

# Report on World Space Week 2005

*Prepared in cooperation with Spaceweek International Association*



UNITED NATIONS



ST/SPACE/29  
Office for Outer Space Affairs  
United Nations Office at Vienna

# **REPORT ON WORLD SPACE WEEK 2005**

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# 1 Introduction

This report on the international celebration of World Space Week provides background information on World Space Week, details of the programmes that occurred during the 2005 celebration and suggestions for future celebrations of what has become the largest annual public space event on Earth.

Held from 4 to 10 October annually, World Space Week was declared in 1999 by the United Nations General Assembly, implementing a key recommendation of the Third United Nations Conference on the Exploration and Peaceful Uses of Outer Space (UNISPACE III). The objective of World Space Week is to increase awareness among decision makers and the public of the benefits of the peaceful uses of space.

Since its declaration, World Space Week has grown to include celebrations in nearly 50 nations. This report includes information on celebrations of World Space Week held by participating organizations such as government agencies, companies, schools, museums, planetariums and other institutions in 46 nations. A global network of 58 volunteer coordinators now supports these participants and promotes the celebration.



*Children in Kuwait learn about the solar system during World Space Week 2005*

Consisting of outreach and education activities, World Space Week uniquely attracts global attention to space. Through media coverage and attendance, World Space Week activities efficiently inform the public about the benefits of space while inspiring students to excel.

The theme of World Space Week 2005 was “Discovery and Imagination”. Events focused on the many ways in which space can inspire creativity and exploration. The theme for World Space Week 2006 will be “Space for Saving Lives.”

To build greater public attention to space during World Space Week, organizations around the world are invited to hold space-related outreach and educational programmes during 4–10 October annually, to publicize and report on such programmes and, where possible, provide voluntary support for the coordination of World Space Week activities.

This report was prepared in cooperation with Spaceweek International Association, a non-governmental organization that supports the United Nations in the global coordination of World Space Week. For further information, please visit [www.spaceweek.org](http://www.spaceweek.org) or email [admin@spaceweek.org](mailto:admin@spaceweek.org).

## 2 Background

### 2.1 History

World Space Week, held from 4 to 10 October, was declared in 1999 by the United Nations General Assembly to celebrate each year at the international level the contribution of space science and technology to the betterment of the human condition. This was in response to the recommendation of UNISPACE III:

*from the*  
***Report of UNISPACE III***

*Recalling* that 4 October 1957 was the date of the launch into outer space of the first human-made Earth satellite, Sputnik I, thus opening the way for space exploration,

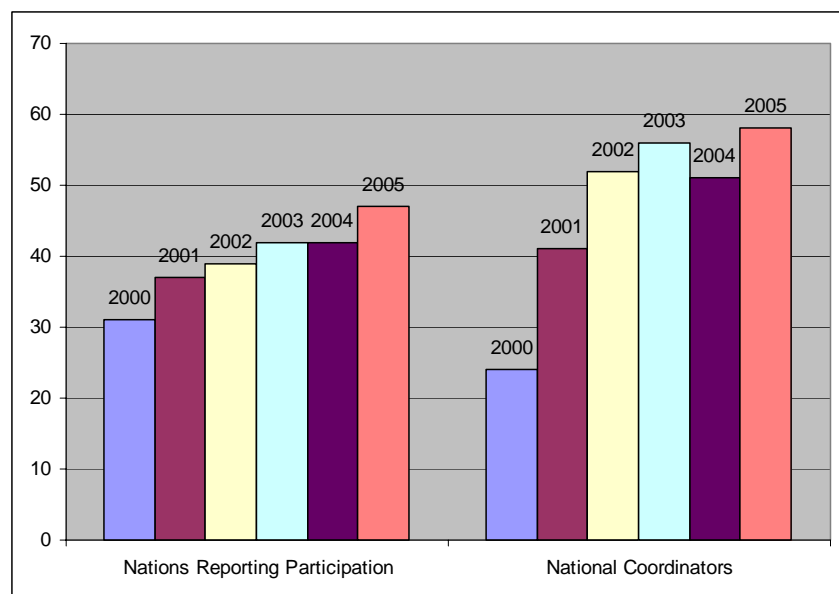
*Recalling also* that 10 October 1967 was the date of the entry into force of the Treaty on Principles Governing the Activities of States in the Exploration and Peaceful Uses of Outer Space, including the Moon and Other Celestial Bodies,

*Decide*, in order to contribute to the achievement of the objectives of UNISPACE III, in particular that of increasing awareness among decision makers and civil society of the benefits of the peaceful uses of space sciences and technology for sustainable development, to invite the General Assembly to declare, according to its procedures, “World Space Week” between 4 and 10 October for the yearly celebration at the international level of the contribution that space science and technology can make to the betterment of the human condition.

### 2.2 Participation

Organizations in 46 nations reported participation in World Space Week 2005. This chart summarizes World Space Week participation trends since its declaration by the United Nations General Assembly.

The table on the next page provides details of reported participation since 2000.





Region	State or Area	Participation in World Space Week					
		2000	2001	2002	2003	2004	2005
Africa	Algeria						
	Djibouti						
	Ghana						
	Kenya						
	Libya						
	Morocco						
	Nigeria						
	Senegal						
	Somalia						
	South Africa						
	Sudan						
	Asia & Oceania	Antarctica					
Australia							
Bangladesh							
China							
India							
Indonesia							
Iran							
Iraq							
Israel							
Japan							
Kazakhstan							
Kuwait							
Malaysia							
Nepal							
New Zealand							
Pakistan							
Philippines							
Republic of Korea							
Saudi Arabia							
Singapore							
Thailand							
Turkey							
Uzbekistan							
Vietnam							
Europe	Austria						
	Bulgaria						
	Czech Republic						
	Croatia						
	Denmark						
	Finland						
	France						
	Germany						
	Hungary						
	Ireland						
	Italy						
	Netherlands						
	Norway						
	Poland						
	Portugal						
	Romania						
	Russia						
	Slovakia						
Slovenia							
Spain							
Sweden							
Switzerland							
United Kingdom							
North America & Caribbean	Canada						
	Cuba						
	Dominican Republic						
	El Salvador						
	Mexico						
	Panama						
South America	Trinidad & Tobago						
	United States						
	Argentina						
	Bolivia						
	Brazil						
Chile							
Colombia							
<b>Totals</b>	<b>71</b>	<b>31</b>	<b>37</b>	<b>39</b>	<b>42</b>	<b>42</b>	<b>46</b>

## 2.3 Organization

### 2.3.1 Global Coordination

The United Nations Office for Outer Space Affairs (OOSA) and Spaceweek International Association (SIA) work closely to encourage global participation in World Space Week, support participants, attract publicity and report on the results. These services include the development and support of the global network of national coordinators, development and distribution of educational and promotional materials, maintenance of the World Space Week website and publication of this annual report. SIA is a non-governmental, non-profit, non-membership organization that is governed by a distinguished Board of Directors with members from over 20 nations. The leadership of the Association is listed below.

### **Spaceweek International Association Board of Directors**

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Former NASA Chief of Staff and White House Liaison; President, Capitol Solutions

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Karl Doetsch, International Space Consultants	Mazlan Othman, Malaysia National Space Agency
Kerrie Dougherty, Powerhouse Museum	F.R. Sarker, Bangladesh Astronomical Society
Driss El Hadani, Royal Centre for Remote Sensing	Michael Simpson, International Space Univ.
George French, Space Education Initiatives	Richard Tremayne-Smith, British National Space Centre
Luo Ge, China National Space Admin.	Joao Vaz, Brazsat
Raimundo González, Chairman, Legal Subcommittee of COPUOS	Chris Welch, Kingston University
Max Grimard, EADS	

#### **Officers**

Dennis Stone, President	Rhonda Alcorn, Secretary
Michel Laffaiteur, Vice President	Marcia Gilbert, Treasurer

### **National Coordination**

World Space Week is coordinated by National Coordinators who generously devote their time and energy to this annual celebration. Coordinators invite organizations to participate in World Space Week, compile information on the resulting celebrations, and provide that information to the media and through SIA to the United Nations. Current Coordinators are listed on the next page. Organizations in these locations should report planned World Space

Week programmes to their Coordinator. Organizations in States not shown are invited to propose a coordinator for their State.

Region	State or Location	Last Name	First Name	Organization
Africa	Algeria	Oussedik	Azzedine	Centre National des Techniques Spatiales
	Ghana	Bonsu	Kwaku	Ashanti Space Agency
	Kenya	Njuguna	Peter	Mbaruk Ecology Centre
	Libya	Gashut	Hadi M.	Libyan Center for Remote Sensing and Space
	Morocco	El Hadani	Driss	Royal Centre for Remote Sensing
	Nigeria	Boroffice	R. A.	National Space Research and Development Agency
	Senegal	Dia	Aliou Mamadou	University of Dakar
	South Africa	Martinez	Peter	SAAO
Asia and Oceania	Antarctica	Greene	Nick	McMurdo Station
	Australia	Young	Jennie	Arndell Anglican College
	Bangladesh	Sarker	F.R.	Bangladesh Astronomical Society
	China	Dept of Foreign Affairs		China National Space Administration
	India	Prasad	M.Y.S	Deputy Director-SITAA
	Iran	Tarikhhi	Parviz	Iranian Space Agency
	Israel	Inbar	Tal	Israeli Space Society
	Japan	Fushimi	Kazuya	Japan Space Forum
	Kazakhstan	Omarova	Gulnara	
	Kuwait	Alifoan	Maryam	
	Malaysia	Shah	Zamri	National Space Agency
	New Zealand	Bouma	Yvonne	
	Pakistan	Siraj	Arshad	SUPARCO
	Philippines	Ogena	Ester	Science Education Institute
	Saudi Arabia	Hakami	Muhammad	Jeddah Science & Technology Centre
	Singapore	Dara	Dr. Sarita	Aerospace Physiology & Human Factors
	Thailand	Singhasaneh	Pitan	GISTDA
	Turkey	Nuranoglu	Hassan	Space Research Working Group Turkey
	Uzbekistan	Gataullin	Yunir	Tashkent Research Institute of Space Engineering
	Europe	Austria	Weinwurm	Gudrun
Bulgaria		Radeva	Veselka	Observatory and Planetarium
Czech Republic		Kolár	Jan	Czech Space Office
Denmark		Jørgensen	Jesper	SpaceArch
Finland		Jukola	Paivi	Finnish Astronautical Society
France		Contreras	Pierre-Louis	Centre National d'Etudes Spatiales
Greece		Manolis	Zoulias	National Observatory of Athens
Hungary		Böth	Elod	Hungarian Space Office
Ireland		Barnett	Ed	Space Encounters
Italy		Parlatini	Adriana Linda	ODISSEOSPACE
Norway		Bekkelund	Kolbjørn	Andoya Rocket Range
Poland		Ustynowicz	Adam	Aeroklub Polski
Portugal		Lopes	Manuel Matos	Universidade de Lisboa
Romania		Piso	Marius-loan	Romanian Space Agency
Russia		Victoria	Mayrova	Bauman Moscow State Technical University
Slovenia		Jarh	Orest	Technical museum of Slovenia
Spain		Cragolini	Alider	Instituto Nacional de Técnica Aeroespacial
Sweden		Brandt	Börje	Rymdtekniknätverk
Switzerland		Meiner	Rudolph	PUSH Foundation
United Kingdom		Welch	Christopher	Space Education Council
South America	Argentina	Capeluto	Victor	St. Peter's School
	Bolivia	Zalles	Rodolfo	Observatorio Astronomico Nacional
	Brazil	Sausen	Tania Maria	World Space Week Brazil Committee
	Chile	Mujica	Fernando	Aeronautical Engineer
	Colombia	Hernandez	Beatriz Elena	Voz Infantil- Hola Juventud WYESR-Colombia
North America & Carribean	Canada	Clemen	Jason	Canadian Space Agency
	Cuba	Suarez	Loudres	Instituto de Geofisica y Astronomia
	Dominican	Guerrero	Robert	Sociedad Astronomica Dominicana
	Mexico	Alcaraz	Francisco	Planetario de Morelia
	Panama	Barrera	Azael	
Trinidad &	Sankar	Hollis	Corinth Teachers College	

## 3 World Space Week Activities

This section describes the activities of World Space Week 2005. The reports are grouped according to geographical region. All reports received from participating organizations by SIA were included in this report. Any additions or corrections should be emailed to [admin@spaceweek.org](mailto:admin@spaceweek.org) and will be posted to the official World Space Week website.

### 3.1 International Organizations

#### 3.1.1 United Nations Office for Outer Space Affairs



To celebrate World Space Week 2005, the United Nations Office for Outer Space Affairs (OOSA) invited school students from grades 5 to 8 around the world, but principally Austria, Slovakia, Slovenia and Hungary, to design a base on Mars. Each participating class was asked to build a model of a Mars base that was suited to the conditions on Mars and that included everything the researchers would need to

survive and work on Mars. After building the base, participating groups submitted photos and descriptions of their Mars base. The designs are posted on the OOSA website ([www.unoosa.org/oosa/en/wsw/index.html](http://www.unoosa.org/oosa/en/wsw/index.html)) and participating classes received certificates and educational materials.

### 3.2 Africa

#### 3.2.1 Algeria

The Sirius Astronomy Association celebrated World Space Week, with numerous events and activities throughout the city and the region. Indeed, during that week Constantine became the focal point for amateur astronomy and space activities to the public with a rich programme of activities.

