3rd International Conference
on the Use of Space Technology for Water Management

Jointly organized by the United Nations, Morocco
and Prince Sultan bin Abdulaziz International Prize for Water (PSIPW),
in cooperation with European Space Agency (ESA), Inter-Islamic Network
on Space Sciences and Technology (ISNET) and Secretariat of the Group
on Earth Observations (GEO)

Hosted by the Royal Center for Remote Sensing (CRTS) on behalf of the
Government of Morocco

Program of the Conference
(as of 28/03/2014)

Rabat, Morocco, 1 - 4 April 2014

Venue: Centre International de Conference MOHAMMED VI,
Skhirat Plage, 12050 Skhirat
Morocco
Day 1 – Tuesday, 01 April 2013

08:00 – 09:00 Registration, welcome coffee

09:00 – 10:30 Opening ceremony
09:00 – 10:00 Opening remarks
- Representative of the Government of Morocco
- Dr. Takao Doi, Head, Programme on Space Applications, United Nation Office for Outer Space Affairs (UN-OOSA)
- Dr. Abdul Malek Al Al-Shaikh, General Secretary, Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW)
- Mr. Jean-Charles Bigot, European Space Agency (ESA)
- Dr. Yasushi Horikawa, Chairman, United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS)
- Mr. Arshad Siraj, Executive Director, Inter-Islamic Network on Space Sciences and Technology (ISNET)

10:00 – 10:30 Water Security: a Global Concern
Keynote address by Prof. Mohammed AITKADI, President of the General Council of Agricultural Development, Morocco, and Chair, Technical Advisory Committee of the Global Water Partnership (GWP)

10:30 – 11:00 Coffee break

11:00 – 12:00 Special Session: Prince Sultan bin Abdulaziz International Prize for Water (PSIPW)

11:00 – 11:25 PSIPW: Current Developments and Call for Nominations
Dr. Abdul Malek Al AL-SHAIKH, General Secretary of PSIPW

11:25 – 11:50 Space Technology, GIS and Modelling as Emerging Tools for Water Resources Engineering and Management
Dr. Abdekader LARABI, Ecole Mohammadia d’Ingénieurs, Morocco

11:50 – 12:00 Space Research Institute Capabilities and Activities in the Field of Water Resources Management
Mr. Walid. Amin MOLLA, King Abdulaziz City for Science and Technology (KACST), Saudi Arabia

12:00 – 12:30 Introduction to the objectives of the Conference, its programme and logistics by UN-OOSA and LOC

12:30 – 14:00 Lunch

14:00 – 18:10 Technical session 1: Space Application for Water Productivity and Economy
Co-Chairs: Dr. Abdul Malek Al Al-Shaikh, PSIPW and Dr. Driss Elhadani, CRTS, Morocco

14:00 – 14:20 Irrigation Monitoring for Water Resources Optimization
Mr. M. MERDAS, CRTS, Morocco
14:20 – 14:40 High Resolution Synthetic Aperture Radars for Water Resource Management in Low-Income Countries
Dr. Giuseppe RUELLO, University of Napoli Federico II, Italy

14:40 – 15:00 Identification of Rain Water Harvesting (RWH) Sites in Potohar Region of Pakistan, Using Geospatial Techniques
Mr. Mirza M. WAQAR, Institute of Space Technology, Pakistan

15:00 – 15:20 Advanced Hydro-Environmental Monitoring Technology System in the Transboundary Niger Basin of West and Central Africa for Preservation of Environment and Socio-Economic Development
Mr. John Ayoade SHAMONDA, Hydrological Services Agency, Nigeria

15:20 – 15:40 Applications of New Satellite Missions in Assessing Crop Development Conditions
Dr. Katarzyna DABROWSKA-ZIELINSKA, Institute of Geodesy & Cartography, Poland

15:40 – 16:00 Water Harvesting Potential for Agricultural Development of Some Areas in North Western Coast of Egypt Using Remote Sensing and GIS Techniques
Mr. Ahmed SALEH, National Authority for Remote Sensing and Space Sciences, Egypt

16:00 – 16:30 Coffee break

16:30 – 16:50 Monitoring of Water Resources on South-Mediterranean Catchments through Remote Sensing and Hydrological Modeling: Case of the Tensift (Morocco)
Mr. S. KHABBA, Université CAM, Marrakech, Morocco

16:50 – 17:10 Remote Sensing for Water Resources Exploration in Dry Regions
Dr. Eman GHONEIM, University of North Carolina, USA

17:10 – 17:30 Monitoring of Irrigation Schemes by Remote Sensing: Phenology versus Retrieval of Biophysical Variables
Mr. Kamal LABBASSI, Université Chouaib Doukkali, Morocco

