REQUEST FOR ADDITIONAL RESOURCES IN THE CURRENT YEAR FOR AN EXISTING EMI R&D PROJECT

Please submit the completed form via https://www.ecmwf.int/en/support (choose *Software and Computing*, then *Gain access to computing resources (create ticket)*) or send to special_projects@ecmwf.int

Country/Organisation: ……ITALY……..…

Principal Investigator[1]: ……Stefano Federico……..……

Affiliation: ……CNR-ISAC (National Research Council – Institute of Atmospheric
Sciences and Climate)……..……
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Address: ……Via del Fosso del Cavaliere 100, 00133 Rome
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Project title: Improvement on NWP prediction at the short-range for high impact meteorological events
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Project account: **SPITFEDE**

Additional computing resources requested for year		**2026**
High Performance Computing Facility	[SBU]	3,000,000
Graphics Processing Unit Cluster - A	[GBU]	
Graphics Processing Unit Cluster - B	[GBU]	
Total DHS Data storage capacity	[GB]	
EWC resources		
Number of vCPUs	[#]	
Total memory	[GB]	
Storage	[GB]	
Number of vGPUs[3]	[#]	

[1] The Principal Investigator is the contact person for this EMI R&D Project

Continue overleaf

Technical reasons and scientific justifications why additional resources are needed

In the current development of the project, we are investigating the impact of the assimilation of MTG-LI (METEOSAT Third Generation – Lightning Imager) data on the precipitation forecast over Italy. The number of experiments elaborated is small as it is limited to the month of June 2025 and the month of September 2024. In addition, the experiments are not completed because the simulation starting at 09 UTC, which maximizes the impact of lightning in the data assimilation process.

The SBU available on the project SPITFEDE for the remaining part of this year is less than 1,500,000 (8% of the total assigned), and I received the notice that the project SPITFEDE will be supported next year (2027). So, I would like to have continuity in the numerical experiments. For this reason, I'm asking these additional 3,000,000 SBU units. With these units I will finish the experiments for the two months, June 2025 and September 2024, before the end of this year.