ISPRS

2004

SCIENTIFIC PROGRAMME

Overall Programme

Tutorials and Workshop

Final Session Programme

Reports of Technical Commissions Presidents

- Technical Commission I

- Technical Commission II

- Technical Commission III

- Technical Commission IV

- Technical Commission V

- Technical Commission VI

- Technical Commission VII

Youth Forum and Youth Camp

Overall Programme

TIME	Monday 12.07.2004	Tuesday 13.07.2004	Wednesday 14.07.2004	Thursday 15.07.2004	Friday 16.07.2004	Saturday 17.07.2004	Sunday 18.07.2004	Monday 19.07.2004	Tuesday 20.07.2004	Wednesday 21.07.2004	Thursday 22.07.2004	Friday 23.07.2004
8:30												
9:00	TU&WS	TU&WS	TU&WS	OC (PL)	TS	TS / YF	YSP	TS	PL	TS / CATCON	PL	TS
9:30												
10:00												
10:30	B	B	B	B	B	B		B	B	B	B	B
11:00	TU&WS	TU&WS	TU&WS / GA	TS	TS	TS / YF		TS	TS	TS / CATCON	TS	TS
11:30												
12:00												
12:30	L	L	L	L	L	L		L	L	L	L	L
13:00												
13:30												
14:00	TU&WS	TU&WS	GA	PS	PS / GA	YF		PS / GA	PS	PS / CATCON / GA	PS	TS
14:30												
15:00												
15:30	B	B										
16:00	TU&WS	TU&WS		B	B	B		B	B	B	B	B
16:30				TS	TS	YF		TS	TS	TS / CATCON	TS	CC
17:00												
17:30												
18:00			OC									
18:30												
19:00								EXHIBITORS' RECEPTION				
19:30												
20:00												
20:30			WELCOME RECEPTION	FUN NIGHT	DINNER CRUISE				CASTLE PARTY	1001 NIGHTS (CANCELLED)	GALA DINNER	
21:00												
21:30												
22:00												
22:30												
23:00												

EX	Exhibition
TU&WS	Tutorials and Workshops
B	Coffee Break
L	Lunch
WR&ER	Welcome Reception, Exhibitors' Reception and Social Programme
OC&CC	Opening / Closing Ceremony
PL	Plenary Sessions
GA	General Assembly

TS	Technical Sessions
PS	Poster Sessions
YF	Youth Forum
YSP	Youth Social Programme
CATCON	CATCON Exhibition Center

TUTORIALS AND WORKSHOP

Following Tutorials and Workshop were held on 12, 13 and 14 July 2004:

TU1 - Capability of High Resolution Earth Observation Systems for Mapping
Convenors: Karsten Jacobsen
Number of Participants: 37

TU5 - Projective Geometry for Photogrammetric Orientation Procedures
Convenors: Wolfgang Foerstner
Number of Participants: 28

TU6 - Airborne Laser Altimetry: DEM Production and Automatic Feature Extraction
Convenors: George Vosselman & Hans-Gerd Maas
Number of Participants: 36

TU10 - Performance of High Resolution, Multispectral and Hyperspectral Imaging Systems for Earth Surface Observation
Convenors: Raad A. Saleh & Maha A. Jaafar
Number of Participants: 35

TU12 - Automatic 3D Modelling from Hand-Held Camera Images
Convenors: Marc Pollefeys
Number of Participants: 32

TU16 - TU16: Database Design for GIS Applications: Using UML, Geomatics Standards and Visual Modelling Tools
Convenors: Yvan Bédard
Number of Participants: CANCELLED

Workshop 4 - Joint ICA/ISPRS/EuroGeographics WS on Incremental Updating and Versioning of Spatial Data
Convenors: Ammatzia Peled, Antony Cooper& Dietmar Grünreich
Number of Participants: 25

REPORTS FROM TECHNICAL COMMISSION PRESIDENTS ON XXTH ISPRS CONGRESS

Technical Commission I, Sensors, Platforms and Imagery

Stan Morain, Commission I President, (USA)

Commission I enjoyed a very busy, productive two weeks at the ISPRS XXth Congress in Istanbul. It offered two tutorials, fourteen technical sessions, and five poster sessions in addition to conducting its business meeting and distributing products to Congress attendees.

