

REPORT ON WORLD SPACE WEEK 2004

Prepared in cooperation with Spaceweek International Association



space for sustainable development



UNITED NATIONS

ST/SPACE/27
Office for Outer Space Affairs
United Nations Office at Vienna

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1 Introduction

This is the annual report on the international celebration of World Space Week. The report provides the background of World Space Week, details of the events that occurred during the 2004 celebration, and recommendations for making future celebrations even more successful.

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 then, World Space Week has become the largest annual public space event on Earth. Government agencies, industry, schools, museums, planetariums and other institutions in 42 nations reported their participation in World Space Week 2004. A network of coordinators in 52 nations supported the growing programme of events.

Consisting of outreach and education activities, World Space Week attracts global attention to space. Through media coverage and attendance, World Space Week activities efficiently inform the public about the benefits of space and inspire students to excel in the fields of mathematics and science.

The theme of World Space Week 2004 was “Space and Sustainable Development”. Events focused on the many ways in which space can help society to develop in a sustainable manner. The theme for World Space Week 2005 will be “Discovery and Imagination”.



Thousands march in Bangladesh to celebrate World Space Week

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-government organization which supports the United Nations in the global coordination of World Space Week. For further information, please visit www.spaceweek.org or email admin@spaceweek.org.

2 Background

2.1 History

World Space Week, held from 4 - 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,

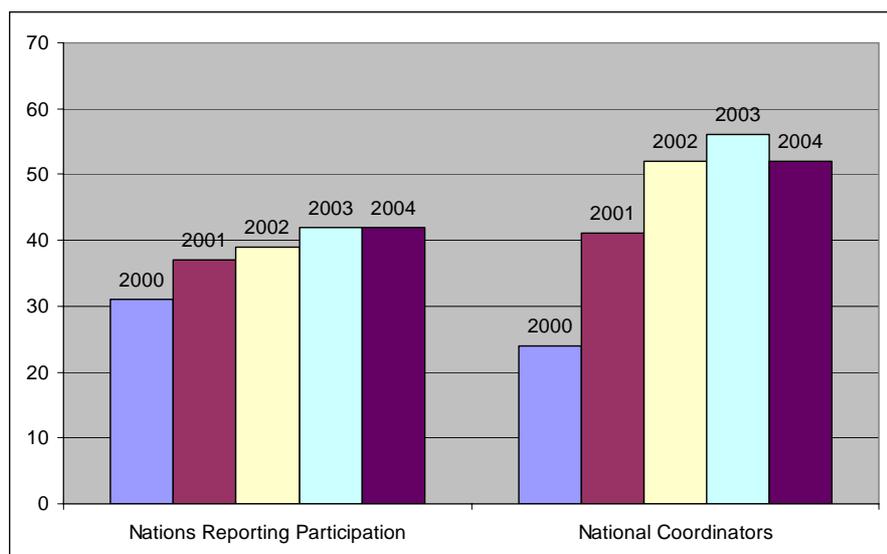
Recalling also that 10 October 1967 was the date of the entry into force of the Treaty on Principles Governing the Activities of States in the Exploration and Peaceful Uses of Outer Space, including the Moon and Other Celestial Bodies,

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 43 nations reported participation in World Space Week 2004. This chart summarizes World Space Week participation trends since its declaration by the UN General Assembly.

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



Region	State or Area	2000	2001	2002	2003	2004	
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							
Malaysia							
Nepal							
Pakistan							
Philippines							
Saudi Arabia							
Thailand							
Turkey							
Uzbekistan							
Europe	Austria						
	Bulgaria						
	Czech Republic						
	Croatia						
	Denmark						
	France						
	Germany						
	Hungary						
	Ireland						
	Italy						
	Netherlands						
	Poland						
	Portugal						
	Romania						
	Russia						
	Slovakia						
	Slovenia						
Spain							
Sweden							
Switzerland							
United Kingdom							
North America & Caribbean	Canada						
	Cuba						
	Dominican Republic						
	El Salvador						
	Mexico						
	Panama						
	Trinidad & Tobago						
United States							
South America	Argentina						
	Bolivia						
	Brazil						
	Chile						
	Colombia						
Totals	63	31	37	39	42	42	

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 web site and publication of this annual report. SIA is a non-government, non-profit, non-membership organization which is governed by a distinguished Board of Directors with members from 22 nations. The leadership of the Association is listed below.

Spaceweek International Association Board of Directors

Courtney Stadd, Chairman

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

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Kerrie Dougherty, Powerhouse Museum	Mazlan Othman, Malaysia National Space Agency
Roger Elaerts, European Space Agency	Michael Simpson, International Space University
Driss El Hadani, Royal Centre for Remote Sensing	Richard Tremayne-Smith, British National Space Centre
George French, Space Education Initiatives	Ernesto Vallerani, AIPAS
Luo Ge, China National Space Administration	Joao Vaz, Brazsat
Raimundo González, Ambassador of Chile	Suvit Vibulsresth, GISTDA
Tom Hanks, Actor	Chris Welch, Kingston University

Association Officers

Dennis Stone, President	Piero Messina, Assistant Secretary
Michel Laffaiteur, Vice President	Ken Short, Treasurer
Rhonda Alcorn, Secretary	Marcia Gilbert, Assistant Treasurer

2.3.2 National Coordination

World Space Week is coordinated by volunteer National Coordinators. Coordinators invite organizations in their countries to participate in World Space Week. They compile information on the resulting celebrations and provide that information to the media and through Spaceweek International Association to the United Nations. Current Coordinators are listed below. Organizations in these regions should report planned World Space Week programmes to their Coordinator. Organizations in regions not shown are invited to propose a coordinator for their region.

Region	State or Area	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 Science	
	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	South African Astronomical Observatory	
	Asia & 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	MYS	Indian Space Research Organization	
	Iran	Tarikhhi	Parviz	Iranian Space Agency	
	Israel	Inbar	Tal	Israeli Space Society	
	Japan	Fushimi	Kazuya	Japan Space Forum	
	Kazakhstan	Gataullin	Yunir	Tashkent Research Institute of Space Engineering	
	Malaysia	Shah	Zamri	National Space Agency	
	Pakistan	Siraj	Arshad	Space and Upper Atmosphere Research Commission	
	Philippines	Ogena	Ester	Science Education Institute	
	Saudi Arabia	Hakami	Muhammad	Jeddah Science & Technology Centre	
	Thailand	Singhasaneh	Pitan	Geo-Informatics and Space Technology Development Agency	
	Turkey	Nuranoglu	Hassan	Space Research Working Group Turkey	
	Uzbekistan	Omarova	Gulnara	Aerospace Committee	
	Europe	Austria	Weinwurm	Gudrun	Österreichisches Weltraumforum
		Bulgaria	Radeva	Veselka	Informational Center for European Educ. Astronomical Programs
		Czech Republic	Kolár	Jan	Czech Board for Space Activity
Denmark		Jørgensen	Jesper	SpaceArch	
France		Contreras	Pierre-Louis	Centre National d'Etudes Spatiales	
Hungary		Both	Elod	Hungarian Space Office	
Ireland		Barnett	Ed	Space Encounters	
Poland		Ustynowicz	Adam	Committee on Space Research, Polish Academy of Sciences	
Portugal		Lopes	Manuel Matos	Universidade de Lisboa	
Romania		Piso	Marius-Ioan	Romanian Space Agency	
Russia		Victoria	Mayrova	Bauman Moscow State Technical University	
Slovenia		Jarh	Orest	Technical museum of Slovenia	
Spain		Cragnolini	Alider	Instituto Nacional de Técnica Aeroespacial	
Sweden		Brandt	Börje	Rymdtekniknätverk	
Switzerland		Meiner	Rudolph	PUSH Foundation	
United Kingdom		Welch	Christopher	Space Education Council	
North America & Caribbean		Canada	Clemen	Jason	Canadian Space Agency
	Cuba	Suarez	Loudres Palacio	Instituto de Geofísica y Astronomía	
	Dominican Republic	Guerrero Miseses	Robert	Sociedad Astronomica Dominicana	
	Mexico	Alcaraz	Francisco	Planetario de Morelia	
	Panama	Barrera	Azael	Universidad Catolica Santa Maria La Antigua	
South America	Trinidad & Tobago	Sankar	Hollis	Corinth Teachers College	
	Argentina	Capeluto	Victor	St. Peter's School	
	Bolivia	Zalles	Rodolfo	Observatorio Astronomico Nacional	
	Brazil	Sausen	Tania Maria	Spaceweek Brazil Committee	
	Chile	Mujica	Fernando	Aeronautical Engineer	
	Colombia	Hernandez Rua	Beatriz Elena	Voz Infantil- Hola Juventud members of WYESR-Colombia	

3 World Space Week Activities

This section describes the activities of World Space Week 2004. The reports are grouped according to geographical region.

All reports received from participating organizations by Spaceweek International Association by March 2005 were included in this report. Any additions or corrections should be emailed to admin@spaceweek.org and will be posted to the World Space Week website.

3.1 Africa

3.1.1 Algeria

Sirius Astronomy Association spearheaded the celebration of World Space Week, coordinating a large number of events and activities throughout Constantine and the region. During that week, Constantine was the focal point of amateur astronomy and space activities for the public, with a rich programme of activities on offer. In addition, the traditional space and astronomy expo at the al-Khalifah Cultural centre was well attended with an unending flux of visitors, mostly young people.



