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 JSS2

• Computational Information

Process Parallelization Methods	MPI
Thread Parallelization Methods	N/A
Number of Processes	8 - 64
Elapsed Time per Case	5 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	532.92	0.00		
SORA-PP	166.41	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	3.33	0.00		
/data	1,796.25	0.03		
/ltmp	672.46	0.06		

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.