All in all, the Fourth Salon held on the occasion of the World Space Week was short (due to the eclipse!) but beautiful, held at the Issiakhem Exposition Hall in the city centre. The exhibits were distributed between the two levels of the Hall. In addition, the traditional space and astronomy expo at the al-Khalifah Cultural Centre in downtown Constantine was well-attended with an unending flux of visitors, mostly



young people.

The exposition saw the participation of various national agencies working on space and space related activities, such as the Agence Spatiale Algérienne (ASAL), the Centre National des Techniques Spatiales (CNTS) from Arzew, the Centre de Recherche en Astronomie, Astrophysique et Géophysique (CRAAG) from Bouzaréah, the Institut National de Cartographie et de Télédétection (INCT), the Office National de la Météorologie (ONM), etc. Furthermore, a dozen astronomy clubs and associations from all over the country had exhibits, with a larger than usual representation from the south and the east of Algeria.

The 3 October annular eclipse constituted a strong point of the activities. The various delegations that participated at the Salon in celebration of World Space Week 2005, went to the Batna observing site, approximately 120 km further south. There, the Sirius Astronomy Association helped to make the eclipse a successful public event nationwide. Since it was the only region along the path of the eclipse that was cloudless, the National Algerian TV covered the event online from the Batna site for close to three hours, instead of the expected two minutes! It was seen by some 10 million viewers, especially youngsters — since the day of the eclipse was declared a holiday so that pupils would stay at home watching the eclipse on TV instead of 'risking their sight' outside. All the official sites were fully cloudy that morning.



The various events received very good media coverage both through the press (around 15 newspapers reporting the activities), and the regional and national radios.

In conclusion, this year's World Space Week celebration was quite successful with many hundreds of visitors to the Salon, although the eclipse campaign that followed right after took its toll and obliged the organizers to somewhat shorten the Salon compared to the previous years.

### 3.2.2 Ghana

World Space Week 2005 took place at Banka Junior Secondary School in Banka in the Asante-Akyem District. The guest of honour was the Chief of Banka, Nana Kwakye Swanzie III. Posters for the exhibition were provided by the European Space Agency. The leaders of schools in the district and the general public were invited. A "Space in the Classroom" programme was launched. Space organizations such as the Mars Society, Young Astronauts, and The Planetary Society, were introduced to the students. Chapters for volunteers in the district were launched.

### 3.2.3 Libyan Arab Jamahiriya

Along with the celebration by the Libyan people of the upcoming 37th year festivities of the Great Elfath Revolution, the Libyan Center for Remote Sensing and Space Science joined other members of the United Nations in celebrating World Space Week.

The Center coordinated the celebrations of World Space Week, with an event on Monday 12 October 2005 under the supervision of the National Office for Research and Development (NORD) and in cooperation with:

- The United Nations Development Programme and United Nations Information Centre in the Libyan Arab Jamahiriya.
- The permanent national committee for the peaceful use of outer space.
- The national committee for remote sensing.

The Center invited one of the scientific institutes in the vicinity of the district of Tripoli to attend the scientific programme, to introduce space science and its application and the purpose of celebrating this event.



The guests attending the General Program of this international event were:

- Head of the People's Committee for High Education.
- Director of the Center and President of the national committee for remote sensing.
- Representative of the permanent national committee for the peaceful use of outer space.
- Representative of the UN programme in Libya.
- Representative of the National Bureau of Research and Development.
- Head of the Department of Survey.
- Head of the Department of Meteorology.
- Dean of the College of Science of Elfath University.
- Various space science representatives from different research centres.
- Students from Amitega School, Tripoli.
- Researchers and specialists from the Center.

At the commencement of the festivities,, the Director of the Center made a speech welcoming the guests, and emphasizing that the celebration was taking place in harmony with all celebrations implemented in the Vienna Declaration, which resulted from UNISPACE-III, held in Vienna in 1999, to use space technology and its applications for the betterment of humanity. Such applications include benefits in water resources, agriculture, managing natural hazards, human welfare, education, and health. He added that the Libyan Arab Jamahiriya had become a Member State of the United Nations Committee on the Peaceful Uses of Outer Space, and that it will make available the benefit of its technology and international expertise in the field of outer space applications. When speeches were over, a visit to an exhibition was conducted.

Two lectures were given by the local engineers of the Center, providing a summary of remote sensing and its applications and on the topic of the total solar eclipse of March 2006.

### 3.2.4 South Africa

Three Cutting Edge in Space conferences were held and focused on the policy and legal aspects of space. The goal of the programme is to obtain valuable information, during presentations and discussions, which would contribute towards developing the South African Space Policy

- Pretoria: Theme: Space Policy. Date: 3 October 2005. Venue: The Farm Inn, Pretoria.
- Durban: Theme: Space Awareness and Education. Date: 5 October 2005. Location: Umhlanga /Durban. Venue: Old Mutual – MTN ScienCentre
- Cape Town: Theme: Space and Science. Date: 7 October 2005. Venue: University of Cape Town, Middle Campus

Sci-Bono Discovery Centre in Gauteng invited all schools to take part in an inter-school Astronomy Quiz and offered great prizes for learners and educators.

MTN ScienCentre at Century City, Western Cape, hosted a series of space-related workshops for school groups: Musical Planets, Rocket Poppers and Paper Satellites. They also had excellent space exhibits, including Mark Shuttleworth's original space suit and helmet, the space shuttle simulator and an assortment of space debris..

Old Mutual - MTN ScienCentre in Umhlanga, KwaZulu-Natal (KZN), celebrated World Space Week with a Space Talk and a Simulation of a Journey into Space. Space workshops were available by special arrangement.

Unizul Science Centre in Richards Bay, KZN, offered visits to their planetarium and careers centre for young space enthusiasts. Satellite-building workshops for school learners were also planned.

Sci-Bono Discovery Centre, Johannesburg, Gauteng, held workshops for learners, focusing on how to launch a satellite, how a space suit works and making your own rocket.

South African Schools Rocketry Challenge: Learners from selected schools in each of the nine provinces built and launched their own rockets in a competitive event coordinated by the South African High Performance Rocketry Association. A video camera rocket was also launched in each of the provinces. These videos will be collected and made available on the South African World Space Week website.

Space Teaching Materials Discussion Forums were hosted in Durban and Cape Town by The Shuttleworth Foundation. These workshops were aimed at educators, textbook publishers and curriculum advisors.

South African version of NASA World Wind: The extremely popular Earth visualization tool, World Wind, developed by the National Aeronautics and Space Administration (NASA) of the United States, has captivated millions of people around the world. As a



special World Space Week project to bring the World Wind experience into South African classrooms without good Internet access, World Wind was made available as a two-CD set for distribution to South African schools and other educational institutions. The South African version includes special layers on South Africa's national parks, provincial borders, landmarks, and a 1:50,000 topographic map layer.

### **3.3 Asia & Oceania**

#### **3.3.1 Australia**

Three events were held in Australia in 2005 to mark World Space Week.

The annual Royal Melbourne Institute of Technology (RMIT) Space Science Expo attracted around 500 high school students. The RMIT Space Science Expo was conceived to promote current space related research, education programmes and industry. The Expo showcased posters about space-related work from all around Australia and from all fields of endeavour. These posters are free to download and contain the contributors' contact details giving people a direct link to current programmes. By attending the Expo, students had the opportunity to meet people currently working and studying in space related fields and to participate in many interactive experiments that demonstrate an aspect of space science.

In conjunction with the Expo, the National Space Society of Australia held its annual Australian Space Science Conference at RMIT. The Australian Space Science Conferences (ASSCs) are a peer reviewed forum for researchers and scientists to gather, network and develop co-operative links to promote space related science and technology in Australia. The conferences provide a platform for researchers and scientists to discuss their work and share their progress with peers and the space industry. The ASSCs have become an important annual event, ensuring that the space related science and university sector has a voice. These conferences also help to maintain momentum within the research community



to ensure that Australia remains a real contributor to cutting edge science and technology. The 2005 conference had 70 presenters and was attended by about 200 delegates. The American Institution of Aeronautics and Astronautics sponsored student papers at the conference and awarded prizes for the three best undergraduate presentations.

The annual Schools Space Technology Symposium was again held at Arndell Anglican College, northwest of Sydney. This is an academic conference for school students who have completed, or are undertaking a space-related project to present a paper about their work to an audience of their peers. This year's conference had nine student presentations on topics ranging from astrophotography to rocket payloads. Five of the presentations were a collaborative effort by students from years 5-10 about the construction and operation of a lunar colony. Students constructed geodesic domes from cardboard, each with a 5m diameter, and joined them together with tunnels. Each of the domes represented a module of the colony. There was a laboratory dome, in which the year 5 students displayed their hydroponics projects and year 8 students displayed apparatus for extracting oxygen from



the lunar soil. Another dome was a museum dome, with posters, models and memorabilia from the Apollo missions. By far the most popular dome was the moonwalk, which was painted black inside and contained a parachute filled with packing peanuts. This was designed to simulate an astronaut's gait while walking on the Moon. Classes were given guided tours through the colony by their peers. It was a wholly student centred and student run project. The keynote speaker at the 2005 Symposium was Professor Malcolm Walter, of the Australian Centre for Astrobiology at Macquarie University.

### 3.3.2 Bangladesh

In Dhaka, the Inaugural Ceremony of World Space Week 2005 was held in the Auditorium of Mirpur Bangla High School on the morning of 4 October. Among others who had delivered their important lectures in the meeting were Dr. A. R. Khan, the President of the Bangladesh Astronomical Society and former Associate Professor of the



Department of Applied Physics, University of Dhaka; Dr. Ali Asgar, former Head of the Department of Physics, Bangladesh University of Science & Technology, (BUET); Dr. Mobarak Ali Akand, former Director of the Science Museum, Dhaka; Mr. F. R. Sarker, General Secretary of the Bangladesh Astronomical Society and the National Coordinator of World Space Week in Bangladesh; Mr. Abdul Mannan, Acting Headmaster, Mirpur Bangla High School; Mr. S. M. Selim, Member of the Managing Committee of Mirpur Bangla High School; and Master Amit, a young Astronomer. The speakers explained at length the necessity for invigorating space education among students in Bangladesh and urged the government to create appropriate infrastructure helping them to gear up their studies and researches on this important sector. It was attended by a large number of students filling the auditorium to capacity. The meeting was followed by a video display on space exploration.



The biggest show of World Space Week 2005 was held at Enayetpur, a tiny village in Sirajganj district about 80 miles northwest of Dhaka. on the morning of 6 October, over the embankment built over the river Jamuna extending about half a kilometre from the village. It was an ideal place where sunny weather and gentle breeze blowing from the vast sparse of the river kept the audience happy. 19 schools and 1 college situated in the villages participated in the event, namely:

Enayetpur High School, Enayetpur.

Meherunnessa Girls School,  
Enayetpur.

Kisholoy Kindergarten, Enayetpur

ICL School, Enayetpur

Maizgram Primary School, Enayetpur

Kabatunnessa Kindergarten, Enayetpur

Enayetpur Primary School, Enayetpur

Mohanpur Primary School,  
Khokshabari

Dhuliabari Primary School, Gopalpur

Gopalpur Primary School, Gopalpur

New Life Model School, Gopalpur

Betil Primary School, Khamargaon

Imperial Pre-Cadet School, Goprekhi

Azugara High School, Azugara

Khukni Multipurpose High School, Khukni

Adarsha Shishu Academy, Rupnai

Sthal Pakrashi High School, Rupshi

Ahsannagar Primary School, Gopalpur

Gaberpara Primary School, Khokshabari

Khamargaon College, Khamargaon



The meeting was scheduled to start at 10 am. Being the first day of Ramadan, the organizers of World Space Week 2005 anticipated scanty attendance but by 9.30 am the entire area was packed with students, teachers and space enthusiasts and more groups of students and people were converging into the meeting place. It was a deluge of space enthusiasts beyond the comprehension of the organizers so they had to declare the meeting closed within 30 minutes with apprehension that the such a huge gathering of crowd might create a stampede, risking the lives of the young children attending it.

During the short span of the meeting, among those who had delivered their lectures were Mr. Abdul Matin, Assistant Headmaster, Enayetpur High School; Mr. Badal Chandra Roy, Headmaster Meherunnessa Girls School; Mr. Ahmed Mustafa Khan, Chairman, Kisholoya Kindergarten School; Mr. F. R. Sarker, General Secretary, Bangladesh Astronomical Society and National Coordinator for World Space Week in Bangladesh; Mr. Saidul Islam;



Mr. Wahiduzzaman Wahid; and Mr. Mosharraf Khan, members of the Society. After the meeting, a big colourful rally marched past the main roads of the village where thousands of students and ordinary people had participated. The function ended peacefully and the people of the entire village found it an unusual event but enjoyed it with great joys and spontaneous gaiety. Lots of people who were still on the way



moving towards the meeting place were shocked for failing to attend this unique and unprecedented event in this remote corner of the country. However, the organizers are tempted and encouraged by the deluge of the enthusiasts attending their event and they are now preparing to arrange a "Space Fair" at Enayetpur in the near future to show to the world community that there are some crazy people in this remote corner of the globe who love space from the core of their hearts.

### 3.3.3 India

The Indian Space Research Organisation (ISRO) has been celebrating World Space Week every year at its various centres located in different parts of India. The celebrations in 2005 were held in a major way at Thiruvananthapuram in the State of Kerala, Ahmedabad in the State of Gujarat, Sriharikota in the state of Andhra Pradesh and Hassan in the State of Karnataka. Major events during World Space Week included public outreach programmes such as popular lectures on themes related to space, competitions involving school children, exhibitions, etc. The highlights of World Space Week 2005 celebrations are described below.