This year the lecture program was expanded to include various cultural and educational centres in the area. Lecturers came from all over the country and from abroad to speak to audiences at the various educational centres and institutions, with no less than 16 programmed lectures. Dr.Bilani from Aleppo University in Syria was the special guest lecturer.

A well-attended programme was held at El-Houria High School, the main city high school, with various multimedia shows and talks. At Mentouri University, a seminar “Forum Sur les Sciences de l’Espace et de l’Univers” was held with space science specialists from various national research centres and universities. Organized in collaboration with the Faculty of Earth Sciences, it drew many students and faculty members to its various sessions.



The Expo saw the participation of various national agencies that work on space and space-related activities, including ASAL (L'Agence Spatiale Algérienne), the CNTS (Centre National des Techniques Spatiales), the CRAAG (Bouzaréah), the INCT (L'Institut National de Cartographie et de Télédétection) and the ONM (L'Office National de la Météorologie). Furthermore, a dozen astronomy clubs and associations from all over the country provided an exposition stand.

In addition to the lectures and the Expo, special activities were held throughout the week at the el-Khalifa Cultural Center, as well as a wonderful Thursday afternoon for kids and their parents with an astro-show, several theatre shows on science subjects and a science competition, ending with an awards ceremony.



World Space Week was well covered by the media in Algeria with eight major national newspapers reporting on it. In addition, a segment was broadcasted on national TV (ENTV) and extensive coverage, including interviews of participants, was provided on the local Radio Station (Cirta-FM), as well as a segment on two official national radio stations (Channels 1 and 3). In addition, hundreds of Internet surfers visited the special site set up for the Salon at <http://www.geocities.com/cirtasalon04>.

It was the most successful and extensive World Space Week celebration held in Algeria so far, with thousands of participants and attracting the attention of millions of people all over Algeria.

3.1.2 Ghana

World Space Week was celebrated in Sos Village in the Asiakwa Eastern Region of Ghana. The program consisted of a world space poster exhibition, film show and excursion to Accra Airport. Entertainment was provided.

3.1.3 Libya

World Space Week in Libya was organized by the Libyan Center for Remote Sensing and Space Science, as the main coordinator in the Great Libyan Jamahiria. To promote awareness of this international celebration, the Libyan Center celebrated this event on 10 October 2004, by holding a Scientific Gathering where speeches were delivered by several distinguished leaders:

- The Director of the Center & Head of the Preparation Committee,
- The head of the Arab Union for Space Science & Astronomy,
- The Director of Department of International Organizations in the General Peoples Committee & International Cooperation
- The Resident Representative of the United Nations Development Program in the Great Jamahiriya
- The General Director of the National Office for Research & Development.



The scientific conference commenced with a first session on “Astronomic Observatories & Space Science and Astronomy in the Arab World”, where a number of scientific papers were presented. The second session was titled “Crescents and the Hijri Lunar Calendar.” During the following day, additional papers on this subject were presented, followed by sessions on “Remote Sensing and Space Science” and Astrophysics. The third day began with a session on the solar system, a session for amateur astronomers, and a

final session and presentation of recommendations.

3.1.4 South Africa

World Space Week in South Africa for the last two years has been coordinated by the National Space Science and Technology Working Group (NSSTWG), which consists of a number of government departments and space-mandated science bodies to promote space-related issues within South Africa. During 2003, the NSSTWG adopted a “big bang” approach, with events designed and coordinated for mass participation. Given the discussion around space and the need to raise issues around space more strategically in South Africa, a different approach that targeted decision makers was adopted for 2004.

This approach resulted in the launch of a space portal (www.space.gov.za), the production of a high quality brochure targeted at decision makers, and the World Space Week website for 2004. World Space Week also coincided with Astronomy Month, which involved schools and the mass media. In early December a successful space policy workshop with government decision makers and involving the International Space University was held in Cape Town.

3.1.5 Sudan

World Space Week was celebrated in Khartoum, Sudan with a public event organized under the Ministry of Science and Technology. The public had the opportunity to view the various exhibits and poster displays and listen to addresses by the Minister for Science and Technology, the Director of the National Centre for Research, and the Director of the Remote Sensing Authority of Sudan.



3.2 Asia & Oceania

3.2.1 Antarctica

McMurdo Station, Antarctica, had three main events for World Space Week:



- A radio broadcast of the top 10 Space Rock songs, which was complemented by discussions on astronomy and space exploration;
- Viewing of a DVD concerning the Apollo Missions;
- Roundtable discussion on the future of space exploration.

Space and astronomy books, as well as a number of space-related posters, were displayed in the library.

3.2.2 Australia

Australia's contribution to World Spaceweek 2004 consisted of two events: The Schools Space Technology Symposium and the Royal Melbourne Institute of Technology Space Science Expo.

The Schools Space Technology Symposium was held on 14 October at Arndell Anglican College on the outskirts of Sydney, Australia. It is an annual Australian World Space

Week event. It is a conference at which school students can present a paper to an audience of their peers about a space-related project they have undertaken or are working on.

Two notable student presentations from the 2004 Symposium were “Athletes Foot or Astronauts Feet” and “Catching Cosmic Rays.” In addition to the student presentations, students visited an exhibition of many hands-on activities, including a miniature drop-tower, and participated in workshops presented by local universities. There were also various static displays, including equipment like that used in the Spiders in Space Project which flew on the Space Shuttle Columbia and samples of materials used to make the Mars Rovers. The work of one group of students, the “Hathor Camera Rocket Project,” will be featured on a youth television program in 2005.

The Royal Melbourne Institute of Technology Space Science Expo is another annual Australian World Space Week event and was held at the Royal Melbourne Institute of Technology (RMIT). The 2004 event was held on 8 October 2004 and attracted over 300 high school students and their teachers



from 25 different schools. Students participated in many hands-on demonstrations that explored aspects of space science and their teachers learnt how they could replicate these experiments in the classroom. Teacher’s kits with instructions for all of the demonstrations were made available on the Internet following the event.

A large poster display allowed students to be exposed to the work of space-related groups, businesses and tertiary institutions from all around Australia. Students were made aware of possible career paths within the space industry and learn which tertiary institutions would best meet their needs. Teachers were provided with material with which to make science and mathematics more enjoyable in the classroom.

Both of these events aimed at inspiring students to study mathematics and science in high school and at the tertiary level and to follow a career path resulting from these disciplines.

3.2.3 Bangladesh

In recognition of World Space Week, the Bangladesh Astronomical Society arranged a week-long programme of celebrations all over the country.

The Inaugural Session of World Space Week-2004 was held in the auditorium of Mirpur Bangla High School, Section-11, Mirpur, Dhaka on 4 October. The Meeting was well attended despite heavy rains. The lecturers included: Dr. K. M. Serajul Islam,



Vice-President of Bangladesh Astronomical Society and the former Director of Science Museum; Dr. Mobarak Ali Akand, Treasurer of Bangladesh Astronomical Society and the former Director of Science Museum; Mr. F. R. Sarker, General Secretary of Bangladesh Astronomical Society and the National Coordinator for World Space Week in Bangladesh; Dr. Ali Asgar, former Head of Physics Department, Bangladesh University of Science & Technology; Prof. Habibur Rahman Chowdhury, former Director of Science Museum; Prof. Sultan Mahmood, Dept. of Physics, Asia Pacific University; Mr. Syed Abdul Kaium, Head Master of Mirpur Bangla High School; Mr. Siba Ranjan Datta, Science Teacher, Mirpur Bangla High School; and Mr. Amit, a kid Astronomer. The lecturers gave an overview of activities in astronomy and space science in Bangladesh and provided their recommendations for improvements in space science and astronomy education.

Also in Dhaka, the Aga Khan School celebrated World Space Week with a programme that included Lance's Lab activities, essay writing, presentations, quizzes and model building.



This year, World Space Week was also celebrated in Enayetpur, a small village in the district of Sirajganj, northwest of Dhaka. On 5 October, despite poor weather, thousands of students and space enthusiasts participated in a colourful and peaceful rally, chanting slogans of "Space for Sustainable Development". Traffic on the road was blocked and police helped the students to walk on the road safely. Wearing caps, badges and holding placards for World Space Week-2004 in their hands, the students strolled on the road with joy and enthusiasm. The villagers enjoyed this unusual event. After the rally, a meeting was held with the participation of Mr. F. R. Sarker (General Secretary of Bangladesh Astronomical Society), Mr. Abdul Matin (Head Master, Enayetpur High School), Prof. Lokendra Nath Ghose (Principal, Khamargaram College), Mr. Badal Chandra Roy (Head Master, Meherunnessa Girls High Schools), Mr. Saidul Islam (social worker) and Mr. Abul Kassem Mal (founder of Khamargram College). The students were encouraged to concentrate on the studies of space science as it would be an essential subject in the future.

