



International Workshop on Land Use/Cover Changes and Air Pollution in Asia

August 4-7th, 2015, Bogor, Indonesia

(2nd Floor, IPB, International Convention Center, Ball Room III)

AGENDA

DAY 1 (4TH AUGUST, TUESDAY)

9:20-10:10 Introduction Session

- 9:20 Welcome Address – Herry Suhardiyanto – Rector (Bogor Agricultural University, Indonesia)
- 9:35 Keynote Address – Siti Nurbaya Bakar (Minister of Environment and Forestry, Indonesia)
- 9:50 Welcome remarks – Bambang Saharjo (Local host, Bogor Agricultural University, Indonesia)
- 9:55 Welcome remarks – Chris Justice (U. of Maryland College Park, USA)
- 10:05 Welcome remarks – Toshimasa Ohara (NIES, Japan)
- 10:10 Meeting Objectives – Krishna Vadrevu (U. of Maryland College Park, USA)

Keynote Presentation

- 10:25 The NASA LCLUC science: Focus on Southeast Asia – Garik Gutman (NASA HQ and GOFC GOLD Program)

10:55-11:00

Group Picture

11:00-11:25

Tea Break

11:25-12:45 Technical Session-I: Regional & National Science Initiatives Chair: Garik Gutman (NASA HQ, USA)

Technical Presentations

- 11:25 7-South-East Asian Studies (SEAS) Campaign – George Lin and Tang Huang Lin (National Central University, Taiwan)

- 11:45 Indonesian National Institute and Aeronautics and Space (LAPAN) remote sensing activities in Indonesia – Rokhis Khomaruddin (LAPAN, Indonesia)
- 12:05 Remote sensing activities in Vietnam and VNREDSAT-1 satellite characteristics for disaster management in Asia - Nguyen Minh Ngoc (Space Technology Institute, Vietnam)
- 12:25 Asia Pacific Network (APN) for Global Change Research – Twenty years of collaborative research/capacity building on LC/LUC and GHG emissions- Erna Adiningsih (LAPAN, Indonesia)

12:45-1:45

Lunch

1:45 – 5:05 Technical Session – II. Land Cover/Land Use Change, Forests and GHG emissions
 Chair: **Chris Justice (UMd, USA)**

Keynote Presentation

- 1:45 Effects of oil palm expansion on land use, carbon emissions and livelihoods in Kalimantan, Indonesia – Lisa Curran (Stanford University, USA)

Technical Presentations

- 2:15 The significance of Indonesian peat swamp and mangrove forests losses in the emission reduction targets – Daniel Murdiyarso (Center for International Forestry Research, Indonesia)
- 2:35 Annual deforestation mapping in Sumatera 1990-2012 using multi-temporal digital classification – Kustiyo (LAPAN, Indonesia)
- 2:55 Forest management and livelihood connections in Southeast Asia – Christine Padoch (Center for International Forestry Research, Indonesia)
- 3:15 Remote sensing of land cover changes in Southern Vietnam – Bach Viet Pham (Vietnam National University-Ho Chi Minh City, Vietnam)

3:35 – 4:05

Tea Break

- 4:05 Enhanced approaches to estimate net emission reductions from deforestation and degradation of undrained peat swamp forests in Central Kalimantan - Wayan Susi Dharmawan (Ministry of Environment and Forestry, Indonesia)
- 4:25 Land cover and Land use changes and impacts on Carbon cycling in South and South East Asia – Atul Jain (University of Illinois Urbana Champaign, USA)
- 4:45 National mapping for REDD+ in Laos – Tricks and tips” – Jeffrey Himel (Aruna Technologies, Lao PDR)

5:05 – 5:30 Poster Introductions (1-minute overviews)

5:30–6:05

Poster Session

7:00 *Welcome Reception*

DAY 2 (5TH AUGUST, WEDNESDAY)

9:20 – 2:20 Technical Session – III. Inventories, Monitoring and Modeling of GHG's and Air Pollution
Chair: **Toshimasa Ohara (NIES, Japan)**

Keynote Presentation

9:20 Atmospheric pollution monitoring using GOSAT-1 and GOSAT-2- Tsuneo Matsunaga (NIES, Japan)

Technical Presentations

9:50 S-12 project and Regional Emission Inventory in Asia (REAS) – Toshimasa Ohara (NIES, Japan)

10:10-10:40

Tea Break

10:40 Global Atmospheric Watch (GAW) activities and air quality monitoring in Indonesia - Dodo Gunawan (Agency for Meteorology, Climatology and Geophysics, Indonesia)

11:00 Air pollution management system in Vietnam – Nguyen Thi Nhat Thanh (VNU-ET, Vietnam)

11:20 Characteristics of inorganic particulate matter in Peninsular Malaysia – Mastura Mahmud (University Kebangsaan, Malaysia)

11:40 The impact of land use/cover change on greenhouse gas emissions in terrestrial ecosystems of tropical Asia – Haruo Tsuruta (Remote sensing technology center for Japan (RESTEC), Japan)

