

UNOOSA
UNITED NATIONS OFFICE FOR OUTER SPACE AFFAIRS
LAPAN
NATIONAL INSTITUTE OF AERONAUTICS AND SPACE OF INDONESIA

**United Nations/Indonesia
International Conference on
Integrated Space
Technology Applications to
Climate Change**

PROGRAMME

2 - 4 September 2013
Jakarta, Indonesia



UNITED NATIONS
Office for Outer Space Affairs





DATE

2-4 September 2013

VENUE

Borobudur Hotel
Jalan Lapangan Banteng Selatan
P.O. Box 1329
Jakarta 10710
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ORGANIZERS

United Nations Office for Outer
Space Affairs (OOSA)
National Institute of Aeronautics
and Space (LAPAN)

IN COOPERATION WITH

European Space Agency (ESA)

BACKGROUND

Climate change has been defined as the challenge of our times as it is a process which may deter sustainable development throughout the world. Satellites offer a unique point of view to track several essential climate variables and to observe its manifestations at the global level such as sea-level rise, deforestation trends or carbon emissions; and to monitor on a permanent basis other parameters which may be too difficult or costly to observe from the ground such as changes in polar ice-caps and glaciers, and social trends such as increasing exposition of vulnerable communities.

The Conference will bring together experts from the space, the environment, academia and the climate change community as well as decision makers from Member States and from national, regional, and international organizations.

The **objectives** of this International Conference are:

- To discuss ways in which Member States affected by climate change can make better use of space applications to assess the manifestations of and the vulnerability to climate change.
- To identify potential types of measures which could be implemented by communities when focusing on mitigation and adaptation to climate change.
- To improve synergies among space agencies and organizations targeting efforts on mitigation and adaptation to climate change.
- To strengthen international and regional cooperation in this area.
- To raise awareness on the recent advances in space-based technologies, services and information resources which can be used to monitor the impacts of climate change and the effects of measures implemented to reduce such impacts.

MODALITIES

The Conference will open on 2 September 2013 with an Opening Ceremony including keynote speeches from representatives of Indonesian government agencies and the United Nations.

The conference will include presentation sessions in the plenary and working groups. 9 thematic working groups are foreseen focusing on the following topics:

- Mitigation/REDD
- Adaptation in Coastal Areas
- Climate Change and the Environment
- The Role of Research in Climate Change issues
- Climate Change and Disasters
- Data Policy
- Mitigation and Adaptation in Mountains
- Adaptation in Agriculture
- Weather and Climate

At the end of each discussion group session, the results of the discussions will be presented and discussed.

The conference concludes with the reports from the working groups as well as a wrap up of the event.

A private sector session in the afternoon of the third day of the event will allow participants to exchange and discuss collaboration opportunities with representatives of the private sector.

In the evening of 2 September 2013, LAPAN invites all participants to attend a reception in the conference hotel including a dinner and a cultural show.



Image: NASA

2 September 2013 Opening Ceremony

| Time | Title | Speaker |
|-------------|---|--|
| 9:00-9:05 | Welcome Remarks | Mr. Bambang Tejasukmana Chairman, LAPAN, Indonesia |
| 9:05-9:15 | Welcome Remarks | Mr. Douglas Broderick Resident Coordinator, United Nations in Indonesia |
| 9:15-9:30 | Summary of the Conference | Mr. Juan Carlos Villagran UNOOSA |
| 9:30-9:45 | Keynote Speech | Prof. Dr. Armida S Alisyahbana Head of BAPPENAS, Indonesia (tbc) |
| 9:45-10:00 | Keynote Speech | Prof. Dr. Balthasar Kambuaya Minister of Environment, Indonesia (tbc) |
| 10:00-10:15 | Opening Address | Prof. Dr. Gusti Muhammad Hatta Minister for Research and Technology, Indonesia |
| 10:15-10:50 | Photo Session & Coffee Break / Press Conference | |

