

Status report on the current and future satellite systems by JAXA

Purpose of this report is to update the current status of JAXA's satellite systems now in operation and to be launched in the near future. Mainly focused on the remote sensing satellites which is and be able to contribute to the climate issues.

JAXA currently is operating ALOS-2 (Daichi-2), DPR on the GPM, GCOM-W (Shizuku) and GOSAT (Ibuki).

JAXA is preparing GCOM-C, GOSAT-2, and CPR on the EarthCARE.

ALOS-2 was successfully launched on May 24, 2014, and it is operating very well. The standard product of ALOS-2 is distributed from commercial vendor, however some research product could be available from JAXA EORC web e.g. annual global mosaic and the forest/non-forest map. If a major natural disaster i.e. earthquake, flooding, landslide, is happened, ALOS-2 is activated an emergency observation to collect information of the site as soon as possible.

GPM/DPR was successfully launched from Tanegashima Space Center on Feb. 28, 2014. GPM successfully replace the TRMM/PR whose operation had been terminated after its 17 years long service. Distribution of the Products from DPR has started from September 2nd 2014. The latest version of products have been released since March 2016. User is able to access the data from JAXA's G-Portal. The Japan Meteorological Agency (JMA) started the DPR assimilation in the meso-NWP system on March 24 2016.

GCOM-W is operating normally, and all AMSR2 products are freely available at the GCOM-W1 Data Providing Service system (DPSS). The DPSS will be integrated to the JAXA G-Portal system in 2017. NOAA continues direct receiving of AMSR-2 data to utilize data for their weather and marine services operationally. AMSR-E, predecessor of AMSR2, on the NASA's Aqua satellite completed its operation on Dec. 4, 2015. The AMSR-E had been operated in slow rotation mode since Dec. 2012, and obtained three-year overlap observations to AMSR2.

The GOSAT data products are distributed through the GOSAT User Interface Gateway (GUIG), a website for GOSAT data distribution. The newly released Level 1B (L1B) (radiance spectra) of version V201 have long-term uniform quality and provide consistent retrieval accuracy even after the satellite system anomalies. GOSAT continue its operation to connect to the next GOSAT-2 mission scheduled to launch in JFY2017.

The developments of, EarthCARE/CPR and GCOM-C are under way.
GCOM-C will be launched in JFY2016.
EarthCARE will be launched in JFY2018.

The advanced fine-resolution optical satellite is started to development. It is currently in the

preliminary design phase and will be launched in JFY2019 as schedule.

Action/Recommendation proposed: N/A

CGMS-44 JAXA-WP-01
08, June 2016