12:00-1:00

Lunch

1:00 GHG emissions from land use change and forestry sector in Myanmar – Cho Cho Win (Forest Research Institute, Myanmar)

- 1:20 CH₄ emissions inventory in India using GOSAT data – Sachiko Hayashida (Nara Women's University, Japan)
- 1:40 Recent and future emission scenarios for emerging renewable biomass and conventional fossil fuel based energy in India – Saroj Sahu (NIES, Japan)
- 2:00 GHG and SLCP emissions projections in Asia and Intended Nationally Determined contributions (INDC's) – Tatsuya Hanaoka (NIES, Japan)

2:20-5:20 Technical Session - IV. Vegetation Fires and Biomass Burning Emissions
 Chair: **Krishna Vadrevu (UMd, USA)**

Keynote Presentation

- 2:20 History and latest updates on the satellite remote sensing of fires – Chris Justice (UMd, USA)

Technical Presentations

- 2:50 Exploring spectral differences in radiant emissions of flaming and smoldering biomass burning – Chris Elvidge (NOAA, USA)

3:10-3:40

Tea Break

- 3:40 Vegetation fires and smoke plume characteristics in Asia–Krishna Vadrevu (UMd, USA)
- 4:00 Indonesian Riau's smoke – sources and mitigation – Bambang Saharjo (Bogor Agricultural University, Indonesia)
- 4:20 Major atmospheric emissions from peat fires in Southeast Asia during non-drought years: evidence from the 2012-13 Sumatran fires – David Gaveau (CIFOR, Indonesia)
- 4:40 Haze and El Nino in Indonesia – Hiroshi Hayasaka (Hokkaido University, Japan)
- 5:00 Emission inventories of air pollutants from biomass burning open burning in Agriculture and forest areas of Thailand – Narisara Thongboonchoo (King Mongkut's Institute of Technology, Thailand)

5:20-6:05

Poster Session

7:00 *Banquet Dinner*

DAY 3 (6TH AUGUST, THURSDAY)

9:20-12:00 Technical Session - IV. Vegetation Fires and Biomass Burning Emissions (continues)
 Chair: **Chris Elvidge (NOAA, USA)**

Keynote Presentation

- 9:20 Pro's and Con's of using remote sensing in fire research - Emilio Chuvieco (University of Alcala, Spain)

Technical Presentations

- 9:50 Impact of vegetation and peat fires on air quality and human health in Southeast Asia – Carly Reddington (University of Leeds, UK)

10:10-10:40

Tea Break

- 10:40 Carbon emissions from the peat swamp forest fires of the ex-Mega Rice Project in Kalimantan – Mark Cochrane (South Dakota State University, USA).
- 11:00 Laboratory study of haze in tropical Asia - Mikinori Kuwata (Nanyang Technological University, Singapore)
- 11:20 Topology analysis of land and forest fire in Riau Province – Israr Albar (Bogor Agricultural University, Indonesia).
- 11:40 Satellite based early warning system to detect peatland fires in Central Kalimantan – Nina Yulianti (University of Palangka Raya, Indonesia)

12:00-1:00

Lunch

1:00-5:20	Technical Session V. Aerosols and Radiation Chair: Eric Vermote (NASA Goddard, USA)
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Keynote Presentation

- 1:00 Satellite remote sensing of Aerosols – Eric Vermote (NASA Goddard, USA)

Technical Presentations

- 1:30 Global aerosol characterization using AERONET data – David Giles (NASA Goddard, USA)
- 1:50 A review of remote sensing applications for investigating aerosol properties in Malaysia – Kasturi Kanniah (University Technology, Malaysia)
- 2:10 Remote sensing of aerosol type and the potential weight of mixing component – Tang-Huang Lin (National Central University, Taiwan)
- 2:30 Ground-based monitoring of aerosol optical properties and surface radiation budget – Akihiro Uchiyama (NIES, Japan)
- 2:50 Evaluation of satellite and reanalysis products of downward surface solar radiation over East Asia – Binghao Jia (Institute of Atmospheric Physics, China)

- 3:10 Aerosol study from Jambi Forest fire – Edwin Aldrian (Indonesia Agency for Meteorology, Climatology and Geophysics, Indonesia)

3:30-4:00

Tea Break

- 4:00 An analysis of aerosol optical properties during seasonal monsoon circulation – Lim Hwee San (University Sains, Malaysia)
- 4:20 Inferring particulate matter sources using a Backward-Time Stochastic Lagrangian air quality model at selected sites in Luzon, Philippines – Patricia Erika Lim (University of Philippines)
- 4:40 PM_{2.5} carbonaceous species and BC emitted from peat land burning in Riau, Sumatera – Puji Lestari (Institute of Technology, Bandung, Indonesia)
- 5:00 Assessment of sulfate aerosols and uncertainty due to clouds using global models – Daisuke Goto (NIES, Japan)

5:20-6:00	Discussion: Regional Science Summary and South East Asia Regional Information Network (SEARRIN) – Research Priorities Chair: Chris Justice ; Rapporteur: Krishna Vadrevu
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