

ALOS / PALSAR data processing for the entire observation period

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● Abstract

Processing the synthetic aperture radar (PALSAR / PALSAR-2) data acquired by the terrestrial observation technology satellites "DAICHI" and "DAICHI-2" to generate user-friendly image

● Reasons and benefits of using JAXA Supercomputer System

JAXA is developing data disclosure to expand the use and spread of earth observation satellite data. As part of this, the previous system JSS2 processes the data for the entire ALOS / PALSAR observation period and archives a large amount of data in J-SPACE.

We used the JSS system to quickly provide this data to external users. (Provided via medium (NAS) or transmission server.)

● Achievements of the Year

- PALSAR / FBD 620TB

AVNIR-2 4TB

Provided using NAS. Conducted 19 times in total.

This year, we received 19 transportation support and carried out 17 copying work. (Two copies were completed last year)

- PALSAR / FBS L1.1 1402TB

L2.1 65TB (North America 2007 / 7-2011 / 4)

Data is provided in a total of 39 sets, including 23 sets of NAS and 16 sets via a transmission

relay server.

Work started in the latter half of 2021.05, and provision was completed in the middle of 2022.01.

- Provide the following data to NASA / ASF by sftp-get by sshgate connection

PALSAR / FBD

PALSAR / FBS (L2.2)

- Providing AVNIR-2 data 339 scenes for GSI via transmission relay server

- 21 scenes of PALSAR FBS / FBD to JGI (Earth Science Institute)

Provided via EORC_FTP

- PALSAR L2.2 PLR @ Japan 152 scenes for NICT are provided via NICT file transmission / reception system.

● **Publications**

N/A

● **Usage of JSS**

● **Computational Information**

Process Parallelization Methods	N/A
Thread Parallelization Methods	N/A
Number of Processes	1
Elapsed Time per Case	0 Second(s)

● **JSS3 Resources Used**

Fraction of Usage in Total Resources*1(%): 0.00

Details

Computational Resources		
System Name	CPU Resources Used (core x hours)	Fraction of Usage*2(%)
TOKI-SORA	0.00	0.00
TOKI-ST	757.01	0.00
TOKI-GP	0.87	0.00
TOKI-XM	0.00	0.00
TOKI-LM	0.00	0.00
TOKI-TST	0.00	0.00
TOKI-TGP	0.00	0.00
TOKI-TLM	0.00	0.00

File System Resources		
File System Name	Storage Assigned (GiB)	Fraction of Usage*2(%)
/home	277.50	0.28
/data and /data2	108,681.49	1.16
/ssd	1,345.00	0.35

Archiver Resources		
Archiver Name	Storage Used (TiB)	Fraction of Usage*2(%)
J-SPACE	3,877.84	26.22

*1: Fraction of Usage in Total Resources: Weighted average of three resource types (Computing, File System, and Archiver).

*2: Fraction of Usage : Percentage of usage relative to each resource used in one year.

● **ISV Software Licenses Used**

ISV Software Licenses Resources		
	ISV Software Licenses Used (Hours)	Fraction of Usage*2(%)
ISV Software Licenses (Total)	0.00	0.00

*2: Fraction of Usage : Percentage of usage relative to each resource used in one year.