



*Global Engagement activities of Satellite  
Observations supporting Paris Agreement*

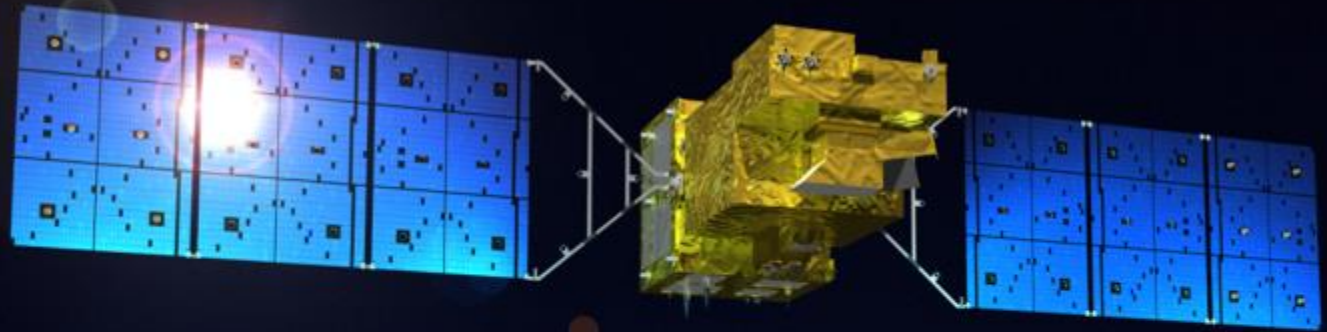
Oct 24, 2017

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GOSAT launched in 2009



GOSAT-2 will be launched in 2018



# Background

1. The contribution by satellite to the Paris Agreement is indispensable to support the transparency framework.
2. Currently, three GHG observation satellites are in operation and more satellites are under development or planning.

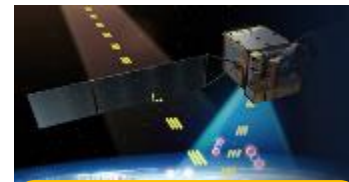
## In Operation



GOSAT  
2009~



OCO-2 (NASA)  
2014~



TanSat 2016~

## Under development or planning

Sentinel-5P, 2017



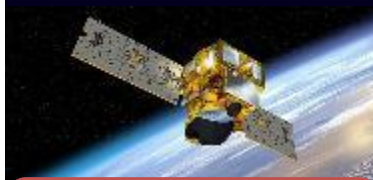
GOSAT-2, 2018



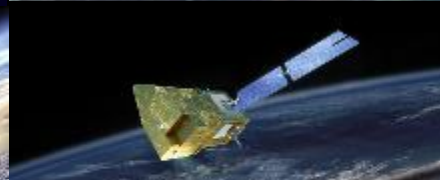
OCO-3, 2018



MERLIN, 2020



MicroCarb, 2020



# Current Status



1. The programmatic International Cooperation to improve the accuracy of GHG data is important to achieve this contribution.
2. Current “IPCC Guidelines for National Greenhouse Gas Inventories” describes as follows;  
**“Even the availability of satellite-borne sensors for greenhouse gas concentration measurements will not fully resolve this problem, due to limitations in spatial, vertical and temporal resolution.”**
3. However, the satellites had advanced in these years after the launch of GOSAT which is the first satellite dedicated to measure GHG.

# Japan's on-going efforts towards the refinement of IPCC Guidelines

- A) Drafting Methodology Document
- B) Efforts for quality control and accuracy of GHG data
- C) Cooperation with Space Agencies
- D) Efforts for engagement with International bodies





# Way Forward



1. Enhance the technical advancements through expanding the International Cooperation.
2. Raise the awareness of satellite GHG observation.

# COP-23 in Bonn

During the COP-23, November 6-18, Bonn, JAXA will host side events at Japan Pavilion.

◆ Cutting-edge Satellite Monitoring and Scientific Knowledge to contribute to the Paris Agreement: Focusing on the IPCC Guidelines for National Greenhouse Gas Inventories

Date: 7<sup>th</sup> November (Tue) , 13:00 – 15:00

Concept: show the progress and status of satellite GHG monitoring technology which contribute to developing national GHG inventories.

◆ Space Agency Round Table at COP-23

Date: 7<sup>th</sup> November (Tue), 15:15 – 16:15

- Representatives from ESA, CNES, DLR, EC, WMO, and China

Concept: Space agencies to present satellite GHG observation programs and also to show that the sustainability of satellite GHG observation, the capability to support the enhancement of transparent framework and the effectiveness for the Paris agreement implementation.



**Thank you for your attention.**