

Inauguration of JUPITER, Europe's most powerful supercomputer

Eviden-built AI-dedicated partition of JUPITER – the exascale partition – celebrated during an official inauguration ceremony

Paris, France – September 5, 2025 – [Eviden](#), the [Atos Group](#) product brand leading in advanced computing, cybersecurity products, mission-critical systems and vision AI announces that the Eviden-built JUPITER Booster, a partition designed for large-scale simulations and AI training, has been inaugurated today on September 5, 2025. The event took place at the Jülich Supercomputing Centre in Germany, in the presence of Friedrich Merz, Chancellor of the Federal Republic of Germany, Hendrik Wüst, Minister-President of the State of North Rhine-Westphalia, Dorothee Bär, Federal Minister for Research, Technology and Space and Ina Brandes, Minister of Culture and Science of the Federal State of North Rhine-Westphalia.

Already listed as Europe's most powerful HPC and AI system and the 4th most powerful in the world¹, JUPITER is set to be the first in Europe to surpass the threshold of one quintillion calculations per second – the equivalent power of 10 million modern desktop computers.

Procured by the EuroHPC JU initiative and hosted at the Jülich Supercomputing Centre in Germany, JUPITER combines compute-intensive power for the Eviden-built booster partition and unrivalled energy-efficiency with sovereign data control, embedded into Eviden's Modular Data Center approach – a unique solution to build a complete data center with pre-built and interchangeable modules.

The JUPITER booster partition, built by Eviden, integrates 24,000 NVIDIA GH200 Grace Hopper Superchips interconnected with NVIDIA Quantum-2 InfiniBand networking optimized for highly parallel applications such as training AI models or numerically demanding simulations. By leveraging Eviden's patented, market leading Direct Liquid Cooling technology, JUPITER has demonstrated an unrivalled energy efficiency, a performance that earned its JEDI module the #1 position in the June 2025 Green500 ranking.

From dramatically improving extreme weather forecasts to accelerating breakthroughs in climate science, sustainable energy, AI, quantum research, and structural biology, JUPITER will empower researchers, industries, public organizations across Europe to drive innovation at an unprecedented scale.

- **Artificial intelligence:** JUPITER's power can dramatically accelerate the training of large language models, enabling breakthroughs in generative AI such as OpenGPT-X, a multilingual model with a focus on German. This high-performance

¹ Source : [June 2025 edition of the TOP500](#), the listing of the world's most powerful supercomputers

infrastructure allows researchers to train models faster and more efficiently, advancing AI capabilities across science, industry, and media.

- **From weather forecasting to climate simulation:** With the power of the JUPITER supercomputer, researchers can run the ICON atmospheric model at unprecedented resolution, enabling highly detailed simulations of future climate scenarios. This breakthrough will significantly improve forecasts of extreme weather events and long-term climate changes, helping scientists better understand the impact of rising CO₂ levels.
- **Brain cells simulated in the electronic brain:** Using the exascale power of JUPITER, researchers can simulate the brain's neural networks with unprecedented biological realism—right down to individual neurons and their dynamic behavior. These high-resolution models, powered by software like Arbor, could deepen our understanding of learning, memory, and neurodegenerative diseases such as Alzheimer's.

About Eviden

[Eviden](#) is the Atos Group brand for hardware and software products with c. € 1 billion in revenue, operating in 36 countries and comprising four business units: advanced computing, cybersecurity products, mission-critical systems and vision AI. As a next-generation technology leader, Eviden offers a unique combination of hardware and software technologies for businesses, public sector and defense organizations and research institutions, helping them to create value out of their data. Bringing together more than 4,500 world-class talents and holding more than 2,100 patents, Eviden provides a strong portfolio of innovative and eco-efficient solutions in AI, computing, security, data and applications.

About Atos Group

Atos Group is a global leader in digital transformation with c. 70,000 employees and annual revenue of c. € 10 billion, operating in 67 countries under two brands — Atos for services and Eviden for products. European number one in cybersecurity, cloud and high-performance computing, Atos Group is committed to a secure and decarbonized future and provides tailored AI-powered, end-to-end solutions for all industries. Atos is a SE (Societas Europaea) and listed on Euronext Paris.

The [purpose of Atos](#) is to help design the future of the information space. Its expertise and services support the development of knowledge, education and research in a multicultural approach and contribute to the development of scientific and technological excellence. Across the world, the Group enables its customers and employees, and members of societies at large to live, work and develop sustainably, in a safe and secure information space.

Press contact

Constance Arnoux – constance.arnoux@eviden.com – +33 (0)6 44 12 16 35