

## Development of Aeroelastic Simulation Tool based on FaSTAR-Move

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### ● Responsible Representative

Hitoshi Arizono, Aircraft Lifecycle Innovation Hub

### ● Contact Information

Hitoshi Arizono(arizono.hitoshi@jaxa.jp)

### ● Members

Hitoshi Arizono, Kohei Konishi, Hamidreza Kheirandish

### ● 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

Implemented the 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(%): 0.00

Details

Computational Resources		
System Name	CPU Resources Used (core x hours)	Fraction of Usage*2(%)
TOKI-SORA	29,742.36	0.00
TOKI-ST	4.05	0.00
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* <sup>2</sup> (%)
/home	169.03	0.15
/data and /data2	12,025.11	0.09
/ssd	1,730.28	0.24

Archiver Resources		
Archiver Name	Storage Used (TiB)	Fraction of Usage* <sup>2</sup> (%)
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* <sup>2</sup> (%)
ISV Software Licenses (Total)	0.00	0.00

\*2: Fraction of Usage : Percentage of usage relative to each resource used in one year.