The Sylhet Astronomical Society, SUST Astronomical Society and Bangladesh Astronomical Society jointly organized a Seminar on October 6, in the Auditorium of Shahjalal University of Science and Technology, (SUST), in Sylhet, about 200 miles east of Dhaka. A large number of students from the University participated. Among those who spoke were Dr. Abdul Hai Chowdhry (Associate Professor of Deptt. of Physics,



Shahjalal University of Science and Technology, Sylhet), Mr. F. R Sarker (General Secretary, Bangladesh Astronomical Society), Mr. A A M Reaz (Assistant Professor of M. C. College, Sylhet) and Mr. Asif (General Secretary, Sylhet Astronomical Society). The speakers discussed the importance of space education and urged the government to include Astronomy and Space Science in the curriculum of the University. A question and answer session was held, followed by a video presentation on various space-related topics.

For more information on World Space Week in Bangladesh, please visit <http://www.bangastrosociety.org/intro.html>. Videos of the 2004 celebration can also be viewed at www.spaceweek.org.

3.2.4 China

On the occasion of the 55th National Day for the Peoples' Republic of China, and to commemorate World Space Week this year, Mr. Jin Zhuanglong, Secretary General of the Commission of Science, Technology and Industry for National Defense (COSTIND) and its delegation (COSTIND/CNSA) arrived in Macau and hosted a major exhibition and seminar on the theme "China's Space Route – Behind the Success."

This Exhibition and Seminar presented more than 40 years of China's space endeavors, the present status and future scenarios. The contribution of China's space program to the world was demonstrated. The special thematic presentation involved IAA and CAS academicians, the recipient of a prestigious service medal and China's lunar mission chief designer.

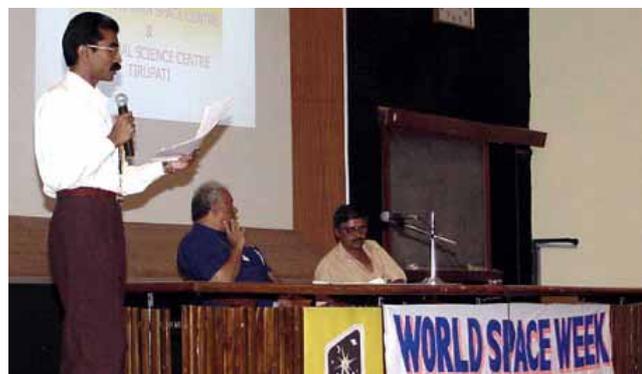
Hosting such an event provided an opportunity for the people of Macau, especially its youth, to better understand China's achievement in space. This event received support from the Government of Macau Special Administrative Region and Macau Foundation. With the exhibition completed, the exhibition pictures will be displayed in Macau schools.

3.2.5 India

The Indian Space Research Organization (ISRO) has taken the lead role in promoting the objectives of World Space Week in India by organizing annual events since 2000. Various Centres and Units of ISRO organized public outreach programmes during World Space Week 2004.

Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram

VSSC observed World Space Week in association with Liquid Propulsion Systems Centre and ISRO Inertial Systems Unit at Thiruvananthapuram. The weeklong event was inaugurated on 4 October at a function held at VSSC. On the same day, a Workshop on remote sensing applications was held for the media. On 5 October, a quiz competition in which 80 students competed was held at Kannur in association with the Kannur Science Park. A debate on "The Need for Manned Space Mission" was organized for the employees of ISRO and was well attended.



On 6 October, a Workshop on tele-Education for school teachers was held at Calicut, during which 136 educational professionals interacted with four experts. In addition, an interactive session with farmers was held at Calicut. ISRO, the Regional Science Centre, Calicut and the Department of Agriculture, Government of Kerala jointly organized both the events.



On 7 October, a lecture on “Sustainable Development,” the theme of World Space Week 2004, was organized for the benefit of employees. On 8 October, Dr. Jonathan McDowell, Centre for Astrophysics, Harvard College Observatory, Cambridge, Massachusetts, USA, gave a talk on the “History of Space Programme” at the VSSC auditorium. In addition, a workshop for 200 students and instructors of Industrial Training Institutes was organized at VSSC. On 9 October a painting competition for students was held at the YMCA auditorium, in which 800 youngsters took part. Around 150 children from the northern districts of Kerala travelled to witness the launch of a sounding rocket. On 10 October a Valedictory function of World Space Week 2004 was held at VSSC auditorium with Wg. Cmdr. Rakesh Sharma as the Chief Guest.



Satish Dhawan Space Centre SHAR (SDSC SHAR), Sriharikota

WSW 2004 celebrations at SDSC SHAR were inaugurated on 4 October at Brahmprakash Hall. The Chief Guest gave a talk on “Aerospace Technologies – Future Directions”, visualizing the potential applications of emerging technologies like nano-materials, smart materials, bio-technology etc. A Talent test/quiz for the top students of Tenth standard from every district of Andhra Pradesh was held on 7 & 8 October. The winner from among the 36 participants, was given the GSLV Award–2004, (instituted by Mr. R.V.Perumal, who was earlier Project Director of GSLV). A Photo Exhibition on “India in Space” was arranged on 7 and 8 October, for the benefit of students and the general public.

Space Applications Centre (SAC), Ahmedabad

The Vikram Sarabhai Space Exhibition was opened for the public throughout World Space Week. “Face-to-Face” with scientists was held between 5 and 7 pm every night of the week, which allowed the students to talk to space scientists on various subjects. An essay competition on “Space Technology for sustainable development / Are we alone in the Universe?” for college students and space model-making for school students were also part

of World Space Week activities. A popular lecture was arranged on “Challenges in Cryopropulsion”, which evoked a good response from the audience.



Master Control Facility (MCF), Hassan

Master Control Facility, Hassan observed World Space Week on 7 October, involving students, teachers, professionals and the general public of Hassan town and surrounding areas. Technical lectures on “Application of Indian Satellites for National Development” and “India’s Strides in the Development of Communication Satellites” were held. Other events included: a panel exhibition on the Indian Space Programme; Space Models Competition for Schools; Pick & Speak Competition on space-related topics; and an Elocution Competition on space subjects. The main function was held at Kala Bhavan and was attended by a capacity crowd of nearly 1300. Senior executives of ISRO delivered the lectures. During the Video Show on Interesting Space Missions & Events, the general public of Hassan had the rare privilege of viewing some of the unique Space Missions, disasters and Indian Space efforts in the form of a bundled video show with a live commentary on every clipping. Leading Newspapers, AIR, Doordarshan and other TV channels covered the activities of World Space Week.

ISRO Headquarters, Bangalore

At the Headquarters of ISRO, in Bangalore, the World Space Week programme included a Space Quiz for the personnel working in the Headquarters. A special lecture entitled “Bees, Bubbles and Block holes” was delivered by the Vice-Chairman of Bangalore Association for Science Education (BASE). Video shows included a documentary on the Apollo 13 Mission.

Planetary Society of Youth

On 5 October, directors of the Planetary Society of Youth visited public schools and colleges in Bagalkot and Belgaum, Karnataka during World Space Week. They spoke with students about space exploration to inspire and motivate young people into pursuing skilled professions in the development of technologies for our future world. On the same occasion The Planetary Society of Youth announced a new project to establish a Science Centre in Bagalkot to raise awareness among children, students and the general public in the areas of astronomy, space and technology.

Also on 5 October, winners of the “Design a Mission to the Moon” contest were announced. Thousands of students from India, USA, Europe, Africa and Bangladesh participated in the contest. Their task was to explore the Moon by using their creative ideas and imagination. Three students from India out of more than 2,500 applicants were

selected for the final round. For more information, please see http://www.youthplanetary.org/worldspace_week.html.

3.2.6 Indonesia

In cooperation with the National Planetarium Jakarta, a star party and general course was held on October 2 as the opening event of World Space Week. At this event, three portable telescopes, borrowed from Bosscha Observatory, were used. Participants ranged from junior high school students to adults.

On 9 October the films “Contact” and “Close Encounters of the Third Kind” were shown because they are popular and contain astronomical concepts. At the end of the event, there was a discussion about the concepts of astronomy that were used in the films.

The culmination of World Space Week took place on October 11 with a number of activities. High school students participated in a rocket show during which they launched water rockets that they designed themselves. Many people attended the lectures on the theme “Titan: Ancient Earth?”, which featured Mr. Taufik Hidayat, member of Cassini-Huygens mission’s crew, and speakers from the department of Biology and Geology of the Institute of Technology of Bandung. An exhibition featured a rocket model, software simulation and a 40 m long panel “Dreams to Fly”, ranging from the myth of Icarus to recent space exploration. The public was able to observe the sun with a four-inch Vixen telescope with filter that belonged to the Bosscha Observatory

3.2.7 Iran

World Space Week 2004 was celebrated in the Islamic Republic of Iran, broadly with the coordination of the Iranian Space Agency, for the first time. The Iranian Space Agency, presently the only state organization responsible for space science and technology applications in the Islamic Republic of Iran, gives great importance to the promotion of space science and technology applications in Iran. The organized activities for celebration of the World Space Week 2004 in Iran indicate the interest and attention of the authorities and public to this event.

The World Space Week 2004 Executive Committee, led by the Iranian Space Agency and consisting of the representatives of different organizations and institutions involved in the application of space science and technology in Iran, agreed to address the following themes on each day of World Space Week 2004:

- First day: space and sustainable development,
- Second day: space, education and research,
- Third day: space and environment,
- Fourth day: space and meteorology,
- Fifth day: space and natural disaster management,
- Sixth day: space and information technology,
- Seventh day: space and management of natural resources.

