



Workshop Building a research program and satellite applications for the ERIS-Chetumal Antenna

PROGRAMME

Venue: Fiesta Inn Hotel

Chetumal, Quintana Roo, Mexico

November 30 to December 2, 2015



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Monday, November 30

08:00 Registration

09:00 - 09:30 Opening Ceremony

Master of ceremonies: M.S. Enrique Pacheco Cabrera, AEM

09:00 Welcome

- ❖ Dr. Mario González Espinosa
ECOSUR
- ❖ Dr. Héctor Hernández Arana
ECOSUR
- ❖ Dr. Francisco Javier
Mendieta AEM
- ❖ Geog. Sergio Ojeda
INEGI Aguascalientes
- ❖ Lic. Carlos Rafael Muñoz
Berzunza
Minister of Environmental
Affairs-Quintana Roo
- ❖ Biol. Gabriela Santana
Duarte. Department of
Ecology, Othón P. Blanco
- ❖ C. Alfredo Chi Department of
Ecology, Bacalar
- ❖ Lic. Fernando Trejo Uco
H. Ayuntamiento de Othón P.
Blanco.
- ❖ Lic. José Luis Funes
Izaguirre
SEMARNAT-Quintana Roo



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Session 1 ERIS Antenna Presentation, Chetumal

Chair: Dr. Benito Orozco, AEM

Rapporteur: Ing. Edward May luit

09:30 - 09:45	Presentation of the ERIS Consortium	M.C. Enrique Pacheco Mexican Space Agency
9:45-10:00	ERIS Antenna overview and background information	Dr. Héctor Hernández ECOSUR-Chetumal
10:00-10:15	ERIS Chetumal Antenna Repair and Maintenance Programme	Ing. Gerardo Ramírez, Ing. Ignacio Torres CIATEQ
10:15-10:30	Storage and distribution platform of satellite data, prototype for the ground station for satellite data (ERIS-Chetumal).	Dr. Victor Sosa Sosa, Dr. José Luis González Compeán CINVESTAV Tamaulipas
10:30-10:45	Proposal for an Image Processing Centre for ERIS	Dr. Norma Dávila UAEMex
10:45-11:00	Coffee Break	

Session 2 Experience of other receiving antennas

Chair: Dr. Norma Dávila, UAEMex

Rapporteur: Dr. Anmi García Arellano, ECOSUR Chetumal

11:00-11:15	Operation experiences of the ERMEX NG Antenna	Ing. David Cuevas Camacho SIAP/SAGARPA
11:15-11:30	Operation experiences of the EVISMAR Station from SEMAR	Tte. Cynthia Verónica Martínez Gutiérrez, Dr. Alejandro Martín Rodríguez Aguayo SEMAR
11:30-11:45	Experiences from the first stage of the ERIS operation	Geog. Sergio Ojeda Servin INEGI-Aguascalientes
11:45-13:00	<u>Round Table: Quo Vadis ERIS?</u> Chair: Dra. Norma Dávila, UAEMex	



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13:00-14:30 Lunch

Session 3 State of knowledge of the ecosystems that made up the transverse coastal corridor located in southern Quintana Roo.

Moderador: Dr. Miguel Ángel Ruiz Zárate

Rapporteur: M.S. Alejandro Vega Zepeda

14:30-14:45	Conceptual framework of the transverse coastal corridor located in southern Quintana Roo.	Dr. Héctor Hernández Arana ECOSUR-Chetumal
14:45-15:00	Structure and productivity of the mangrove ecosystem	Lic. Haydee López Adame ECOSUR-Chetumal
15:00-15:15	Bacterial communities : stromatolites , microbialite , thrombolites , nutrients and carbon fixation , production and respiration	Dra. Luisa Falcón Institute of Ecology-UNAM
15:15 -15:30	Paleoecology of the lagoon ecosystems of the Yucatan Peninsula	Dra. Nuria Torrescano Valle ECOSUR-Chetumal
15:30-16:00	Coffee Break	
16:00-16:15	Water quality in the lake systems of Quintana Roo	Dra. Teresa Álvarez Legorreta ECOSUR-Chetumal
16:15-16:30	Connections , streams and underground flows in the karstic system of Quintana Roo	Dra. Rosa María Leal Bautista CICY-Cancún
16:30-16:45	Structural changes in the past four decades on the coral reef ecosystems	Dr. Lorenzo Álvarez Filip UASA, UNAM



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16:45- 18:15 Round Table: State of knowledge and perspectives of medium and long term research lines
Chair: Dr. Héctor A. Hernández Arana

20:00 **Reception-Welcome Dinner (Fiesta Inn Hotel)**
Sponsor: CONACYT and The Mexican Space Agency

Tuesday, December 1

Session 4 Human threats and disasters: Integrity of the coastal ecosystems and challenges for its management.