#### *Thiruvananthapuram – Kerala*

- Vikram Sarabhai Space Centre (VSSC), the largest centre of ISRO, in association with the Liquid Propulsion Systems Centre (LPSC) and the ISRO Inertial Systems Unit (IISU) at Thiruvananthapuram organized 'World Space Week – 2005' with great enthusiasm. The celebration was inaugurated at VSSC auditorium on 4 October by Dr. G Madhavan Nair, Chairman of ISRO. Mr Ajit Kumar, Director of Public instructions, Government of Kerala, was the guest and Dr. B.N.Suresh, Director of VSSC presided over the event. Various programmes were conducted as described below.

- Quiz Competition: An all Kerala inter-school quiz competition was organized for high school students (8<sup>th</sup> to 12<sup>th</sup> standards). The preliminary qualification round was conducted in three different towns. The final event was recorded and telecast on a State television channel.



- Essay Competition: An all Kerala Essay competition '*Space for National Development*' was conducted for High School and Higher Secondary School Students. The prize winners were invited for the valedictory function held on 10 October 2005. The special 'GSLV award' was given away to the first prize winner of the English essay.
- Non formal Inventions: The contest 'Non-formal Inventions' was primarily aimed at triggering the layman's ideas and imagination and present inventions and discoveries that were accomplished outside the formal academic schemes. The response was overwhelming with people from all walks of life from all over Kerala sending in entries. 87 entries were received from primary school children to post graduates and from farmers to businessmen.
- Competition for ISRO Employees: A competition 'Impact of Space Programme for Rural India' was conducted for employees of VSSC, LPSC and IISU on 5 October 2005.
- Workshop for Diploma students: The workshop was conducted at the VSSC Auditorium. The programme comprised of lectures illustrating the space technology from theory to present day eminence and to the future vision. The participants were students drawn from polytechnics in the city. 185 students from various branches and 11 teachers participated in the programme.
- Workshop for NGOs: The programme on 'Space Application for Social Development' was conducted on 7 October 2005 at VSSC, for non-governmental organizations spread out all over Kerala. The programme included lectures on basic concepts of communication through satellites, tele-education and telemedicine and their benefits to society and remote sensing data and its advantages for resource management. The workshop was attended by 54 persons from different NGOs all over Kerala.

- Workshop for High School students: The workshop was conducted on 9 October 2005 for 195 gifted children from different schools. Lectures were organized on the overall programmes and activities of ISRO, the physics of rockets, applications of satellites and future programmes of VSSC and ISRO. Students were taken to Thumba Equatorial Rocket Launching Station (TERLS) and Control Centre to witness a rocket launch, which was especially arranged for them.
- Film shows at 150 schools: The task was to enable schools to screen space films at 150 schools by sending CDs containing a movie, on the 'Indian Space Program' by ISRO. The CDs were sent to 150 schools in Kerala on 30 September 2005.
- An "India in Space" exhibition was organized at the Science and Technology Museum in Thiruvananthapuram and was open to the public from 4 to 10 October 2005, attracting a large number of people, mostly students.
- Films on the activities of ISRO were screened at various schools in rural areas on outdoor mobile screens. Around 10,000 children viewed the films.
- Painting Competition: A painting competition for students was conducted on 8 October 2005. About 1,400 students from 200 schools out of the listed 456 schools in Thiruvananthapuram district participated in the competition.



- WSW celebrations at Schools: In an effort to inspire schools to celebrate World Space Week on their own, as requested by the organizers, 48 schools celebrated the Week. They conducted various programmes at their venue, with the participation of all teachers and students from their schools. Detailed reports on the celebrations were sent to VSSC, which issued certificates to the winners of the competitions at the schools.



- All the prize winners for the above events were invited for the valedictory function held at VSSC on 10 October, where the prizes were distributed.



### *Ahmedabad – Gujarat*

- The Vikram Sarabhai Space Exhibition was open to the public for nine hours daily during World Space Week.
- A video programme on space activities was shown.
- A face-to-face meeting was organized with space scientists, and a popular science lecture on space research was delivered by an invited speaker.
- Wide publicity was given through newspapers as well as by sending letters to a number of schools about the celebrations. The students and the teachers showed keen interest in the Indian Moon Mission and the Edusat project. More than 5,000 visitors from all over Gujarat participated in this celebration, which included a large number of students from the city as well as from the neighbouring towns.
- The face-to-face meeting with space scientists evoked keen interest, with a large number of questions pertaining to all aspects of space research, space science, astronomy, etc, being raised and answered during this session. The meeting was conducted between 5 and 6:30 pm on all days of the Week. About 15 senior Department of Space/ISRO scientists participated in responding to these queries.
- A lecture on "Unveiling the Mystery of the Moon" by Prof. J.N. Goswami, Director, Physical Research Laboratory (PRL) and Principal Scientist of India's Chandrayaan-1 Mission, was organized by the Space Applications Centre at Dr. Ram Nathan Auditorium, PRL on 10 October 2005.

### *Sriharikota – Andhra Pradesh*

- Since 2002, Satish Dhawan Space Centre SHAR (SDSC SHAR) has been arranging special programmes for students of 10<sup>th</sup> Grade during World Space Week and giving away the GSLV Award (instituted by Mr R V Perumal, Director, LPSC) to the winner in the competitions held at SDSC SHAR. The GSLV-2005 Award was given to a student of Ranga Reddy District. The SHAR Staff Benevolent Fund has also come forward to present a shield from this year onwards. As part of this year's celebrations, students, who achieved top results in the 10<sup>th</sup> Grade-2005 examination (both Andhra Pradesh State and the Central Board in every district of Andhra Pradesh, for a two-day programme on 4 and 5 October 2005. 27 students participated.
- In the quiz competition, Mr. P. Ramesh, from Rangareddy district and Ms B. Sweta, from Visakhapatnam district emerged as winner and runner up respectively. As part of the students' programme, an exhibition – 'India in Space' was organized. A cultural programme was also



from Visakhapatnam district emerged as winner and runner up respectively. As part of the students' programme, an exhibition – 'India in Space' was organized. A cultural programme was also

organized on 4 October 2005, in which students exhibited their talents.

- A special lecture 'In-Orbit Management of ISRO's GSO Satellites and Challenges in Space Applications' was delivered by Dr. M.Y.S. Prasad, Director, Master Control Facility (MCF), Hassan on 10 October 2005.

#### *Hassan – Karnataka*

- Master Control Facility, Hassan (MCF) has been observing World Space Week since 2000 with a variety of programmes involving students, teachers, professionals and the general public of Hassan and the surrounding areas. World Space Week 2005 was observed with the following programmes:
  - Technical lecture by Mr G.Ravindranath, Project Director- Geosynchronous Satellite Launch Vehicle (GSLV) on "Launch of EDUSAT".
  - Technical lecture "EDUSAT Spacecraft" by Mr N. Neelakantan, Project Director- EDUSAT
  - Technical lecture by Mr A. Bhaskaranarayana, Director- Satellite Communications Programme Office (SCPO), ISRO Headquarters, Bangalore on "EDUSAT Ground Network and Utilisation".
  - Talk on EDUSAT and Vishweshwaraia Technological University (VTU) by Dr K Balaveera Reddy, Vice-Chancellor, VTU, Belgaum.
  - Video show on the Space Shuttle's latest launch
  - Physics models competition for schools
  - Physics quiz competition for college students
  - Painting competition for middle school students
  - Debate competition on space/physics topics for high school students.



- The main function was organized at an auditorium in the town, which was attended by a capacity audience consisting of officials, academicians, teachers, students and the general public. All competitions organized for colleges and schools were held at MCF campus, which attracted a large number of entries. Guests and the general public lauded the efforts of all participants. Prizes were distributed by the dignitaries during the main function.

### **3.3.4 Islamic Republic of Iran**

For World Space Week this year, the organizers planned to further persuade the involvement of non-governmental organizations, particularly those that are active out of the capital in celebrating World Space. With support from the Iranian Space Agency, a non-governmental organization in Yazd, a city in Eastern Iran, celebrated World Space Week in parallel with the ceremonies that were organized in Tehran.

### **3.3.5 Israel**

World Space Week 2005 in Israel was short due to holidays. The Israeli Astronomical Society collaborated with the Fisher Brothers Institute for Air and Space Strategic Studies, and they provided funding to mail World Space Week posters and activities brochures for students in more than 150 schools.

Two lectures were held in cooperation with the Israeli Space Society and the Israeli Astronomical Association. A special lecture and mini symposium was held in the SPACECOM company, which operates Israel 2 communication satellites.

A one-day seminar was held at the Israel Air Force Space Branch. The topic was microsattellites.

Web related events included the science and space forums of Israel, a special website dedicated to World Space Week, and articles published on the websites of all major national newspapers.

In addition, about 30 "sidewalk astronomy" events were held in various locations nationwide.

### **3.3.6 Japan**

The United Nations/International Astronautical Federation Workshop on Space Education was held in Kitakyushu on 14 and 15 October. Experts in the field of space education shared presentations and met in workshops to share best practices and develop recommendations for improving space education globally. Included in the agenda was a presentation on World Space Week. Student events were held in conjunction with the Workshop.

World space leaders met in Fukuoka, Japan, for the International Astronautical Congress. This year the Congress began one week after World Space Week on 17 October. In addition to hundreds of presentations about space for professionals in the field, numerous events were held about space for the public.

### **3.3.7 Kazakhstan**

Kazakhstan, with its suitable space infrastructure, particularly the unique facilities of Baikonur, a world-known space launching pad for the last year, has undertaken significant efforts towards the formulation of its place in international space activities. A first State Program for the Development of Space Activities in the Republic of Kazakhstan in 2005-2007 was initiated. The Program lays the foundation for the building of space infrastructure, the manufacturing of satellites for different purposes, the modernization of Baikonur space launching port facilities and increasing space education. The main goal of



the programme was to consolidate the independence of Kazakhstan's access to space and to increase capacity building in space activities.

From 4 to 11 October 2005 two parallel events were organized to celebrate World Space Week in Almaty and Baikonur.

Representatives from space organizations and research institutions attended a special event organized by the Space College, Almaty, on 4 October. The event comprised an opening ceremony, a student conference on space related topics and a special joint dinner.

At the same time, eleven students from the Space College in Almaty were selected for a one-week trip to Baikonur to attend the International Space Conference on space and rocket modelling held by invitation of the International Space School in Baikonur. The Ministry of Education and Science provided financial support to the students to enable them to visit the famous space port and to present their scientific papers and their vision on different space subjects to their young friends from the Russian Federation, Ukraine and Slovenia. The conference ended with the launch of space rocket models made by young students from different countries.

In 2006, after the launch of the first Kazakhstan telecommunication satellite "KazSat" from Baikonur, a more exciting celebration of World Space Week is expected in Kazakhstan.

### 3.3.8 Kuwait

World Space Week was held for the first time in Kuwait at the Scientific Center. It was



postponed due to Ramadan in October. It was therefore held from 15 to 21 December 2005.

The central hall of the Center was decorated with flags of countries that had sent people to space such as the Russian Federation, the United States of America and Saudi Arabia. In the central court there was a space photo exhibit summarizing space history and why World Space Week was celebrated worldwide.



In the Dhow harbour, there were radio activities, operating on high frequency and very high frequency bands using a special call sign "9K2WSW" for the event. Amateur radio operators tried to get into voice contact with the crew onboard the International Space Station (ISS), and showed visitors how to make

contact and listen to digital signals from the ISS.

The radio operators explained to the children and public how space was important in daily communication. They described the radio station on board ISS and explained how to make contact with astronauts and cosmonauts in space. The operators also described satellite (space) communication, explained how to track such communication on computers and how to understand the terms used.

There were star shows on the portable planetarium during the entire World Space Week, explaining the northern part of the sky, how to find directions, and how astronomy was important in our daily lives.

In the Resource Room of the Discovery Place, there was a collection of books about space, as well as computer games and websites on the same topic, which were added to the computers in the Resource Room for this occasion.

The Space Station 3-D I-Max film was shown during World Space Week. The Scientific Center supplied its gift shop with space souvenirs such as food, books, DVDs and space toys.

The last day of World Space Week included space contests for children and adults. Space-related questions were asked to the visitors after a brief introduction of space. The winners got a space-related book and two full admission tickets to the Scientific Center.



### 3.3.9 New Zealand

World Space Week was celebrated in New Zealand with numerous activities in the classroom and in the communities. Teachers at the primary and intermediate schools spent the term prior to World Space Week exploring different units on space. During World Space Week, parents and community members were invited to schools to see students' work, projects and space art. In 2006, a committee is being formed to invite even more organizations to take part in World Space Week.

### 3.3.10 Pakistan

World Space Week 2005 was celebrated in December due to Ramadan. The Space & Upper Atmosphere Research Commission (SUPARCO) of Pakistan organized a large number of



events and activities for the celebration of World Space Week 2005 in Pakistan. During the Week, students were the main targets for the awareness-raising activities about space.



Inauguration Ceremony -- The week started with an inauguration ceremony on 19 November at the University of Karachi, to which intellectuals, scientists/teachers and students, particularly school students, were invited. Prof Dr Pirzada Qasim, Vice Chancellor, University of Karachi (KU)

was the Chief Guest.

Space Talk/Panel Discussion -- A panel discussion was held at KU on the afternoon of the same day. The panel of experts comprised: Mr Raza Hussain, Chairman SUPARCO; Mr Arshad Hussain Siraj, Director General, Space Applications and Research, SUPARCO; Mr Usman Bajwa, CEO, PAKSAT International (Pvt) Ltd; Mr Shahid Qureshi, Incharge, Institute of Space and Planetary Astrophysics (ISPA) KU; and Mr Arif Abbasi, ex-secretary, PIA planetarium. A large number of participants, including students of all ages, attended the talk and participated in the question-answer session. The topic of the panel discussion was "Space Technology and Future of Pakistan".

