

# First European exascale computers, Germany, France

Sentinel-2 MSI acquired on 13 August 2022 at 10:46:29 UTC  
Sentinel-1 CSAR IW acquired on 09 September 2022 at 17:40:51 UTC  
Sentinel-2 MSI acquired on 11 June 2023 at 10:36:31 UTC  
Sentinel-1 CSAR IW acquired on 23 June 2023 at 05:50:36 UTC

Author(s): Sentinel Vision team, VisioTerra, France - [svp@visioterra.fr](mailto:svp@visioterra.fr)

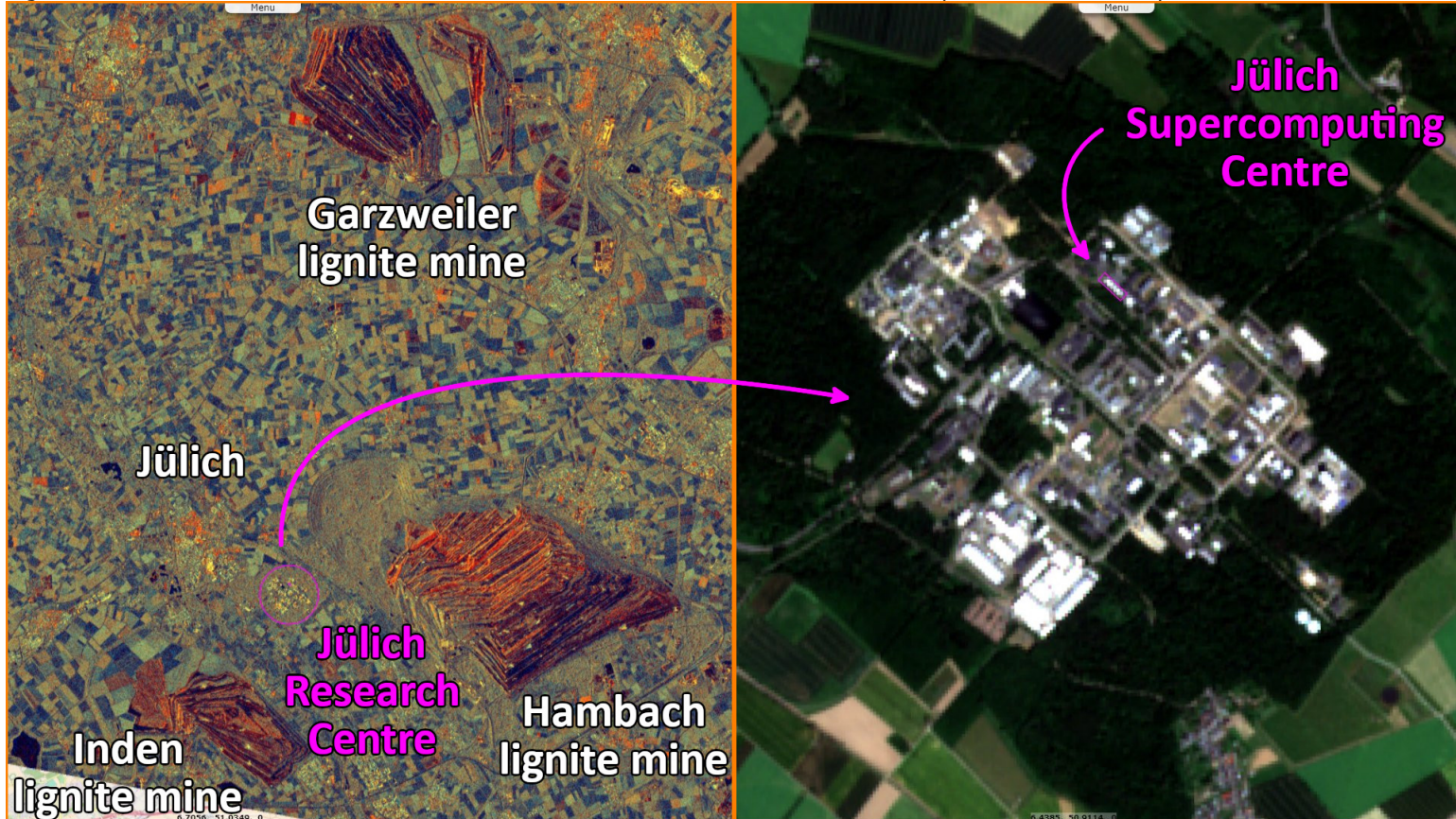
Keyword(s): Infrastructure, Germany, France



[2D Layerstack](#)

Fig. 1 - S1 (23.06.2023), S2 (11.06.2023) - Jülich Research Centre is located in North Rhine-Westphalia (NRW), Germany.

