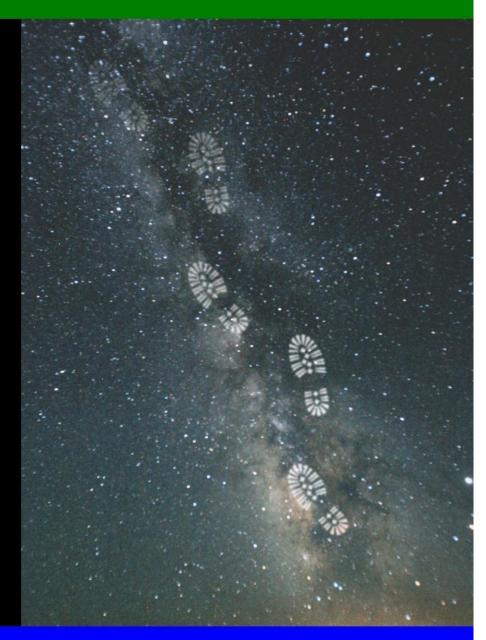
WORLD SPACE WEEK 2015 REPORT





The biggest space event on Earth

www.worldspaceweek.org

Published by World Space Week Association 957 NASA Parkway, Suite 350 Houston TX 77058 United States of America

www.worldspaceweek.org

© 2016 World Space Week Association. All rights reserved.



TABLE OF CONTENTS

| FOREWORD | 4 |
|---|----|
| WORLD SPACE WEEK INTRODUCTION | 5 |
| EXECUTIVE DIRECTOR AND OPERATIONS MANAGER | 6 |
| SPECIAL REPORT FROM CHINA | 8 |
| EVENTS STATISTICS | 9 |
| WORLD SPACE WEEK 2016 | 11 |
| ORGANIZE AN EVENT | 12 |
| LEADERSHIP | 12 |
| WORLD SPACE WEEK ASSOCIATION SPONSORS | 15 |
| WORLD SPACE WEEK ASSOCIATION PARTNERS | 16 |
| WORLD SPACE WEEK NATIONAL COORDINATORS | 17 |



FOREWORD

Dear Supporters and Colleagues,

This year's World Space Week saw the largest number of events to date and hundreds of thousands of attendees worldwide. With almost 1,900 World Space Week events in 73 nations, the creativity and scale of participation were an incredible feat. Each year we see new and more imaginative ways to celebrate and build on the excitement from the past year's events. Meanwhile, we see other events that a well-established and effective means to stimulate interest in space sciences.

Around the globe individuals and organizations put on events that were both entertaining and educational. Through World Space Week many educators used STEM (Science, Technology, Engineering, and Mathematics) to ignite the imagination of students. By inspiring students with creative World Space Week events, these educators building the foundations of our future for the next generation of space professionals. This is an incredible investment in our future as an ecosystem, as a society and as a world.

With so many nations, traditions and cultures partaking, the variety of events was as diverse as the populations participating. The photos available in this annual report and online demonstrates how space also celebrates our diversity and ability to work together. This theme also shows how many cultures and nations can collaborate internationally on World Space Week events and on space projects successfully.

World Space Week continues to grow at a robust pace, building on the 2015 momentum towards an already exciting 2016.

We look forward to your continued celebration of World Space Week 2016!

Max Grimard, Chairman

World Space Week Association



WORLD SPACE WEEK INTRODUCTION

"The General Assembly declares 4 to 1 0 October World Space Week (WSW) to celebrate each year at the international level the contributions of space science and technology to the betterment of the human condition"

UN General Assembly Resolution, 6 December 1999

World Space Week has grown into **the largest public space event on Earth**. Each year humankind celebrates the benefits of space and the excitement about space exploration. Participation has seen giant leaps, more than doubling over the last three years.

Why World Space Week?

Synchronizing many events within one week, instead of throughout the year, provides the space community with needed leverage to raise public awareness, grow media attention and inspire youth.

World Space Week Reach

During WSW 2015, nearly 1,900 events organized by over of 800 organizations.

2015 Theme and Poster

World Space Week 2015 Theme - "Discovery"

"Discovery" is an outward looking theme, celebrating deep space exploration. It means to highlight missions like ESA Gaia, Kepler, Herschel, Hubble, etc. and emphasizes discoveries of new galaxies, exoplanets, asteroids and comets. We are convinced that this exciting theme helped to inspire event organizers to set up wonderful events at schools, universities, science centers, planetaria, astronomy clubs, museums and companies, making World Space Week bigger than ever!