Science Caravan -- A science caravan also departed on the same day from Karachi for the rural areas of Sindh for the entire week. The purpose of the caravan was to create awareness about space technology and its benefits among the students of under-privileged schools. An overwhelming response was received. About 2,000-2,500 students and teachers from various schools benefited from space related lectures and documentaries.

Space Week Walk -- A walk was organized in Karachi on 20 November in which nearly 2,000 people of all ages took part, reflecting their interest and curiosity in space science. Space related questions were asked from the school students before the start of the walk.



Space Seminar -- On 21 Nov, the Institute of Space Planetary and Astrophysics (ISPA) in collaboration with SUPARCO organized a seminar at KU. The theme of the Seminar was "Space Sciences and the World Challenges of 21<sup>st</sup> Century". The Chairman of SUPARCO was the Chief Guest. Seven scientific/technical papers were presented by scientists/professors from SUPARCO and KU.

Sky Simulation Shows -- From 21 to 25 November, sky simulation shows, space movies and a planetarium show were arranged at the PIA Planetarium for students and the public. In addition, observations of the Sun and planets and awareness lectures were organized at the ISPA Observatory, KU during this period.

Quiz Competition -- On 22 November; a quiz competition was held for school students. Fifty students from 24 participating schools took part in the competition .



Declamation Contest -- On 23 November, a declamation contest was held at SUPARCO Headquarters for students. The topic for the declamation contest was "Space Technology and Future of Pakistan". 35 students from various schools took part in the contest.

Poster Painting and Model Making Competitions -- Schools were asked to participate in space oriented poster painting and model making competitions. Discovery and imagination was the theme for those competitions, which saw participation by a large number of school students.

Space Fair -- Additionally, a two-day space fair was arranged at the Pakistan Maritime Museum for the general public, on 26 and 27 November. Dr Hamida Khoro, Minister for Education and Literacy, Government of Sindh was invited to grace the occasion and distribute prizes among the winners of the declamation contest, quiz, painting and model-making competitions. Different stalls were arranged to attract the general public, particularly students, to create an awareness about space. Special features of the space fair were the Mobile Planetarium established by the Pakistan Science Foundation, school stalls of painting posters and model making and stalls of scientific models established by SUPARCO.





### 3.3.11 Philippines

The Science Education Institute (SEI) of the Department of Science and Technology (DOST) held a series of space education activities from 4 to 10 October to celebrate World Space Week. The conduct of said activities in the Philippines is in response to SEI's commitment to the United Nations Educational Scientific and Cultural Organization's (UNESCO) invitation to participate in the international space education programmes involving the youth.

The week-long World Space Week activity had for its objectives the following:

- to popularize space education among students and teachers;
- to create awareness on the benefits of space technology and applications among the youth; and

- to establish linkages and partnerships with space organizations and related institutions for collaboration in space science education programmes and projects

The activities for the World Space Week were organized by DOST-SEI under the leadership of Dr. Ester B. Ogena, SEI Director and National Coordinator, World Space Week, in partnership with the following agencies/institutions: DOST-Philippine Atmospheric, Geophysical and Astronomical Services (PAGASA), University of the Philippines (UP) Training Center for Applied Geodesy & Photogrammetry (UPTCAGP), DOST-Advanced Science Technology Institute (ASTI), DOST- Philippine Council for Advanced Scientific and Technological Research and Development (PCASTRD), DOST-Philippine Volcanology and Seismology Institute (PHIVOLCS) and the Department of Education (DepEd).



4 OCTOBER 2005 -- PHILIPPINE ATMOSPHERIC, GEOPHYSICAL AND ASTRONOMICAL SERVICES (PAGASA)

The first day of the Philippine World Space Week activities was held on 4 October 2005 at PAGASA. The On The Spot-Poster Making Contest with the theme "Discovery & Imagination" was held in the morning with 37 students participating from both the public and private high schools in Metro Manila.

The opening ceremony was also held at PAGASA. Dr. Graciano P. Yumul, Jr. Officer-in-Charge, PAGASA made opening remarks, while former Senator Dr. Leticia Shahani and DOST Secretary, Dr. Estrella F. Alabastro gave their respective messages. Dr. Ester B. Ogena launched the Philippine Space Education website, which is being hosted and maintained by SEI. There were 300 pupils who participated together with their science teachers/advisers from selected public elementary schools in Metro Manila. Also in attendance were the members of the National Advisory Committee on the Philippine Space Education Program. After the opening ceremony, the pupils had their lecture-tours at the PAGASA Planetarium and Weather Forecasting Bureau.

Also, PAGASA hosted a free Planetarium visit for all interested schools the whole duration of the World Space Week.





5 OCTOBER 2005 -- UNIVERSITY OF THE PHILIPPINES TRAINING CENTER FOR APPLIED GEODESY & PHOTOGRAMMETRY (UPTCAGP)

A crash training programme for secondary students was conducted by UPTCAGP with Dr. Rhodora Gonzales, Director of the Center as the over-all coordinator. The day-long programme started with the opening ceremonies graced by former Senator Dr. Leticia Ramos-Shahani, who was the guest speaker. University of the Philippines-Diliman Campus Chancellor Sergio S. Cao made the opening remarks, and Dr. Ester B. Ogena, SEI Director and Co-Chairman of the National Advisory Committee on Philippine Space Education Program delivered the keynote speech.



In three batches of 100, the students interactively attended the lecture-demonstrations conducted by select UPTCAGP faculty members. The two-hour lecture focused on the latest space technology equipment and applications; animated PowerPoint presentations and question-and-answer portions were incorporated. Laboratory tour – students toured the space technology laboratory of the TCAGP to appreciate the tools. The uses of those tools were explained to them. A "Space Hunt" game was organized to enhance participation in the spirit of fun in learning; and prizes were given to the winning teams.

#### UNIVERSITY OF THE PHILIPPINES NATIONAL INSTITUTE FOR SCIENCE & MATHEMATICS EDUCATION (UPNISMED)

A crash training programme on space education for student teachers from various teacher education institutions in Metro Manila and teachers from Pangasinan State University and Don Pablo Lorenzo Memorial High School of Zamboanga City (both schools were last year's recipient of Meade Telescopes under the NSS Project to Dream Project) was conducted by UPNISMED. Dr. Merle Tan, Director of UPNISMED welcomed and joined the participants throughout the afternoon up to the evening activities. The activities included a lecture on space technology applications at the UPTCAGP, sharing of European Space Camp (2005) activities/experiences, which included a lecture-demonstration on water rocket models by two Filipino participants (Mr. Vryan Palma and Ms. Zolah Botin), launching of the rocket models made by the participants; while the lectures and video watching on basic astronomy, and lecture-demonstration on the use of telescopes were handled by the UP Astronomical Society.

#### 10 OCTOBER 2005 -- ADVANCED SCIENCE AND TECHNOLOGY INSTITUTE (ASTI)

The culminating activities for World Space Week were hosted by DOST-ASTI with Director Dennis Villoriente welcoming the participants to his Institute. The activities comprised of three events: a lecture on water rocket modelling and space camp experience by Mr. Vryan Palma; a video conference with Dr. David McKinnon, Charles Sturt University, Australia; and a closing programme. The video conference was a lecture on astronomy and the lecturer used an actual telescope for demonstration. There was also a question and clarification portion, in which the students interacted directly with Dr. McKinnon.

The closing programme included the awarding of cash prizes and certificates to the top three winners in the On the Spot Poster Making Contest. Dr. Rogelio Panlasigui, Undersecretary for Research and Development of DOST and Chairman, National Advisory Committee on Philippine Space Education Program gave his inspirational message, while Dr. Ester Ogena delivered her closing remarks.

High school students from the Philippine Science High School and other selected science high schools in Metro Manila participated in the activities.

9-30 OCTOBER 2005 -- For the four Sundays of October there was a "Space Science Quiz Bee on Radio" hosted by Mr. Angelo Palmones on the local radio programme "Bago Yan" of the DZMM radio channel. The contest was open to elementary and high school students



throughout the country. Students who participated in the contest sent their answers through SMS or text messaging. The winners received cash prizes from SEI.

### 3.3.12 Republic of Korea

In 2005, the Ministry of Science and Technology (MOST) in the Republic of Korea announced “Space Korea”, a three-year space promotion programme that mainly includes launching a satellite mounted on a KSLV-1 rocket at Naro Space Center (launching site) until 2007.



On 26 September, the Korea Aerospace Research Institute (KARI) and Young Astronauts Korea (YAK) started the National Model Rocket Contest. 600 students around the country came together to build and launch their own rocket.

On 4 October there was an official ceremony hosted by Dr. Myung Oh,

Minister of Science and Technology, and a “Space Week Festival” exhibition at the COEX convention and exhibition centre.

During World Space Week, there were many other space-related events all around the country, organized by KARI, YAK and the Korea Science Foundation.



On 5 October, the “Name-on-a-chip to space” ceremony was hosted at KARI, and the chip including names of 120,000 people was mounted on the “ARIRANG-2” satellite. Over 1,000 elementary schools participated in the “Space Science Contest” and “Family Star Party” hosted by YAK. There was also a year-round “Space Festival” exhibition at the War Memorial Museum, which also hosted events commemorating World Space Week 2005.



More than 30,000 people participated in this biggest space event and it was covered by all major TV channels and newspapers.



Overall, it was a successful start and the organizers will work more to inspire the interest of young students in space science. The Republic of Korea will also continue to participate in World Space Week to play an important role in the coming space development programme. For more information on World Space Week and the Space Development Program in the Republic of Korea, please visit [www.yak.or.kr](http://www.yak.or.kr), [www.kari.re.kr](http://www.kari.re.kr).

### 3.3.13 Singapore

World Space Week was celebrated for the first time in Singapore this year. The events that were organized were in tune with the theme of this year's celebrations, "Discovery and Imagination." Singapore Aeromedical Centre, Singapore Science Centre, Astronomical Society of Singapore and National Junior College took lead in putting together a week long schedule of events.

Singapore Aeromedical Centre and National Junior College co-hosted the inaugural event on 4 October, which was an interactive session on "Exoplanets" and "Life on Alien Planets" followed by an astronomy exhibition and a hands on session with the telescope. The venue was the National Junior College, Singapore. The event was attended by about 400 participants, mostly school children.

The Singapore Science Centre had organized a series of events (4 to 9 October) to celebrate World Space Week including the space science exhibition, Moon rocks exhibit, Ariane Rockets exhibit, magic planet exhibit as well as a Space Shuttle Simulator Ride. All the exhibitions were open to the public and were very well received.

On 5 October, the Singapore Aeromedical Centre organized an Aerospace Workshop for children. It was a whole afternoon of fun and learning about the mysteries of human body in flight and included simulator rides on flight simulators.

The finale of the World Space Week celebrations was the Star Party at the Observatory, Singapore Science Centre, co-hosted by The Astronomical Society of Singapore (TASOS) and the Singapore Science Centre on the 7 October. It was a phenomenal success; thankfully the skies were clear and provided for a great viewing session.



### 3.3.14 Thailand

There were many space related activities to celebrate World Space Week 2005 in Thailand.

APRSAF-12 Water-boosted Rocket Competition – The National Science Museum (NSM) and the Geo-Informatics and Space Technology Development Agency (GISTDA) sent a representative team from Thailand to join the 1st Water-boosted Rocket Competition held in continuation with the Asia-Pacific Regional Space Agency Forum-12 (APRSAF-12) in Kitakyushu, Japan. Many countries participated in the competition on 15 October 2005, namely: Japan, China, Republic of Korea, Viet Nam, Bangladesh, India, Sri Lanka, Cambodia, Malaysia, Indonesia, Australia and Thailand. The Thai team from Panatwittayakarn School won the 1st prize in this international event. Details and pictures of the event are posted at [funscience.gistda.or.th/thaiwaterrocket/aprsaf12.html](http://funscience.gistda.or.th/thaiwaterrocket/aprsaf12.html)

"Basic Knowledge for Kids: Space Technology and Geo-Informatics" -- This year, GISTDA published another book for kids: "Basic Knowledge for Kids: Space Technology and Geo-Informatics", describing the basics of remote sensing, geographical information systems (GIS) and the global positioning system (GPS). The book is full of colourful illustrations, graphics, satellite imageries and pictures with simple explanations. The book also introduced 'THEOS', Thailand's first remote sensing satellite, which will be launched in mid 2007. World Space Week is explained on the inside of the back cover. This book is an updated edition of the one published in the previous year.

World Space Week THEOS: Eye of Thailand -- GISTDA teamed up with the Children Museum to organize World Space Week THEOS: Eye of Thailand, from 5 to 9 October 2005 at the Children Museum in Bangkok. Details and pictures of the event are posted at <http://wsw.gistda.or.th/wsw/wsw2005.html>. Mr.Chanchai Peanvijarnpong, Director of THEOS Project, made a speech in the opening ceremony. Posters for children explaining THEOS, basis remote sensing, and remote sensing satellites can be downloaded from that webpage. A THEOS song is also available. The media download page can be accessed at <http://funscience.gistda.or.th/wsw/download.html>.

Space Exploration Timeline -- To cherish the hard effort and sacrifice of space scientists and astronauts in the past and present, the timeline is compiled in Thai with lots of nice pictures at <http://funscience.gistda.or.th/spaceexploration/timeline.html>.

