

## System-level technical study for the future lunar polar exploration mission

Report Number: R20EEE20300

Subject Category: Space Exploration

URL: <https://www.jss.jaxa.jp/en/ar/e2020/14339/>

### ● Responsible Representative

ASOH, Dai; JAXA Space Exploration Center

### ● Contact Information

INOUE, Hiroka([inoue.hiroka@jaxa.jp](mailto:inoue.hiroka@jaxa.jp))

### ● Members

INOUE, Hiroka; HOSHINO, Takeshi; KARIYA, Kazuki; YAMAMOTO, Mitsuo

### ● Abstract

Landing site analysis for the lunar polar exploration mission (LUPEX)

Ref. URL: <http://www.exploration.jaxa.jp/e/index.html>

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

It can be used by contractors and has rich computing resources

### ● Achievements of the Year

The output cannot be made public

### ● 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	0.1 Second(s)

- **Resources Used(JSS2)**

Fraction of Usage in Total Resources<sup>\*1</sup>(%): 0.01

Details

Computational Resources		
System Name	Amount of Core Time (core x hours)	Fraction of Usage <sup>*2</sup> (%)
SORA-MA	0.00	0.00
SORA-PP	5,810.10	0.05
SORA-LM	1,842.55	1.08
SORA-TPP	0.00	0.00

File System Resources		
File System Name	Storage Assigned (GiB)	Fraction of Usage <sup>*2</sup> (%)
/home	95.71	0.09
/data	1,260.41	0.02
/ltmp	9,883.32	0.84

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

- **Resources Used(JSS3)**

Fraction of Usage in Total Resources\*1(%): 0.01

Details

Computational Resources		
System Name	Amount of Core Time (core x hours)	Fraction of Usage*2(%)
TOKI-SORA	0.00	0.00
TOKI-RURI	0.00	0.00
TOKI-TRURI	0.00	0.00

File System Resources		
File System Name	Storage Assigned (GiB)	Fraction of Usage*2(%)
/home	339.59	0.23
/data	5,590.31	0.09
/ssd	437.10	0.23

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.