

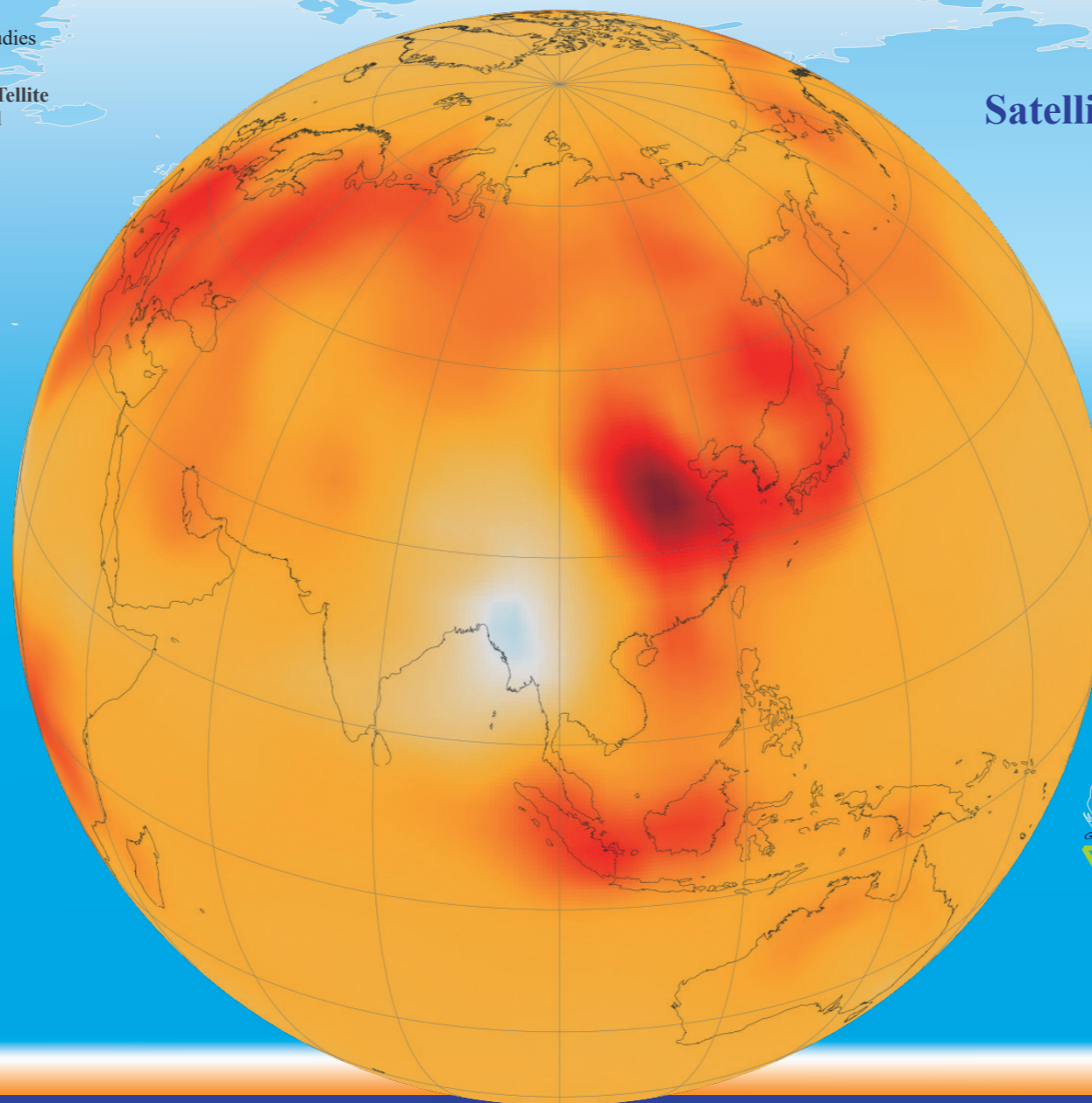


Global CO₂ concentration based on GOSAT observations
(October 2015)

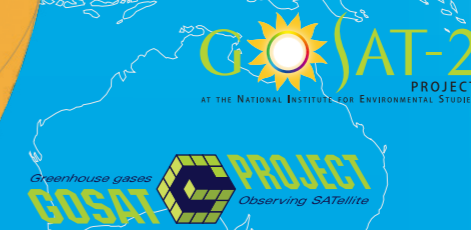
GOSAT Series Timeline

at National Institute for Environmental Studies

- 2004 Greenhouse gases Observing SATellite (GOSAT) Research Team started
- 2006 GOSAT Project Office opened
- 2009 GOSAT launched
- 2012 GOSAT-2 Project Preparation Team started
- 2013 GOSAT-2 Project Team started
- 2016 Satellite Observation Center established
- 2018 GOSAT-2 launched
- 2019 GOSAT-GW Preparation Team started