The World Space Week activity report for Thailand is currently presented and regularly updated on the GISTDA webpage at <http://wsw.gistda.or.th/wsw/wsw.html>.

### **3.3.15 Viet Nam**

In Viet Nam, World Space Week 2005 was celebrated by the Vietnam Amateur Club of Astronomy (VACA), with two main activities: dissemination of information about World Space Week and the Vietnam Astronomy Festival celebration.

Information about World Space Week was translated into Vietnamese, printed, distributed and broadcasted on the Internet through the VACA website at <http://thienvanvietnam.com/spaceweek.htm> and the VACA forum at <http://www.ttvnol.com/thienvanhoc/425452.ttvn>.

The Vietnam Astronomy Festival 2005 was held on 9 October 2005 with the participation of not only VACA members but also many Vietnamese astronomy enthusiasts. In particular, the festival was attended by Professor and Academician Nguyen Van Hieu, one of the most famous physicists in Viet Nam. The contents of the festival were:

- Introduction of World Space Week.
- Introduction of this year's theme: Discovery and Imagination.
- Lists of major milestones in human space discovery.

With the broadcast on television, VACA gained increasing consideration and encouragement from the public. The successful activities served as the first step in raising the awareness of the people of Viet Nam about astronomy – one of humankind's most long-standing and important sciences.

## **3.4 Europe**

### **3.4.1 Austria**

The United Nations Office for Outer Space Affairs provided material to schools across Austria as part of its global World Space Week 2005 Mars Base Design competition.

From 6 to 9 of October 2005 the Austrian space event of the year 2005 - the "SpaceTime Austria 2005" - took place in the picturesque and unique set-up of Hangar-7 of Red Bull in Salzburg, Austria.

SpaceTime Austria 2005 was conducted as part of the World Space Week and the Long Night of the Museums and designed to make up for a multi-faceted event featuring both a space conference and exhibition for the general public. Co-organized by the Austrian Space Forum (<http://www.oewf.org>), the State Secretary for Innovation and Research of the Austrian Federal Ministry for Transport, Innovation and Technology and the European Space Agency, and supported by the Austrian Research Promotion Agency and Austrospace, the event was a major success.

More than 150 show pieces, covering the whole spectrum of space flight, attracted 10,315 visitors into Hangar-7 during the four days of the exhibition. On Saturday, 8 October, 4,350 spectators stormed SpaceTime, a new visitor record in the history of Hangar-7.



Among the most impressive exhibits were the different models provided by ESA; the ISS in scale 1:20, the satellites Envisat, Mars Express, Galileo and SOHO in scale 1:4 and an impressive Titan diorama together with a 1:1 model of the Huygens probe. Other marvellous show pieces, provided by private parties, were the original SOKOL-2 space suit of Jean-Pierre Haigneré; space stamps, which were flown onboard of SALJUT, MIR and the ISS; a 1.5 m big and illuminated sphere shaped space ship out of the Perry Rhodan series; Klingon swords; Yoda, the Jedi master; space nutrition of all sorts (including a plastic bag of Vodka) as well as hygiene articles, which were/are used by the astronauts onboard the different space stations.



Memorabilia with a strong Austrian connection were the original moon rocks, flown with a small Austrian flag on board Apollo 11, which were packed together after the first manned Moon mission and presented to the Austrian Government by the USA.

The most massive exhibit was an iron meteorite; although only as big as two hands, it nevertheless had a mass of 22 kg. Much lighter was the smallest fly able rocket of the world; with a length of only 22 mm long it has an entry in the Guinness Book of Records for having achieved an altitude of more than 4 meters.

The focus of attention of the younger spectators of the exhibition lay on the two Mars rovers of the Austrian space forum. Presented in 4 x 5 m Mars diorama, the visitors were invited to operate the smaller one, via onboard cameras to drive through the artificial craters and rocks. The larger one was put on display only, but was also of high attraction, as it will perform a mission (dubbed "AustroMars") in spring 2006, where it will drive autonomously through the desert of Utah in the USA, remote controlled over the Internet out of a Mission Control Center in Austria.

### 3.4.2 Bulgaria

The Bulgarian celebration of World Space Week included the following activities:

- World Space Week began on 3 October 2003 with public observations of the partial solar eclipse
- There were cosmic shows in which the newest achievements in space explorations were shown - from 4 to 10 October in the planetariums in Bulgaria
- Festivals of astronautics were organized in many Bulgarian schools.
- A series of lectures in astronautics were made in the planetarium in Varna
- Observations of the night sky and the planet Mars for students and teachers were conducted during the week.

- Presentations of the DVD "Hubble-15 years of discovery" were organized in the planetariums all over Bulgaria
- TV shows and media presentations about World Space Week and the achievements in world astronautics were shown during the Week.
- The project Martian base - part of the educational programme "School Space Agency" was presented at many schools in Varna, and many students participated in it.



### 3.4.3 Czech Republic

2005 was the fourth consecutive year of the Czech Republic's participation in World Space Week.

As in the previous years, the Czech Space Office ([www.czechspace.cz](http://www.czechspace.cz)) was the main organizer of the Czech participation. Involvement of professional as well as individual organizations was managed and coordinated by Mr. Milan Halousek, editor of KOSMOS – NEWS astronautics bulletin.

The World Space Week 2005 events had focused on several occasions on specific space events that occurred close to the period of World Space Week. Among those events, great interest was devoted to the return of the Space Shuttle to flight after the Shuttle Columbia tragedy in 2003. Other topics were the second manned flight by China and the third tourist visit to ISS. The main event relating to unmanned space flights was mainly the impact of the Deep Impact probe into comet Tempel 1.

Activities carried out were primarily organized by professional astronomical observatories in the Czech Republic. A positive feature was the increased number of activities at elementary and secondary schools, mainly those prepared and organized by teachers and students themselves.

A dedicated free flyer was prepared for the occasion of the Week containing, explaining and presenting various spin-offs of space technologies. The flyer was distributed to the

general public at many opportunities, a total of 6,000 copies. It was well received and efficiently contributed to general public awareness on the use of space technology in ordinary life.

Various astronomical observatories planned and organized programmes and lectures for the general public during the World Space Week period and the effort of all organizations and individuals contributing to the list of events, which were all interesting and acknowledged by hundreds of participants, was appreciated.

One of the events was an interesting lecture made by Swiss astronaut Claude Nicollier for experts at the Academy of Sciences and the interested public. Two meetings were also organized with Czech astronaut-candidate, Oldřich Pelčák (Soyuz 28, 1978).

A great exhibition on space containing photos, maps, documents and models was organized in the commercial centre in Pardubice. For several days a large crowd of people had received an interesting opportunity to become more familiar with the content and general importance of space research and space flights.



In addition to the activities at the public observatories, several events took place at elementary and secondary schools. These were attended by several hundreds of students in Praha, Sokolov, Nymburk and other cities. A group of students from a high school in Nymburk visited the Euro Space Centre in Belgium.

World Space Week has been celebrated by a lot of propagators, individuals and enthusiasts, who are keen on astronautics and who are actively involved in promoting space activities.

The number of participants at the World Space Week events increased by almost 30% compared to 2004, reaching almost 3,000 people. It is encouraging that especially young people from primary and high schools attended those events.

Information and announcements about World Space Week appeared on a large number of web pages. Besides a dedicated webpage (see below), special web sites of the Czech

Astronomical Society ([www.astro.cz](http://www.astro.cz)), KOSMO Club ([www.kosmo.cz](http://www.kosmo.cz)) and the Czech Space Portal have publicized the event. Moreover, the Czech Astronomical Society published the official press release and prepared information about World Space Week for a press conference during the International Book Fair.

The media also paid attention to World Space Week. National newspapers Lidove noviny and Pravo published articles on the objectives of World Space Week and some events in the Czech Republic. Television and radio stations, both local and national, produced interviews and reports about related activities.

It is the intention of the organizers to simultaneously increase general awareness about World Space Week not only among enthusiasts and people interested in space but also among those working or interested in other fields that are not directly connected to space research and technology.

For information on the Czech World Space Week events, please visit:

- <http://web.quick.cz/SKT/index.htm> and KOSMOS-NEWS
- <http://kosmos-news.kosmo.cz>

Some other Czech World Space Week events are listed below:

- Lecture: “Space Research in Everyday Life”, Valasske Mezirici Observatory
- Two-day seminar on space technology and planetary exploration, Valasske Mezirici Observatory
- Lecture: “50 years of Exploration of the Universe”, Valasske Mezirici Observatory
- Lecture: “To Moon, Mars and Beyond”, Pardubice Observatory
- Lecture: “Astronautical Chronicles”
- Lecture: “People on the Moon”
- Lecture: “Why We Go to Space”, Prostejov Observatory
- Lecture: “Apollo-Soyuz and International Space Flights”, Vsetin Observatory
- Lecture: “Man on Mars”, Vsetin Observatory
- Lecture: “Shuttle: Return and Gloom”, Uhersky Brod Observatory and schools
- Lecture: “Mars in 3D”, Valasske Mezirici Observatory
- Lecture: “Towards New Worlds”, Prostejov Observatory
- Exhibition: “Space Weekend”, Pardubice
- Exhibition: “Astronautics of Yesterday and Today”, Upice Observatory
- Exhibition: “Space Research”, Teplice High School
- Exhibition: “Space Research in Everyday Life”, Valasske Mezirici Observatory

#### **3.4.4 France**

World Space Week was celebrated in Strasbourg by the International Space University with a number of events for students and faculty.



### 3.4.5 Germany

In Berlin, [www.c-base.org](http://www.c-base.org), a grassroot based organization that is promoting space culture and space related activities, celebrated this unique event with a special programme.

#### Cultural Events

- 04.10. 8 pm: 48th anniversary of Sputnik - space party with multimedia show of Hubble images and space films (mainly NASA material)
- 06.10. 8 pm: public social experiment: c-lounge open for members and friends -- video screenings, space films - Gemini, Apollo missions & science fiction
- 08.10. 7 pm: cultural experiment party onboard c-base.org
- 10.10. 9 pm: acoustical "signals from outer space" (remixed) celebrating World Space Week 2005

#### Workshops and seminars

- 5.10. 6 pm: tour through space station infrastructure. 8 pm: radio and transceiver technology workshop [www.freifunk.net](http://www.freifunk.net) and seminar for urban communicators and 3d circle. 8-10 pm: 3D worlds development basics
- 6.10. 6 pm: tour through c-base infrastructure for new members
- 7.10. 7 pm: programming displays, controls and sensors with Aint Vector Graphics (AVG)
- 9.10. 2 pm: implementing displays, controls and sensors in AVG
- 10.10. 8 pm: developing communication modules with PHP (part II)

For World Space Week 2006, the organizers will try to reach out to the schools and other organizations in the region. Moreover, they are grateful for having the opportunity to take part in this unique celebration and are looking forward to participate next year.

### 3.4.6 Hungary

In October, Space Day 2005 was held, organized by the Hungarian Space Office and the Hungarian Astronautical Society. The public event is partly for professionals, partly for a general audience, with a great emphasis on undergraduate students. The annual event attracts a few hundred participants.

The Hungarian Space Office organized the Fifth Youth Forum as a student conference about the possibilities that those students had for participating in space research.

The Hungarian Astronautical Society announced the start of its annual essay competition for young people. The first prize involves participation in a Space Camp in Huntsville, Alabama, USA, for the two best applicants.

The Planetarium Kecskemét and the TIT Planetarium, Budapest commemorated World Space Week with their programmes and special presentations on space research that week.

The United Nations Office for Outer Space Affairs provided material to Hungarian schools as part of its global World Space Week 2005 Mars Base Design competition.

### 3.4.7 Ireland

On 9 October, "Discovery and Imagination" was presented as an Open Day at University College Cork (UCC). Members of the public were introduced to the night sky via a mobile planetarium provided by Armagh Planetarium. Attendees also had the opportunity to interact with research staff in the UCC Astrophysics Department and have many questions answered by experts.

An estimated 5,000 students, parents and teachers from all over Ireland, converged on UCC on Saturday, 8 October to participate in the University's annual Open Day for Schools.

From 3 to 7 October, a travelling planetarium supplied by Space Encounters toured a number of smaller, and more remote, schools around Ireland promoting astronomy, discovery, and letting one's imagination run free.

Throughout the week, World Space Week was promoted in the press and media nationwide.

### 3.4.8 Italy

ODISSEOSPACE ([www.odisseospace.it](http://www.odisseospace.it)) was the new organizer of the Italian participation in World Space Week for 2005. The activities were coordinated by the President Mrs. Adriana Parlatini, while Prof. Massimo Auci, an expert in astrophysics, planned and held some lectures during the World Space Week period. Those lectures were attended by students from primary and high schools.

World Space Week 2005 consisted of the following activities:



- conferences on themes relating to space sciences
- workshops on space in the schools, which involved: 1) imagining "space", drawing and describing "space," 2) talking about "space" and using one's imagination to invent space machines, and 3) answering the questionnaire and making notes about what one does not know and what one would like to know about space
- information about World Space Week on the ODISSEOSPACE website
- communication about the activities on the websites of ODISSEOSPACE and the schools

The conferences on the themes relating to space science involved two comprehensive schools: the "International European School Altiero Spinelli" in Turin, Piedmont, and the "Paolo Sarpi" Institute at Settimo Milanese (Milan), Lombardy.

The first conference, on "The Colonization of the Solar System", covered the following themes: the colonization of the solar system, the Apollo missions and the moon base. The theme of the second conference was "Man and Universe."

The workshops on space were carried out in the comprehensive School "Paolo Sarpi". The activities were organized by several teachers: Prof. Giovanna Cipressi, Enrichetta Galli and Annalisa Salomone.

