

Trial Use of Thermochemical Non-equilibrium Flow Solver JONATHAN

Report Number: R24EDA201G11

Subject Category: Aeronautical Technology

URL: <https://www.jss.jaxa.jp/en/ar/e2024/26909/>

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● Abstract

We evaluate the performance of JONATHAN, a thermochemical non-equilibrium flow solver developed and maintained by Aviation Technology Directorate of JAXA, through a trial use of the code.

● Reasons and benefits of using JAXA Supercomputer System

To share files necessary for the trial use through the business code directory.

● Achievements of the Year

The performance of the code was evaluated through a 6-month trial use. Files necessary for code evaluation were shared via the business code directory.

● 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	0 Second(s)

- **JSS3 Resources Used**

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

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	1,171.00	0.79
/data and /data2	62,076.00	0.30
/ssd	15,611.00	0.84

Archiver Resources		
Archiver Name	Storage Used (TiB)	Fraction of Usage*2 (%)
J-SPACE	3.20	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.