World Space Week Association

World Space Week Association (WSWA) stimulates participation in the celebration of the United Nations-declared World Space Week (WSW), October 4-10 annually. As an association of volunteers, WSWA works to encourage global participants to hold events during WSW.



The Association works closely with educators, space industry, space agencies and other organizations to advocate Science, Technology, Engineering, and Mathematics (STEM) education to build the workforce of the future by inspiring students through WSW.

WSWA is an international non-government organization (NGO) supporting WSW National Coordinators in 80 nations and is a registered 501 (c)(3) (not for profit) organization in the United States. It is led by an esteemed Board of Directors comprised of global space leaders and other dignitaries.

WSWA has permanent observer status in the UN Committee on the Peaceful Uses of Outer Space (COPUOS), is a member of the International Astronautical Federation, and has numerous global partners.

The mission of WSWA is to strengthen the link between space and society through public education, participation, and dialogue on the future of space activities, using World Space Week as a focus.



EXECUTIVE DIRECTOR AND OPERATIONS MANAGER

Dear Partners, Supporters, Participants and Friends,

Already the largest public space event on Earth, UN-declared World Space Week (WSW) continued its growth in 2015. WSW celebrated its 16th year with the theme "Discovery" and saw nearly 1,900 events. Over 800 schools, organizations, planetaria, museums and individuals organized events where hundreds of thousands of people attended.

To further grow WSW and to reach an ever-increasing audience, the Association underwent an executive realignment after WSW 2015. Ms. Timiebi Aganaba-Jeanty was appointed Executive Director and Mr. Goran Nikolasevic was appointed Operations Manager. We are excited to be working toward making the world's largest annual space celebration even larger.

We are grateful to our ongoing sponsors and partners who have given us the opportunity to help build the workforce of tomorrow, increase awareness about space activities and encourage education. We also welcome our sponsors to the World Space Week Association family, such as Lockheed Martin, Lunar Mission One and others. Their generous donations were a key to World Space Week's growth last year.

We are most thankful for the many event organizers and volunteers around the world that work tirelessly to make WSW such a success each year. Thank you all for your continued support to ignite the imaginations of so many with your creative and compelling events.

As we look ahead to 2016, we are both excited about the upcoming prospects for growing the organization and building on our current momentum for even more events. The 2016 Theme, "Remote Sensing: Enabling Our Future", has already caught the imagination of many and we look forward to seeing the creative and truly inspiring ways the world will celebrate World Space Week 2016!

Timiebi Aganaba-Jeanty

Executive Director

Goran Nikolasevic

Operations Manager

Milolaseyc'



GLOBAL HIGHLIGHTS

- Pakistan held an amazing 300 events throughout the week that were an inspiration for both teachers and students across the country. They used space, during World Space Week, to inspire children about science, technology, engineering, math, and other subjects.
- The film "The Martian" opened in over 60 nations during the WSW period. World Space Week Association
 worked with 20th Century Fox to create special screenings and educational outreach across the globe via the
 WSW National Coordinators.
- **ESTEC's 2015 Open Day** took place on 4 October to mark the 58th anniversary of the launch of Sputnik, as part of the Netherland's national Weekend of Science and World Space Week.
- **Sky Light Space Opera:** An official project of UNESCO's International Year of Light 2015 was a global science opera which was performed in 32 nations simultaneously during World Space Week.
- **Israel** hosted the grand finale WSW2015 Tweet-Up in Jerusalem, with space experts addressing the theme "Discovery"
- United Kingdom saw many events launching educational resources in preparation of British astronaut Major
 Tim Peake's Principia Mission to the ISS. The Heinlein Educational Trust's SOKOL KV-2 spacesuit was also
 in wide use inspiring children of all ages, at schools, festivals and launch events across the country. NASA
 astronaut Greg Johnston began Northern Ireland's World Space Week celebrations in a special event at
 Ulster Museum, Belfast, and was a guest at many of the events across the province.
- Mexico celebrated World Space Week with the premiere of the movie The Martian and with simulation of zero
 gravity. The Congress of Mexico was inaugurated with a ceremony and a press conference. The Mexican
 Space Agency hosted the "Forces of Nature" photographic exhibition, as seen from space.
- India: Sounding rockets seared through the skies at Vikram Sarabhai Space Centre (VSSC). There were
 various competitions for schoolchildren in connection with the event jointly organized by the ISRO units of
 Thiruvanathapuram.
- Ireland: This year CIT Blackrock Castle Observatory, Cork partnered with the Dunsink Observatory and Lough Gur to celebrate WSW together with the students of Ireland.
- The Space Foundation celebrated World Space Week with former NASA astronaut, Dr. Leroy Chiao at the Discovery Center in Colorado Springs, USA.
- **Cubes in Space** Global Design Competition 2015 Winners were announced and the MPAC Group also announced its continued support for the 2016 program. Their launch took place in London, England.

