ALOS / PRISM data processing

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● **Abstract**

We process data obtained from the Synthetic Aperture Radar (PALSAR), AVNIR-2, and PRISM by the Advanced Land Observing Satellite "Daichi," and generate and provide user-friendly image products (Analysis Ready Data).

● **Reasons and benefits of using JAXA Supercomputer System**

JAXA is working to make Earth observation satellite data publicly available in order to expand the use of such data.

As part of this, the previous system, JSS2, processes data from the entire observation period of ALOS/PALSAR, and archives large amounts of data on J-SPACE.

As for AVNIR-2, 1B1/1B2 data is also archived.

This year, some processing was carried out on PRISM L1B1/L1B2 data.

The JSS system was used to provide this data to external users as quickly as possible.

● **Achievements of the Year**

This year, PRISM processed L1B1 and L1B2 data for the Japanese region.

The processed results are:

Number of downlink segments: 92 paths

Number of products created: 24,818 (L1B1: 18,676, capacity 5.62Tib L1B2: 6,142, capacity 1.07Tib)

● **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	1 Hour(s)

● **JSS3 Resources Used**

Fraction of Usage in Total Resources[1](%): 0.01

Details

Computational Resources		
System Name	CPU Resources Used (core x hours)	Fraction of Usage[2](%)
TOKI-SORA	0.00	0.00
TOKI-ST	1,366.09	0.00
TOKI-GP	0.00	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	167.50	0.11
/data and /data2	105,779.83	0.51
/ssd	0.00	0.00

Archiver Resources		
Archiver Name	Storage Used (TiB)	Fraction of Usage[2] (%)
J-SPACE	2,468.24	8.07

[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.