The first tutorial, titled Capability of High Resolution Earth Observation Systems for Mapping, attracted 36 participants. Specifics included characteristics of digital images and an overview of sensor data suitable for mapping. Scene orientation was detailed, addressing different conditions for available image products. Possibilities and limitations of SRTM C-band DEMs as reference for DEMs from stereoscopic space images was explained, and the relation of vector map scales to image resolution and quality was shown. The second tutorial, Performance of High Resolution, Multispectral and Hyperspectral Imaging Systems for Earth Surface Observation, had 29 participants.

The Technical Sessions were extremely well-attended, many of which were standing-room only. A major achievement was the SPOT HRS Scientific Assessment Program. It provided an opportunity for 60 scientists from 17 countries to generate DEMs from HRS stereo pairs, and to evaluate their quality. Results were presented in three sessions, confirming the high accuracy and quality of data from the HRS sensor. Two Special Sessions on the SPOT-5 Application Validation Program presented results on eight different applications for sites around the world.

Two working group sessions on sensor calibration focused on SPOT-5, Orbview-3,ALOS, CBERS, and aerial cameras. Emphasis was on high- and very high-resolution image products, with special note to aspects of geometric calibration. Another highlight in calibration activities was the work of the Joint ISPRS/CEOS WGCV Task Force. It presented an interim report from its workshop in 2003. Recommendations in the report set the agenda for future Task Force activities, calling for an expansion of participation to include EuroSDR and expansion of sensors to include LiDAR, SAR, and INSAR devices.

There was a vigorous program on platform and sensor integration, which included two Technical Sessions, a large Poster Session, a Theme Session, and a Tutorial (already mentioned). Despite the Saturday morning schedule, the Technical Session drew a large audience. Presentations discussing direct georeferencing, the TAG experimental positioning system, orientation of high resolution space images with different mathematical models, and practical results for handling space images with the Z/I Imagestation provided a wealth of information. Highlights included relative kinematic GPS positioning as the limiting factor for direct georeferencing, and a sampling of investigations involving GPS and IMUs in several countries. Platform and sensor integration is a hot topic, as evidenced by the large number and high quality of poster papers.

The session on Airborne Optical Sensor Systems focused on frame and Three Line Sensor (TLS) airborne systems. TLS systems are a dramatic departure from traditional photogrammetric processing, and offer important advances in simultaneous acquisition of high-resolution stereo and multispectral imagery. Frame-based systems represent an evolutionary digital approach that allows rapid ingest of digital imagery into the workflow of traditional photogrammetric processing.

The Special Session on Future Intelligent Earth Observing Satellites attracted a large audience. The word "intelligent" in this context was articulated well. It refers to the ability of satellite constellations and sensor webs to self-adapt, self-organize, and self-configure with few human commands issued from the ground. Resolution 1.6 for the 2004-2008 term is expected to draw considerable international participation.

As a new initiative, products prepared by the Commission's working groups were on display in the Commission's business office. Business hours were published, inviting colleagues to visit and obtain copies of these materials. This was a tremendous success considering that all of the materials were gone by the fourth day of the technical program. The idea is worth remembering for future Congresses.

Commission I announced the release of volume two in the ISPRS Book Series. This volume, entitled Post-Launch Calibration of Satellite Sensors is the peer-reviewed collection of papers from the workshop on Geometric and Radiometric Calibration held in December 2003.

