. In the future, the Coordinating Committee will continue to revise the text and seek related resources to share with event hosts.

2021 Program Outcomes: International Observe the Moon Night 2021 took place on October 16. An estimated 500,000 observers participated, representing 122 countries, all seven continents, all 50 U.S. states, Guam, Puerto Rico, the U.S. Virgin Islands, and Washington, D.C. 75% of respondents to the Observer Feedback Survey reported increased interest in lunar science and exploration, and 94% reported increased interest in planetary science. [2]

Collaboration Opportunities: International Observe the Moon Night is always growing and evolving. The Coordinating Committee welcomes new collaborators, participants, and ideas for engagement.

Invitation to Participate: The next International Observe the Moon Night is scheduled for October 1, 2022. All are welcome. Program information and resources are available at moon.nasa.gov/observe.

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References:

- [1] <https://moon.nasa.gov/observe>.
- [2] <https://moon.nasa.gov/observe-the-moon-night/about/past-events/>.
- [3] <https://moon.nasa.gov/observe-the-moon-night/resources/>.
- [4] <https://moon.nasa.gov/observe-the-moon-night/participate/live-streams/>.
- [5] <https://moon.nasa.gov/observe-the-moon-night/participate/connect/>.
- [6] <https://moon.nasa.gov/observe-the-moon-night/about/code-of-conduct/>.
- [7] NPR 3717.3A, <https://nodis3.gsfc.nasa.gov/displayDir.cfm?t=NPR&c=3713&s=3A>.