

Lunar landing site analyses

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● **Abstract**

Production of lunar polar mosaic for landing site studies.

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

It has rich computing resources such as memory and processing units.

● **Achievements of the Year**

We created a multi-band mosaic of the lunar south-pole from Lunar Reconnaissance Orbiter Wide Angle Camera (WAC) data sets.

● **Publications**

- Oral Presentations

Sato,H. (2020) Polar WAC color mosaic and geology: Preliminary results, LROC-Diviner Science Team Meeting.

● Usage of JSS2

● Computational Information

Process Parallelization Methods	N/A
Thread Parallelization Methods	Manual Parallelization (submitted many independent sub-set jobs)
Number of Processes	1
Elapsed Time per Case	1 Hour(s)

● Resources Used

Fraction of Usage in Total Resources*1(%): 0.02

Details

Computational Resources		
System Name	Amount of Core Time (core x hours)	Fraction of Usage*2(%)
SORA-MA	0.00	0.00
SORA-PP	3,346.01	0.02
SORA-LM	0.00	0.00
SORA-TPP	0.00	0.00

File System Resources		
File System Name	Storage Assigned (GiB)	Fraction of Usage*2(%)
/home	94.20	0.08
/data	53,363.91	0.91
/ltmp	6,123.74	0.52

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.