Technical Commission II, Systems for Spatial Data Processing, and Analysis and Representation

Chen Jun, Commission II President, (P.R. China)

Automated updating of geo-spatial databases from images and other collateral sources in the GIS environment was discussed by five technical sessions, two poster sessions and one workshop organized by IC WG II/IV during the Congress. The workshop was organized in conjunction with the International Cartographic Association (ICA). Major topics included an overview of the state-of-the-art of digital aerial cameras to collect suitable input, automated feature extraction algorithms and systems, and database-driven approaches for the updating process. The highlights of the presentations were three invited papers delivered by Helmut Mayer (Bundeswehr-Universitat Munchen), Peggy Agouris (University of Maine), and Peter Woodsford (Laser-scan, Cambridge/UK and EuroSDR). These three papers demonstrated progress made over the last four years, e. g. the appearance of commercial systems for semi-automated feature extraction, and the increasingly close cooperation between photogrammetry and GIS. They also pointed out the major remaining challenges, namely the development of better automatic algorithms for efficient updating from images by including the user in the updating loop, more advanced statistical modelling and self diagnostics for automatic algorithms, and the exploitation of images directly within a GIS, exploiting the topological data structures for achieving better database consistency.

'Systems for SAR and Lidar Processing was discussed by four presentations. Ian Dowman gave an invited paper with an excellent overview of the technologies. Most papers presented in the poster session were SAR-related, topics ranging from speckle reduction in images to deformation measurements from differential InSAR to stereo measurements from spotlight SAR.

The Web and now also the Grid are the keys that facilitate the information services on Internet or Intranet. The three major components of geospatial services -the data services, the value-added services and the broker services - have been dealt with from different points of view and in relation to various applications and projects. It is obvious that the future will bring many independent geospatial data and service providers. Service chaining where output from one service will be input to the next service are already seen. Standards for this concept are found in the OGC specifications (WMS, WCF, WFS etc.) and are demonstrated in various services. The complexity of geospatial services is growing rapidly and interoperability can only be managed through interface and service standards. The services are moving from dissemination of data through distribution of information to be based on queries formulated from structured knowledge.

A technical session on 'Image data standards' , which was held 20th July, gave an insight into the status of work already done in the area of standardization of geo-spatial production, management and dissemination including the techniques and process required for these activities. It was pointed out that while standards on vector-GIS are almost completed (with comprehensive vector geometry standards and a more general vector visualization standards), the standards on raster-GIS are still being developed.

The major achievements on design and operation of spatial decision support systems at this Congress were the demonstration of novel approaches to spatial decision making, such as rough sets and the integration of raster and vector, which improve the possibilities of spatial decision support systems and are effectively applied in real world problems.

Spatial analysis and visualization systems were discussed 21 papers by 2 oral and I poster sessions. It can be observed that the movement in spatial analysis is to exploratory analysis and relational analysis. In visualization, the movement is to the integration of image data and 3D models. Spatial analysis and geo-visualization meets on the web to form web-based exploratory analysis.

Technical Commission III, Theory and Algorithms

Franz Leberl, Commission III President, (Austria)

Commission III deals more with academic topics than other ISPRS Commissions. This is encapsulated in the Commission's previous motto: ,,Theory and Algorithms" of photogrammetry, remote sensing and the spatial information sciences. Naturally then, Commission III is the element of ISPRS that is most affected by the evolution of computer science where computer vision and graphics have become core topics and core subjects in virtually every university's computer science curriculum.
Prior to the current 4-year term of the Congress, some felt that a separate Commission on ..Theory and Algorithms" was wrong, and that therefore Commission III should be absorbed into the existing other Commissions. This idea has been invalidated simply by the level of activity in this Commission.

There were more papers (180) and attendees (353) from more countries (49) at its Inter-Congress Symposium in 2002 (in Graz, Austria) than ever before, many working groups (9) and I assume that the number of paper submissions to this Congress from the ranks of Commission III also reflects its vitality

In 2000 we wanted to make a difference in introducing academically oriented peer review procedures and double blind reviews of full papers for acceptance at a conference. This was very successful and unanimously praised when implemented at the Symposium of the Commission in 2002 (45 oral presentations selected). I assume that such academically oriented conference organization should be and will be continued under the incoming leadership.