Chair: Dra. Luisa Isaura Falcón Álvarez
Rapporteur: Dr. Lorenzo Álvarez Filip

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|-------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 09:00-09:15 | Current context and perspectives for the urban and coastal development in Quintana Roo. | Lic. José Funes Izaguirre, Delegado SEMARNAT |
| 09:15-09:30 | Land use change and reduction of areas occupied by mangrove ecosystems and other wetlands. | Lic. Yolanda Medina Gamez SEMARNAT |
| 09:30-09:45 | Blue Carbon, its potential in the Yucatan Peninsula. | Dr. Jorge Herrera Silveira CINVESTAV-Mérida |
| 09:45-10:00 | Water quality and integrity of the bacterial ecosystems (microbialites). | Dr. José García Maldonado CINVESTAV-Mérida |
| 10:00-10:15 | Coastal, urban and communications infrastructure: effects on hydrology and geohydrology. | Dr. Jorge Euán Ávila CINVESTAV-Mérida |
| 10:15-10:30 | Hurricanes, storms, floods and fires effects on mangrove ecosystems and other wetlands and restoration strategies. | M.S. Arturo Zaldivar Jimenez
Dra. Rosela Pérez, ATEC |
| 10:30-10:45 | Coffee Break | |



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10:45-11:00	Wastewater treatment, regulatory criteria for use and disposal.	Ing. Jorge Dzul Chi CAPA
11:00-11:15	Pollution and climate change, the main threat to coral reef ecosystems.	Dr. Juan Pablo Carricart UASA-UNAM
11:15-11:30	Current regulations and management strategies for ecosystems in the transverse coastal corridor.	M.S Marisol Torres Aguilar CONANP
11:30-11:45	Local Ecological Planning Programs	Ing. Salvador Poot Villanueva Ministry of Environment Quintana Roo
11:45-12:00	International designation Ramsar: designation request for the transverse coastal corridor Bacalar-Chetumal Bay.	M.S. Alejandro Vega Zepeda ECOSUR-Chetumal
12:00-13:30	<u>Round Table: Ecosystems threats and challenges for its management and preservation.</u> Chair: Dr. Juan Pablo Carricart Ganivet.	

13:30-15:00 Lunch

Session 5 International Cooperation UK-Mexico.

Chair: Dr. Werner Balogh, UNOOSA

Rapporteur: M.S. Sandra Cabrera Alvarado, AEM.

15:00-15:20	International Partnership Space Programme (IPSP).	Dr. Ray Fielding, IPSP Head from the UK Space Agency (UKSA)
15:20-15:40	IPSP Project UK-Mexico: Use of remote sensing for the Bacalar Ecological Corridor preservation.	Dr. Raffaella Guida Surrey Space Centre (SSC) University of Surrey
15:40-16:00	Platforms and space products from the IPSP project.	Dr. Raffaella Guida Surrey Space Centre (SSC) University of Surrey



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Terri Freemantle
Satellite Application Catapult

16:00-16:15 **Coffee Break**

16:15-17:15 Round Table: Platform for end users "Next Steps for the initiatives under the International Partnership Space Programme Mexico-United Kingdom Framework"
Chair: Guglielmo Aglietti, Surrey Space Centre (SSC) University of Surrey.

Wednesday, December 2

Session 6. Applications of Remote Sensing and Potential Contribution of ERIS for Scientific Research and Management of Natural Resources Issues

Chair: Lic. Gertrudis Cleotilde Arellano, SEMARNAT
Rapporteur: Dr. Jorge Omar López Martínez, ECOSUR.

09:00-09:15	Astrobiology and first records of life on earth	Dra. Sandra Ramírez, UAEM
09:15-9:30	Use of satellite images for archaeological heritage protection	Arq'lgo. Jaime Cedeño Nicolás INAH
09:30-9:45	MAdMEx Initiative	Dr. Rainer Ressler CONABIO
09:45-10:00	Use of satellite images and its challenges applied to agriculture in Mexico.	Geog. Pablo Flores Lorenzo, ERMEX
10:00-10:15	Coffee break	
10:15-10:30	Use of satellite images in geomedicine.	Dra. María Guadalupe Galindo MendozaUASLP
10:30-10:45	Forest fire monitoring	Ing. Yucundo Coutiño Estrada CONAFOR
10:45-11:00	Monitoring strategies for natural and anthropogenic impacts in tropical forest of Quintana Roo.	Ing. Rafael León Negrete. Ing. José Javier May Chan CONAFOR-Quintana Roo



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11:00-11:15	SEMARNAT's needs and uses of satellite images	Lic. Gertrudis Cleotilde Arellano Molina SEMARNAT
11:15-11:30	CFE processing system and its satellite needs	M.S. Leodegario Sansón Reyes, M.S. María de la Paz Medina Barrios CFE satellite images
11:30-13:00	<u>Round Table: Development of future applications and its uses for the ERIS Antenna</u> Chair: Lic. Gertrudis Cleotilde Arellano, SEMARNAT	
13:00-14:30	Lunch	

Sesión 7 International Study Cases

Moderador: Raffaella Guida, Surrey Space Centre (SSC) University of Surrey

Rapporteur: M.S. Sandra Cabrera Alvarado, AEM.

14:30-14:45	DEIMOS-2 experiences at its Puertollano ground station	MSc. Carlos Fernández de la Peña (LATAM URTHECAST) Spain
14:45-15:00	Experience in the use of space data for emergencies	Dr. Felix Menicocci CONAE Argentina
15:00-15:15	Space Technology in Support of Sustainable Development - Activities of the United Nations Office for Outer Space Affairs.	Dr. Werner Balogh UNOOSA
15:15-15:30	Satellite emergency services for the European Union	Ing. Francisco Mata Cosmos SkyMed, E-geos.
15:30-15:45	Coffee Break	
15:45-16:45	<u>Round Table: Use of remote sensing for disaster evaluation and monitoring</u> Chair: Raffaella Guida, Surrey Space Centre (SSC) University of Surrey	
16:45-17:45	Conclusion Presentation Members of ERIS Consortium	



Closing Ceremony

17:45-18:15

Master of ceremonies: Dr. Héctor Hernández, ECOSUR

Closing remarks

- ❖ M.S. Enrique Pacheco
AEM
- ❖ Geog. Sergio Ojeda
INEGI Aguascalientes
- ❖ Dr. Rainer Ressler, CONABIO

18:15

Closing Cocktail (Fiesta Inn Hotel)