17:30 – 17:50 Water Productivity Mapping of Agricultural Fields in Saudi Arabia
Prof. V.G. CHANNA BASAPPA GODA PATIL, King Saud University, Saudi Arabia

17:50 – 18:10 ASI Activities and Achievements in Water Management
Dr. Veronica LA REGINA, Italian Space Agency, Italy

19:30 – 21:30 Reception hosted by the Local Organizing Committee

Day 2 – Wednesday, 2 April 2014

09:00 – 10:40 Technical session 2: International and Regional Initiatives to Integrate Space Technologies in Water Resource Management

Co-Chairs: Mr. Sergei Chernikov, UN-OOSA and Mr. Hammad Benchekroun, CRTS, Morocco
Rapporteur: Ms. Amal Layachi, CRTS, Morocco

09:00 – 09:20 The TIGER Initiative
Dr. Benjamin KOETZ, ESA

09:20 – 09:40 The World Bank-NASA Initiative on Regional Coordination for Improved Water Management and Capacity Building
Dr. Shahid HABIB, NASA, USA
09:40 – 10:00  Using Earth Observations for Integrated Water Resources Management
Dr. Douglas CRIPE, Group on Earth Observations (GEO) Secretariat

10:00 – 10:20  JAXA Water-related Activities in Various Regions
Dr. Yasushi HORIKAWA, Chairman of the UN COPUOS

10:20 – 10:40  GMES – AFRICA: The BRAGMA Project on Africa-Europe Cooperation
Mr. Eric MWANGI, Ministry of Education, Science and Technology, Kenya

Dr. Pasquale STEDUTO, Deputy Regional Representative for MENA Region, Food and Agriculture Organization of the United Nations (FAO)

10:50 – 11:10 Coffee break


Co-Chairs: Mr. Arshad Siraj, SUPARCO, Pakistan and Prof. Abderrahman Touzani, CRASTE-LF, Morocco
Rapporteur: Mr. A. Erraji, CRTS, Morocco

11:10 – 11:30 Tsunami Risk Modeling Using Space Data
Mr. A. ATILLAH, CRTS, Morocco

11:30 – 11:50 Remote Sensing Based Hydrological Modeling for Flood Early Warning in the Upper and Middle Awash River Basin
Mr. Sifan Abera KORICHE, Jimma Institute of Technology, Ethiopia

11:50 – 12:10 Environmental Risk and Water Management in the Region of Safi, Morocco
Mr. Ralf LOEWNER, Institute of Applied Geosciences, Germany

12:10 – 12:30 Flood Vulnerability Assessment Using Geospatial Techniques
Mr. Babar SHEIKH, SUPARCO, Pakistan

12:30 – 12:50 Utilisation et application des technologies spatiales (Pouvoir Précipitant et RGB convection & Bispectrale des données SEVERI) pour la gestion des risques naturels
Filali Boubrahmi Noureddine, Saouri tahar, Morocco

Dr. Mary-Jeanne ADLER, National Institute of Hydrology and Water Management, Romania

13:10 – 14:30 Lunch

14:30 – 18:00 Technical session 4: Geospatial Information for Ground Water Resources Management

Co-Chairs: Dr. Douglas Cripe, GEO Secretariat and Dr. Abdekader Larabi, Ecole Mohammadia d'Ingénieurs, Morocco
Rapporteur: Mr. Nouredine Bijaber, CRTS, Morocco

14:30 – 14.50 National Strategy for Water Resources Management - Role of Space Technology
Mr. A. BENABDELFADEL, DRPE, Water Department, Morocco
14.50 – 15.10  Using Radar Interferometric Satellite Data for Ground Water Management in the Arno River Basin
Dr. Bernardo MAZZANTI, Arno River Basin Authority, Italy

15.10 – 15.30  Use of Remote Sensing and GIS Technologies to Analyse the Pilcomayo River Complexity as International Boundary Between Argentina and Paraguay
Mr. Miguel Angel GIRAUT, Undersecretary for Water Resources, Argentina

15:30 – 15:50  Water resources management in Chad
Mr. Olivier SENEGAS, UNOSAT/UNITAR, France

15:50 – 16:20  Coffee break

16:20 – 16:40  Satellite Data and Geospatial Technique Based Mapping of Groundwater Potential Zones in Nethravathi Basin, South India
Prof. Ramesh HONNASIDDAIAH, National Institute of Technology Karnataka, India

16:40 – 17:00  Management of Underground Water Quality in Semi Arid Environment Using Space Science Technology - Case Study Botswana
Ms. B. MATHANGWANE, Ministry of Agriculture, Botswana

17:00 – 17:20  Use of Satellite Imagery to Monitor Water Quality in Valle de Bravo Dam, One of the Main Providers of Freshwater to Mexico City
Mr. Julio C. CASTILLO URDAPILLETA, Mexican Space Agency, Mexico