World Space Week Association congratulates all participants, volunteers, coordinators, sponsors, and partners for this record-breaking year!



SPECIAL REPORT FROM CHINA

During World Space Week 2015, the Chinese Society of Astronautics (CSA) sent a group of specialists to about 30 schools in many Provinces. Almost 40 lectures were organized to over 15.000 attendees. The lectures received consistent high praise by the teachers and students. During World Space Week, a science popularization lecture was held in China Science and Technology Museum which is the most important venue for public science popularization in China. 450 people including China National Space Administration (CNSA) officials, students, and general public attended. The celebration has already become a brand activity during World Space Week.

Based on the poster provided by World Space Week Association, CSA designed, produced, and printed 1,200 copies of Chinese version World Space Week poster and sent them to over 180 space-related units and institutes and to over 30 key branch schools and science popularization branches to post in public area and promote World Space Week. The posters have brought great attention to the series of World Space Week events from space community and the public. People learn more about this global event through the publicity.

Under the theme of Discovery, a special webpage named "Space Science and Technology Online" was published from 30 September to 10 October on SOHU.COM which is one of China's most popular web portals. The page hits exceeded one-half million from 4 to 10 October, and on 8 October it got the highest number of 205,500 hits in one day.

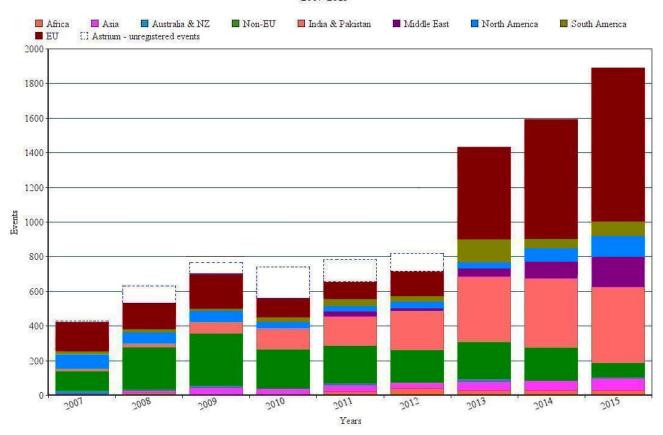




EVENTS STATISTICS

Number of Reported World Space Week Events by Year and Region Since 2007







Ten Countries with Most Reported Events in 2014 and 2015

| | | Number of | | Number of |
|------|----------------|-------------|----------------|-------------|
| Rank | Country 2014 | Events 2014 | Country 2015 | Events 2015 |
| 1 | France | 235 | Pakistan | 300 |
| 2 | India | 231 | France | 185 |
| 3 | Pakistan | 176 | Spain | 170 |
| 4 | United Kingdom | 157 | India | 151 |
| 5 | Spain | 120 | Saudi Arabia | 128 |
| 6 | Romania | 89 | United Kingdom | 113 |
| 7 | Germany | 79 | Germany | 109 |
| 8 | Saudi Arabia | 73 | Romania | 108 |
| 9 | United States | 69 | Brazil | 102 |
| 10 | Croatia | 40 | United States | 74 |



WORLD SPACE WEEK 2016

Theme "Remote Sensing: Enabling Our Future"

From the early age of space activities, satellites have always been considered a perfect tool for observing the Earth, either for scientific purposes or to monitor activities on ground.

The UN Conference of Parties on Climate Change, held in Paris in December 2015, emphasized the key role space systems play monitoring essential climate variables, either for scientific modeling or for the assessment of greenhouse gas emissions by countries.

Besides monitoring the effects of climate change, the role of Earth observation satellites is recognized for other benefits such as:

- environmental observation leading to land use optimization, sustainable agriculture, detection of pollutants;
- disaster prevention and management providing vulnerability assessment, early warning alerts, impact assessments, management of first aid and first responder resources;
- peace keeping, such as the prevention of conflicts and for illegal traffic mitigation; and
- commercial uses such as mapping, analytics, data and other uses translate into economic benefit

For all these reasons, many emerging space faring nations chose to invest early on into Earth observation satellites.

The emergence of optimally performing small satellites, combined with the use of constellations, is also changing the paradigm of the Earth observation, bringing business into the picture with new private start-ups attempting to meet the insatiable demand for fresh and reliable information.

It is time to celebrate the increasing importance of Earth observation from space, a topic which has never been addressed as such since the creation of World Space Week.