A painting contest for children aged 7-12 was organized jointly by the Iranian Space Agency and the Aerospace Research Institute of Iran and was widely welcomed by the primary school students. A large number of participants entered the contest on story

writing for youth. The winners received their awards from both Mr. Reza Hussein, the President of Pakistan's Space and Upper Atmosphere Research Commission (SUPARCO), and Mr. Hassan Shafti, President of the Iranian Space Agency. This took place at the closing ceremony of the Seminar on the Applications of Space Technology in Communications and Remote Sensing, jointly held by the Iranian Space Agency and the Inter-Islamic Network on Space Technology (ISNET), with the support of the Islamic Development Bank and held in Tehran from 8th to 15th October 2004.

Various interviews were held by the media with the participation of managers, specialists, scientists and scholars involved in space science and technology activities throughout the country. Throughout his interviews, the President of the Iranian Space Agency pinpointed the importance of space science and technology applications under the supervision of the Iranian Space Agency, that acts as the only governmental body responsible for the space technology applications in Iran since its establishment in December 2003.

A number of relevant seminars were held by some organizations and institutes as follows:

- Seminar on Space and Geomatics Engineering, by the Khajeh Nasir Technical University on 5 October 2004
- Seminar on Space Education and Research, by the Amir Kabir Technical University on 6 October 2004
- Seminar on Space and Information Technology, by the Aerospace Research Institute of Iran on 7 October 2004.

3.2.8 Israel

2004 was the second year that Israel participated in World Space Week activities. The driving force of the activities was the Israeli Space Society (ISS), an independent, public, educational, non-profit organization dedicated to the vision of creating a space-faring society in Israel.

The following World Space Week events were held in Israel:

- Live web event in which Israeli Space Society's president, Astronaut Itzhak Maio, took part, was held on the Space & Satellites forum of the largest forums community in Israel. The participants of the forum were able to chat with the astronaut and ask questions.
- Israeli Space Society's vice president Tal Inbar attended the International Astronautical Congress in Vancouver, Canada. He gave 2 presentations on space education issues and participated in the board meeting of Spaceweek International Association.
- Several planetarium shows were given at a mall in Herzlia, near Tel Aviv, using a Starlab portable planetarium system.
- Space related lectures were given at 5 schools.
- Special "films night" was organized in the youth activities section of the Weizmann Institute of Science. Several movies, including "The Right Stuff," were on show.
- A panel of space experts gathered at the Fisher Institute of Strategic Air & Space Studies and launched an ambitious project to create Israel's space vision for the next 20 years. The announcement was made on the closing day of World Space Week.

3.2.9 Japan

In Japan, September 12 is “Space Day.” On this day in 1992, the astronaut Mamoru Mohri became the first Japanese in space aboard the Space Shuttle and the 12th Space Day was celebrated in 2004. Since 2000, the period between the Space Day in Japan and World Space Week has been regarded as the “Space Month” and many space-related events are held every year.

The Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Japan Aerospace Exploration Agency (JAXA) promoted an Essay and Drawing Contest for elementary and middle school students, as well as other space-related events, where children could learn about space and space development. Along with those events, JAXA also opened its facilities to the public.

As the opening event of Space Month, “Fureai Festival 2004” was held in Miyazaki City from September 18 - 20. 16,081 essays and drawings were sent by children from all over Japan for the Essay and Drawing Contest, with the awards ceremony held at “JAPAN AEROSPACE 2004” on October 10.



3.2.10 Kazakhstan

On 4 October 1957 the first artificial satellite was launched from Baykonour cosmodrome in Kazakhstan. In order to celebrate this jubilee date, World Space Week was organized by the Fessenkov Astrophysical Institute. Some special excursions, devoted to the history and achievements of space exploration, were organized by the Observatory of the Institute. In the evening the Observatory organized excursions for school children, citizens and visitors of Almaty. People were invited to attend a popular lecture about astronomical achievements and to look at stars, planets or nebulae through the telescope.

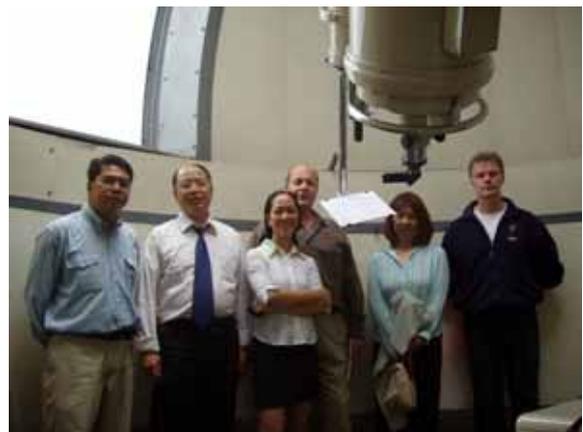


3.2.11 Philippines

The United Nations Educational, Scientific and Cultural Organization (UNESCO) organizes a series of information/demonstration sessions in developing countries aimed at enhancing space studies in schools and universities and keeping the general public abreast of the important role and contribution of space to the well-being of society and to the sustainable development of the country.



The first of a series of these sessions began during World Space Week 2004. It took place in the Philippines from 10 to 15 October 2004 in three geographic locations, namely Manila, Zamboanga and Pangasinan. Representatives of space agencies and space-related institutions presented their organization's education programmes and outreach activities, hands-on projects, best teaching practices, space technology application projects and partnership-building exercises. Speakers represented Norway, China, the United States and Spaceweek International Association. The visit was hosted by Mrs. Leticia Ramos Shahani, wife of former Philippines President Ramos, and the Ministry of Science and Technology. The participants of these sessions were teachers, students at various educational levels, representatives of the government sector, policy- and decision-makers and the private sector. Telescopes were donated to schools by the Permission to Dream Foundation.



One result of the sessions was the creation of a space education programme in the Philippines, which will include the annual celebration of World Space Week.

3.2.12 Saudi Arabia

The United Nations Regional Workshop on the Use of Space Technology for Disaster Management for Western Asia took place from 2 - 6 October 2004 in Riyadh, Saudi Arabia. The workshop is the last regional workshop in the series and was organized jointly by the United Nations Office for Outer Space Affairs and The King Abdulaziz City for Science and Technology (Space Research Institute). The event was co-sponsored by Space Imaging Middle East.

3.2.13 Thailand

The Ministry of Science and Technology organized “Thailand Science-Tech 2004” during 15 - 23 October 2004 at Impact, Muangthong Thani under the slogan “Science provides solutions.” The event’s objectives were to promote the usefulness of science and technology in solving problems in the real world and to exhibit products and services provided by the offices under the ministry.



Astronaut Kay Hire visited GISTDA and gave a special lecture about her experience during her Space Shuttle mission. Participants included Thai astronomers, webmaster of Thai astronomy web sites, members of the Thai Astronomical Society, education centres and university personnel.



This year, GISTDA published a children’s book, “Basic Knowledge for Kids: Space Technology and Geo-Informatics,” describing basics of remote sensing, geographical information system, and global positioning systems. The book is full of colorful illustrations, graphics, satellite images, and pictures with simple explanations. This book also introduced “THEOS”, Thailand’s first remote sensing satellite which will be launched

in mid-2007. World Space Week is explained in the inside of back cover. The book was distributed for free during “Thailand Science-Tech 2004.”



The WSW activity report for Thailand is currently presented and regularly updated in GISTDA's web page: <http://wsw.gistda.or.th/wsw/wsw.html>.

3.2.14 Uzbekistan

The following events were held to celebrate World Space Week:

- October 4 Opening Ceremony, Monument of the first astronaut Yuri Gagarin
- October 5 Space Awareness Popular Lectures, School # 42
- October 6 Rocketry Lectures, School # 42
- October 7 Astronomy, School # 42
- October 8 Space Youth Internet Forum, School # 42
- October 9 World Space Party, Café-bar “KOINOT”
- October 10 Closing Ceremony, School # 42

Participating & sponsoring organizations included the Uzbekistan Space Research Center, the International Aerospace School of Vakhidov, the Embassy of France, Rocket Modeling Circle, IREX, School # 42 (pupils), Tashkent Research Institute of Space Engineering, Tashkent State Aviation Institute, Organizing team.

3.3 Europe

3.3.1 Austria

The United Nations Office for Outer Space Affairs organized World Space Week 2004 activities in Vienna. Vienna school children were asked to imagine and draw their “ideal planet.” In keeping with the World Space Week theme, “Space for Sustainable Development,” this raised questions related to peace, development and human rights on their respective “ideal planets.”

During World Space Week, students visited the Vienna International Centre, where they participated in a mock “United Nations Conference” to compare and discuss their different ideas for an ideal planet. Following that, they officially handed over their drawings to a representative of the United Nations Office for Outer Space Affairs and had a guided tour of the Office for Outer Space Affairs Permanent Exhibit. The drawings were displayed for

a short time in the exhibit. In addition, staff of the Office for Outer Space Affairs were interviewed by a local radio station.

