

The International Year of Astronomy 2009: The Largest Science Education and Public Outreach Event in History

8 January 2010, Paris

As the International Year of Astronomy 2009 (IYA2009) comes to a close, the true scope of the venture is becoming clear. The final count of countries involved stands at 148, a staggering number that confirms that the IYA2009 network is the largest ever in science. Activities and events from these participating nations paint a picture of professional and amateur astronomers bringing the Universe down to Earth through countless projects, opening the eyes of the public to the wonders above.



Click to Enlarge

IYA2009 was launched by the International Astronomical Union (IAU) and UNESCO under the theme "The Universe, Yours to Discover". Abundant in grass-roots initiatives and global projects, this venture has been highly visible and its impact will last for years. As from today, astronomers from around the world have gathered in Padua, Italy for the two-day official conclusion of IYA2009. Reflecting on the events of the past year is on the agenda, and there is no shortage of success stories to tell.

Most of the incredible initiatives have come from individual countries. IYA2009 supporters in Sweden created the world's largest model of the Solar System. The Sun is represented by the huge spherical Ericsson Globe Arena in central Stockholm and the planets are distributed along the country. Finland also made a huge scale Solar System model, with the Sun located at the Helsinki Central Railway Station, with a giant sticker representing our local star. During the display around 50 000 people saw it every day! Sticking with the transport theme, some Paris Metro stations have been decked out with about 500 metres of astronomical images, allowing millions of passengers to marvel at the Universe.

During 2009 more than one million Canadians have experienced a so-called "Galileo moment", an engaging astronomical experience that has opened their eyes to the Universe. In Portugal more than 300 000 people participated in this year's astronomy-themed Oceans festival. It featured a Guinness World Record 4.8-km long canvas painted with the help of enthusiastic volunteers. In Japan more than 7 million people were outside stargazing during 2009.

The IYA2009 presence in the new media sphere has been tremendous: the number of IYA2009-related blog entries and tweets reached millions. The IYA2009 Cornerstone Project Cosmic Diary, a blog where 60 professional astronomers from around the world blog about their lives, families, friends, hobbies and interests, as well as their work, had more than 250 000 visitors and more than 2100 blog entries. As another example, more than 100 000 people participated in Meteorwatch on Twitter, making this the first event of its kind, and also one of the biggest mass-participation events of IYA2009. On both nights of the Perseid meteor shower it was the #1 top "trending topic", by far the most-discussed thing on the Twitter network anywhere in the world!

Astronomy enthusiasts proved keen to innovate in ways of sharing astronomy with the public, and one original way was through street parades. In January Indian astronomers took the grand opportunity to showcase IYA2009 to the citizens of India by presenting a tableau on astronomy in the Republic Day Parade in New Delhi. Around 30 000 people were present to witness it. During the Brazilian carnival Unidos da Tijuca, a samba school from Rio de Janeiro themed its parade "astronomy" in celebration of IYA2009. The parade typically has 600 000 spectators, and the number of TV viewers can reach hundreds of millions, or even a billion. In Dublin astronomy topics lined the streets during the St. Patrick's Day Parade, with more than 675 000 participants. In October a Galileo-actor marched as part of the famous Columbus Day Parade in New York City, the world's largest celebration of Italian-American culture.

The global IYA2009 projects have also been more successful than anyone initially dared to imagine. Two worldwide star parties were held in 2009: 100 Hours of Astronomy in April, and Galilean Nights in October. In total more than 3 million people got involved, with many members of the public seeing night sky objects such as planets and the Moon through a telescope for the very first time; a life-changing experience for many. A record-breaking and unprecedented live 24-hour webcast called Around the World in 80 Telescopes was a true highlight during 100 Hours of Astronomy. Featuring astronomical research observatories both on and off the planet, the webcast gave members of the public a snapshot of life at research observatories around the world during a single 24-hour period, showing viewers the wide range of astronomers' activities at many, often very different, observatories. The marathon webcast, which had at least 200 000 viewers worldwide, gave a striking demonstration of the global diversity of astronomical research.