Where we were less successful was to open ourselves up to attendants and participation from computer science and computer engineering. We recruited a few people into the Working Group leadership, but then found that the commitment of those ,,recruits" to the ISPRS was simply not there. Nonetheless, as computer vision and computer graphics move to centre stage in the computer sciences, ISPRS and its Commission III must continue to attract players from those disciplines. I wish the incoming leadership good luck with this important effort.

Obviously there was a lot of work done and is now also being presented in Istanbul on terrain surface modelling from aerial laser scanning. Another very active topic has been and continues to be the automated image analysis directed towards the extraction of GIS data base content from digital images. Less active, for me with some regret, was the work done on automatically determining camera and platform orientation by triangulation, direct geo-positioning or combinations thereof. This is very important with new technologies and applications, for example in tracking for mixed reality scenarios, or in robotics.

One interesting key-number to describe the vitality of the Commission is the attendance at Tutorials. Three of them were held at the occasion of the Symposium in 2002, and they were all oversubscribed!. Also the tutorials here in Istanbul were very successful. This demonstrates the degree to which people need Commission III.

Somewhat disappointing was the level at which the advent of new sensing technologies were reflected in the Commission's work. New digital aerial cameras have been introduced that can change the prevalent and traditional thinking in photogrammetry, yet the papers do not reflect this opportunity. In robotics, a range of imaging sensors is becoming popular with very intriguing geometries, such as catadioptric cameras, and yet this does not live in the Commission yet.

I am really happy that a refocusing of the ISPRS commissions has led to a renaming, and hopefully an ensuing reorientation, of the Commission onto the computer science aspects of the field. We do not have an accepted definition of when computer vision (or graphics) are "photogrammetric". In the computer science field, ,,photogrammetry" is seen as a narrow intersection of the Geo-application with image-based measurements using special cameras. I suggest that we counter this view by defining "Photogrammetric Computer Vision" as that branch of computer science that deals with 3D object models at a verifiable accuracy from sensor data streams. This should promoted as an internationall ,,motto". We started in 2002 by labeling our Commission III Symposium as ,,PCV'O2 - Photogrammetric Computer Vision".

Technical Commission IV, Spatial Information Systems and Digital Mapping

Costas Armenakis, Commission IV President, (Canada)

During the XXth ISPRS Congress, Commission IV on Spatial Information Systems and Digital Mapping covered a wide and diverse field of spatial sciences. Commission IV addressed science, technology and applications in the fields of spatial information sciences and systems, geo-databases generation and digital mapping from air- and space-borne sensors, visualization and web-mapping, integration of remotely sensed imagery with spatial information systems, and extraterrestrial mapping.

The contributions of Commission IV in the technical program of the XXth ISPRS Congress consisted of 21 technical sessions and 14 poster sessions. These also include four Theme Sessions (ThS I: Integration and fusion of data and models; ThS 9: Uncertainty, consistency and accuracy of data and imagery; ThS II: Automatic image interpretation in the GIS environment; and ThS 15: Web 3D mapping and visualization). It also contributed 7 invited papers by: M, Molenaar (Data modelling and semantics),]. Gong et al. (Data sharing standards and technologies), G. Konecny (Mapping from small satellites), T. Schenk (Information and knowledge in the digital mapping era), F. Samadzadegan (Sensor, data and model integration), D.R.F. Taylor (Global mapping and sustainable development), and H. Han et al. (2D/3D Architectures for fast web services). The recent exciting missions to Mars, the NASA's Athena Mars Rover Science and the High Resolution Stereo Camera on ESA's Mars Express Mission, were presented in the Plenary Session III by S. Squyres

and G. Neukum, their respective principal investigators. Commission IV in co-operation with the Open GIS Consortium (OGC) organized also a Special Session on the Sensor Web Environment. Two formal Commission IV open business meetings were held.