3.3.2 Bulgaria

World Space Week 2004 consisted of the following activities in Bulgaria:

- Opening of World Space Week with cosmic shows in the Astronomical Observatories and Planetariums in Bulgaria
- Demonstration of launching of model rockets by the Youth Club of Young Space Engineers, Varna, Bulgaria
- Exhibition-contest for space pictures made by students (12 years old) in the Maritime Garden, Varna
- Starry show for the young cosmonauts in the First Bulgarian childrens planetarium and the Childrens Space Center in Varna
- Students' Space Agency involving student debates about the projects "Marsbase – Marsgateway" (<http://www.geocities.com/marsgateway>) and "Moonbase", Varna
- Educational astronomical observational meetings for teachers and students in the National Astronomical Observatory, Rozhen
- Sending letters to newspapers about space and participation in TV broadcast
- School paintings exhibition "Space travelers" in several towns

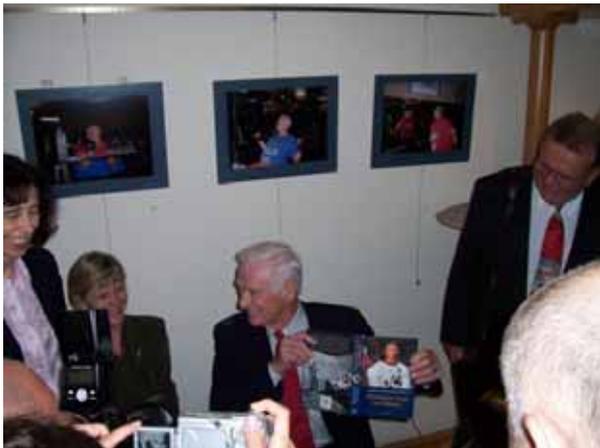


- Star séances in the Planetarium in Varna “Space travelers”
- Presentation of Educational European student programs - Eduspace and International Space Station in Bulgarian schools.

3.3.3 Czech Republic

The Czech Republic participated in World Space Week for the third time. As in previous years, the Czech Space Office (www.czechspace.cz) was the main organizer of Czech participation. Activities were coordinated by Mr. Milan Halousek, editor of KOSMOS–NEWS astronautics bulletin.

Various astronomical observatories planned and organized programs and lectures for the general public during the World Space Week period, which were attended by hundreds of participants.



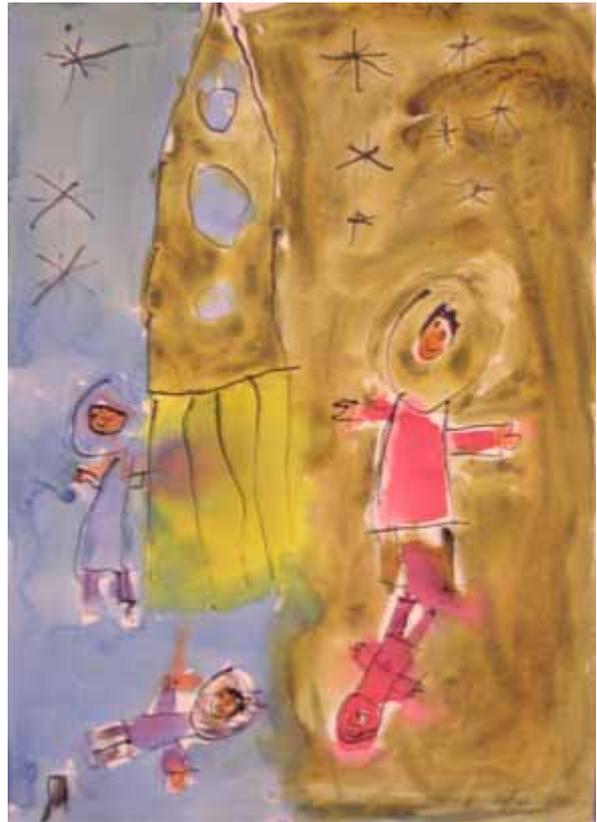
A special event, “Café Scientifique,” was organized by the British Council in Prague and consisted of a videoconference between Czech students and British specialists from the National Space Centre in Leicester. The second special event was AEROSPACE 2004 – International philatelic exhibition. Models of planes and spaceships, collections of astronauts’ signatures and talks with Czech astronaut-candidate, Oldřich Pelčák (Soyuz 28, 1978) complemented this exhibition. Another important event supporting publicity of the

space activities was a public meeting with Eugene Cernan, a former American astronaut of Czech/Slovak origin who had signed the Czech edition of his book “The Last Man on the Moon.”

The E. Hally Amateur Astronomical Observatory organized a workshop on astronautics and two exhibitions of space ships and launcher kits for children from primary schools.

Information and announcements about World Space Week appeared in a large number of web pages, especially the Czech Astronomical Society (www.astro.cz) and KOSMO (www.kosmo.cz), the Czech Space Portal. Astronomical observatories in Uhersky Brod and Valašské Meziříčí announced World Space Week information on their web pages, too. The Czech Astronomical Society published an official press release that was distributed to all media in the Czech Republic.

The number of events was similar to the previous year, 2003. In total, more than 2000 participants attended all lectures, especially young people from primary and high schools and their interest is an encouraging indication for the future. For information on the Czech World Space Week events, please visit <http://web.quick.cz/SKT/index.htm> and KOSMOS-NEWS and <http://kosmos-news.kosmo.cz>. Lectures were held on such topics as “Graceful Journey all over Red Planet – Adventure of Spirit and Opportunity Rovers,” “living in space,” “10 Tragedies or Disasters in Astronautics,” “Interesting Observations of the Sun and their Significance,” “Saturn Probes,” the “Cassini-Huygens mission to Saturn,” MSG-Meteosat Second Generation, “Truth and Myth of Landing on the Moon” and “Readable Mystery of the Moon.” A lecture series was held on “Nuclear Energy in Space Exploration, Titans at the Start, Apollo 11 and Saturn - so near and yet so far”. An exhibitions of space technology models were held, along with the exhibitions “We are Flying through Space” and “American Astronomy and Astronautics”. In addition, a 3D panel “Mars Exploration” was set up, children’s competitions and night astronomical observations were held.



3.3.4 France

As in previous years, CNES participated in or organized several events for World Space Week 2004.

Research organizations were invited to present their activities in the Jardin du Luxembourg. CNES presented the “Communicating Village,” which demonstrated how satellite communications can be used in regions where ground-based communications networks do not exist. Examples of the use of space technology for climatology, oceanic meteorology, navigation, and fishing resources were demonstrated using images and films at the CNES exhibition area of the International Forum of Meteorology, held from 15 – 17 October. CNES was also present at the World Space Week events that took place at the City of Space in Toulouse, Millau and Denain.

In the school year 2004 – 2005 teachers and pupils at the Cité Scolaire Albert Camus de Bois Columbes carried out educational projects in various disciplines under the topic of the mission Rosetta. The results will be presented at an open day on 21 April 2005.

3.3.5 Hungary

In October the Fourth Youth Forum was held, mainly organized by the Hungarian Space Office and the Scientific Council on Space Research.

The Hungarian Astronautical Society announced the start of its annual essay competition (dealing with the 25th anniversary of space flight by the first astronaut) at their yearly SPACE DAY in October.

The Hungarian Chapter of Mars Society organized a competition titled “The first Human Expedition to Planet Mars”. Applicants below age 14 demonstrated the field work of the first Humans on the surface of Mars while applicants older than 14 designed the Mars-habitat of this Human Expedition. The application material was any kind of drawing, computer graphic or demonstration model. For more information, please see <http://www.marssociety.hu>.

3.3.6 Ireland

The Irish Astronomical Association organized a lecture by Prof. R. Lambourne of the The Open University entitled “The New Cosmos” in Belfast on 6 October. East Antrim Astronomical Society organized a lecture on 4 October at Ballyrobert by Mr. John McFarland (Armagh Observatory) entitled “Some Astronomical Cover-ups.” Cork Astronomical Club organized lectures by Kieran O’Leary (optical engineer) and Tour of the Stars Speaker Paddy O’Keeffe on 13th October.

Space Encounters mobile planetarium ran an Ireland-wide crossword competition for primary and post-primary schools. The top prize was a free school visit by the mobile planetarium, with four other related prizes. The winners were chosen on 11 October. More details can be obtained from www.space-encounters.com download area.

Throughout the month of October a number of schools focused on space-related activities based on the World Space Week Teachers Activities Guide 2004.

3.3.7 Poland

World Space Week was celebrated for the fifth time in Poland, launched with the opening of the Polish Ranging and Monitoring Integrity Station (RIMS), which is a vital part of the satellite navigation system, EGNOS. The station was constructed as result of cooperation between the Polish Space Research Center and the European Space Agency. EGNOS, which is first element of the global satellite navigation system GALILEO, will enhance the accuracy of positioning based on satellite signals and increase the reliability of the results. RIMS in Poland is a good example of using satellite technology to meet the demands of modern economy and to satisfy public needs. It is also an important element of European transport infrastructure. The opening ceremony was reported in several television and radio programs, which informed the public about World Space Week 2004 and space technologies that boost economic development.

The Planetarium and Astronomical Observatory in Olsztyn organized a series of events during World Space Week. Mr. Jacek Szubiakowski, director of the Planetarium, and Mrs. Elzbieta Plucinska, responsible for World Space Week, prepared an extremely interesting program, which included a lecture on satellite navigation, the latest news from the Cassini-Huygens Mission, films about exploration of the Solar System and the 2001 Mars Odyssey Concert. One of the biggest attractions for children was the opportunity to control the “Red Rover” in the library of Olsztyn Planetarium.

