ED43D-01


Isbell, D (dougisbell@hotmail.com), US Single Point of Contact, US IYA2009 Program, Tucson, AZ, United States

The United States conducted an active and wide-ranging program for IYA2009, thanks largely to support from the American Astronomical Society, the National Science Foundation, and NASA. The U.S. effort included leadership of several international “cornerstone” projects, including the GalileoScope telescope kit, the “From Earth to the Universe” image exhibition, Dark-Skies Awareness, and a variety of creative New Media activities, such as a daily podcast (“365 Days of Astronomy”) and a virtual island in Second Life. In addition, U.S. astronomy educators and outreach professionals played major roles in IYA2009 cornerstone projects designed to promote greater gender equity in astronomy (“She is An Astronomer”); to provide the best astronomy resources for formal education (the Galileo Teacher Training Program); and to conduct global weekend-long celebrations of astronomy involving star parties, several live Webcasts, and special events (“100 Hours of Astronomy” and “Galilean Nights”). NASA led special projects to provide large astronomy images to science centers across the nation, and sent comprehensive exhibits on the major themes of modern astronomy to dozens of libraries in small and medium-sized cities, based on competitive proposals for community impact (“Visions of the Universe”). Underpinning all of these efforts was a variety of methods for informing and engaging the large community of U.S. amateur astronomers, and active communication with our colleagues in Canada, Puerto Rico and Mexico. This talk will review the outcomes and major success stories from the year, discuss several lessons learned that could be useful for pending efforts such as the 2011 International Year of Chemistry, and provide a look ahead for IYA2009 projects and resources that are expected to continue to be active in 2010 and beyond.

ED43D-02

NASA International Year of Astronomy 2009 Programs: Impacts and Future Plans (Invited)

Hasan, H (hhasan@nasa.gov), NASA Headquarters, Washington, DC, United States
Smith, D (dsmith@stsci.edu), Space Telescope Science Institute, Baltimore, MD, United States
Stockman, S A (Stephanie.A.Stockman@nasa.gov), NASA Headquarters, Washington, DC, United States

The opportunity offered by the International Year of Astronomy (IYA) 2009 to increase the exposure of the public and students to NASA discoveries in astronomy resulted in several innovative programs which have reached audiences far and wide. Some examples of the impact of these programs and building on the success of these programs beyond 2009 will be discussed in this talk. The spectacular success of the traveling exhibit of NASA images to public libraries around the country prompted NASA to extend it to include more libraries. As a part of the IYA Cornerstone project From Earth To The Universe, NASA images were displayed at non-traditional sites such as airports, parks, and music festivals, exposing them to an audience which would otherwise have been unaware of them. The NASA IYA Student Ambassadors engaged undergraduate and graduate students throughout the U.S. in outreach programs they created to spread NASA astronomy to their local communities. NASA’s Afterschool Universe provided IYA training to community-based organizations, while pre-launch teacher workshops associated with the Kepler and WISE missions were designed to engage educators in the science of these missions. IYA activities have been associated with several missions launched this year. These include the Hubble Servicing Mission 4, Kepler, Herschel/Planck, LCROSS. NASA’s IYA website and Go Observe! feature remain popular. The associated IYA Discovery Guides and Observing with NASA MicroObservatory activities have guided the public and students to perform their own observations of the night sky and to interpret them. NASA intends to work with its Science Education and Public Outreach Forums (SEPOF) to develop a strategy to take forward the best of its IYA2009 plans forward so as to build on the momentum generated by IYA2009 and continue to keep the public and students engaged in the scientific exploration of the universe.

ED43D-03

Galileo Teacher Training Program and Other IYA Projects: Status and Future Strategies from the Astronomical Society of the Pacific

Manning, J G (jmanning@astrosociety.org), Astronomical Society of the Pacific, San Francisco, CA, United States
Schultz, G (gschultz@astrosociety.org), Astronomical Society of the Pacific, San Francisco, CA, United States
Fraknoi, A (afraknoi@astrosociety.org), Astronomical Society of the Pacific, San Francisco, CA, United States

The Astronomical Society of the Pacific (ASP) is leading the U.S. IYA signature effort in teacher professional development called the Galileo Teacher Training Program (GTTP). The program is developing a workshop model designed to help teachers teach the process of science to their students using Galileo’s iconic observations, and provides training in additional resources adaptable to the classroom--undertaking the effort in partnership with the New Jersey Astronomy Center for Education (NJACE). The presenter will report on results of the initial pilot workshop held in September, plans for future workshops and for sustaining the program for the longer term, and the status of related ASP IYA educational efforts designed to build sustainable programs for improving science and astronomy education and science literacy going forward.

www.astrosociety.org
Worldwide Impact: International Year of Astronomy Dark Skies Awareness Programs

Walker, C E (cwalker@noao.edu), Education & Public Outreach, National Optical Astronomy Observatory, Tucson, AZ, United States
Pompea, S M (spompea@noao.edu), Education & Public Outreach, National Optical Astronomy Observatory, Tucson, AZ, United States
Isbell, D (dougisbell@astronomy2009.us), Lawrence Berkeley National Lab, Berkeley, CA, United States

The arc of the Milky Way seen from a truly dark location is part of our planet’s natural heritage. More than one fifth of the world population, two thirds of the United States population and one half of the European Union population have already lost naked eye visibility of the Milky Way. This loss, caused by light pollution, is a serious and growing issue that impacts astronomical research, the economy, ecology, energy conservation, human health, public safety and our shared ability to see the night sky. For this reason, “Dark Skies Awareness” is a global cornerstone project of the International Year of Astronomy. Its goal is to raise public awareness of the impact of artificial lighting on local environments by getting people worldwide involved in a variety of programs through: - New Technology (website, podcasts, social networking, Second Life) - Educational Materials (Great Switch Out, a traveling exhibit, brochures, posters, CDs, DVDs, educational kit) - The Arts (photo contest) - Events (Earth Hour, International Dark Sky Week, World Night in Defense of Starlight, Dark Skies Discovery Sites, Sidewalk Astronomy, Nights in the Parks) - Citizen Science Programs (5 star hunting programs & Quiet Skies) Dark Skies Communities (Starlight Initiative, International Dark Sky Communities) Many countries around the world have participated in these programs. We will highlight 24 countries in particular and focus on successful techniques used in aspects of the programs, results and impact on the audience, and plans and challenges for maintaining or extending the program beyond the International Year of Astronomy. The International Year of Astronomy 2009 is partially funded from a grant from the National Science Foundation (NSF) Astronomy Division. The National Optical Astronomy Observatory is host to the IYA2009 Dark Skies Awareness programs and is operated by the Association of Universities for Research in Astronomy, Inc. under cooperative agreement with NSF.

Authors (2009). Title, Eos Trans. AGU, 90(52), Fall Meet. Suppl., Abstract xxxxx-xxxx