

Development of Aeroelastic Simulation Tool based on FaSTAR-Move

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● Abstract

Development of Aeroelastic Simulation Tool based on FaSTAR-Move

● Reasons and benefits of using JAXA Supercomputer System

Aeroelastic analysis requires unsteady analysis. Therefore, it is necessary to use JSS because the simulation cost is high.

● Achievements of the Year

The validation analysis for aeroelastic simulation of FaSTAR-Move have been conducted.

● Publications

N/A

- Usage of JSS

- Computational Information

Process Parallelization Methods	MPI
Thread Parallelization Methods	N/A
Number of Processes	8 - 64
Elapsed Time per Case	3 Hour(s)

- Resources Used(JSS2)

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	712.17	0.00
SORA-PP	11.00	0.00
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	3.11	0.00
/data	6,709.16	0.13
/ltmp	625.95	0.05

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.

- **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	17,726.72	0.00
TOKI-RURI	19.94	0.00
TOKI-TRURI	0.00	0.00

File System Resources		
File System Name	Storage Assigned (GiB)	Fraction of Usage*2(%)
/home	3.31	0.00
/data	6,796.52	0.11
/ssd	32.55	0.02

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.