

Transition from commissioning to exploitation phase

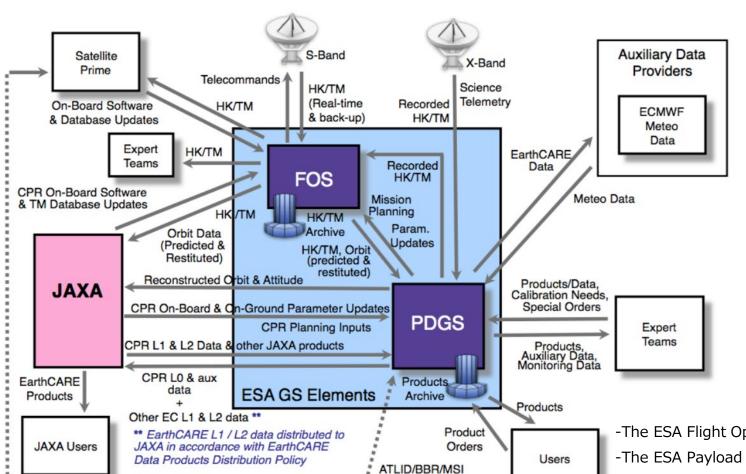
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1. Overview of EarthCARE GS Operation



Ground Segment (GS) Functional Overview is shown in below figure.



Parameter Updates

- Satellite Platform/Instrument
 Operations are performed by ESA/FOS
 through the S-Band station, at Kiruna,
 Sweden, where downlink the Telemetry
 (TM) data from the satellite and uplink
 the Telecommand (TC) data.
- The science data are downlinked at two X-Band stations located in Kiruna and Inuvik, then transmit to ESA/PDGS.
- Both ESA/PDGS and JAXA/MOS process science products and distribute them to users.
- -The ESA Flight Operations Segment (FOS), located in ESA-ESOC, Darmstadt, Germany.
- -The ESA Payload Data Ground Segment (PDGS), located in ESA-ESRIN, Frascati, Italy.
- -The JAXA Mission Operation System(MOS), located in Tsukuba, Japan

2. Transition to nominal operation phase of CPR



- In December 2024, JAXA confirmed that CPR could be moved to nominal operation phase by completion of the initial check-out and initial calibration & validation.
 - GS Operations such as CPR planning, monitoring, data processing were also verified.
- Then JAXA have started to operation of CPR as the nominal operation phase since 2025.
 - > The basic organizational structure is maintained, which is constructed from CPR project team, SAOC and EORC.
- The exploitation phase, that is, the exploration phase for all users has just started !!
 - > JAXA/NICT's CPR L1b product is released on January 14, 2025

3. Data Access

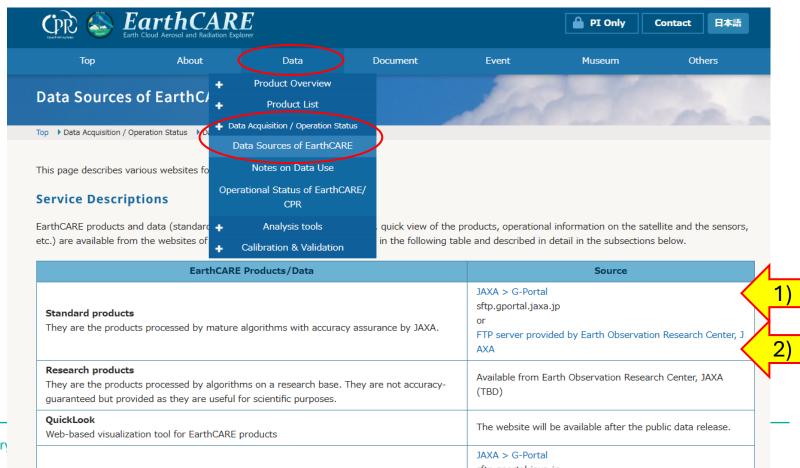


- EarthCARE product is available from both ESA and JAXA.
- You can access data from top page of JAXA/EORC EarthCARE;
 - ▶https://www.eorc.jaxa.jp/EARTHCARE/index.html

Data > Data Acquisition/Operation Status > Data Sources of EarthCARE

There are two options;

- 1) G-Portal REPO
- 2) EORC SFTP Server



3. Data Access 1)G-Portal



JAXA data distribution site for standard products is "G-Portal".

