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 JSS2 because the simulation cost is high.

Achievements of the Year

Inplemented the 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 Resource	ces	
System Name	CPU Resources Used (core x hours)	Fraction of Usage*2(%)
TOKI-SORA	23,984.89	0.00
TOKI-ST	615.80	0.00
TOKI-GP	0.00	0.00
TOKI-XM	0.00	0.00
TOKI-LM	0.29	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	3.71	0.00		
/data and /data2	7,174.29	0.08		
/ssd	36.51	0.01		

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	Fraction of Usage*2(%)
	Used			
	(Hours))	
ISV Software Licenses		0.17		0.00
(Total)	0.17		0.17	0.00

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