Another hit of IYA2009 is the Galileoscope, a low-cost telescope kit especially designed for the project. More than 110 000 of these educational tools have been distributed in 96 countries, and another 70 000 are in production. This style of practical science extended to a wide variety of award-winning dark-skies education programmes that are underway worldwide. More than 20 000 measurements of the night sky were made by citizen scientists during IYA2009; many of these projects will continue in 2010. These involve people in scientific research that is beneficial to researchers measuring the impact of human development on our environment, highlighting the fact that we all live on a single planet with shared resources.

Seventeen developing countries, namely Macedonia, Nepal, Uganda, Mongolia, Nicaragua, Nigeria, Kenya, Ethiopia, Gabon, Rwanda, Bolivia, Uruguay, Tajikistan, Ghana, Trinidad and Tobago, Mozambique, Pakistan and Tanzania, have received seed grants to stimulate astronomy educational and outreach. Their activities span from astronomy education workshops for teachers, recording and preservation of indigenous astronomy knowledge, production of school astronomy education resources in local languages and many more.

The From Earth to the Universe project enabled more than 500 exhibits of the most beautiful and inspiring large-format astronomical images in 70 countries. The IYA2009 Special project, The World at Night, coordinated exhibitions in 24 shopping centres in 18 states across the US, during summer and autumn 2009. Both global projects are a reminder of the beauty of the night sky and for others it was the impression of how all humanity is one family under the universal eternal roof of the celestial vault.

More than 75 nations have run Galileo Teacher Training Programs, creating one of the largest astronomy education networks at a global level. The Portal to the Universe created the first "one-stop shop" for astronomy news and has so far had more than 300 000 visitors since its opening in April 2009.

Catherine Cesarsky is the Chair of the IYA2009 Working Group and was the IAU's President during the majority of IYA2009. She says, "Over the past 12 months we have seen astronomy enter the public's imagination and inspire people to ask the grandest questions. The International Year of Astronomy 2009 has been an unforgettable journey and I am pleased to see that many of the projects will continue."

Political interest in IYA2009 was also high, which in itself is an achievement for any popularisation initiative. In the United States of America, the House of Representatives passed a resolution supporting IYA2009. The Spanish Congress of Deputies also passed a law supporting astronomy in the framework of IYA2009. Heads of State were keen to express their support for the Year. The President of the Portuguese Republic, Prof. Dr. Aníbal Cavaco Silva, personally presided over the Portuguese IYA2009 Honour Committee. The President of the Republic of Slovenia, Dr. Danilo Turk, became the patron of IYA2009 in Slovenia. Lech Kaczyński presided over the Polish IYA2009 Honour Committee, while Prince Felipe of Spain (Prince of Asturias) did the same for the Spanish IYA2009 Honour Committee. The former Belgium Prime Minister and current President of the European Council, Herman Van Rompuy, voiced support of astronomy during an IYA2009 event in Belgium held in April 2009. The former European Commissioner for Science and Research and present European Commissioner for Environment, Janez Potočnik, expressed his support of astronomy during the European opening of IYA2009 in Prague, Czech Republic. In the US, the event celebrating IYA2009 at the White House with President Obama and the First Family on 5 October 2009 made headlines. In Nepal the total solar eclipse observation event on 22 July 2009 was attended by the Prime Minister of Nepal, Madhav Kumar together with thousands of members of the public. Iran's President Mahmoud Ahmadinejad pointed that IYA2009 provided a chance for young scientists to develop a more vivid vision of man's future during his inaugural speech of the 3rd International Astronomy and Astrophysics Olympiad in Tehran, Iran. Pope Benedict XVI gave an eloquent speech in which he said "The International Year of Astronomy is meant not least to recapture for people throughout our world the extraordinary wonder and amazement which characterised the great age of discovery in the sixteenth century."

