

JAXA aims to contribute to disaster prevention and mitigation, climate change countermeasures, and national resilience through the development and operation of Earth observation satellites and the advancement of data analysis technologies. It also seeks to support the achievement of the SDGs and provide scientific evidence to the international community, including the IPCC.

During the JAXA's 5th Mid-to-Long-Term Plan period (2025–2031), JAXA will clarify the expected benefits in collaboration with relevant organizations, set priority themes, ensure continuity of satellite observations, and establish a stable data provision system. It will also enhance data analysis technologies and promote the expansion of Earth observation data utilization by leveraging digital technologies such as AI/ML and data platform.

1990

- 1993.10 First TRMM research announcement (RA) jointly issued by NASDA and NASA.
- 1995.09 GRFM/GBFM (tropical and boreal forest mapping project) using JERS-1 SAR begins.
- 1996.03 Agreement signed with the Japan Meteorological Agency (JMA) on ADEOS utilization.
- 1996.06 First ADEOS-II research announcement (RA) issued.

2000

- 2002.06 Agreement signed with JAFIC on the use of satellite data in fisheries.
- 2004.11 AMSR-E data assimilation began in JMA's mesoscale model, later in global model.
- 2008.01 First GCOM research announcement (RA) issued.
- 2008.04 GOSAT research announcement (RA) issued.
- 2008.12 SAFE (Space Applications for Environment) initiative established under APRSAF.

2010

- 2011.03 ALOS conducted emergency observations after the Great East Japan Earthquake.
- 2013.09 AMSR2 brightness temperature data (clear sky) used in JMA's global model.
- 2015.06 ALOS-2 InSAR detected precursors to Mt. Hakone eruption.
- 2016.03 ALOS-2 recognized for disaster response; awarded by Central Emergency Communication Council.
- 2016.03 GPM data operationally used in JMA's mesoscale and global models.
- 2016.08 First unified Earth observation research announcement (RA) issued.
- 2017.08 ALOS 3D map service awarded Asia Geospatial Technology Innovation Award.
- 2017.09 Received letter of appreciation from the Commandant of the Japan Coast Guard for the long-term provision of sea ice data.
- 2017.11 JJ-FAST (Early deforestation monitoring system using ALOS-2) launched.
- 2018.08 GCOM-C test data delivery to JAFIC began.
- 2018.09 Received a commendation from the Commandant of the Japan Coast Guard for contributions to the development of a marine monitoring system using satellite technology.
- 2018.09 GOSAT series research announcement (RA) issued.
- 2019.03 GOSAT data provided to WMO GHG World Data Centre.
- 2019.11 "Today's Earth - Japan" flood risk information system launched.

2020

- 2020.01 Aerosol product generated by JAXA's algorithm used in JMA's operational assimilation system.
- 2020.03 "Today's Earth - Japan" predicts flood risk over 30 hours in advance.
- 2021.01 Ministry of Agriculture, Forestry and Fisheries (MAFF) Japan launches JASMAI system using GCOM-C/W and GPM data.
- 2021.03 GSMAp received Quintanar Award for flood forecasting.
- 2021.08 EO Dashboard Hackathon for COVID-19 response held.
- 2021.08 GOSAT monthly global mean data on CO₂ and CH₄ were cited in IPCC AR6 WG1 as objective evidence of rising greenhouse gas concentrations and changing growth rates.
- 2021.10 Information provided on discolored water and pumice from Fukutoku-Okanoba eruption.
- 2021.10 GCOM-C data used by local governments to monitor red tide off eastern Hokkaido.
- 2022.03 Scientific findings and best practices from GOSAT and ALOS/ALOS-2 were jointly provided with relevant organizations to support the Paris Agreement Global Stocktake.
- 2023.06 Earth Observing Dashboard won the IAF Special Award on Space on Climate Protection.
- 2023.11 Mongolia uses GOSAT data to estimate CO₂ emissions in UN report, pioneering the international use of satellite data for emission verification.
- 2024.11 APRSAF/SAFE initiative received letter of appreciation from AFSIS for supporting ASEAN food security.

2025

Applications

- Climate/Weather
- Disaster
- Ocean
- Agriculture, Forestry and Fisheries
- Others
- Research announcement