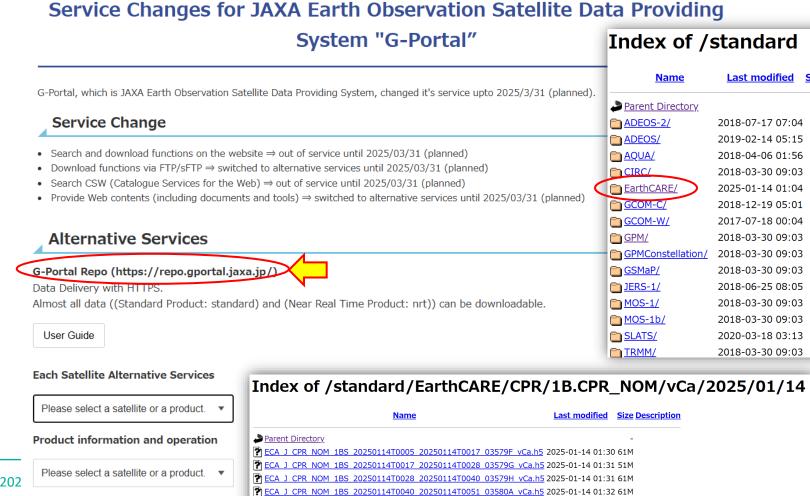
>From G-Portal, EarthCARE data is available together with GPM/DPR, GCOM-C/SGLI etc.

Tools and Documents

https://gportal.jaxa.jp/gpr/

Currently, original G-Portal is under maintenance until around March 2025.

The alternative method "G-Portal REPO(https://repo.gportal.jaxa.jp/)" can be used for data download via https, though the data refining-search by physical parameter or area cannot be used.



3. Data Access 2) EORC SFTP Server



- The other alternative method is also available, i.e. EORC SFTP server below.
 - ➤ After registration, you can get FTP account automatically.

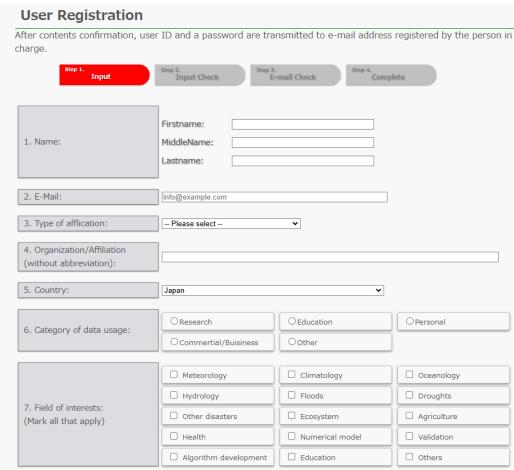
https://www.eorc.jaxa.jp/EARTHCARE/research_product/registration.html

User Registration →

SFTP data directory image ↓

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/SenserName(e.g. CPR)/Level(e.g.1B) /ProductID(e.g.CPR_NOM)/Version(e.g.vCa) /yyyy/mm/dd