The University in Olsztyn is very active in the field of monitoring of the environment and satellite navigation. Prof. Stanislaw Oszczak, Satellite Geodesy Chair, was invited during

World Space Week by Polish Television for an interview about the benefits of space technologies for protection of the environment.



There were several events organized by the Polish Astronautics Society. Especially active are 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 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, reports were received about several local activities – lectures, exhibitions and other educational events in planetariums, schools and universities all over Poland.

Organizers are convinced that World Space Week 2004 had a significant promotional effect in the media, helping to spread the idea of space education across Poland.

3.3.8 Portugal

World Space Week was celebrated across Portugal with various activities and events including seminars, discussion panels, theater plays and astronomical and earth observation exhibitions. These took place in public places and schools, reaching all sections of the public and particularly students of different grades. For more information, please see <http://www.cienciaviva.pt/rede/space/space2004/>.

3.3.9 Romania

The Romanian Space Agency has organized celebrations of World Space Week each year since 1999. The presentations, discussions and exhibitions held in 2004 highlighted the crucial role of space projects and infrastructure in the stability and sustainable development of our planet. Space projects can improve technology, promote enterprise and develop human resources. In particular, notable contributions by means of environmental monitoring, support for agriculture, disaster management and telemedicine were emphasized.

There was some space-related news in the media during October 4 - 5, announcing World Space Week events. On 5 October, the “Aeronautics and Space” Exhibition, organized by the Romanian Space Agency, was opened as part of the national event “CONRO - 2004”, which was organized by the Romanian Government - Ministry of Education and Research. Two radio shows, each of 15 minutes duration, were given by Radio Romania (Permanent Education and Science Department) on October 4 and 5 with the participation of space professionals. A special World Space Week celebration was held on October 6 in the ROMEXPO facilities in Bucharest. All events were posted on the Romanian Space Agency web page. The World Space Week poster was distributed and placed in public places, mostly in schools and universities.

3.3.10 Russia

From 2 – 4 October, a national conference “Cosmonautics of the XXI century: issues, solutions and aspects” in the framework of World Space Week was conducted by the K.E. Tsiolkovsky Russian Academy of Cosmonautics, the Federal Space Agency of Russia and the Federation of Cosmonautics of Russian Federation. The aim of the conference was to discuss key fundamental and practical problems in aerospace technology that are crucial for solving social and economic tasks of humankind in the 21st century, to demonstrate new technologies and equipment, and to demonstrate new fields of application for cosmonautics.

On October 5, World Space Week commenced in Kaliningrad in the Museum of the World Ocean. Various lectures, workshops and meetings with scientists and Federal Space Agency specialists, the “Space Odyssey” exhibition and a film festival devoted to “Russia in Space” were held during World Space Week in Kaliningrad.



On October 5 a long term science and educational program and contest for youth research projects among high school students called “Space Experiment” were announced by the Moscow State Department for Youth Creativity with the support of Department of Education of Moscow, the M.V. Lomonosov Moscow State University and the S.P. Korolev Rocket and Space Corporation “Energia”. This program will be conducted in cooperation with the Youth Space Center of the Bauman Moscow State Technical

University, the All-Russian Youth Aerospace Association “Soyuz” and leading Russian aerospace companies. Through this contest, high school students receive a unique opportunity to participate in planning, preparing and conducting an experiment in space (onboard the International Space Station, spacecraft or biosatellite) with the guidance of teachers, scientists and specialists. This experience gives high school students a chance to apply their knowledge to a real space mission, stimulates their interest in science, technical creativity and self-education in the required fields of science and technology, and helps them to better understand future job opportunities. This program also expands educational opportunities for teachers in organizing basic and complementary education. The presentation of projects is scheduled for October 6-7, 2005 during World Space Week 2005 (www.astro.mgdttd.ru).

On 10 October, the ScanEx Research and Development Center and non-profit and non-governmental partner organization “Transparent World”, with the assistance of the Laboratory for Aerospace Methods of Moscow State University, announced a competition among student and Ph.D. candidates called “Space images for geographical exploration” (<http://www.transparentworld.ru/edu/stud-konkurs2004.htm>).

On 10 October, within the framework of the national program “Engineering Legacy of Russia,” an exhibition dedicated to the 80th anniversary of the famous Russian academician Mikhail Reshetnev was opened in Moscow Polytechnic Museum. The aim of this

exhibition was to show the public, in particular young people, the great achievements of Russian aerospace engineers.

Youth Space Center representatives took part in the 55th International Astronautical Congress in Vancouver, Canada from 4 – 8 October.



On October 10, a meeting was held in Bauman Moscow State Technical University to award the winners of 1st International Junior F3A Radio Control Power Model Aerobatics Championship and participants of the “Scientific-technical Creativity and Modeling Sports in the 21st Century” International Scientific and Educational Conference. The Championship took

place on Tushino airfield in Moscow on September 22 and the Conference took place in Bauman Moscow State Technical University on 18-22 September, 2004. The list of participants includes young people from Moscow, Kaluga, Nalchik, Novomoskovsk, Kolchugino and also foreign participants from Ukraine, Finland, South Africa and Belgium. The winners received cups, diplomas and presents (<http://www.vimpel-f3a.ru/index.php?lang=eng>).

3.3.11 Spain

World Space Week 2004 was widely promoted on several web-sites of Spanish governmental organizations, universities and industries of the space sector. At least four newspapers and several weekly magazines with national distribution devoted specific articles to World Space Week. Some radio stations broadcasted programmes on World Space Week.

European Space Agency astronaut, Pedro Duque, was named “Universal Spaniard” during World Space Week, recognising his contribution to widely extending the image of Spain. Also during World Space Week, INTA announced an essay contest on “Space and daily life”, for young Spanish students, that ended in March 2005.

Research establishments, schools and two science museums held promotional initiatives, using their own audiovisual and printed materials as well as World Space Week posters.

3.3.12 Switzerland

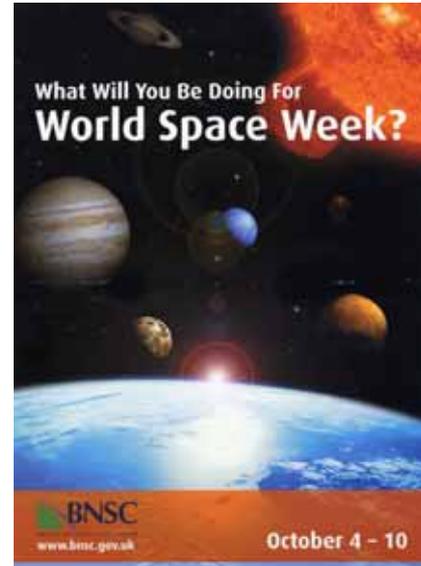
At the IMAX Theater, Verkshaus Luzern the “IMAX DAYS” programme ran from 17 September to 31 October showing the IMAX films SOLARMAX and SPACE STATION. A special event was the IMAX Space Night on 20 October with a speech by Dr. Bruno Stanek, a well-known Swiss Space Reporter.

The Swiss Astronautics Association (SRV) held its annual convention near Geneva on 24 September and organized the Swiss Space Days 2004 at the “Integral Science Data Centre” with an exhibit and a lecture by the Swiss astronaut Claude Nicollier.

The Astronomical Society Antares organized a special Space Exhibition, which was held in the large shopping mall “Säntispark,” St. Gall from 7 - 25 September. It focused on scientific satellites, their results and some specific technical parts that were made in Switzerland.

3.3.13 United Kingdom

The promotion of World Space Week 2004 in the United Kingdom was considerably enhanced by the support of the British National Space Centre (BNSC). The June 2004 issue of their Space UK magazine included a double-page pull-out with a special UK World Space Week poster on one side and ideas for World Space Week classroom activities on the other. Because of support such as this, World Space Week is increasingly making its way onto the space agenda in the United Kingdom. The BNSC insert was produced in cooperation with the Space Education Council, the World Space Week liaison organization in the United Kingdom.



On 4 October the 6th Form Lecture Day on Current Research in Astronomy and Astrophysics was held at Bletchley Park, Milton Keynes for A-Level students of Physics and related subjects. A series of four inspiring lectures by scientists at the forefront of current research, the programme included Dr. Robin Catchpole, University of Cambridge Institute of Astronomy, on “The Universe Unveiled” and Dr. Jim Collett, University of Hertfordshire, on “Decoding messages from Space”.

On 5 October the “Key Stage 2 Space Discovery Day – The Earth, Moon and Stars” was held at Bletchley Park, Milton Keynes with activities from the National Space Centre and the Open University covering National Curriculum topics for year 5 and 6 Pupils. A mobile planetarium, hands-on rocket launching and a rare chance to come face to face with some genuine moon rocks and meteorites from Mars were offered. A model of Beagle II was also on display. Also on 5 October, year 8 Pupils at Royds Hall High School, Huddersfield, W.Yorks gave a multimedia presentation to an “Assembly” of 170 of their peers to describe World Space Week.

On 6 October the “GCSE Science - Space As We Know It” talks and demonstrations were held for GCSE students at Bletchley Park, Milton Keynes. The presentations were made by: Cambridge University astrophysicists on the solar system and current research; local astronomer Sheridan Williams on Solar eclipses; and Dr. Chris Riley, producer of BBC1 science epic “Space Odyssey” (due to be aired in November 2004) on the making of the programme. Props from “Space Odyssey” were also on display.

