

Astronomy Festival on the National Mall

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Abstract. The annual Astronomy Festival on the National Mall (AFNM) takes place on 11 acres north of the Washington Monument in June (previous AFNM were April and July). AFNM, sponsored by Hofstra University, features optical and radio telescope viewing of the Sun, Moon, planets, stars, clusters, and nebulae; a live large-screen image, a cell phone imaging mount; exhibits; hands-on activities; videos; large outdoor banners and posters; citizen science activities; hand-outs; bookmarks, and teacher information materials. With no tall buildings almost the entire sky is visible and 10th mag. moons of Saturn and the Ring Nebula (9.75 mag.) were easily visible on clear nights. Representatives from some of the nation's foremost scientific and educational institutions presented exciting demonstrations and activities; and answered questions about careers in science, celestial objects, and the latest astronomical discoveries. Local amateur astronomers set up twenty telescopes on the Mall and long lines of 20–30 people waited to look through the telescopes. Visitors met astronaut Dr. John Grunsfeld (Associate Administrator, NASA) and astronomers Dr. Lisse, Dr. Livengood, Dr. Warren, and Dr. Paul Hertz (Director, Astrophysics Division, NASA). Important historical astronomers spoke to the attendees: Caroline Herschel (Lynn King); Tycho Brahe (Dean Howarth); and Johannes Kepler (Jeff Jones). Free telescopes, donated by Celestron, were raffled off.

1. History of the Astronomy Festival on the National Mall

AFNM was started in 2010 (as Astronomy Night on the National Mall) with the co-sponsorship of the White House Office of Science and Technology Policy, as part of my NASA-funded grant, *Music and Astronomy Under the Stars*, at outdoor concerts (the U.S. Marine Corp Band performed at the Sylvan Theater). AFNM partnered with the National Air and Space Museum in 2011 and was co-sponsored by the USA Science and Engineering Festival in 2012. AFNM is now separate from concerts and has expanded from telescope, posters, and videos into an astronomy festival with science organization, colleges, and universities doing activities at tables.

2. Outcomes

Thousands of people came to the AFNM including tourists, school children, and scouts (some volunteered to assist). Scouts were provided with information to help them earn

their badges, patches, etc. AFNM promoted planetariums and science museums and provided information on joining astronomy clubs.¹

3. Logistics

This event costs \$5000 for the National Park Service permit; park police; rental of tables, chairs, tents, and a generator; travel costs (minivan, hotel, meals), signage, handouts, rental of portable toilets, tee shirts, badges, and support staff, lighting of posters/banner, and tables. One needs to: create partnerships with astronomy clubs and schools; test equipment; have backup equipment; create professional displays; position the displays for maximum visibility (they became teachable moments); use branding and identifying signage; use social media/internet sites to promote the AFNM, attract volunteers; plan for success.

4. Participating Organizations (in at least one AFNM)

Astronomy Clubs: Astronomical Association of Greenbelt, Goddard Astronomy Club, National Capital Astronomers, Northern Virginia Astronomy Club, Rappahannock Astronomy Club, and the Society of Amateur Radio Astronomers.

Science Organizations: Astronomy Magazine, American Astronomical Society, Celstron, Chandra X-ray Center, International Dark Sky Association, NASA (Goddard Space Flight Center; Heliophysics Division), National Optical Astronomy Observatory, National Science Foundation, National Center for Earth and Space Science Education, Smithsonian National Air and Space Museum, Sky and Telescope, Space Telescope Science Institute, and the U.S. Naval Observatory.

Colleges and Universities: American University, The Catholic University of America, George Mason University, George Washington University, Johns Hopkins University, Montgomery College, and The Pennsylvania State University.

¹NSF Video: www.youtube.com/watch?v=n800m9qBxRY