During the sessions, the developments and progress in the relevant fields of Commission IV were presented and discussed. They are summarized as follows:

Significant advancements were presented in extraterrestrial mapping and contributions on the MER and MEX missions to Mars. Approaches for higher levels of automation in database generation and mapping, and GIS-driven approaches were presented. The shift towards 3-dimensional and temporal models and applications is noticeable. We observed the maturing of web-map services, and we are moving towards 3D web applications, location-based services, semantic interoperability, and the sensor web environment. Significant emphasis is being put on data uncertainty and quality and the visualization of the quality of the data. In image databases the use of image management systems and content-based image retrieval approaches were discussed. We saw new approaches in generalization for small mobile displays and 3D buildings, while the geospatial data infrastructures expand at regional and global scales to address environmental and socio-economic issues. There was also a renewed interest in mapping due to digital airborne cameras and the upcoming small and other high resolution satellites, as well as in data fusion due to the multi-sensor approaches. Landscape modelling and 3D visualization become tools for various applications. Finally, it was clear that we are moving towards to "near real-time mapping", "issue-based mapping", "web-based spatial services" and a "spatially aware society and applications". The contributions of Commission IV in the future are expected to be as important as ever.

The contributions of the officers and members of Commission IV were also acknowledged. M. Madden, Chair WG IV/6, was the recipient of the Willem Schermerhorn ISPRS Award. M. Sester, Chair WG IV/3, received the President's Citation. T. Ai with his paper entitled "A Generalization of a contour line based on the extraction and analysis of drainage system", and A, Forberg with her paper entitled "Generalization of 3D building data based on a scale-space approach" were the recipients of Best Young Authors Paper Awards. The two Best Poster Paper Awards went to papers "True 3D visualization of the Martian surface based on lenticular foil technology using HRSC imagery" by M.F. Buchroithner, O. Waelder, B. Koenig. T. Gruendenmann, G. Neukum, K. Habermann, and "A visibility test on SPOT5 images" by A. Hincq, M. Idris-sa, V. Lacroix, H. Bruynseels, O. Swatenbroekx, I.Mahamadou.

Technical Commission V, Close range Vision and Techniques

Petros Patias, Commission V President, (Greece)

The wide spectrum of Commission's thematic interests, as summarized in the Terms of Reference were covered, to a broad extend, bv the accomplishments; of its groups during the last 4 years.

During this Congress we have seen the current advances in:

Automation for Vision Metrology Systems and Industrial Applications

- off-line and on-line systems, digital imaging systems and solutions for metrology and robot vision
- sensor orientation and system calibration
- Sensor fusion and the integration of disparate data types
- Target and feature recognition in multi-image correspondence
- Range image acquisition, localization and segmentation

Scene *Modelling and Virtual Reality*

- accurate and realistic looking virtual reality (VR) models from real scenes and objects
- Knowledge-assisted 3D scene understanding
- Integration of computer graphics and VR technology

Medical Image Analysis and Human Motion

- Development of real-time medical imaging systems
- Dynamic analysis of human motion
- 3D medical imaging for anthropometry and expression analysis
- 3D representation and visualization and medical VR, including support to tele-medicine

Image Analysis and Spatial Information Systems for Applications in Cultural Heritage

- Development and integration of close-range vision techniques and spatial information systems for recording, 3D reconstruction, modelling and visualization of structures and items of Cultural Heritage
- low-cost and rapid techniques
- Use of Internet and VR techniques

Image-Quick Response and Distributed Computing for Close Range Applications

- Integration of close range and air-/space-borne imagery.
- office-to-field solutions for data collection, remote data access, and mobile management

Visualization and Animation
- image-based techniques for integration of live figures and environment generation tasks into the animation process and procedures
- interaction of real and virtual objects

Image Sequence Analysis
- temporal analysis, time-constrained solutions and dynamic analysis and tracking.
- Integration of image data with navigation sensor data and multi-sensor information.

During the Congress 195 papers were presented in 16 oral and 7 poster sessions on the topics of: Automation for Vision Metrology Systems and Industrial Applications; Scene Modelling and Virtual Reality; Medical Image Analysis and Human Motion; Image Analysis and Spatial Information Systems for Application in Cultural Heritage; Image Sequence Analysis; Metrology and Industrial applications; Close-Range Integrated Mapping Systems/Laser Scanning; CIPA-Low cost systems in recording and managing the cultural heritage and the Hans Foramitti Session - Celebrating CIPA's 35th Anniversary.

