

**Expanding an Established Public Science Event: Lessons from International Observe the Moon Night 2018.**  
M.L. Wasser<sup>1</sup>, A. J. P. Jones<sup>2</sup>, A. Shaner<sup>3</sup>, S. Tiedeken<sup>1</sup>, S. Buxner<sup>4</sup>, E. Joseph<sup>4</sup>, M. Bakerman<sup>4</sup>, V. White<sup>5</sup>, N. Whelley<sup>6</sup>

<sup>1</sup>ADNET Systems, Inc (6720B Rockledge Drive, Suite # 504, Bethesda, MD 20817, molly.l.wasser@nasa.gov). <sup>2</sup>NASA Goddard Space Flight Center, Greenbelt, MD. <sup>3</sup>Lunar and Planetary Institute, Houston, TX. <sup>4</sup>Planetary Science Institute, Tucson, AZ. <sup>5</sup>Astronomical Society of the Pacific, San Francisco, CA. <sup>6</sup>University of Maryland, College Park, MD

**Introduction:** International Observe the Moon Night is a worldwide public science festival celebrating lunar science and exploration. Sponsored by NASA's Lunar Reconnaissance Orbiter (LRO) with many contributing partners, the event has been held annually since 2010. Science museums, astronomy clubs, universities and schools, libraries, National Parks, and many other institutions host both in-person and virtual events and register their participation on the International Observe the Moon Night website, [moon.nasa.gov/observe](http://moon.nasa.gov/observe). In return, the website offers informational resources on lunar science and exploration, guides and materials to host and promote International Observe the Moon Night events, and connects individuals with local events through an event map.



Figure 1: 2018 Map of International Observe the Moon Night Events

The first eight years of International Observe the Moon Night had relatively stable registered participation, with an average of 558 registered events for a given year. Seeking to expand our reach and reinvigorate existing International Observe the Moon Night hosts, we made many changes to our program including a new website, updated registration form, new strategies for reaching international participants, and targeted outreach to specific audiences.

**Updated Digital Assets and Strategies:**

*Website* A major innovation to the 2018 International Observe the Moon Night program was a new website. We moved from a dedicated site, [observehethemoonnight.org](http://observehethemoonnight.org) to join [moon.nasa.gov](http://moon.nasa.gov). By work-

ing with a web development company, we improved the user interface (UI) and user experience (UX) of the site to make important items easier to find. The move to [moon.nasa.gov](http://moon.nasa.gov) gave us greater visibility and connected us with an already-established website, website support team, and audience.

*Reducing Barriers of Entry* When we updated the website, we made some changes to event registration. Our former registration process targeted event hosts - institutions holding more formal events. We decided to explicitly open registration to anyone who observed the Moon in any way. A goal of our program is to encourage communities of lunar enthusiasts to come together to observe and discuss the Moon, but we also want to reduce barriers of entry. It is not possible for everyone to attend or host an event, but the Moon is visible to all – from the dark skies of rural communities to the bright city. By opening registration to individuals, we encouraged more backyard (or city park) observing and were able to reach a wider audience.



Figure 2: A lunar observer at Tusi-Bohm Planetarium, Baku, Azerbaijan. Credit: Famil Mustafa.  
<https://flic.kr/p/2cqdBfV>

*Overhauling activities, event materials, and graphics* In conjunction with a new look for our website, we created new graphics and particularly focused on making graphics for social media rather than for print. In previous years of International Observe the Moon Night, our graphic support focused on printable Moon Maps and Save the Date cards. This year, we provided materials in a wide array of languages, thanks to translation efforts, and in a wide array of

digital formats. We also updated several activity manuals and guides.

### Making International Observe the Moon Night more International:

*Translations* While 104 countries have participated in International Observe the Moon Night over the past nine years of the event, we felt that our resources and support of our international community needed improvement. In order to help make the event truly international, we made a concentrated effort to translate event documents into many different languages. In 2018, translations into French, German, Hindi, Italian, Mandarin, Portuguese and Spanish were provided by a translation service as well as subject matter experts whose native language is not English. The IAU now offers free translation services which will be utilized in the future for event documents.



Figure 3: Example of translated Save the Date Postcard, shown here in Hindi. The postcard also features a brand new graphic.

*International Collaborators* This year, we made a concentrated effort to connect with space science organizations outside of the United States. We reached out to Astronomy Ireland, Astronomers Without Borders, Universe Awareness, the Federation of Astronomical Associations in Spain, World Space Week, and the Canadian Space Agency. All informed their local networks of International Observe the Moon Night and encouraged participation. By engaging with international organizations, we will be better able to serve an international audience and learn more about each country's different cultural connections to the Moon. These efforts are just a start and we hope to connect with even more organizations from other countries in the coming years.

**Results from International Observe the Moon Night 2018:** Preliminary results from the 2018 data reveal that about 1000 observers and event hosts registered participation in International Observe the Moon Night, with about 700 of those as events and 300 as individual observers. Registrants came from 75 different countries, and 10 were from countries that

had never previously registered an International Observe the Moon Night event.

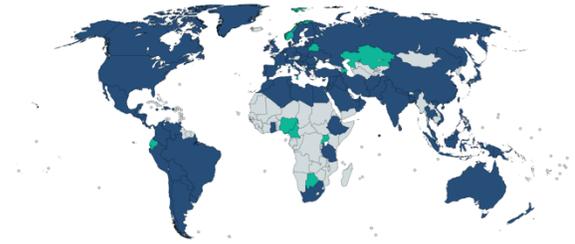


Figure 4: 104 countries have participated in International Observe the Moon Night over 9 years. The green indicates the 10 new countries that participated this year.

A social media campaign proved successful at informing the public of International Observe the Moon Night and encouraging lunar observations. For example, on Twitter the search terms #observethemoon, #inomn, #InternationalObserveTheMoonNight, and International Observe the Moon Night appeared in more than 1000 tweets, which were re-tweeted more than 7000 times.

Our new website collected a record amount of traffic with over 15,000 unique visitors to the site on October 20th, International Observe the Moon Night 2018. The unprecedented number of registered events actually broke our event map since the number was much higher than anticipated. Next year, we will prepare for a large number of visitors.

**Plans for 2019:** 2019 is a monumental year for our Moon, with the anniversary of Apollo as well as NASA's focus on a return to the Moon. 2019 also marks LRO's 10th year in orbit. We plan to highlight these milestones by developing and providing presentations and resources, including new posters.

We also plan to continue our international efforts through expanding our language choices and translating more of our materials. We are looking for native speakers of Bahasa Indonesian, Korean, and Japanese as these regions tend to have many International Observe the Moon Night participants. We are also focused on strengthening existing connections with international organizations while developing new contacts at space science organizations across the world.

We are also interested in improving our evaluation methods. Encouraging and training our event hosts to gather visitor data at their events is an area we'd like to improve upon in 2019.

We look forward to continuing to expand and improve our program and welcome new collaborations and partnerships.