49th Session of the United Nations Committee on the Peaceful Uses of Outer Space (UN COPUOS)
Vienna, Austria, 7 – 16 June 2006

REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN (CRECTEALC)
(Affiliated to the United Nations)

José Marques da Costa
Secretary General (CRECTEALC)
Regional Centres for Space Science and Technology Education (affiliated to the United Nations)
REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN CRECTEALC (Affiliated to the United Nations)

MAIN OBJECTIVE

- Development of skills and knowledge of university educators and research and application scientists, in those aspects of space science and technology that can enhance social and economic development in countries of the region of Latin American and the Caribbean.
REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN CRECTEALC (Affiliated to the United Nations)

SPECIFIC OBJECTIVES

Improvement of skills and knowledge of university educators, environmental research scientists and project personnel in the design, development and application of remote sensing, satellite meteorology and related technologies for subsequent use in national and regional development and environment management programmes including bio-diversity protection.
REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN (CRECTEALC) (Affiliated to the United Nations)

SPECIFIC OBJECTIVES

Development of skills on satellite communications including those associated with rural development, long distance education, delivery of health services, disaster mitigation, air and maritime navigation, and network/linkage of the region’s professionals and scientists, government establishments and industries in order to facilitate the exchange of new ideas, data and experiences.
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INITIAL PROGRAMMES

- Remote sensing and geographic information systems
- Meteorological satellite applications
- Satellite communications and global-positioning systems
- Space and atmospheric sciences
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EDUCATIONAL CURRICULA

REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN CRECTEALC (Affiliated to the United Nations)

- **MARCH 1997**: Brazil and Mexico signed the “Agreement to establish the Centre for Space Science and Technology Education for Latin America and the Caribbean”.

- **SEPTEMBER 2000**: Agreement of Headquarters firmed by CRECTEALC with the Government of Brazil.

- **OCTOBER 2002**: Operational Agreement firmed by CRECTEALC with the Government of Mexico.

- **JUNE 2003**: Affiliation Agreement firmed by CRECTEALC with UN OOSA.
REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN CRECTEALC (Affiliated to the United Nations)

STRUCTURE

GOVERNING BOARD
ADVISORY COMMITTEE
SECRETARIAT
CAMPI
REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN (CRECTEALC) (Affiliated to the United Nations)

GOVERNING BOARD

- Principal policy-making organ of the Centre.
- 01 representative of Brazil, 01 representative of Mexico and 01 representative of each country of the region, or from other interested country which have signed an Agreement of Cooperation with the Centre.
- Established in October 1999.
REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN CRECTEALC (Affiliated to the United Nations)

SECRETARIAT

- Main executive organ of the Centre
- Coordinate the activities of the Campi
- Represent the Centre at national and international institutions
- Headed by the Secretary-General, who is the first administrative authority of the Centre.
REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN CRECTEALC (Affiliated to the United Nations)

ADVISORY COMMITTEE

- Composed by prominent representatives of the national Governments, private industry and academic and research communities.
CAMPI

- The Campi are responsible for the planning, the organization, the implementation and the administration of education programmes in the areas concerning the competence of the Centre.
  
- Campus Brazil
- Campus Mexico
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HOST INSTITUTIONS

National Space Research Institute - INPE
São José dos Campos, São Paulo, Brazil

National Institute for Astrophysics, Optics and Electronics – INAOE
Tonantzintla, Puebla, Mexico
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CAMPUS BRAZIL
Director: Dr. Tania Maria Sausen
Host: INPE
São José dos Campos, São Paulo, Brazil
tania@ltid.inpe.br

Specialization courses (nine months long)
Graduate courses (pilot project developed in the student country)
Short and middle term courses
Seminars and Workshops
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CAMPUS MEXICO
Director: Dr. José Guichard Romero
Host: INAOE
Tonantzintla, Puebla, Mexico

Specialization courses (nine months long)
Graduate courses (pilot project developed in the student country)
Short and middle term courses
Seminars and Workshops
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INTERNATIONAL COURSE ON REMOTE SENSING AND GIS
Campus Brazil