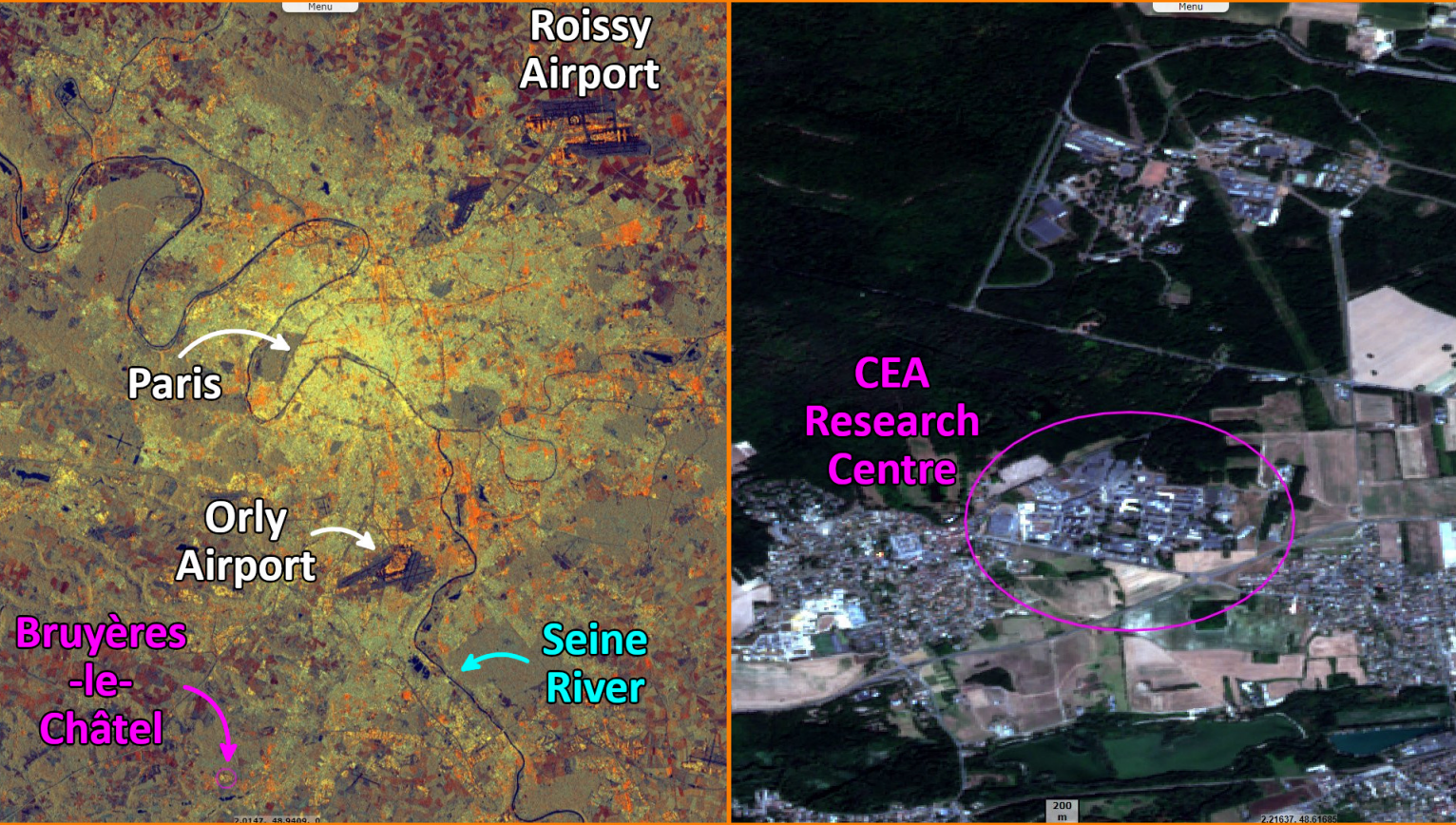
[3D view](#)



It will be home to JUPITER, Europe's first exascale supercomputer (1 billion billion floating-point operations per second), in 2023. The average power is anticipated to be up to 15MW. JUPITER has been designed as a "green" supercomputer and will be powered by green electricity despite NRW carbon-based energy mix (72% coal, 88% fossil).















Fig. 2 - S1 (09.09.2022), S2 (13.08.2022) - France has been chosen to host "Jules Verne", Europe's second exascale supercomputer. [3D view](#) [2D view](#)



It will be housed at the French Alternative Energies and Atomic Energy Commission (CEA) to the south of Paris. It is a joint investment by France, the Netherlands and the EU, 50% of which will be funded by the European joint venture EuroHPC.

*The views expressed herein can in no way be taken to reflect the official opinion of the European Space Agency or the European Union.  
Contains modified Copernicus Sentinel data 2023, processed by VisioTerra.*

More on European Commission space:						
More on ESA:				<a href="#">S-1 website</a>	<a href="#">S-2 website</a>	<a href="#">S-3 website</a>
More on Copernicus program:				<a href="#">SciHub portal</a>	<a href="#">Cophub portal</a>	<a href="#">Inthub portal</a> <a href="#">Colhub portal</a>
More on VisioTerra:				<a href="#">Sentinel Vision Portal</a>	<a href="#">Envisat+ERS portal</a>	<a href="#">Swarm+GOCE portal</a> <a href="#">CryoSat portal</a>