

Satellite Observation Contributing to Decision making to Reduce GHG Emissions

Date and Hour

Thursday, 5th December 2019,
15:00–16:30

Venue

Japan Pavilion

Purpose:

The 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, adopted in May 2019, has now reflected the latest scientific and technical advancement with new additional chapters regarding satellite observation addressing the efficacy of satellites including Greenhouse gases Observing Satellite (GOSAT) launched by Japan in 2009, and no longer considers the technical deficiency of satellite observation as a major problem.

After Paris agreement adopted in 2015, Conference of Parties has begun discussions toward implementation guidelines and the Global Stocktake planned in 2023. Furthermore, following the Global Warming of 1.5°C, an IPCC Special Report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems was published in August of this year. With reference to such discussions, importance of precise estimation of GHG emission and its sources is increasing.

This seminar will begin by introducing the latest activities of GHG observation by satellites and how these satellite data are contributing to the Model analysis. After highlighting the country's effort and challenge to utilize satellite data to understand the GHG emission, the Japan's new initiative to develop a GHG analysis platform aiming to support the national, regional and global effort to reduce the GHG emission will be introduced. It will be followed up by discussions on the topics of preparing GHG emission report as well as implementing GHG reduction policy with earth observation data for each country.

CO₂ Concentration by GOSAT

Organizer

Ministry of Education, Culture, Sports, Science and Technology – Japan (MEXT)

Ministry of the Environment, Government of Japan (MOE)

Japan Aerospace Exploration Agency (JAXA)

National Institutes for Environmental Studies, Japan (NIES)

Agenda

15:00 Opening Remarks

Ministry of Environment, Government of Japan

15:05 Interpretation of Carbon Cycle with Model Analysis and expectations from Satellite Observation

Prabir Patra

Japan Agency for Marine-Earth Science and Technology (JAMSTEC)

15:15 Latest result of GHG Observation by Satellites

Masakatsu Nakajima

Manager for Engineering, Space Technology Directorate I , JAXA

15:20 Space based Atmospheric CO₂ and CH₄ Inventories to Support the Global Stocktake

David Crisp

Senior Research Scientist, Jet Propulsion Laboratory, NASA

15:30 Estimation of GHG emission/absorption using Satellite Data – Needs for satellite monitoring and challenges in Mongolia –

Batjargal Zamba

Special Envoy of Mongolia on Climate Change

15:40 Integrated Observation and Analysis System for Monitoring Anthropogenic and Natural Greenhouse Gas Sources and Sinks

Nobuko Saigusa

Director of Center for Global Environmental Research, NIES

15:50 Panel Discussion

16:25 Closing Remarks

Takeshi Hirabayashi

Director of Satellite Applications and Operations Center, Space Technology Directorate I , JAXA