- Fundamental on Remote Sensing and GIS  400 hours
- Remote Sensing and GIS Applications      260
- Complementary Activities                260
- Pilot Project and Monograph             400

Total: 1320 hours
REGIONAL CENTRE FOR SPACE SCIENCE AND TECHNOLOGY EDUCATION FOR LATIN AMERICAN AND THE CARIBBEAN (CRECTEALC)

INTERNATIONAL COURSE ON REMOTE SENSING AND GIS
2003-2006

COUNTRIES

ARGENTINA 2
BOLIVIA 3
BRAZIL 13
COLOMBIA 10
CHILE 1
CUBA 2
ECUADOR 1
MEXICO 1
PARAGUAY 1
PERU 5
URUGUAY 2
VENEZUELA 2

STUDENTS
From 1985 to 2002 the Course had 7-month duration and was promoted under the responsibility of the National Institute for Space Research - INPE of the Ministry of Science and Technology-MCT of Brazil.

From 2003 to 2005, 36 students have already been graduated on this course under the coordination of the CRECTEALC/Campus Brazil. This year 7 students should be graduated and the total will reach 43 students.

Up to December 2006 the Course will form 189 specialists from Algeria, Argentine, Bolivia, Brazil, Burkina Faso, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, Ethiopia, Ghana, Honduras, Kenya, Mexico, Panama, Paraguay, Peru, Nigeria, Senegal, Uruguay and Venezuela.
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First Seminar for Information and Dissemination of CRECTEALC
Mexico City, Mexico, from 16 to 17 December 2003
Representatives from Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama and Venezuela.

Seventh Latin American Conference on Space Geophysics - 7th COLAGE
Atibaia, São Paulo, Brazil, March 28 to April 2, 2004
165 participants from Argentina, Bolivia, Chile, Costa Rica, Cuba, England, France, Germany, Greece, Israel, Italy, Mexico, Peru, Switzerland, United States, Uruguay and Taiwan.
First Seminar on Education and Environment in Latin America: emphasis on the use of remote sensing to study global and regional climate changes, Cordoba, Argentina, 26-29 October 2004.
29 participants from Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, Spain, Guatemala, Mexico, Panama, Dominican Republic, Uruguay and Venezuela.

First Seminar on Meteorological Satellite Applications and Global Climate in Latin America, Cachoeira Paulista, São Paulo, Brazil, 14-16 December 2004.
25 participants from Argentina, Brazil, Colombia, Costa Rica, Cuba, Panama, Dominican Republic, Venezuela and Uruguay.

FUTURE

Increase of number of Members.

VII Governing Boarding Meeting.

First meeting of the Advisory Committee.

Promotion of capacity building on space science and technology education through training courses, seminars, workshops and research networks.

Promotion of distance learning activities taking the advantage of the rapid development of internet-based technologies.

Promotion of educational programs for high school students on relevant topics of space science and technology.
COOPERATION

Memorandum of Understanding - MOU
IAI x CRECTEALC
April, 2003

Priority Areas for Collaboration

- Education, research, and development of applications of remote sensing, satellite meteorology and space atmospheric sciences related to global change.
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COOPERATION
DISTANCE EDUCATION

- Latin American Institute of Educational Communication - ILCE
- Latin American Cooperation of Advanced Networks - CLARA
- Organization of the American States - OAS
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CRECTEALC (Affiliated to the United Nations)

SUPPORT

- Foreign Relations Ministry of Brazil – MRE
- Foreign Relations Secretary of Mexico – SRE
- Brazilian Space Agency - AEB
- National Institute for Space Research – INPE/MCT
- National Institute of Astrophysics, Optics and Electronics – INAOE
- National Council for Science and Technology - CONACYT
- National Council for Scientific and Technological Development – CNPq/MCT
- University of the United Nations – UNU
- Office of Outer Space Affairs of the United Nations – UN OOSA
- Organization of the American States – OAS
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Thank you

http://www.crectealc.org/

http://www.inpe.br/unidades/cep/atividadescep/crectealc/