

JAXA's satellite data products and services



Forest Non-Forest Map (FNF) provides time series global forest distribution data. The product is generated using the data observed by the Japanese Earth Resources Satellite-1 (JERS-1), the Advanced Land Observing Satellite (ALOS) and ALOS-2.

More information at <https://earth.jaxa.jp/en/data/2555/index.html>



JICA-JAXA Forest Early Warning System in the Tropics (JJ-FAST) is a web-based system using ALOS-2 to monitor tropical forests in 78 countries every 1.5 months and release deforestation data, even in the rainy season. Users can easily access the data for deforested areas from PCs and mobile devices and download the data.

Link to JJ-FAST: <https://www.eorc.jaxa.jp/jjfast/system.html>



The Global Mangrove Watch (GMW) provides countries lacking a national mangrove monitoring system with first cut mangrove extent and change maps, to help safeguard against further mangrove forest loss and degradation. GMW has generated a global baseline map of mangroves for 2010 using ALOS and Landsat data, and changes from this baseline using JERS-1, ALOS and ALOS-2.

More information at https://www.eorc.jaxa.jp/ALOS/en/dataset/gmw_e.htm

Link to GMW Platform: <https://www.globalmangrovewatch.org/>



Ocean

Sea Surface Temperature (SST) is a product derived from the data obtained by the Advanced Microwave Scanning Radiometer Series (AMSRs). Coverage of the product is over the ocean, its unit is [°C] and the horizontal resolution is about 20-30 km.

More information at https://www.eorc.jaxa.jp/AMSR/datacatalog/ocean/index_en.html



Sea Ice Concentration (SIC) is a product storing percentage of sea ice coverage within target ocean area. Coverage of the product is over the ocean around Arctic and Antarctic Sea, and unit is [%]. This product is also derived from the AMSRs data.

More information at https://www.eorc.jaxa.jp/AMSR/datacatalog/cryosphere/index_en.html#sic



Atmosphere

Global CO₂ Concentrations have been monitored by the Greenhouse gases Observing SATellite (GOSAT) and GOSAT-2. Since the beginning of observation in 2009, CO₂ concentrations have continued to increase every year. The observation data including CH₄ is freely available online.

More information at <https://www.eorc.jaxa.jp/GOSAT/index.html>



Greenhouse gas Observations of Biospheric and Local Emissions from the Upper sky (GOBLEU) is a joint project of JAXA and All Nippon Airways (ANA). JAXA has applied the remote sensing technology with the spectrometer onboard GOSAT to passenger aircrafts operated by ANA. The project estimates local emissions from different source sectors such as power plants, industries and transport by combining the satellite data.

More information at https://www.eorc.jaxa.jp/GOSAT/ANAexp/index_e.html

