

Flight Demonstration of Gust Alleviation Technologies

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Subject Category: Aeronautical Technology

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● Abstract

Flight demonstration of gust alleviation control technologies using JAXA doppler lidar

● Reasons and benefits of using JAXA Supercomputer System

Database construction of aerodynamics of a demonstration aircraft

● Achievements of the Year

We calculate aerodynamic characteristics with jet engine exhaust conditions for a demonstration aircraft.

● Publications

N/A

● Usage of JSS2

● Computational Information

Process Parallelization Methods	MPI
Thread Parallelization Methods	N/A
Number of Processes	256
Elapsed Time per Case	6 Hour(s)

- **Resources Used**

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

Details

Computational Resources		
System Name	Amount of Core Time (core x hours)	Fraction of Usage*2(%)
SORA-MA	99,639.47	0.01
SORA-PP	187.55	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	0.66	0.00
/data	610.35	0.01
/ltmp	122.07	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.