Plasma simulation for electric propulsion

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Abstract

Plasma simulation for electric propulsion

Reasons and benefits of using JAXA Supercomputer System

It is available immediately after application

Achievements of the Year

Plasma numerical analysis and flow analysis of neutral particles in electric propulsion were performed. The number of parallel processing was performed by a method using MPI with 20 processes per node. This year, the main focus was on code tuning.

Publications

N/A

Usage of JSS2

Computational Information

Process Parallelization Methods	MPI
Thread Parallelization Methods	N/A
Number of Processes	20
Elapsed Time per Case	10 Hour(s)

- **Resources Used**

Fraction of Usage in Total Resources[*1](%): 0.00

Details

Computational Resources		
System Name	Amount of Core Time (core x hours)	Fraction of Usage[*2](%)
SORA-MA	13,688.82	0.00
SORA-PP	1,716.30	0.01
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	12.72	0.01
/data	127.16	0.00
/ltmp	2,604.17	0.22

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.