Satellite Observation Center



16-2 Onogawa, Tsukuba, Ibaraki 305-8506 JAPAN
 Satellite Observation Center,
 National Institute for Environmental Studies
 Phone: +81-29-850-2838
 Email: soc-info@nies.go.jp URL: www.nies.go.jp/soc

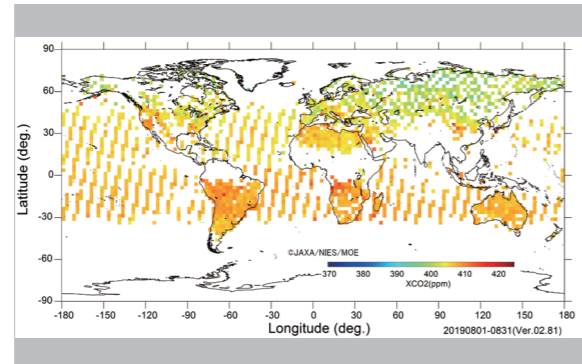


February 2020 Ver. 2



National Institute for Environmental Studies

GOSAT Project



Global distribution of column-averaged CO₂ concentration based on GOSAT observations (August 2019)

GOSAT (Greenhouse gases Observing SATellite), an earth observation satellite, launched on January 23, 2009, is observing CO₂ and methane among greenhouse gases contributing to global warming. After GOSAT completed its five-year nominal operation phase, it has been continuing its observation. The National Institute for Environmental Studies (NIES) conducts the higher-level data processing and validation of GOSAT data.

In April 2016, the Satellite Observation Center (SOC) was established in the Center for Global Environmental Research (CGER) as the responsible organization for the “Satellite Observation Research Project” under the fourth five-year plan of NIES (April 2016–March 2021).

This research project includes three global satellite observation projects, which NIES jointly promotes with the Ministry of the Environment, Japan (MOE) and the Japan Aerospace Exploration Agency (JAXA): Greenhouse gases Observing SATellite (GOSAT) “Ibuki” Project, GOSAT-2 Project, and Global Observing SATellite for Greenhouse gases and Water cycle (GOSAT-GW) Project.

Two objectives of the “Satellite Observation Research Project”:

1. To continue global observation of greenhouse gases and other atmospheric components using satellites in an effort to enhance scientific understanding on the global carbon cycle and spatial distribution of related substances as well as to improve the accuracy of future climate predictions.
2. To develop satellite observation-based methodologies regarding verification of country-level emission inventories of greenhouse gases and particulate matters as well as emission reduction activities, and thereby contribute to MOE’s global-warming related policies.

GOSAT-2 Project



GOSAT-2

Launched on October 29, 2018

GOSAT-2, a successor to GOSAT, is an earth observation satellite which is observing not only CO₂ and methane with higher accuracy, but also CO, aerosol, and PM_{2.5}. NIES conducts the higher-level data processing and validation of GOSAT-2 data.

GOSAT-2 was launched from JAXA Tanegashima Space Center on October 29, 2018.



Greeting

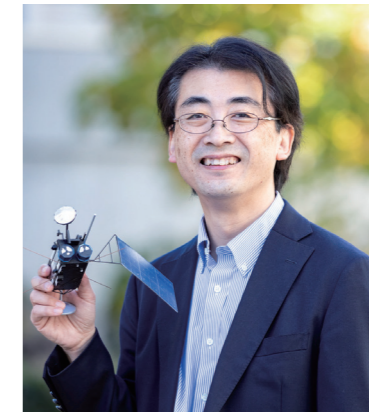
My name is Tsuneo Matsunaga. I have served as Director of Satellite Observation Center since fiscal year 2016.

The Center is currently promoting GOSAT Project, GOSAT-2 Project, and GOSAT-GW Project.

These projects are mainly conducting the development and operation of two ground systems, GOSAT DHF for operational processing of GOSAT data and G2DPS for GOSAT-2 data, as well as validation for the products of these two satellites and other various studies. The Center takes charge of Science Team organized by related researchers in Japan and a secretariat for Research Announcement on Greenhouse Gases Observing Satellite Series targeting researchers at home and abroad.

In addition, we have commenced the development of GOSAT-GW, a successor to GOSAT-2, in cooperation with the Ministry of the Environment and the Japan Aerospace Exploration Agency.

We appreciate your continued support and cooperation.



Tsuneo Matsunaga
Director, Satellite Observation Center



Access Map

SOC offices and facilities are in six locations. Please confirm the location before your visit.



* NOTE: This map is created based on the map by NIES.