Who uses remote sensing and why:

- the geographer, who looks for changes on the Earth's surface that need to be mapped;
- the forester, who needs information about what type of trees are growing and if they have been affected by disease, fire or pollution;
- the environmentalist, who wants to detect, identify and follow the movement of pollutants such as oil slicks on the ocean:
- the geologist, who is interested in finding valuable minerals:
- the farmer, who wants to keep an eye on how his crops are growing and if they've been affected by drought, floods, disease or pests;
- the ship captain, who needs to find the best route through the northern ice packs;
- the firefighter, who sends out his crews based on information about the size and movement of forest fire.



ORGANIZE AN EVENT

You Can Be Part of World Space Week 2016 by Organizing an Event

There are no limits to what can be done to celebrate space during WSW. Audiences can be the public, students, employees, or other targeted communities. Participating organizations get leverage by being part of the largest space event in the world. On the World Space Week website there are many examples of what can be done and what has been done in the past. Examples include:

- Hundreds of Airbus employees speaking at schools during World Space Week
- SUPARCO organizing 300 events across Pakistan
- Inmarsat starting the Volvo Ocean Race during World Space Week in Alicante Spain
- Space Foundation hosting WSW events in Colorado for teachers and students

There are only two criteria to have a World Space Week event:

- 1. The event must be space related.
- 2. It must begin or end during World Space Week October 4-10.

Enter the Event into the WSW Calendar

Enter the event into the global WSW event calendar on www.worldspaceweek.org before the event so that it can be counted. Afterward, update the entry with results so the impact of your event can be shared. Make your event count!









LEADERSHIP

UN Office of Outer Space Affairs

P.O. Box 500

Vienna A - 1400

Austria

Director: Mrs. Simonetta di Pippo

World Space Week Association

957 NASA Parkway, Suite 350

Houston, TX 77058

United States of America

Board of Directors

Max Grimard, Chairman Lisa LaBonté
George Abbey Michel Laffaiteur

Adigun Ade Abiodun Agnieszka Lukaszczyk

Buzz Aldrin Li Guoping Oleg Alifanov Mark Mackay Ali Al-Mashat Victoria Maiorova Anousheh Ansari Yasunori Matogawa Alvaro Azcárraga George Mueller Ahmed Bilal Elon Musk Elöd Both Bill Nye **Gerard Brachet** Misuzu Onuki

Sergio Camacho Dorin-Dumitru Prunariu
Karl Doetsch Seiichi Sakamoto
Kerrie Dougherty F. R. Sarker
Art Dula Michael Simpson
Raimundo González Randy Sweet

Raimundo González Randy Sweet
Senol Gulgonul Bee Thakore
Tom Hanks Chris Welch

Miguel Hernandez Loretta Hidalgo Whitesides

Yang Junhua



Officers

President: Mr. Dennis Stone

Vice President Strategy: Michel Lafaitteur
Vice President Middle East: Ali Al-Mashat

Advisors

General Counsel: Lex Mercatoria Solicitors

Accounting Firm: Baker Crane LLP

Staff and Volunteers

Executive Director: Mrs. Timiebi Aganaba-Jeanty

Operations Manager: Mr. Goran Nikolasevic

| Name | Position |
|--------------------|--|
| Vix Southgate | Communications & Media Relations Manager |
| Ramasamy Venugopal | Content Contributor |
| Lauren Napier | Education Manager |
| Zoe Van Der Hoeven | Marketing Manager |
| Haritina Mogosanu | Astronomy Liaison |
| Goran Nikolasevic | National Coordinator Manager |
| Marcia Gilbert | Office Manager and Treasurer |
| Chris Vasko | Strategic Partnership Manager |



WORLD SPACE WEEK ASSOCIATION SPONSORS

20.000



10.000



5.000













2.500





1.000









500

Stuart G Crane of Cluny



Teacher Guide Sponsor

Poster Sponsor





WORLD SPACE WEEK ASSOCIATION PARTNERS



















WORLD SPACE WEEK NATIONAL COORDINATORS

Organization Country Name **SGAC** Afghanistan Ahmad S Hakimyar

Jamal Minouni Sirius Astronomy Association Algeria Viviana Bianchi Oficina Gemini Argentina Argentina

Australia Paul Spencer **Space Milestones**

Austria Michael Taraba University of Vienna and Austrian

Space Forum

Shamakhy Astrophysical Azerbaijan Famil Mustafa

Observatory, Tusi-Bohm

Planetarium

Arab Youth Venture Foundation Bahrain Mohammed Al Kiyumi Bangladesh F.R. Sarker Bangladesh Astronomical Society