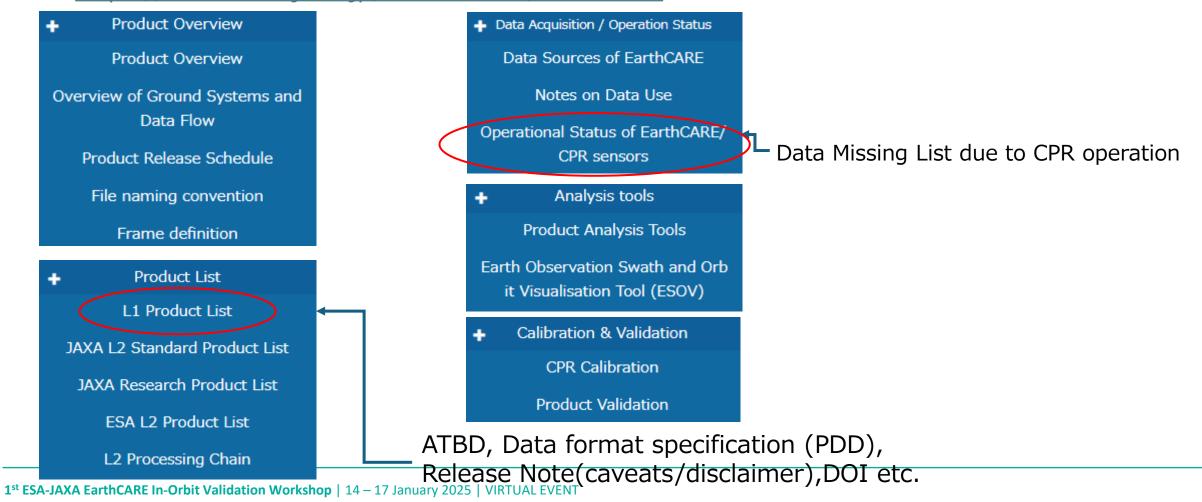


4. Data Utilization Guide



 Data user can get following information regarding EarthCARE data use from EORC/EarthCARE Website;

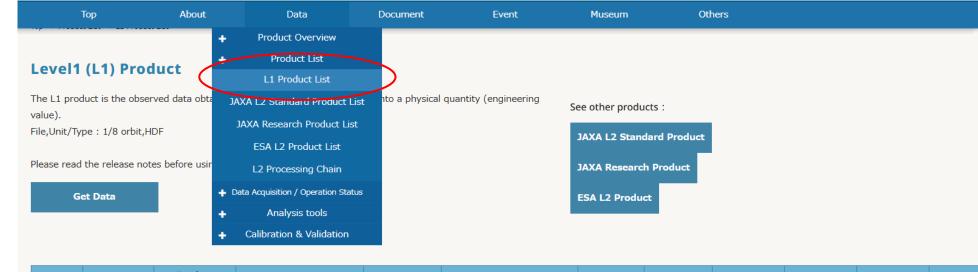
➤ https://www.eorc.jaxa.jp/EARTHCARE/index.html



4. Data Utilization Guide



- Product list includes the following information;
 - > ATBD
 - Data format specification (PDD)
 - Release Note(caveats/disclaimer)
 - > DOI



	Sensor	Processing Level*1	Name [Product ID]	Primary Parameter	Unit	Grid spacing		Algorithm	Developer	ATBD	PDD	Release	DOI*2
						Horizontality	Vertical	Version	Developei	AIDD	PDD	Note	DOI*2
CI				Received Echo Power	W	0.5 km	0.1 km	vCa	JAXA NICT	Ver: D Update: 2023/05/31	Ver: H Update: 2025/01	Ver: vCa Update: 2025/01/14	https:// doi.org/ 10.5774 6/EO.01 jdvcydw jf63vpd
		L1b	CPR One- sensor Received Echo Power and Doppler Product [CPR_NOM]	Radar Reflectivity Factor	dBZ								
	CPR			Surface Radar Cross Section	dB	0.5 km	-						
				Doppler velocity	m/s	0.5 km	0.1 km						
				Pulse Pair Covariance	-								bjp0vz6 v64
				Spectrum Width	um								V04

5. Terms of Use

XA Cesa

- EarthCARE data policy is open and free.
- Terms of Use are also shown in EORC/Website;
 - "Data > Data Acquisition/Operation Status > Notes on Data Use"
 - > CPR L1b credit is "JAXA/NICT", the other L1 credit is "ESA".
 - > CPR L1b DOI is below;

https://doi.org/10.57746/EO.01jdvcydwjf63vpdbjp0vz6v64



Тор

About

Data

Notes on Data Use

Top Data Acquisition / Operation Status Notes on Data Use

Usage Note

EarthCARE/CPR products and images provided on JAXA/ESA v to the JAXA EarthCARE Data Policy.

The credits for EarthCARE standard products are as follows:

Standard products	Credit			
L1 (JAXA)	JAXA/NICT			
L1 (ESA)	ESA			
L2 (JAXA)	JAXA/ESA			
L2 (ESA)	ESA/JAXA			

JAXA EarthCARE Data Policy (Excerpt)

Rights to EarthCARE Data *1

(1) JAXA/NICT and ESA share rights listed below to accomplis



14 – 17 January 2025 | VIRTUAL EVENT