

Evaluation of the radiation exposure in the pressured rover.

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Subject Category: Space Exploration

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● Abstract

The radiation dose to astronauts in the lunar pressurized rover from solar flares will be evaluated using radiation simulation tools.

● Reasons and benefits of using JAXA Supercomputer System

Due to the Monte Carlo simulation, it is necessary to earn statistics. In addition, the memory and CPU used will be significantly needed in anticipation of the eventual introduction of a detailed CAD model of the rover for calculation.

● Achievements of the Year

No specific results were obtained this year, I completed only with the construction of the TOKI-RURI environment until the simulation tool could be used.

● Publications

N/A

● Usage of JSS

● Computational Information

Process Parallelization Methods	MPI
Thread Parallelization Methods	N/A
Number of Processes	N/A
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	500.95	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	5.00	0.00
/data and /data2	50.00	0.00
/ssd	50.00	0.01

Archiver Resources		
Archiver Name	Storage Used (TiB)	Fraction of Usage*2 (%)
J-SPACE	0.00	0.00

*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.