

## Developping high-quality all sky far-infrared map using AKARI data

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### ● Abstract

Combining the all-sky scanning time-seris data from the Akari Far-Infrared Surveyor with those from other all-sky survey satellites in a complementary manner, we will create a high-precision all-sky far-infrared map.

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

Combining large amounts of time-series data from multiple satellites to create an optimal all-sky infrared map requires a large amount of memory and CPU power, so JSS is effective.

### ● Achievements of the Year

We were able to reproduce at JSS the analysis of the far-infrared all-sky scan data that the AKARI team had been conducting on their own analysis server. We also installed Commander, a tool for simultaneously analyzing scan data from multiple satellites, on JSS, and were ready to analyze AKARI data on Commander.

### ● Publications

N/A

### ● Usage of JSS

### ● Computational Information

Process Parallelization Methods	N/A
Thread Parallelization Methods	OpenMP
Number of Processes	1
Elapsed Time per Case	10 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	0.25	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* <sup>2</sup> (%)
/home	1,024.00	0.69
/data and /data2	108,524.00	0.52
/ssd	31,724.00	1.70

Archiver Resources		
Archiver Name	Storage Used (TiB)	Fraction of Usage* <sup>2</sup> (%)
J-SPACE	0.02	0.00

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

\*<sup>2</sup>: 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* <sup>2</sup> (%)
ISV Software Licenses (Total)	0.00	0.00

\*<sup>2</sup>: Fraction of Usage : Percentage of usage relative to each resource used in one year.