17:20 – 17:40  Irrigated Lands Changes Mapping and Impact on Ground Water Resources
Mr. A. ERRAJI, CRTS, Morocco

17:40 – 18:00  Spatial Modelling of Groundwater Quality Assessment: a Case Study of Peshawar District
Mr. Muhammad Ahsan MAHBOOB, National University of Sciences and Technology, Pakistan

Day 3 – Thursday, 3 April 2014

09:00 – 13:10  Technical session 5: Capacity Building and Cooperation Initiatives
Co-Chairs: Mr. Jean-Charles Bigot, ESA and Dr. Mahmoud ABU-ZEID, President of Arab Water Council, Morocco
Rapporteur: Mr. Atillah, CRTS, Morocco

09:00 – 09:20  Role of International Cooperation in Capacity Building – Activities of CRAST-LF
Prof. A. TOUZANI, CRASTE-LF, Morocco

09:20 – 09:40  CRTS Initiatives and Action for Capacity Building
Ms. A. LAYACHI, CRTS, Morocco

09:40 – 10:00  EarthLab Programme: a Galaxy of worldwide centres using remote sensing devoted to environmental survey including water management
Mr. Didier RIGAL, Telespazio France

10:00 – 10:20  Incorporating Use of Space Technology for Water Management in Mainstream Curriculum: Case for an Innovative Green MBA Program
Dr. K. M. B. ISLAM, Institute of Management Kashipur, India
Dr. Yekini Biodun Adeleye ANIFOWOSE, Federal University of Technology, Nigeria

10:40 – 11:10 Coffee break

11:10 – 12:10 Overview of LDAS Project:  
Presentations from MENA countries on WB-NASA initiative “Coordination régionale pour une meilleure gestion des ressources en eau et renforcement des capacités“  
- Role of Regional Coordination in the Arab Region, Heba AL HARIRY, Arab Water Council  
- Capacity building of Tunisian institutions in improvement of water resources management and adaptation to climate change: state and perspectives, Sinan Bacha, CNT, Tunisia  
- Building Lebanon capacity for the assessment and monitoring of environmental hazards and sustainable management of natural resources, Tala DARWISH, Lebanon  
- LDAS-Maroc: Contribution to strengthening end-users capacities for Improving Water Resources Management and Climate Change Adaptations, Mr. Ahmed ERRAJI, CRTS, Morocco

12:10 – 13:10 Overview of the TIGER Ongoing Capacity Building Programmes:  
- TIGER Capacity Building Facility, Dr. Zoltan Verkerdy, ITC, The Netherlands  
- ESA/TIGER Water Observation Information System (WOIS), Dr. Silvia Huber, DHI GRAS A/S, Denmark

13:10 – 14:30 Lunch

14:30 – 18:00 Working Groups Meeting  
Two Working Groups will be established to prepare observations and recommendations of the Conference as well as proposals for follow up activities.

Working Group 1: Cooperation and Capacity Building  
Moderators: Dr. Douglas Cripe, GEO Secretariat and Dr. Katarzyna DABROWSKA-ZIELINSKA, Institute of Geodesy & Cartography, Poland

Working Group 2: Future Challenges for Water Resources Management  
Moderators: Mr. Felix Menicocci, CONAE, Argentina and Eng. Aliwafa Abu-Risheh, PSIPW

14:30 – 14:45 Introduction to and formation of Working Groups  
UN-OOSA and LOC

14:45 – 16:00 Working Groups Meeting

16:00 – 16:30 Coffee break

16:30 – 18:00 Working Groups Meeting (continued)
Day 4 – Friday, 4 April 2014

09:00 – 11:00  Working Groups Meeting (continued)

11:00 – 11:30  Coffee break

11:30 – 13:00  Closing Session

Co-Chairs: Mr. Sergei Chernikov, UN-OOSA and Dr. Driss Elhadani, CRTS, Morocco

11:30 – 12:00  Presentation of WGs observations, recommendations and proposals (by
               moderators of WGs)

12:00 – 12:30  Discussion and adoption of the Workshop observations and
               recommendations

12:30 – 13:00  Closing remarks:
               • Representative of LOC
               • Representative of ISNET
               • Representative of PSIPW
               • Representative of ESA
               • Representative of UN-OOSA

Presentations scheduled for posters sessions
(Session 1 – PM Tuesday; Session 2 - AM Wednesday; Session 3 - PM Wednesday; and
Session 4 – AM Thursday)

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<td>Ms. Andrea Ferraz Young, CEPAGRI-UNICAM, Brazil</td>
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<td>Ms. Gerhild BORNEMANN, German Aerospace Center (DLR), Germany</td>
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