Belgium Geraldine Mariën

Bolivia Rodolfo Zalles Observatorio Astronomico Nacional

University in Tuzla Bosnia And Senad Gutic Herzego

Brazil Valmir M. de Morais Núcleo de Astronomia

Bulgaria Veselka Radeva Observatory and Planetarium **Hubert Foy Kum** Space General Advisory Council Cameroon Canada Wayne Ellis Canadian Space Society (CSS)

Chile Fernando Mujica Aeronautical Engineer

China Jinyu Gong Chinese Society of Astronautics Colombia Beatriz Elena Voz Infantil- Hola Juventud,

> WYESR-Colombia Hernandez

Croatia Danko Kocis Astronomy society "Orion" Cuba Ramón E. Rodríguez Institute of Geophysics and

> Taboada Astronomy

George Troullias Kition Planetarium & Observatory Cyprus

Czech Republic Milan Halousek Czech Space Office

Denmark Jesper Jørgensen SpaceArch

Ecuador Juan Gabriel Robalino

Mohamed Attia World Space Week Egypt Egypt

Coordinating Committee

Ethiopia Bekele Tujuba

Finland Markus Hotakainen Tiedetuubi.fi Bernd Brincken Space-week.de Germany

Kwaku Bonsu Ghana Ashanti Space Agency

Greece Zoulias Manolis National Observatory of Athens

El Both Hungarian Space Office Hungary India C B Devgun World Space Week India Coordinating Committee

Iran Saeed Jafari **Human and Space Museum**



Iraq Harem Omer Kakil Amateur Astronomy Association in

Iraqi Kurdistan

Ireland CIT Blackrock Castle Observatory Claire McSweeney

Israel Tal Inbar Israeli Space Society

Italy Adriana Linda Odisseospace

Parlatini

Japan Seiichi Sakamoto **JAXA**

Kazakhstan Gulnara Omarova Astrophysical Institute Kenya Peter Njuguna Mbaruk Ecology Centre Korea, Republic Gi-Joong Kim Young Astronauts Korea

Macedonia

Gorjana Vrzhovska

Automation Engineer for Simtech

Soultion

Madagascar Charles A. Ministry of National Education

RATSIFARITANA

Malaysia Azreena Ahmad National Planetarium Mexico Andres Eloy Martinez Congress of Mexico

Rojas Morocco Zakaria Belhaj

Casablanca Astronomical

Association

Nepal Dambaru Ballab Nepal Academy of Science and

Technology Kattel

New Zealand Mark Mackay NZ Space Foundation

Nigeria J.O Akinyede African Regional Centre for Space

Science and Technology Education

Oman Dr. Saleh Said Hamed Oman Astronomical Society

Pakistan Abdul Sattar **SUPARCO**

Palestine Dawoud Tarawa The Palestinian Astronomical Site Panama Azael Barrera Florida State University Panama

Paraguay Silvia Triguis **CEDIA Association**

Peru David A. Villanueva

Cardenas

Philippines Rogel Mari D. Sese University of the Philippines Los

Poland Adam Ustynowicz Spaceweek Poland, Committee on

Space Research

Portugal Rui Agostinho Universidade de Lisboa

Qatar Abdulrahman Alassi Qatar University Astronomy Club

Romania Marius-Ioan Piso Romanian Space Agency

Russia Victoria Maiorova Bauman Moscow State Technical

University

Saudi Arabia Mohammed Saeed

Barziq

Zoran Tomic Serbia Astronomical Society Eureka Slovenia Orest Jarh Technical museum of Slovenia

South Africa Kaizer Moroka DST

Spain Armengol Torres Inteligent Consulting



Sri Lanka Senarath Arachchige Sri Lanka Astronomical Association Thishan Pavithra Switzerland Thomas Schildknecht Swiss Space Association Turkey Corporate **Turksat Satellite Communication** Communications and Cable TV Department Ukraine Sergey Gerasymchuk **NSAU United Arab** Mohammed Al Kiyumi Arab Youth Venture Foundation **Emirates** United Kingdom Suszann Parry British Interplanetary Society **United States** Allegra Saerle-LeBel WSW USA NC Committee and Charlotte Kiang Uruguay Fernando Gimenez Asociacion de Aficionados a la Astronomia Uzbekistan Yunir Gataullin Tashkent Research Institute of Space Engineering Venezuela Ana Alexandra Perez Space Generation Advisory Council Vietnam Tan Vu Nguyen Ho Chi Minh City Amateur Astronomy Club Zambia Prospery C Simpemba Zimbabwe Timothy K Udzanayi Broadcasting Authority of Kuhamba Zimbabwe