Technical Commission VI, Education and Communication

Manos Baltsavias, Commission VI, WG VI/1 Chair, (Switzerland)

Due to various reasons, the Com. President Tania Maria Sausen and Secretary J .Avila, as well as the WGVI/3 Co-chair and the two WG VI Chairs did not participate in the Congress. In spite of these short-notice difficulties, all present WG officers and the new Commission President Kohei Cho (Japan) took care of the Commission activities during the Congress with success.

The activities included 4 Technical Sessions (TS), 2 Poster Sessions (PS), one presentation in a plenary session, Business Meetings, the CatCon 3 competition, decision of Best Poster Awards and the Youth Forum, which although independently organized, belongs topic-wise to and was supported by Commission VI.

The 4TS had a very good participation, by Com. VI standards, with 40-120 persons per session and a total of 300 participants. 19 papers (2 of which invited) were presented with just one no-show, less than the other Commissions average, and lively discussions. In the 2 PS, 33 papers were planned, whereby, as in other PS, the no-shows were significant.

TS and PS topics and highlighted problems, grouped according to the 4 WGs of Corn. VI, included:

/. *Education*
- Educational programs and courses at university and country level Accreditation was identified as a problem, especially for joint degrees between universities of different countries. Concerns about Geomatics education were expressed (negative developments in many Departments with closing, fusion, splitting etc. and declining number of students) and activities were presented to confront such problems, like PR in high schools (which needs increasing attention) and establishment of PR-oriented WEB portals (www.geomatics.org.uk reported by j. Mills, UK) in co-operation efforts of academia, industry and public and professional organizations.

2. E-Learning
- Models of e-Learning, activities and projects, course material design E-Learning seems to take off, with increase of investments and significant activities in many developed countries. A highlight was the presentation of the Rector of Stuttgart University, Dieter Fritsch, who presented general models but also a very extensive multi-million project at his institution.
- Examples of WEB-based, multimedia, interactive, VR-based and simulation-based tools Dasea ana simulation-Dasea tools.

3. International co-operation and technology transfer
- Knowledge and technology transfer, training, capacity building in developing countries.

The CatCon 3 competition, initiated in 1996 by K. Cho (Japan) and generously sponsored by S. Murai (Japan), included 9 software packages and 2 demonstration packages. About 100 persons visited the competition, while a popular vote was taken into account by a 5-member jury which awarded 3 prizes and a special Gold Prize Award to the firm Intermap (Canada) for a tutorial on InSAR.

Summarizing, the Congress activities have shown a great and increasing interest in education, technology transfer, capacity building and e-learning. Student activities were a Congress innovation and a hope for the future of ISPRS. Many colleagues expressed their readiness to help Commission VI, but even more than statements, concrete actions and support of the Com. VI activities are needed. For the next period, Com. VI is in very good hands and the new TCP Kohei Cho (kcho@keyaki.cc.u-tokai.ac.jp) and the other WG officers, which will be soon appointed, are waiting for contributions from interested colleagues

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Technical Commission VII, Resource and Environmental Monitoring

Rangnath Navalgund, Commission VII President, (India)

Technical Commission VII on Resource and Environmental Monitoring organized, in all, twenty-six sessions at the Istanbul Congress. It included ten technical (oral) sessions and seven poster sessions related to scientific themes of its Working Groups and five theme sessions and a poster session on special topics related to hyper-spectral sensing, advanced classifiers, applications of high spatial resolution data and integrated coastal zone management. In addition, two special sessions on ocean color and sustainable development under the aegis of the International Committee on Remote Sensing of Environment (ICORSE) and one technical session on the theme of the Commission were are also organized. About two hundred and twenty-five scientific papers were presented together in oral and poster sessions. The papers covered a wide spectrum of topics pertaining to spectral signature research and advanced classifiers, and applications of earth observation data related to sustainable agriculture and ecosystem, forestry, water resources, geo-sciences, global change, human settlement analysis, etc., besides disaster monitoring, mitigation and damage assessment. Methods of integration of data in GIS environment and inter-comparison and calibration of data across different sensors/platforms and validation received due attention.