Also at Bletchley Park, the “Key Stage 3 Technology Day – Mission to Mars – Build Your Own Mars Rover” was held on 7 October for year 8 and 9 technology students. Using basic classroom materials, Technology Education Projects (TEP) staff helped students design and build their very own planetary rovers, which were then tested on Bletchley Park’s own “Martian Landscape”

On 8 October, members of the general public were invited to the National Space Centre, Leicester to watch the live link to the launch of the Swift spacecraft.

The “INSET Day – Key Stage 2/3 Space Education,” held at Bletchley Park for KS 2 and 3 Teachers of Science and Science Coordinators, was lead by Anita Heward, Director of the British Festival of Space and included information and hands-on ideas for teaching “The Earth, Sun and Moon.” Anita highlighted areas of current UK space research that 7 - 14 years olds would find exciting and provided information on how and where to access the relevant resources.

The “EMC4: 4th European Mars Society Conference” was held from 8 – 10 October at the Open University, Milton Keynes for Mars Society UK members and anyone interested in Mars. The main guest speaker was Dr. Robert Zubrin, Founder and International President of the Mars Society. Other guest speakers included Dr. Andrew Ball, Principal Investigator, Mars, Phobos and Deimos Survey Proposal; Dr. Kevin Fong, Chairman, UK Space Biomedical Research & Education Advisory Committee; and Professor David Southwood FRAS, Director of Scientific Programmes, ESA. Further information can be found at www.marssociety.org.uk/EMC4-OU/.

The “Café Scientifique – Space” was held during World Space Week at Settle, North Yorkshire for members of the public who are interested in space. For more information refer to www.cafescientifique.org/settle.htm.

3.4 North America & Caribbean

3.4.1 Canada

Canada was proud to host the International Astronautical Congress (IAC) in Vancouver during World Space Week 2004. The IAC is the world’s largest annual conference devoted to space technology.

The Space Generation Congress (SGC) was held from 1 – 10 October in Vancouver. Approximately 200 international young delegates attended with the objective of implementing the vision of young people on the future utilization and exploration of space.

Vancouver Space Fest was a week-long program of various space-related activities offered to the public. Space Fest offered the public a chance to meet space experts from around the world and learn about the wonder of space and the fascinating work accomplished in space.



The Canadian Aeronautics and Space Institute (CASI), a non-profit scientific and technical organization devoted to the advancement of art, science and engineering relating to aeronautics, astronautics, and associated technologies and their applications, celebrated its 50th anniversary in 2004 by hosting the 55th Annual Congress of the International Astronautical Federation (IAF). In close cooperation with the United Nations and the European Space Agency, IAF co-sponsored an annual workshop on the use of space technology for the benefit of developing nations. The Canadian Space Agency contributed greatly to the success of the IAF conference. The Agency worked closely with CASI and MacDonald Detwiler and Associates and other members of the organizing committee to ensure the success of this prestigious international space conference, which was attended by more than 1500-2000 high-level participants and university graduate level students.

The conference began on 4 October at the Orpheum Theatre in Vancouver with a gala opening ceremony hosted by Canadian Space Agency Chief Astronaut Julie Payette. During the ceremony, a special message from the Honourable Paul Martin, Prime Minister of Canada was read to conference delegates. There were many special events and receptions, as well as a closing gala dinner on the final evening. Public outreach events were held under the umbrella “Vancouver SpaceFest”. During the conference a significant Canadian space milestone, the 20th anniversary of Dr. Marc Garneau's first spaceflight, was observed. In addition, CSA held a corporate exhibit tracing the four strategic thrusts of the Canadian Space Program for international visitors to the IAC-2004. CSA scientists, researchers, astronauts and program managers complemented communications staff in greeting and responding to queries from delegates and the public.

Dr. Marc Garneau joined the Heads of Space Agencies in a roundtable plenary on major issues facing space agencies as well as opportunities for future collaboration. James Cameron, a Canadian filmmaker, moderated the discussion.

The Canada-ESA 25th Anniversary exposé, a meeting with members of the Canadian space industry and media events were held on 5 October. In particular, events included a speech by Jean-Jacques Dordain, Director General of the European Space Agency on achievements from a European Point of view over the past quarter century; a speech by

Marc Garneau, President of the Canadian Space Agency on Canada's view of the collaboration and cooperation agreement and a look to the future; a question-and-answer session between Agency Heads and members of Canadian and international space industry on future collaboration and opportunities; and a press Conference offered by Mr. Dordain and Dr. Garneau on 25 years of collaboration and excellence in space science, technology, exploration and discovery.

As part of SpaceFest, Canadian astronauts Chris Hadfield and Juile Payette offered their impressions of visiting and working aboard the International Space Station and responded to questions during an open lecture for children and families that was held at the IMAX theatre before and after the showing of the International Space Station film. The astronauts also participated in a number of lectures that were offered to primary school students. Chris Hadfield gave an evening public lecture on Canada's achievements in space and the future – Moon, Mars and beyond. To celebrate the 20th anniversary of human space flight (Marc Garneau's first flight), an interactive exhibit informed the public on the achievements and benefits that flow from Canada's role in space.

3.4.2 Cuba

World Space Week was celebrated in Cuba with numerous activities. The following activities were of particular interest.

- Several movies and videos with a space theme were shown on television and several space programs were broadcast on various national and provincial radio stations.
- Night observations with the use of manual telescopes were held for groups of astronomy amateurs.
- The Third National Workshop "Outer Space and its Peaceful Uses" was held in the national capital.

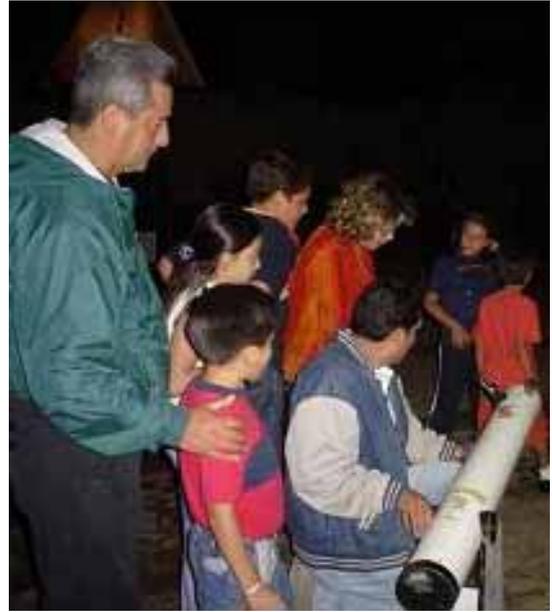
3.4.3 El Salvador

Representatives of Space Generation Advisory Council in El Salvador organized a celebration of World Space Week in which students designed and studied new robots for space exploration, including creation of new materials and an electronics component.

3.4.4 Mexico

The Morelia Planetarium has many years experience in promoting science with the Mexican Physics Association and strong connections with science museums and planetariums all over Mexico. During World Space Week, Morelia Planetarium held special presentations on astronomy and space for students. For 2005, the Planetarium plans to expand the celebration by inviting other organizations from across Mexico to participate.





3.4.5 Trinidad & Tobago

World Space Week posters were distributed to five educational institutions at the primary and secondary levels. Teachers discussed the idea of space with students.

In 2005, a national committee is planned so that more stakeholders will take part in World Space Week. The value of this project is recognized and Trinidad and Tobago's continued support is guaranteed.

3.4.6 United States

Teachers across the United States used the opportunity of World Space Week to excite students about science and mathematics. Many teachers achieved this by using the World Space Week teacher activity guide. Many students designed "Lance's Lab" during World Space Week.

On 4 October, Space Ship One was launched from the Mohave Desert, California to win the X-Prize. Also in California, Lance Bass of NSYNC appeared in Los Angeles schools to promote science and maths education.



The Space Frontier Conference was held on the Queen Mary in Long Beach, California from 8 - 10 October. The conference, sponsored by the Space Frontier Foundation, highlighted exciting commercial initiatives in space. It included a speech by Burt Rutan, designer of Space Ship One, and an appearance by World Space Week Youth

Spokesperson, Lance Bass. The Space 2004 Conference, organized by AIAA in San Diego, California on September 28-30, helped launch World Space Week.

Chapel Trail Elementary, in Pembroke Pines, Florida, held a World Space Week event, “Family Stargazing Night & Poetry Under the Stars.” Newspapers and other media were notified. Students watched the Space Ship One live webcast. All teachers in Broward County were invited to participate in World Space Week.

The Iowa Space Grant sponsored the Fifth Annual Space Week Challenge. Classrooms across Iowa won prizes by participating in the Challenge. The top class from each level won a classroom telescope and were eligible for the Grand Prize. The divisions were by class level (K-3, 4-8, and 9-12). The top class overall won a trip to the Science Station and IMAX. One teacher selected from each division attended the Space Exploration Educators Conference in Houston. The contest involved listening to the Earth and Sky broadcast, classroom activities about the solar system and a quiz based on the broadcast and activities. Details are available at <http://www.ia.spacegrant.org>.

