

Innovative Green Aircraft Technology : High Efficiency and Low Noise Aircraft

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Subject Category: Skills Acquisition System

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Abstract

The purpose of the iGreen research is to develop and mature a bunch of advanced and innovative technologies on aerodynamics, aeroacoustics, and structures to enable airframe design with higher environmental performances. In addition to verifying practical application of these technologies, we will also work on the development of elemental and system technologies. This business code was used for data sharing of computational results.

Reasons and benefits of using JAXA Supercomputer System

CFD analysis are used for the understanding of aerodynamic characteristics and evaluation of the performance in the aircraft design phase. Huge calculation resources and costs were required for the high fidelity and quick response CFD analysis for the optimum aerodynamic design process on complex aircraft geometry. JSS3 can achieve those requirements, the cost and time are drastically saved on the CFD analysis.

Achievements of the Year

This business code was used for data sharing of computational results.

Publications

N/A

Usage of JSS

Computational Information

Process Parallelization Methods	N/A
Thread Parallelization Methods	N/A
Number of Processes	1
Elapsed Time per Case	1 Second(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	0.00	0.00
TOKI-ST	0.00	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* ² (%)
/home	99.82	0.07
/data and /data2	33,912.22	0.16
/ssd	836.67	0.04

Archiver Resources		
Archiver Name	Storage Used (TiB)	Fraction of Usage* ² (%)
J-SPACE	2.55	0.01

*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.