The deliberations in the technical sessions showed that data availability from recent satellites such as Landsat 7, Hyperion, MODIS, QUICKBIRD, IKONOS-II, IRS-P6, SPOT-5, CBERS-II, ENVISAT, etc. are opening new vistas in earth resources applications. These space based EO data are being complemented with the data available from airborne hyperspectral, multispectral, SAR and LIDAR instruments. Integration of complementary datasets from different spacecrafts, multiple sensors and at different levels of processing have become important. Some of the directions for future work include development of better algorithms for retrieval of biophysical/geophysical parameters from advanced hyperspectral/microwave sensors, especially with the use of polarimetric signatures of SAR. Major advances in data handling and pre-processing techniques in areas such as radiometric correction, spectral calibration and directional (BRDF) processing were highlighted. Advanced data processing techniques such as wavelet transformation, spectral unmixing, and object-based classification were presented along with case studies. Spatial modelling tools with a goal to generate decision support systems at various scales were discussed. Derivation of sustainability indicators amenable to remote sensing and establishing efficacy of space inputs for cropping systems research and precision farming were dealt with. The advance techniques used towards human impact analysis showed closeness between the technology and its use for local governance. Development of integrated monitoring systems, especially in the fields of coastal ecosystem, ocean color, land use/ land cover, water resources (both underground and surface) and forests are essential to ensure environmental protection and sustainability. The sessions on disaster monitoring and mitigation addressed new techniques in hazard assessment, geohazards and climate and environmental hazards and also International capacity building programs. Need for better forecast/early warning systems for disasters such as landslides, floods, forest fires, volcanoes, oil spills, snow avalanches and earthquakes and integrated global observation systems was emphasized. Creation of appropriate global data sets and global change models is the need of the hour. Assimilation of satellite-data derived parameters for improving weather forecasts, ocean state forecasting, polar research are some of the areas needing attention.

Continued growing interest in the scientific activities of the commission is manifested through the volume of the proceedings of the Commission, it being the largest.

Considering the vast scope of activities of the current Commission VII and also to attract enhanced participation of global earth observation professionals, two new Commissions viz., Commission VII on Thematic Processing, Modelling and Analysis of Remotely Sensed data, and Commission VIII on RS Applications and Polices are constituted. Resolutions for the two commissions were brought forward, discussed and adopted at the Congress

YOUTH FORUM and YOUTH CAMP

During the XXth Congress of ISPRS held in Istanbul, Turkey between 12 – 23 July 2004, the Youth Forum was organized for the first time in the history of ISPRS and attracted great attention. A special day was allocated to the youth on 17th July when two scientific sessions and one poster session were arranged. As a result of the poster session, a special "Youth Forum Best Poster Award" was announced on the last day of the Congress, on 23rd July at the Closing Ceremony and thus ISPRS Youth was encouraged.

Following the Congress, a Youth Camp in the Guzelyali District of Canakkale was planned where the aim was to bring the young ones of the profession together to get to know each other. The Ministry of Education allocated the camp only to the young participants of the ISPRS Congress and a minimal fee of USD 90.- was collected from them for one week of full board stay in the camp including transportation to and from Istanbul to the camp site.

The district of Guzelyali was especially interesting since it is very near to the historical site of Troy. They also had the chance of visiting the Anzac Cove and the Memorial erected for the dead fallen during the First World War which is one of the legends of world history.

Many activities of different kinds were prepared in the camp where the youth could indulge in the special tasks they were interested in and also many sport activities. However perhaps the best part was having the chance of swimming in the azure waters of the Aegean Sea and also sunning under a clear sky.