Students at Luther Branson Elementary School in Canton, Mississippi celebrated World Space Week for two weeks, starting October 1 and ending October 15. Besides studying the solar system, there were many different activities: the class decorated their front door and hallway about space; each student created a model planet that was hung from the ceiling in the classroom; students created a community of aliens or “Space Neighbors”; students created a Space Lab; a field trip to the Russell



C. Davis Planetarium in Jackson was organized; teachers gave a presentation about the solar system; and students watched a video about space labs and how astronauts are trained.

In New York, the Long Island Space Society held an international “Space Exploration Meet-up” day (see <http://space.meetup.com/>) at the Velvet Lounge in E. Setauket. It was intended as a gathering for local enthusiasts to talk about space.

World Space Week was celebrated in Dallas, Texas, on October 9, at the Frontiers of Flight Museum. Activities included exhibits from local clubs including the Texas Astronomical Society of Dallas, the National Space Society – North Texas Chapter, the Dallas Area Rocket Society, the Mars Society, the Moon Society and Olympus Mons. The astronomy groups organized solar observing. Children’s activities included colouring picture books and experiments with string, straws and balloons. Solar System Ambassadors from NASA JPL were on hand to discuss current space missions including the Mars Rovers, Cassini and the recently returned Genesis mission.

The Space Store in Houston, Texas celebrated World Space Week on October 9 with a children’s event featuring an appearance by famous astronaut Walt Cunningham. The first 50 people received a free World Space Week 2004 poster. The Apollo 7 astronaut read

from the Dr. Seuss book, “There’s No Place Like Space.” Mr. Cunningham was also available for autographs and to answer questions.

Many K-12 teachers in the Clear Creek Independent School District, Texas received World Space Week Teacher Kits sponsored by Hernandez Engineering. They used these materials to promote student interest in science and maths.

The United States chapter of the Association of Space Explorers (ASE) hosted its first National Congress coinciding with World Space Week. The public was invited to take part in a special “Evening With the Astronauts” on October 14 at Rocket Town. Proceeds from the reception and autograph session benefited ASE’s educational and environmental awareness programs. For information, see <http://www.rocket-town.com/>.

3.5 South America

3.5.1 Bolivia

The celebration of World Space Week 2004 in Bolivia had the participation of the Bolivian Astronomy Association and the La Paz Friends of Astronomy community. World Space Week was highlighted in the October news bulletins of the observatory, which are distributed throughout the country.

From 4 to 10 October the Observatory was opened to the public with videos on astronomy and astronautics, observations of the sky without instruments, visits to all observatory facilities, astronomical observations with available telescopes and a permanent exhibition of photos on astronomy and astronautics.

From 4 to 8 October there was an exhibition with pictures and posters on astronomy and astronautics at the School of Fine Arts.

“Space Week 2004” posters were distributed to the public across the entire country. Broadcast regarding World Space Week were made on local television channels and national networks. World Space Week information was distributed to schools and colleges of the city so that teachers could talk about World Space Week with students.

A workshop on astronomy was held for rural school students. Courses on the theory and practice of astrophotography were held in La Paz. Also in La Paz, a photography exhibition and conference was held at the Universidad San Francisco de Asís.

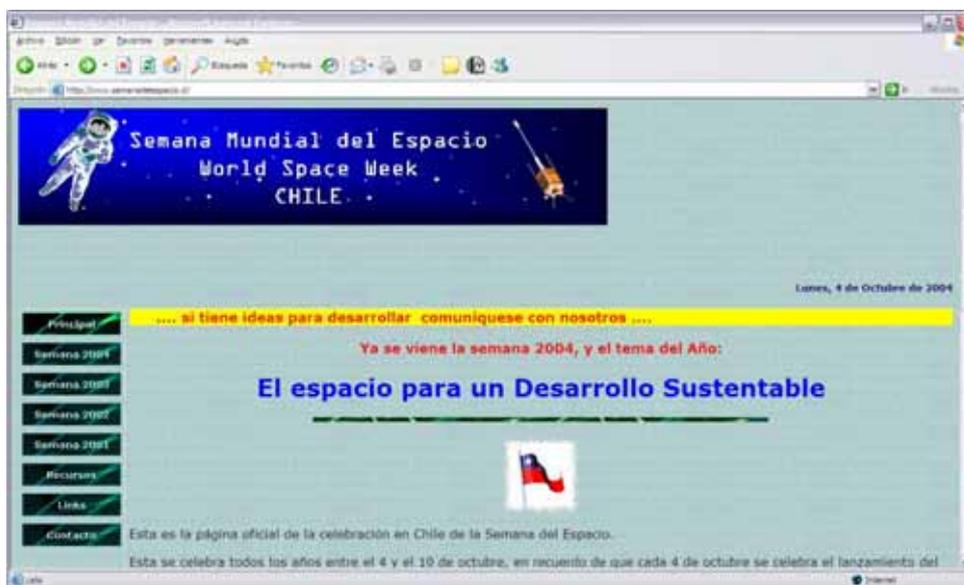
3.5.2 Brazil

World Space Week was celebrated across Brazil. On 5 October, a World Space Week celebration was held for grammar and high school teachers at INPE in Sao Jose dos Campos. On 8 October, in the south of Brazil, the UNISINOS University celebrated World Space Week. There was a celebration, conference and exposition in the north-east region, in Teresenia, for school teachers all week. Macae, in the south-east region, had an exposition as well as radio and TV programs. The Louis Cruls Astronomy Club prepared posters about World Space Week and posted them in many schools of the region. The Club used TV programs to popularize World Space Week and to motivate the organization of events in the schools. It organized a contest and rewarded the best works prepared by the

students. The club visited schools and also held an exhibition on the theme of 2004 World Space Week, Space and Sustainable Development.

3.5.3 Chile

The Chilean World Space Week web page was created for World Space Week 2004. Please see www.semanadelespacio.cl.



3.5.4 Colombia

The following Colombian schools participated in World Space Week 2004: Unidad Porteña de Aprendizaje; Colegio Maria Auxiliadora; Colegio Eucarístico de La Merced; Liceo Los Comuneros; Colegio Nuestra Señora del Carmen; Instituto Distrital Alberto Assa; Colegio Comunitario Pablo Neruda; Instituto Distrital San José; Colegio Nuestra Señora de Nazareth; Colegio Marymount; Internacional Berkclely School; Colegio de San José; and Colegio de la Sagrada Familia Guillermo Lagares, Programas Educativos de Unilever.

Participating organizations and individuals included: Raúl Joya Olarte, Red de Astronomía de Colombia y Observatorio Astronómico de la Universidad Sergio Arboleda; Luis Enrique Rodríguez, Muñiz Engineering y WYESR; JSC Education Programs; Erquinio Taborda, Grupo de Estudio e Investigación Eridanol; AeroRepublica; Instituto Técnico Nacional de Comercio; Escuela Naval de Suboficiales ARC Barranquilla; Centro Cultural Comfamiliar del Atlántico; Planetario de Barranquilla; Cinemateca del Caribe; Emisora La Voz de la Costa; Noticias Ya!; Radio Reloj, Caracol; Diario El Heraldo; and Voz Infantil –Hola Juventud, WYESR Colombia.

On 4 October, an opening ceremony “Space and sustainable development” was held, during which youngsters from various schools in Barranquilla considered space and its contribution to humankind. A video and a lecture coordinated by Mr. Guillermo Lagares, Environmental Comision of UNILEVER in Colombia, helped to reach this goal.

On 6 October the programme “Children Talk about the Environment” was held, providing an opportunity for children between 7 and 13 years of age from several schools in Barranquilla to discuss their views on sustainable development and environmental care.

On 8 October, a video-conference with members of NASA was held. This was a wonderful opportunity for students from various schools on the Atlantic Coast of Colombia to ask members of NASA in Houston, USA about interesting topics related to sustainable development. In Houston this activity was coordinated by Captain (R) Luis Enrique Rodriguez - Director of WYESR and Member of Muniz Engineering. Also on this day, Mr. Raul Joya Olarte, Director of the Red de Astronomia en Colombia, lectured students in Barranquilla.

On 9 October, a special radio program “World Space Week, 5th anniversary” was held. Voz Infantil and Hola Juventud, radio programs broadcast by youngsters through La Voz de la Costa Radio Station 1.190 KHz, broadcasted a special program for this WSW. With interviews, historic details, guests and a complete report on the 5th anniversary of World Space Week, Colombia closed its World Space Week 2004 celebrations.

4 Affiliate Programme

To develop resources for the global coordination of 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 who are invited to become affiliates.

Affiliated organizations are credited in official World Space Week publications (such as this report), the web site 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 the Affiliate in the global space community and the opportunity to promote products and services.

Benefits

Outreach – Help promote and demonstrate public support for space

Education – Encourage student interest in math and science

Networking – Interact with space leaders from over 50 nations

Marketing – Promote your organization and its space products and services

Affiliates pay annual dues ranging from \$500 and higher, depending on the level of benefits desired. Benefits are described in the Affiliates section of www.spaceweek.org. To become an affiliate, organizations can complete the on-line application at www.spaceweek.org. For more information, please email admin@spaceweek.org.

Spaceweek International Association Affiliates

Spacefleet

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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 nations. For further information, please contact Spaceweek International Association.

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For information on how to become an affiliate of the Association, please visit
www.spaceweek.org/affiliates.html



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