Full information about World Space Week was available on the ODISSEOSPACE website ([www.odisseospace.it](http://www.odisseospace.it)) and on the websites of the schools, and included information about the results achieved to celebrate this important anniversary. The students were fascinated and really interested and their participation has been an encouraging indication for the future.

### 3.4.9 Norway

SATURDAY 1.10.2005 -- Romdagene (Space Days) Time: 11.00-17.00 (local time). All talks were in the Norwegian language only. Location: Norwegian Space Center, Oslo. Organizers: Norwegian Space Center and Norwegian Astronautical Society. Website: <http://www.romsenter.no/artikkel.cfm?aid=9&bid=10&oid=501>

- Lecture title: "The Navigation System of the Future: GPS + Galileo" ('Fremtidens navigasjonssystem : GPS+Galileo'). Lecturer: Frank Udnæs, Norwegian Space Center
- Lecture title: "NCUBE: The First Norwegian Built Satellite" ('NCUBE: Den første norskbygde satellitten'). Lecturer: Eystein Sæther, Andøya Rocket Range, Norway
- Lecture title: "KSAT – A World Leading Commercial Satellite Center" ('KSAT – et verdensledende kommersielt satellittsenter'). Lecturer: Tone Schønberg, KSAT, Norway
- Lecture title: "Parabolic Flight Research" ('Forskning i parabelflyging'). Lecturer: Tonje Nanette Arnesen, PhD student, NTNU, Norway
- Lecture title: "The Mars Exploration" ('Utforskningen av Mars'). Lecturer: Øyvind Guldbrandsen, Editor of the Norwegian magazine 'Romfart'
- Lecture title: "Mars: Now What?" ('Mars: hva nå?'). Lecturer: Knut Jørgen Røed Ødegård, Astrophysicist, Univ. of Oslo, Norway
- Lecture title: "An Overview of the History of the Space Age" ('Stort og smått fra romfartens historie') Lecturer: Erik Tandberg, National space expert (covered the first lunar landing on live television in Norway in 1969)

SUNDAY 2.10.2005 -- Romdagene (Space Days) Time: 11.30-16.00 (local time). Location: Norwegian Space Center, Oslo. Organizers: Norwegian Space Center and Norwegian Astronautical Society. Website: <http://www.romsenter.no/artikkel.cfm?aid=9&bid=10&oid=501>

- Lecture title: "Space Travel Today" ('Romfart i dag'), Lecturer: Erik Tandberg, National space expert
- Lecture title: "Psychological Effects of Long Term Space Travel" ('Psykologiske aspekter ved langtidsopphold i rommet'), Lecturer: Gro M. Sandal, Dr., Psychologist

- Lecture title: “A Golden Age for Space Research” ('En gullalder for romforskning?'), Lecturer: Bo Andersen, Norwegian Space Center
- Lecture title: “The Next 30 Years of Space Activities” ('Romvirksomhet de neste 30 år'), Lecturer: Terje Wahl, Norwegian Space Center

TUESDAY 11.10.2005 -- Location: Andøya Rocket Range, Norway. Organizers: NAROM AS (National Center for Space Related Education), Andøya Rocket Range, Norway. website: <http://narom.no>

- Lecture title: “Our Fantastic Sun – from Galileo to Hypermodern Observatories in Space” ('Vår fantastiske Sol - fra Galileo til hypermoderne romobservatorier'), Lecturer: Pål Brekke, Senior Adviser, Space Science Coordination, Norwegian Space Center
- Lecture title: “Our Disturbed Sun – Auroa, Space Weather and Climatic Change” ('Vår urolige Sol - Nordlys, romvær, og klimaendringer'), Lecturer: Pål Brekke, Senior Adviser, Space Science Coordination, Norwegian Space Center
- Lecture title: “Norway – a Big, but Still a Small Space Nation” ('Norge - en stor, men liten romnasjon'), Lecturer: Pål Brekke, Senior Adviser, Space Science Coordination, Norwegian Space Center

### 3.4.10 Poland

World Space Week was celebrated for the sixth time in Poland. One of the main events, widely reported by Polish media, was the introduction of astronautics as a new field of study in the Technical University of Warsaw. From now, Polish students have the opportunity to study space-related subjects and take part in international cooperation in the exploration of space.

The best example was the student project SSETI EXPRESS, which included the construction, launch and operation of a small satellite built by 15 teams of students from 14 European countries. The launch was scheduled for 27 October 2005 and a Polish student team was selected to control the flight. During and after World Space Week, almost all Polish newspapers and TV stations published extensive reports about student activity in space research. Thanks to this recognition, many students wanted to follow achievements of the Aeronautical Students Circle, directed by a 5<sup>th</sup> year student, Miss Edyta Dzieminska, and supported by Professor Piotr Wolanski – the Chairman of the Committee on Space Research. The next great challenge for the students will be the CUBE SAT project and the ESA Zero-G flights campaign.

The main educational events linked to World Space Week 2005 were organized again in Olsztyn – a major city in North-East Poland, which is a region famous for its beautiful, pristine lakes and forests. The Planetarium and Astronomical Observatory in Olsztyn organized a series of events during the Week. Mr. Jacek Szubiakowski, Director of the Planetarium and Mrs. Elzbieta Plucinska, who is responsible for the World Space Week events, prepared a very interesting programme, which included lectures on the exploration of the solar system and the latest discoveries on Mars. The lectures about Mars and other planets were accompanied by concerts of music dedicated to space.

There were several events organized by the Polish Astronautics Society. Especially active were groups from Gdansk, Gdynia and Torun (the city of Copernicus). Young enthusiasts of astronautics participated in the ZNEK project (Application of Science for the Exploration of Space) <http://znek.astronet.pl> led by the Polish Astronautics Society and its



leaders Mr Andrzej Kotarski and Mr Marek Sadowski. ZNEK has a significant role in the popularization of World Space Week among 14 to 19 year old pupils and students.

In addition to the main events organized under the patronage of the Polish Academy of Science, several local activities were reported. These included lectures, exhibitions and other educational events in planetariums, schools and universities all over Poland.

World Space Week 2005 had a significant promotional effect in the media, helping the

organizers spread of space education.

### 3.4.11 Portugal

The effort to prepare this very complete programme must be credited to the Portuguese governmental agency for Science Outreach called "Ciência Viva" (Science Alive), and its centres throughout the country. For more information, please visit: <http://www.cienciaviva.pt/rede/space/space2005/>. The celebration consisted of many events in schools, observatories and planetariums. For more detail, please visit [http://www.spaceweek.org/portugal\\_2005.html](http://www.spaceweek.org/portugal_2005.html).

### 3.4.12 Romania

The Romanian Space Agency has organized celebrations of World Space Week annually since 1999, since space projects and infrastructure play a crucial role in the stability and sustainable development of our planet. In 2005, World Space Week was focused on for meetings and seminars for scientists involved in this rapidly evolving field.

Some highlights of the Romanian Space Agency's space related activities in 2005:

- In particular, notable contributions by means of environmental monitoring and disaster management were emphasized in light of the 2005 spring and summer floods.
- Also, on 25 September, the national research programme on security and defence was announced, some of its priorities being clearly related to the use of space technology for disaster management, environmental awareness and space-assisted emergency telemedicine.
- In 2005, with support from the Romanian Space Agency, a group of Romanian students started a project on building a CubeSat type of nanosatellite. Information on the project and on the students' study-trip to Stanford University, USA, is available at <http://news-service.stanford.edu/news/2005/september14/rom-091405.html>. World Space Week provided an opportunity for coverage of this topic in Romanian



newspapers and media (television interviews and a 45-minute radio show on Radio Romania – Permanent Education and Science Department).

### 3.4.13 Russian Federation

The Russian Federation celebrated World Space Week with a rich array of programmes.



From 3 to 6 October, the International Conference “SPACE SCIENCE WEEK” was held at the Space Research Institute in Moscow. The following thematic days were part of the conference: 48th Sputnik anniversary, Space Research Institute - 40 years, astrophysics, solar-Earth physics, planetary exploration, Earth observation. On the last day of the conference a round-table discussion entitled “Limits of robotic exploration of space. When human participation is required?” was moderated by academician R.Z. Sagdeev. The full schedule of the Conference is available at <http://www.iki.rssi.ru/eng/2005e.htm>.

The International Seminar “Planetary and Earth- Rovers” was held in St. Petersburg from 3 to 5 October. It was organized by the All-Russia Research and Development Institute “TransMash”, Scientific Center “Rover”. Scientists and engineers from the Russian Federation, United Kingdom, Germany, France, China and Belarus presented reports and exhibits on rovers to be used in emergency situations and planetary rovers.

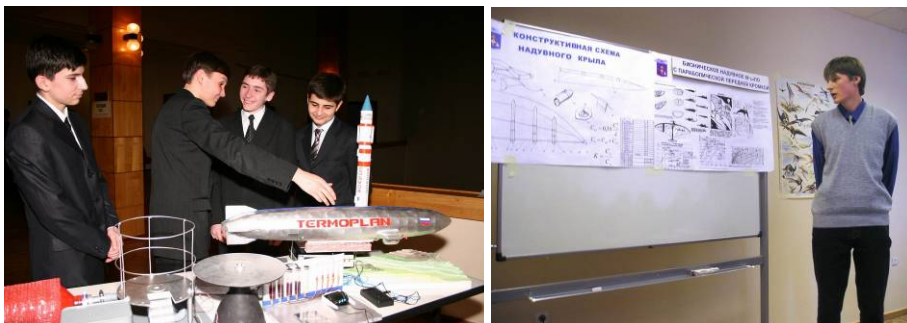


A round table entitled “Space for children” was organized by the Museum of Cosmonautics, St. Petersburg, on 4 October 2005. The goal of the round table was to develop a concept of a modern set of educational materials related to space education. High

school and university students from St. Petersburg interested in space took part in this event.

The first scientific and practical conference “Experiment in Space” was held at the Moscow State Department for Youth Creativity from 6 to 8 October 2005. It was organized by Moscow State University, named after M.V. Lomonosov, Rocket and Space Corporation “Energia”, Moscow Department of Education and Moscow State Department for Youth Creativity. The goal of the conference, which was attended by high school and university students, was to select the best experiment to be held in space. 250 students from several Russian cities in the Moscow, Severomorsk, Nizhnekamsk, Ryazan, Kaluga, Pereslavl Zalesky, Chelyabinsk and Voronezh regions took part in the conference. A total of 74 reports were presented in the following sessions: “Science and Life”, “Advanced Technologies”, “Astrophysics, Geophysics and Space Physics” and “Physics Experiments”. Cosmonaut Sergey Krikalev greeted conference participants from onboard the International Space Station. A Russian-language website with more detail on the conference can be accessed at: [http://www.astro.mgtd.ru/index\\_fr.html](http://www.astro.mgtd.ru/index_fr.html).

A scientific conference entitled “Cosmonautics – today and tomorrow. Problems and prospects” was held in Nalchik, Kabardino-Balkaria, on 6 October 2005. It was organized by the Kabardino-Balkaria Center of Scientific-Technical Creative Activity of High School Students. 120 participants took part in the conference. Among them were young people – the winners of regional and all-Russian contests on space related projects.



The plenary session of the 4<sup>th</sup> International Conference “Aviation and Cosmonautics-2005” was organized by and held at the Moscow Aviation Institute, from 10 to 13 October 2005. More than 100 Russian and international institutions and organizations participated in this conference. More than 250 reports were presented within 34 scientific sessions, which were dedicated to modern technologies in broad spectra of aerospace sciences including applied and fundamental issues. More than 500 participants took part in this event. In 2005, the conference was dedicated to the 75<sup>th</sup> anniversary of the Moscow Aviation Institute. The conference was addressed by Anatoly Perminov, head of the Russian Space Agency, who presented a report on “Youth of Russia and future of cosmonautics.” A Russian-language website with more detail on the conference can be accessed at: <http://www.mai.ru/news/conf/program.htm>



A seminar on “Space and Education” was held in Ulyanovsk, from 10 to 14 October 2005. It was organized by Moscow State University, “MSU-250” project. The programme of the seminar included lectures by researchers the from the Skobeltsyn Institute of Nuclear



Physics of Moscow State University, about the main processes in space and their influence on the Earth, lessons on the composition of the small satellites "Universitetskiy" and "Kompas-2", their scientific equipment, methods of experimental data analysis and the space-physics lab exercises. Students and teachers from the Ulyanovsk, Kostroma, Volgograd State universities and Samara State Aerospace University became active participants of the seminar. They offered new variants of the lab exercises, programmes for their realization and the scientific works of the students. For more information, please visit <http://cosmos.msu.ru/eng/>.



#### 3.4.14 Slovenia

The United Nations Office of Outer Space Affairs provided materials to schools across Slovenia as part of its global World Space Week 2005 Mars Base Design competition.

#### 3.4.15 Spain

The celebration of World Space Week in Spain this year reaped the benefit of coinciding with a major astronomical event: the annular eclipse of the Sun that swept across the country on 3 October. Given its broad nature, such a heavenly phenomenon –the first in over 90 years- was really well suited to a massive dissemination of information about World Space Week activities. Posters and additional printed material on space matters were displayed at more than 50 places where public observations were carried out in several Spanish cities. Since observations were taking place at schools, research centres and museums, they naturally led to a number of classes, lectures and other events related to space issues at many of these gathering spots.