Presentations

| Time | Title | Speaker |
|-------------|--|--|
| 10:50-11:10 | The adaptation and mitigation policy of climate change impact in Indonesia | Mr. Rachmat Witoelar Director DNPI, Indonesia (tbc) |
| 11:10-11:30 | REDD at national & project scales dedicated geo-spatial solutions to meet user needs | Mr. Patrick Houdry Astrium |
| 11:30-11:50 | The adaptation strategies and application of space-based data in mitigation of climate change impact in Bangladesh | Mr. Monowar Hossain Akhand Ministry of Home Affairs, Govt. of Bangladesh |
| 11:50-12:10 | Use of space-based technology information in the regional Niger Basin in the West and Central Africa on the mutual use of the shared water resources for sustainable development and mitigation of climate change challenges | Mr. J. A. Shamonda Nigeria Hydrological Services Agency, Nigeria |
| 12:10-12:30 | Introduction to Working Groups by Organizers: UNOOSA & LAPAN | |
| 12:30-14:00 | Lunch | |

Working Group Session 1

| Time | Working Group I MITIGATION / REDD | Working Group II CLIMATE CHANGE AND DISASTERS | Working Group III CLIMATE CHANGE AND ENVIRONMENT |
|-------------|---|--|---|
| 14:00-14:20 | Utilization of satellite remote sensing data for national forest cover change monitoring to support REDD+ MRV system in Indonesia Ms. Orbita Roswintiarti LAPAN, Indonesia | Space-based application for coastal vulnerability assessment in Indonesia Mr. M. Rokhis Khomarudin LAPAN, Indonesia | Efforts to address climate change in Colombia Ms. Vicky Guerrero Barrios Instituto de Hidrología Meteorología y Estudios Ambientales - IDEAM |
| 14:20-14:40 | Remote sensing role in climate change research in Lebanon Mr. Mohamad Awad National Council for Scientific Research, Lebanon | Applications of space-based information in the Philippines Mr. Edna L. Juanillo PAGASA, Philippines | Adaptation to climate change in Guatemala: Efforts by MARN Mr. Jose David Diaz Gonzalez Ministry of Environment and Natural Resources, Guatemala |
| 14:40-15:00 | Examples of the use of satellite imagery to climate change – REDD Programme Mr. James Durana RapidEye | Space Application in climate change in SUPARCO Mr. Rahamatullah Jilani SUPARCO, Pakistan | Integrated Space technology applications to climate change adaptation and mitigation in Africa Mr. Frederick Mokua RCMRD Kenya |
| 15:00-15:30 | Coffee Break | | |
| 15:30-17:00 | Discussion & Proposals | Discussion & Proposals | Discussion & Proposals |

Cultural Event

| | |
|-------------|--|
| 19:00-21:00 | Dinner and Cultural Show / Reception hosted by LAPAN at Hotel "Borobudur" |
|-------------|--|

3 September 2013 Working Group Session 2

| Time | Working Group IV THE ROLE OF RESEARCH | Working Group V ADAPTATION IN COASTAL AREAS | Working Group VI DATA POLICY |
|-------------|---|--|--|
| 9:00-9:20 | Remote Sensing data processing for ecology and climate monitoring at the territory of the Republic of Belarus Mr. Sergey Ablameyko Belarusian State University | The use of space-based information in helping Mauritius to mitigate and address its needs related to adaptation to climate change Mr. Vivekarran Rughooputh Ministry of Health and Quality of Life, Mauritius | Remote Sensing Data Policy in Indonesia Ms. Orbita Roswintiarti LAPAN, Indonesia |
| 9:20-9:40 | Don't waste Space Mr. Sean Tuttle University of Canberra, Australia | The use of space-based applications to identify how best to adapt to the challenges of climate change in Jamaica Mr. Mark A. Codling Ministry of Water Land Environment & Climate Change, Jamaica | The interface between international and national mission products for climate change applications Mr. Owen Hawkins Surrey Satellite Technology Ltd. |
| 9:40-10:00 | The Asia Knowledge and Innovation Lab Mr. Charles Brigham World Bank, Indonesia | Space-based information applications related to climate change monitoring in Morocco Mr. Abderrahman Atillah Royal Center of Remote Sensing, Morocco | Land reforms and usable floor space its results Mr. Divankhan Ahadov State Committee Land and Cartography of Azerbaijan Republic |
| 10:00-10:20 | Blue carbon and climate change in Indonesia Mr. Arief B. Purwanto CCMRS IPB, Indonesia | Research activities on climate variability impact to marine and fisheries sector Mr. Widodo S. Pranowo Ministry of Marine and Fisheries, Indonesia | Indonesian Space Act Ms. Erna S. Adiningsih LAPAN, Indonesia |
| 10:20-10:50 | Coffee Break | | |
| 10:50-12:10 | Discussion & Proposals | Discussion & Proposals | Discussion & Proposals |
| 12:10-13:30 | Lunch | | |

