

INTERNATIONAL OBSERVE THE MOON NIGHT: ENGAGING A GLOBAL AUDIENCE IN NASA PLANETARY SCIENCE AND EXPLORATION. A. J. P. Jones¹, L. V. Bleacher¹, A. Shaner³, B. Day^{4,5}, S. Buxner², M. Wenger², E. C. S. Joseph², P. Gay⁶, S. Gurton⁷, ¹NASA's Goddard Space Flight Center (8800 Greenbelt Road, Greenbelt MD 20771; andrea.j.jones@nasa.gov), ²Planetary Science Institute, ³Lunar and Planetary Institute, ⁴NASA's Ames Research Center, ⁵Lockheed Martin Information Technology, ⁶Southern Illinois University Edwardsville, ⁷Astronomical Society of the Pacific.

Introduction: International Observe the Moon Night (InOMN) is an annual worldwide celebration of lunar and planetary science and exploration, sponsored by NASA's Lunar Reconnaissance Orbiter (LRO) mission. One day each year, everyone on Earth is invited to unite to observe and learn about the Moon and its connection to planetary science, and share personal and community connections we all have to the Moon.

Each year, tens of thousands of people participate in InOMN. Events are held at NASA Centers, museums, planetaria, schools, universities, observatories, libraries, National Parks, businesses, and backyards around the world.

Volunteer hosts register their events on the InOMN website (<http://observethemoonnight.org>). The InOMN Coordinating Committee, led by the LRO Education & Communications team, provides online content and resources, virtual training, and evaluation.

Through InOMN, audiences: 1) gain access to NASA content and subject matter experts, 2) are inspired to learn more about NASA science and exploration, and 3) are provided with the resources and opportunities to see themselves as citizens of the solar system.



Figure 1. 2015 InOMN event map.

A Global Celestial Celebration: In 2015, InOMN was held on September 19. 545 InOMN events were held in 54 countries and 49 US states. 3,275 events

have been held in 98 countries since InOMN began in 2010.

InOMN Partners: InOMN engages a global community with support from several key partners: NASA's Solar System Exploration Research Virtual Institute (SSERVI), the Lunar and Planetary Institute, the Astronomy Society of the Pacific's Night Sky Network, CosmoQuest, the Science Festival Alliance, Astronomy Day, Google Lunar X Prize, and the NASA Discovery Program.



Figure 2. Visitors observe the Moon at an InOMN event at NASA GSFC in Maryland (top) and at the Galileo Science Center in India.

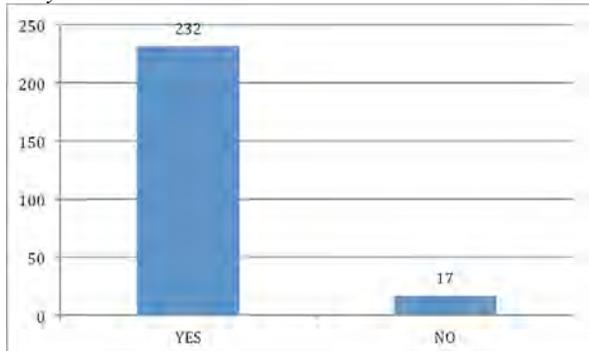
New in 2015: We held a special session at the International Public Science Events Conference (IPSEC), showing science festival hosts how they can leverage InOMN and make use of InOMN materials to share lunar and planetary science with festival audiences around the world.

InOMN was featured on Science Friday in 2015, reaching 1.5 million live listeners through the radio broadcast and over 2.5 million podcast listeners of the featured segment. We also provided educational resources, which were featured on the Science Friday website. These resources received over 3.8 thousand unique views, and over 4.3 thousand total views, with a viewing time over 4 minutes.

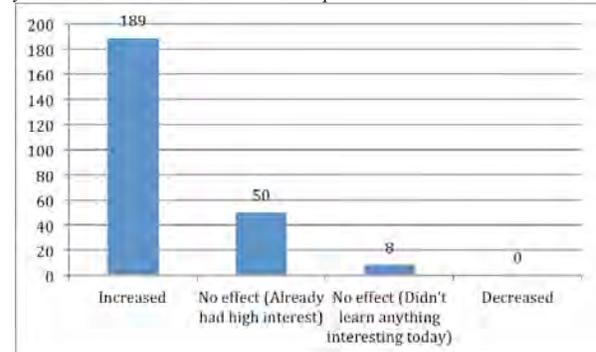
To thank 2015 InOMN participants, we bounced the InOMN event map and 9 images posted to InOMN social media off the Moon! The images were transmitted through an OPTICKS live event [1], open to the public through a CosmoQuest Google Hangout.

Evaluation Highlights: Evaluation data is collected via an event registration form (online), a visitor survey (online and paper), and a host post event survey (online). Evaluation findings since 2010 include the following: 1) InOMN is an easy-to-implement event that is attractive to many different organizations and segments of the population, as evidenced by the variety of host organization types and sizes. Over 60% of 2015 hosts has hosted an InOMN event previously. 2) NASA content is featured in InOMN events worldwide. 3) InOMN hosts make use of resources provided on the InOMN website. 4) Visitors report learning about lunar science and exploration at InOMN events. 5) InOMN participants are motivated to learn more about NASA science and exploration after attending an event. 6) Through InOMN, NASA can successfully provide audiences with access to NASA data and science results inspire people to learn more about planetary science and exploration, and provide the connections and opportunities to do so.

Did you learn anything about lunar science or exploration today?



How has observing and/or learning about the Moon today affected your interest in lunar science and exploration?



After observing and/or learning about the Moon today, are you interested in learning more about NASA's planetary science research and exploration of other places in our Solar System?

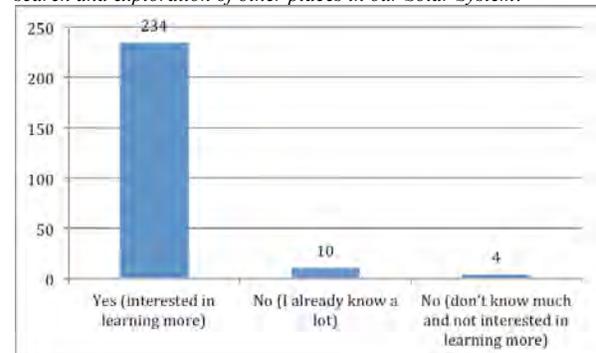


Figure 2. Sample data from InOMN 2015 visitor surveys. Survey respondents represent 4 countries and 9 US states. We will report fully on 2015 evaluation results in March, and will post the final evaluation report on the InOMN website.

Gateway to the Solar System—Global Dissemination of NASA Content: Event hosts report observing and discussing with visitors other celestial objects visible in the night sky during InOMN, beyond the Moon. *InOMN is a platform to engage the public in NASA's work across the solar system and to help people of the world see themselves as citizens of the solar system.*

Get involved: The next InOMN is October 8, 2016. Go look at the Moon! Invite your family, friends, and community to join you. For more information, activities, an annually-updated InOMN Moon map, and a number of other resources, visit (<http://observethemoonnight.org>). Share highlights and pictures from your experience with the world, and join the global conversation, through #moonnight on Twitter; International Observe the Moon Night on Facebook; and on our Flickr pages.

References: [1] <http://www.opticks.info/>.