Another favourable opportunity to enhance the World Space Week celebration was a series of aerospace events held in different major cities:

- "Aeronautics and Space Week", Barcelona, 24 September to 3 October
- "From Einstein towards Future", Madrid, from 3 October to 2 December
- "Hangar 05", Seville, 29 September to 30 October

Finally, as in previous years, routine actions were performed by the National Institute for Aerospace Technology (INTA) to spread information and to encourage participation, specially among youngsters. Press agencies and other media were fittingly informed well in advance, while the INTA corporate website announced the celebration of World Space Week, allowing direct links with other major sources of space information (Spaceweek International Association, United Nations Office for Outer Space Affairs, ESA, etc.). Brief information about World Space Week and its origins appeared in some newspapers and journals; other media (TV, radio) also reported about the Week.

### 3.4.16 Switzerland

The Swiss Astronautics Association (SRV) organized the Space Exhibition 2005 from 25 September to 16 October 2005 at the Air Force Museum in Dübendorf (near Zurich).

It consisted of an exhibition during the whole period and various lectures and events. The highlight was the Space Forum 2005 Conference on 1 October with the Swiss astronaut Claude Nicollier, who made a PowerPoint presentation via telephone from Houston because he could not personally attend due to hurricane problems. Another highlight was the musical Space Dream 2. Many Swiss industries showed their contributions to various space projects, and schools and universities displayed many original space models, experiments and ideas. A number of lecturers from academia and the Government presented overviews of space research and technology.

For more information, please visit <http://www.srv-ch.org>, under Space Forum 2005.



### 3.4.17 United Kingdom

Saturday 1 October

- Magnificent Desolation and Space Day -- The National Museum of Photography, Film & Television, Bradford held a Space Day to launch the new IMAX film Magnificent Desolation: Walking on the Moon. As well as screenings of the film, the day included archive displays from the photography & film collection, workshops, talks and other fun activities for families in order to educate about space exploration.
- Alien Worlds – Part 1 -- In association with The Science Of Aliens exhibition (see 15 October), Channel 4 broadcasted the first part of Alien Worlds.

3-7 October

- Discovery and Imagination using Image Manipulation -- Armagh Planetarium collaborated with Queen's University Belfast for this year's celebration of World Space Week in Northern Ireland. Students from local secondary schools were invited to the university to listen to presentations on Earth observation and our place in the Universe. After the presentations, teachers and students used the European Space Agency Earth Observation portal for schools (EDUSPACE) and manipulated images of Belfast and surrounding areas. Students then had the opportunity to remotely control the Hawaii-based Faulkes Telescope to take their own images of celestial objects.

#### 3-9 October

- World Space Week on Discovery Science TV – World Space Week on the Discovery Science television channel encompassed a whole week dedicated to space programming from 3 to 9 October. To mark this event, which coincided with International Space Week, Discovery Science gave away a sightseeing trip for two to Amsterdam and a personal tour of the European Space Agency's Technology and Research Centre in Noordwijk.

#### 4-10 October

- World Space Week Space Bookcrossing -- Bookcrossing is the practice of leaving a book in a public place to be picked up and read by others, who then do likewise. Bookcrossers around the world celebrated World Space Week by releasing space and science-fiction books for others to find. More information can be accessed at [www.wsw-bc.bookcrossing.com](http://www.wsw-bc.bookcrossing.com)

#### 4 October – 5 November

- "Win A Telescope for Your School" Competition -- To celebrate World Space Week 2005, the Space Education Council offered secondary school students the opportunity to win a Meade ETX90 Telescope for their school plus astronomical equipment worth £200 for themselves. See [www.secuk.org/telecomp.htm](http://www.secuk.org/telecomp.htm)

#### Thursday 6 October (National Poetry Day)

- A Poem for Space – On 6 October, National Poetry Day, the public had the chance to choose the poem to see launched into space to be discovered by whatever creatures should find it, far in the future.

#### Friday 7 October

- SETI and Biodiversity Evening -- In the first half of a two-part event, Gubir Singh, Chairman of the Salford Astronomical Society, gave a talk on the Search for Extraterrestrial Intelligence (SETI) and the possibilities for biodiversity elsewhere in the cosmos. Following refreshments, the film *Microcosmos* revealed the universe beneath our feet and the alien-like proportions of Earth-bound insects. This is one of the most astonishing and memorable nature films that one can see! The location was the Lancashire Wildlife Trust in Preston.

### Saturday 8 October

- 7th Annual Space Education Symposium -- The Space Education Council offered a day of space-education related talks focussing on the twin themes of 'Communicating Space' and 'Teaching Space'. The location was the National Space Centre, Leicester. The event was for anyone working, active or interested in space education and outreach
- Alien Worlds – Part 2 -- In association with The Science of Aliens exhibition (see 15 October), Channel 4 broadcasted the second part of Alien Worlds.

### Tuesday 11 October

- Alien Evolution -- How special is our planet? What can life on Earth tell us about the possible evolution of extra-terrestrials? Could there be life on Mars or a moon of Jupiter, and what life forms might evolve on planets around other stars? In association with Channel 4. This event was at the Dana Centre, London.

### Other Activities in Northern Ireland

- At the beginning of the week, Armagh Planetarium organized some great events in association with Queens University Belfast. In the computer suite of Queens, hundreds of local school children used Earth observation data, including data from ESA, of Belfast and realized how scientists use remote sensing and satellite data to learn about the environment locally and globally. Participants then took control of the massive 2-m Faulkes telescopes and went 'live' to Mount Haleakala in Hawaii. Teachers and pupils then made the link on how to use remote sensing in a similar fashion to Earth observation to learn about the Solar System and journey out into the cosmos. There was a lot of media attention and school children were actually discussing their projects on the prime-time news!
- Armagh Planetarium also ended World Space Week in the Republic of Ireland at University College, Cork (UCC) -200 miles from Belfast!- where participants set up a portable 'Stardome' (Planetarium) and took members of the public on a journey through space. The presentations highlighted how UCC researchers and Irish Astronomers were utilising new resources and information to unlock the secrets of the universe.



## 3.5 North America & Caribbean

### 3.5.1 Canada

During World Space Week, École Secondaire De La Rive in Lavaltrie, Québec, unveiled a scholastic space simulator for the first time. Parents and students alike were very impressed with the technology and with the realism of the simulator, which combines an immense 42 inch screen with an 800 watt acoustic system under the seats to provide the perception of intense vibrations. The simulator is now used twice a week to allow students to experience realistic virtual missions.



Kidston Elementary School in Coldstream, British Columbia, celebrated World Space Week with a telescope viewing session for students. Four scopes were out for this event and participants were able to see Mars through the scope, Andromeda the double star of the Big Dipper and a few other cosmic treats.

### 3.5.2 Cuba

World Space Week took place in Cuba with a press conference devoted to the Institute of Meteorology at its 40th anniversary, taking into account the great effort and the results obtained by this institution.

The press conference also witnessed the announcement of the Fourth National Space Workshop "Outer Space and its Pacific Use".



The objectives of World Space Week were disseminated through print media and radio. The Fourth National Space Workshop was successfully developed in the National Capitol with more than 30 specialists from 10 institutions dedicated to space applications and research in Cuba.



### 3.5.3 Panama

World Space Week 2005 was celebrated at the Panama campus of Florida State University (FSU). The celebration involved the City of Knowledge Foundation, which is working with various other organizations in a NASA project here. Since 2005 was also the World Year of Physics (WYP), the organizers cooperated with the National Physics Society. In addition, the organizers planned an Einstein Week related to WYP 2005 with the National Library, since Einstein visited and made a speech in 1930. During World Space Week, students at FSU campaigned to get a telescope observatory site. A small telescope, which was left at FSU-Panama, is being rebuilt.

### 3.5.4 United States

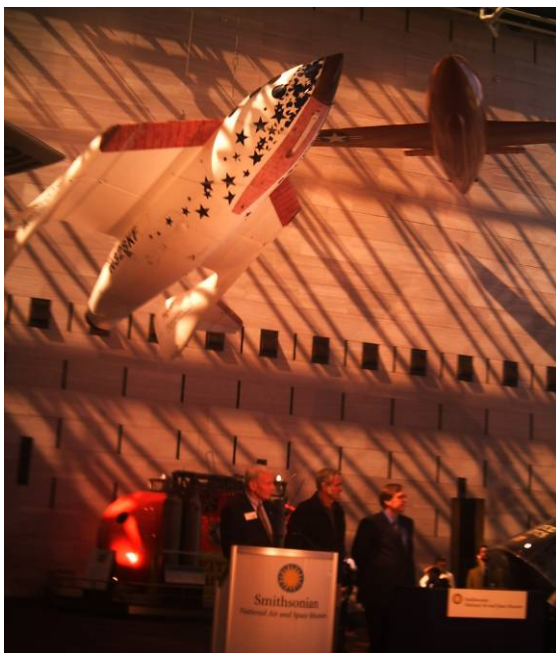
World Space Week 2005 was celebrated across the United States. Following is a sample listing of events.

#### Nationwide

- Teachers across the U.S. excited students about science, mathematics and language arts during World Space Week using the World Space Week Teacher Activity Guide and new Heinlein Activity Guide.

#### District of Columbia

- Space leaders gathered in Washington to celebrate World Space Week at a reception at the Cosmos Club on 5 October. Appearing was NASA Deputy Administrator nominee Shana Dale, representing Presidential Science Advisor, Dr. John Marburger, and Michael O'Brien of NASA. The event was sponsored by Global Science & Technology, Inc. and was hosted by Spaceweek International Association and the National Space Society. SIA Chairman Courtney Stadd was master of ceremonies.



- SpaceShipOne, winner of the X-Prize last year during World Space Week, was unveiled by the National Air and Space Museum at a ceremony on 5 October attended by Burt Rutan and Paul Allen.
- US space organization leaders held a World Space Week organizational meeting at the National Space Society on 5 October.

- The UN Association of the National Capital Area hosted a discussion panel on international cooperation in space exploration on 5 October on Capitol Hill.
- The Arthur C. Clarke Foundation hosted the annual Clarke Lecture and Awards Ceremonies at The Cosmos Club. The event featured a spectacular space art exhibit titled "The Moon, Mars & Early Astronomical Concepts," rare plus studio photos from "2001: A Space Odyssey" and historic Clarke first editions and books. Featured speakers included NASA Chief Historian Steven J. Dick, Joseph Allen IV, Tom D. Crouch Fred Ordway III and Scott Pace, Associate NASA Administrator for Program Analysis & Evaluation. The annual Clarke Lifetime Achievement Award was awarded to Ben Bova, prolific futuristic author of 100 fiction and non-fiction books. The Clarke Innovator Award was presented to Bradley Edwards for "Pioneering Development of the Space Elevator Concept." Sir Arthur spoke to the audience from his home in Sri Lanka.

#### Missouri

- The Celestial Theatre created an innovative theatrical performance about space, astronomy and science fiction at the Bird's Nest Space Place in St. Louis. The performance was distributed electronically.

#### New Mexico

- The X-Prize Cup in New Mexico showcased the latest developments in commercial space transportation. It was an event where the public were able to watch the next generations of space vehicles fly, see the vehicles up close, learn about the technology, build thier own rocket or telescope, operate a robot, talk to astronauts and promote space tourism.

#### Texas

- Numerous kindergarten to 12th Grade teachers in the Clear Creek Independent School District received World Space Week Teacher Kits sponsored by Hernandez Engineering. They used these materials to promote student interest in science and mathematics.
- A member of the NASA Mars Exploration Rover Mission Team, Dr. John Grotzinger from the California Institute of Technology, gave a lecture on "The 2004 Mars Exploration Rover Mission: Evidence for Water and Prospects for Life" on Thursday, 13 October 2005 at the University of Texas at Austin. The lecture could be viewed via live webcast.

### **3.6 South America**

#### **3.6.1 Bolivia**

Es una celebración internacional de ciencia y tecnología, y su contribución a la mejora de la condición humana. La Asamblea de General de Naciones Unidas declaró en 1999 que anualmente del 4 al 10 de octubre se recuerde como "Semana Mundial del Espacio".

El 4 de octubre de 1957 fué el Lanzamiento del primer satélite de la Tierra hecho por el hombre el Sputnik 1 de la URSS, abriendo la exploración espacial,

El 10 de octubre de 1967 se celebra la firma del Tratado del Uso Pacífico del Espacio Exterior, incluso la Luna y otros Cuerpos Celestes.

El tema elegido para 2005 es " Descubrimiento e Imaginación" Este tema trata de la exploración del sistema solar, así como también impactos positivos de la exploración del espacio y ciencia en el descubrimiento, la imaginación humana y la inspiración de la juventud.



El Observatorio Astronómico Nacional ubicado en la ciudad de Tarija al sur de la República de Bolivia cuenta con la infraestructura necesaria para difundir la ciencias del espacio y en calidad de coordinador nacional de este

evento por tercer año consecutivo organizó la SEMANA MUNDIAL DEL ESPACIO del 4 al 10 de octubre y contó con el apoyo de la Prefectura del Departamento de Tarija, Universidad Juan Misael Saracho y la Asociación Boliviana de Astronomía.

El afiche oficial del evento fue presentado en conferencia de prensa la mañana del 4 de Octubre, los medios de comunicación de Tarija dieron amplia cobertura a esta actividad.

