

REQUEST FOR ADDITIONAL RESOURCES IN THE CURRENT YEAR FOR AN EXISTING SPECIAL PROJECT

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MEMBER STATE: Spain

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Sensitivity of regional climate models to improved soil thermo-hydrodynamics and land-air interactions: impacts on future climate and renewable energy resources over the EURO CORDEX domain

Project account: **spesgarc**

Additional computing resources requested for year		2025
High Performance Computing Facility	[SBU]	15.500.000
Total DHS Data storage capacity	[GB]	50.000
EWC resources		
Number of vCPUs	[#]	
Total memory	[GB]	
Storage	[GB]	
Number of vGPUs ³	[#]	

Continue overleaf

¹ The Principal Investigator is the contact person for this Special Project

Technical reasons and scientific justifications why additional resources are needed

During this year we have faced several difficulties mostly related to 1) the amount of storage needed for the heavy outputs from the RCM simulations considering their length the very high spatial resolution and the resulting amount of fields and variables simulated, which ultimately points to a need of longer/larger storing capacity for the outputs of our simulations, 2) the subsequent download of the simulated fields to our institutional servers and 3) difficulties related to the technical part that seeks improving the RCM code standards to allow for an innovative approach, mainly connected to the management of databases that feed our running system. Nonetheless, it is worth mentioning that our simulations have been running mainly on a twin account connected with this project (*spesgarc*), due to a mislabelling in our scripts. Our aim was to equally make use of both accounts at a similar rate. However, by the end of the year, the full amount of allocated space for this project is planned to be used with the progress of the simulations planned