

Aerodynamic Characteristics Improvement of Quad Tilt Wing VTOL Plane

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● Abstract

Improvement of aerodynamic characteristics of Quad Tilt Wing VTOL Plane in cruise.

● Reasons for using of JSS2

It takes a lot of time to calculate using workstation.

● Achievements of the Year

Wing aspect ratio sensitivity analysis of practical demonstration unmanned plane was conducted using FaSTAR.

● Publications

N/A

● Usage of JSS2

● Computational Information

Parallelization Methods	MPI
Thread Parallelization Methods	OpenMP
Number of Processes	160 - 640
Elapsed Time per Case	10.00 hours

● Resources Used

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

Details

Computing Resources		
System Name	Amount of Core Time (core x hours)	Fraction of Usage*2 (%)
SORA-MA	23,331.00	0.00
SORA-PP	3,136.13	0.04
SORA-LM	3.67	0.00
SORA-TPP	0.00	0.00

File System Resources		
File System Name	Storage assigned(GiB)	Fraction of Usage*2 (%)
/home	035.76	0.02
/data	596.05	0.01
/ltmp	244.14	0.02

Archiver Resources		
Archiver System 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