Entre los eventos realizados en esta celebración fueron:

- Exposiciones fotográficas con motivos astronómicos y astronáuticos, fotografías y posters, en los salones secundarios del Planetario
- Proyección de DVDs pantalla gigante en la sala principal del Planetario

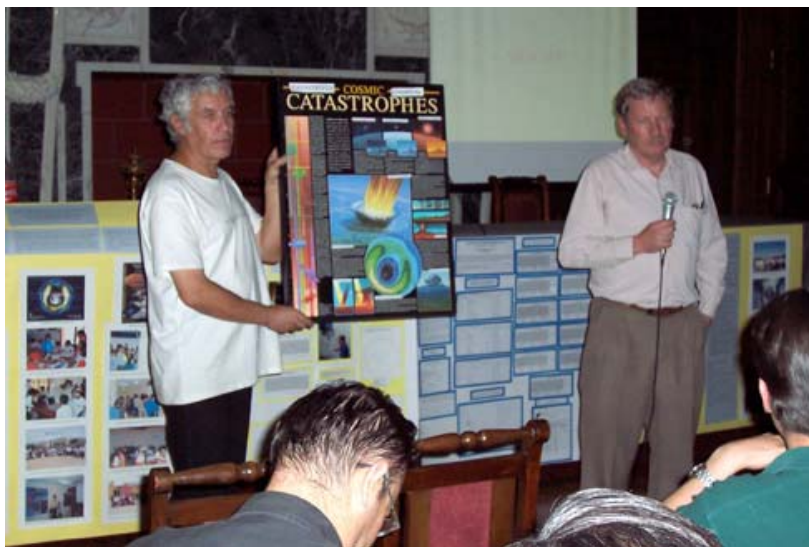
Tema: "15 años del telescopio Hubble" en 9 capítulos

- La historia del Hubble
- Funcionamiento del telescopio espacial
- Relatos planetarios
- La vida de las estrellas
- Colisiones cósmicas

- Monstruos Espaciales
- Ilusiones gravitatorias
- Nacimiento y muerte del Universo
- El fin de los tiempos

Tema: Meteoritos -- "Fragmentos de otros mundos"

- Observación astronómica con telescopios
- Excursiones guiadas por las instalaciones del Observatorio mas la descripción de los telescopios y otros equipos
- Charlas y conferencias astronómicas a cielo abierto.
- Demostración de software astronómico.
- Juegos astronómicos.
- Presentación de la exposición fotográfica y conferencia sobre la SEMANA MUNDIAL del ESPACIO en el XIV Encuentro Nacional de Astronomía, Cochabamba, 14-16 de octubre de 2005, evento que se llevara a cabo en el Centro Pedagógico y Cultural "Simón I. Patiño", Palacio Portales , Cochabamba, Bolivia



Grupos de entusiastas jóvenes y familias completas le dieron vida a esta actividad. Los niños, como todos los años, fueron los protagonistas principales: destacamos la presencia de la delegación del 8º año de escolaridad de la Unidad Educativa de "Los Naranjos" distrito de Entre Rios Dpto. de Tarija así como los

estudiantes de nuestra comunidad de Santa Ana "La Cabaña", estudiantes del Colegio "San Jorge" turno de la tarde, estudiantes del Colegio Alemán de la ciudad de Santa Cruz, la prpmoción del 5to grado de la Escuela Normal de Abra Pampa, porvincia de Jujuy, República Argentina, así mismo la delegación de la comunidad Cristiana Evangélica de Méndez Arcos quienes se encuentran organizando grupos de observación de lluvias de meteoros debido al gran interés despertado en el tema en su visita al Observatorio, clara muestra que la astronomía es para todos, una de las finalidades de la conmemoración de la "Semana Mundial del Espacio" que esperamos repetir al próximo año, con tan marcado éxito.

### 3.6.2 Brazil

The following schools and universities across Brazil participated in World Space Week 2005:

- UFRGS – Rio Grande Do Sul University, Porto Alegre - RS

- Science and Technology Museum, Londrina State University,
- UNESP – University Geography Course, Fazenda Lambari Grammar School, Poços de Caldas, Minas Gerais State
- Colégio Universitas, Ponta da Praia, Santos – SP
- Ivone Maria da Silva Vidal, Educandário, Bananal – SP
- Escola Agrotécnica Sérgio de Carvalho, Vitória da Conquista – BA
- Leila Aparecida do Nascimento Takehisa, Santa Cruz dos Lázaros, Jacareí – SP

### 3.6.3 Chile

During World Space Week 2005, Chile celebrated the tenth anniversary of the launching of FASat-Alfa, the country's first satellite launched in cooperation with Surrey Satellite Technology of UK. A website was set up ([www.fasat-alfa.cl](http://www.fasat-alfa.cl)) to provide information about this important date. The Chilean Air Force webpage published a historical note about space activities in Chile (<http://www.fach.cl/proyec/proyec.htm>; see the FASAT project). Several national newspaper published stories about this anniversary.

### 3.6.4 Colombia

Barranquilla -- En esta ocasión la Semana Mundial del Espacio 2005: Descubrimiento e Imaginación en Barranquilla – Norte de Colombia- contará con la participación especial de:

- GERMAN PUERTA RESTREPO, Astrónomo aficionado experto. Miembro de la Asociación de Astrónomos Autodidactas de Colombia ASASAC. Miembro y ex presidente de la Asociación de Aficionados a la Astronomía de la Universidad de los Andes. Ex director del Planetario Distrital de Bogotá. Reconocido autor de libros, como: Astronomía para todos; Estrellas, Planetas y vida en el universo; Guía para viajeros del cielo; Vida en otros mundos; Marte, al encuentro del planeta rojo; Astronomía, ciencia explicada; Galileo Galilei, el primer hombre moderno, y otras publicaciones, como: Revista Eclipse total de sol y Tormenta de meteoritos de las Leonidas.
- RAUL JOYA OLARTE, Ingeniero Mecánico. Director del Observatorio Astronómico de la Universidad Sergio Arboleda y coordinador de 'Colombia en Órbita', un proyecto que incluye el desarrollo, ensamblaje, lanzamiento y control del primer satélite artificial hecho en el país. Miembro de la Asociación de astrónomos Autodidactas de Colombia. Ex-Presidente de la Red de Astronomía de Colombia RAC.

#### Agenda

- Martes 4 de octubre: Conferencia a estudiantes de 5o a 7o. Lugar: Colegio Real de Colombia. Conferencista: Germán Puerta Restrepo. Temática sugerida: Galileo Galilei, El primer hombre moderno.
- Tertulia con reporteritos de Voz Infantil – Hola Juventud y de Radios Escolares. Lugar: Comfamiliar. Ponente: Germán Puerta Restrepo. Temática: Marte, fantasía y realidad en el planeta rojo.



- Miércoles 5 de octubre: Conferencia a estudiantes de 4o a 7o de colegios de Puerto Colombia. Lugar: Salón multifuncional del Municipio. Conferencista: Germán Puerta Restrepo. Temática sugerida: El Universo a gran escala
- Conferencia a estudiantes de 6o a 8o. Lugar: Instituto Técnico Nacional de Comercio. Conferencista: Germán Puerta. Temática sugerida: Historia de la Cohetería
- Jueves 6 de octubre: Conferencia a estudiantes de 8o a 10o. Lugar: Instituto Pesatalozzi. Conferencista: Raúl Joya Olarte. Temática sugerida: Colombia en Órbita.
- Conferencia a Niños, Niñas y Jóvenes pertenecientes a la Asociación de Clubes de Astronomía del Atlántico "Eridano" y estudiantes de Colegios del Sector Sur Oriente. Lugar: Universidad del Atlántico. Conferencista: German Puerta Restrepo. Temática sugerida: Vida en el Universo y el enigma OVNI
- Tertulia con comunidad de expertos y aficionados a la astronomía. Lugar: Planetario de Barranquilla. Ponentes: Germán Puerta Restrepo. Temática: Vida en el Universo y el enigma OVNI
- Viernes 7 de octubre: Conferencia a estudiantes de Colegios de la Autopista Vía. Lugar: International Berckley School. Conferencista: Raúl Joya Olarte. Temática sugerida: Colombia en Órbita
- Tertulia con comunidad de expertos y aficionados a la astronomía. Lugar: Planetario de Barranquilla. Ponentes: Raúl Joya Olarte. Temática: Colombia en Órbita
- Sábado 8 de octubre: Especial Radial de Voz Infantil, Hola Juventud y Panel Sin fronteras dedicado a "SME-05, Espacio e imaginación". Lugar: Emisora La Voz de la Costa. Con la presencia del Ingeniero Raúl Joya Olarte

#### Bogotá

- LA COMISIÓN COLOMBIANA DE COHETERÍA Y ASTRONÁUTICA C-3 los invita a unirse en Bogota a la celebración de semana mundial del Espacio que realiza todos los años naciones unidas.
- En esta ocasión y con la colaboración del Planetario Distrital, el C-3 abrirá la celebración el día sábado 1 de octubre a las 3:00 p.m. en la sala Oriol Rangel segundo piso, Planetario Distrital con la conferencia: Las misiones Mars Explorer Rovers (MER) (los exploradores de Marte) a cargo del integrante del C-3 DAVID TOVAR - pregrado FÍSICA, Universidad Nacional de Colombia
- Luego el día 8 de octubre A LAS 2:00 PM en el parqueadero al costado norte del planetario: LANZAMIENTOS DE COHETES HIDRÁULICOS a presión, con paracaídas a cargo de los integrantes del C-3
- Seguido este mismo día a las 3:00 p.m. en la sala oriol Rangel segundo piso, planetario distrital con la conferencia: VIDA HUMANA EN EL ESPACIO

ESTACIÓN ESPACIAL-TRASBORDADOR, a cargo del integrante del C-3 JOSÉ MANUEL BAUTISTA - MIEMBRO DE LA A.I.A.A (American Institute of Aeronautics and Astronautics) - DISEÑADOR INDUSTRIAL Universidad Nacional de Colombia.

- 5:00 PM CLAUSURA DE LA CELEBRACIÓN. Las personas que deseen llevar modelos y maquetas espaciales los días de las conferencias pueden hacerlo para exhibirlos DURANTE LAS CHARLAS.

Entidades que se unen a la Celebración de la Semana Mundial del Espacio 2005 en Colombia:

- Fundación Voz Infantil-Hola Juventud
- Unidad porteña de Aprendizaje – UPA
- COMISIÓN COLOMBIANA DE COHETERÍA Y ASTRONÁUTICA C-3
- Asociación de Clubes de Astronomía del Atlántico "Erídano"
- Colegio Real de Colombia
- International Berckley School
- Instituto Técnico Nacional de Comercio
- Alcaldía de Puerto Colombia
- Americam School
- Programa Radial panel Sin Fronteras Emisora La Voz de la Costa
- Planetario de Barranquilla
- Emisora La Voz de la Costa
- Planetario de Bogota
- Noticiero Noticias Ya!
- Instituto Pestalozzi
- Programa Radial Hablan las Mujeres Emisora Radio Mar
- Altamira International School
- Colegio Británico
- Colegio Nuestra Señora del Lourdes
- Colegio Maria Auxiliadora
- MALOKA
- Grupo APOLO

## 4 Affiliate Programme

To expand and coordinate World Space Week and to foster networking among space-related institutions, Spaceweek International Association maintains a programme of voluntary affiliation with other organizations. This programme is open to both government and non-government organizations that are invited to become affiliates.

Affiliated organizations are credited in official World Space Week publications, the official website and elsewhere. Affiliates have the opportunity to network with key leaders in the global space community who support and/or participate in World Space Week. This creates goodwill for affiliated organizations in the global space community and the opportunity to promote their space-related products and services.

Affiliates pay annual dues of \$500 or more depending upon the level of benefits desired. Benefits are described in the Affiliates section of [www.spaceweek.org](http://www.spaceweek.org). To become an affiliate, organizations can complete the online application at [www.spaceweek.org](http://www.spaceweek.org) or contact [admin@spaceweek.org](mailto:admin@spaceweek.org).

### Benefits

Outreach – Help promote and demonstrate public support for space

Education – Encourage student interest in maths and science

Networking – Interact with space leaders from over 50 nations

Marketing – Promote your organization and its space products and services

### Spaceweek International Association Affiliates

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## 5 Recommendations

World Space Week continues to be successful in communicating the benefits of the peaceful uses of outer space to government leaders and the public, and in inspiring youngsters about science, mathematics and technology. To increase its impact, it is recommended that the scale of World Space Week increase. This would require that more events be held in the period 4 – 10 October each year in order to reach more of humanity through attendance at events and through media coverage of the combined global celebration.

To this end, all organizations are invited to participate in World Space Week in an appropriate manner. Methods of participation can include the following:

1. Schedule Events During World Space Week Annually.

All organizations are encouraged to make World Space Week a main timeframe of their annual outreach and education programmes. Participation can be as simple as rescheduling planned events and programmes to occur during 4 - 10 October and incorporating “World Space Week” into the event name and publicity. This can be done with no additional resources and yet can be very effective in increasing the global visibility of World Space Week. Planned programmes should be reported to the media, to the national coordinator if any and to Spaceweek International Association prior to World Space Week each year. A report should also be filed after World Space Week in order to receive credit in this annual report.

2. Support the Coordination of World Space Week.

All organizations are also encouraged to support the global and national coordination of World Space Week. The growth and effectiveness of World Space Week depends greatly on the ability of the United Nations Office for Outer Space Affairs, Spaceweek International Association and World Space Week national coordinators to invite organizations to participate and to provide them with support. To this end, the following steps can be considered:

- Organizations could provide voluntary contributions or in-kind support for World Space Week to the Office for Outer Space Affairs, Spaceweek International Association and/or national coordinators. An Affiliation Programme provides specific recognition to supporters as described in section 4.
- Organizations could support focused projects related to World Space Week, such as sponsoring the distribution of educational materials to teachers for use during World Space Week, providing awards to schools to encourage their participation or providing materials to developing countries. For further information, please contact Spaceweek International Association or the United Nations Office for Outer Space Affairs.



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developing countries in using space science and technology.*



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