Working Group Session 3

| Time | Working Group VII MITIGATION AND ADAPTATION IN MOUNTAINS | Working Group VIII ADAPTATION IN AGRICULTURE | Working Group XI WEATHER AND CLIMATE |
|-------------|---|--|---|
| 14:00-14:20 | Climate change impacts on pollution and insect pest management in the East African mountain ecosystem Mr. Tino Johansson International Center of Insect Physiology and Ecology (ICIPE) | Use of space-based technologies to climate change adaptation and mitigation: Prospects for Ethiopia Mr. Demeke Nigussie Alemu Ethiopian Institute of Agricultural Research (EIAR) | The impact, mitigation and adaptation of climate change in Sri Lanka Mr. M.M.P. Mendis Department of Meterology, Sri Lanka |
| 14:20-14:40 | Climate Change and disaster-risk management in Bhutan Ms. Gaki Tshering Royal Civil Service Commission, Bhutan | Ghana technology needs assessment project for climate change adaptation and mitigation Mr. Francis Danquah Ohemeng Irrigation Development Authority, Ghana | The possibility of remote sensing application to detect and identify climate change over Indonesia Mr. Eddy Hermawan LAPAN, Indonesia |
| 14:40-15:00 | Challenge in climate assessment for climate change impacts, vulnerability and adaptation: Potential use of gridded dataset Mr. Perdinan Bogor Agricultural University-IPB, Indonesia | Space Technologies in Sudan Ms. Donia Hassan Khalafalla Ministry of Agriculture and Irrigation, Sudan | An overview of southern Philippine climate change-related meteorological events Mr. Daniel McNamara Manila Observatory and Ateneo de Davao University, Philippines |
| 15:00-15:30 | Coffee Break | | |
| 15:30-17:00 | Discussion & Proposals | Discussion & Proposals | Discussion & Proposals |

4 September 2013 Plenary

| Time | Title | Speaker |
|-------------|--|---|
| 9:00-9:20 | Assessment of some vulnerability parameters to the urban heat island in Tanta City, Egypt using Remote Sensing and GIS | Ms. Hala A. Effat National Authority for Remote Sensing and Space Sciences, NARSS, Cairo, Egypt |
| 9:20-9:40 | Coupling spatial data and high-resolution climate modeling in support for a strategy to climate change adaptation in Algeria | Mr. Abdelhak Trache ASAL, Algeria |
| 9:40-10:00 | Climate change and disaster risk reduction: Space technology relevance | Mr. Shirish Ravan UNOOSA/UN-SPIDER |
| 10:00-10:30 | Report from Working Group 1-3 | Rapporteurs |
| 10:30-11:00 | Coffee Break | |
| 11:00-11:30 | Report from Working Group 4-6 | Rapporteurs |
| 11:30-12:00 | Report from Working Group 7-9 | Rapporteurs |
| 12:00-13:30 | Lunch | |

Closing Plenary

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|-------------|---|
| 13:30-14:30 | Discussion: Next steps |
| 14:30-15:00 | Closing remarks (Mr Taufik Maulana, LAPAN and Mr Juan Carlos Villagran, UNOOSA) |
| 15:00-15:30 | Coffee Break |
| 15:30-17:00 | Open session with private sector - Stands |