IYA2009 was a huge event not only on Earth, but also above it. In March the space shuttle *Discovery* launched towards the International Space Station. On board was the Japanese astronaut and IYA2009 supporter Koichi Wakata. He took a special flag with the IYA2009 logo with him. Another IYA2009 enthusiast, Canadian Space Agency Astronaut and Expedition 20/21 crew member Bob Thirsk, recorded a special IYA2009 message during his long-term mission on board the International Space Station, to remind the marvels of the night sky and propose once more a rediscovery of interest in astronomy and the Universe. In May the space shuttle *Atlantis* was launched to refurbish the NASA/ESA Hubble Space Telescope, carrying on board a replica of Galileo's telescope that was used 400 years ago to change our view of the Universe and our place within it. May also saw the launch of the highly anticipated European Space Agency missions Herschel and Planck, which are probing the origins of our Universe. The IYA2009 logo was proudly displayed on the Ariane 5 launcher that lifted the two spacecraft into space.

Several IYA2009-affiliated movies were made during the Year, and received critical acclaim. More than 300 000 *Eyes on the Skies* DVDs, a film documenting the story of the telescope in 33 languages, were distributed worldwide and received a MEDEA 2009 Jury Award. Another film, *400 Years of the Telescope*, has been seen by over 2.5 million individuals. The film has garnered four peer-reviewed Telly awards for animations, writing, cinematography and documentary production. *Naming Pluto*, the film about Venetia Burney Phair, the most influential 11 year-old in the history of science, has won cinematic and scientific acclaim in different festivals, including the prize for Best Documentary, second place at the Palm Springs SHORTEST, the Best Short Documentary at the Rockport Film Festival, Best UK Documentary at the Falstaff Film Festival, a Remi Jury Award at the Houston Worldfest and the Festival Award at the Paso Robles Festival.

Some projects crossed country borders in a literal sense. The GalileoMobile was a science education itinerant project that spent two months bringing life-changing experiences and the excitement of astronomy to young children in Chile, Bolivia and Peru. In total the GalileoMobile visited around 3000 children in 30 schools, covering a distance of 7000 km. Tunisia's Astro-Bus was a similar project. From January to September the Astro-Bus visited around 60 regions all over the country, crossing approximately 15 000 km, sharing its content with 100 000 Tunisians of all ages. Telescopes have also travelled more than 20 000 km across Argentina, providing thousands of people with the opportunity of observing the firmament through a telescope.

The International Year of Astronomy 2009 was never seen as a "one-off" event lasting just one year, but as a means of creating structures for collaboration, lasting self-sustaining activities and innovative concepts for the communication of astronomy. Most of the IYA2009 Cornerstone projects will continue beyond 2009 unchanged or in a slightly changed form. The maintenance of the IYA2009 networks is one of the priorities of the IYA2009 legacy and the global networks will continue to operate and engage millions of people.

Robert Williams, the current IAU President, continues: "IYA2009 may be over, but it leaves an important legacy for us to continue. The groundwork has been laid for astronomers and enthusiasts around the world to use the momentum gained from IYA2009 to ensure that the Universe is still ours to discover far into the future."

###

Links

- IYA2009 Closing Ceremony website: <http://www.beyond2009.org/>
- IYA2009 website: <http://www.astronomy2009.org/>
- The IYA2009 Legacy document: http://www.astronomy2009.org/resources/documents/detail/iya2009_legacy/

For more information:

Pedro Russo

IYA2009 Coordinator

ESO ePOD, Garching, Germany

Tel: +49 89 320 06 195

Cellular: +4917661100211

E-mail: prusso@eso.org

Lars Lindberg Christensen

IYA2009 Secretariat Manager/IAU Press Officer

ESO ePOD, Garching, Germany

Tel: +49 89 3200 6761

Cellular: +49-173-3872-621

E-mail: lars@eso.org

Further contacts

Yolanda Berenguer

UNESCO Focal Point for the International Year of Astronomy 2009

UNESCO HQ, Paris

Tel: +33-1-45684171

E-mail: y.berenguer@unesco.org

Ian Corbett

IAU General Secretary, Paris, France

Tel: +33 143 258 358

Cellular: +44 7919 888 942

E-mail: icorbett@eso.org

Organisational
Associates:



The International Year of Astronomy 2009 is endorsed by the [United Nations](#) and the [International Council of Science](#).