Development of Aeroelastic Simulation Tool based on FaSTAR-Move

● **Responsible Representative**

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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 JSS2 because the simulation cost is high.

● **Achievements of the Year**

Inplemented the new moving grid function of the aeroelastic simulation and conducted validation analysis.

● **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	5 Hour(s)

● **JSS3 Resources Used**

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

Details

Computational Resources		
System Name	CPU Resources Used (core x hours)	Fraction of Usage[*2](%)
TOKI-SORA	20,777.51	0.00
TOKI-ST	41,621.69	0.04
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	163.33	0.14
/data and /data2	11,968.17	0.07
/ssd	1,673.33	0.16

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.