

Active Fluid Flow Control using DBD Plasma Actuators

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Subject Category : Aeronautical Technology

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● Abstract

Improvement of aerodynamic characteristics using DBD plasma actuators.

● Reasons for using of JSS2

It takes a lot of times to calculate using workstation.

● Achievements of the Year

Unsteady fluid flow analysis around cylinder was conducted using FaSTAR.

● Publications

N/A

● Usage of JSS2

● Computational Information

| | |
|--------------------------------|--------------|
| Parallelization Methods | MPI |
| Thread Parallelization Methods | OpenMP |
| Number of Processes | 320 |
| Elapsed Time per Case | 200.00 hours |

● Resources Used

Fraction of Usage in Total Resources*1 (%): 0.03

Details

| Computing Resources | | |
|---------------------|------------------------------------|-------------------------|
| System Name | Amount of Core Time (core x hours) | Fraction of Usage*2 (%) |
| SORA-MA | 258,899.81 | 0.03 |
| SORA-PP | 99.39 | 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 | 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