

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: Belgium / University of Liège

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Project title: Black Sea Ensemble for Neural Emulator

Project account: **SPBEMANG**

Additional computing resources requested for year		2026	
High Performance Computing Facility	[SBU]	10.800.000* + 26.000.000	
Graphics Processing Unit Cluster - A	[GBU]	0	
Graphics Processing Unit Cluster - B	[GBU]	0	
Total DHS Data storage capacity	[GB]	0	
EWC resources			
Number of vCPUs	[#]		
Total memory	[GB]		
Storage	[GB]		
Number of vGPUs ³	[#]		

* *already spent.*

¹ The Principal Investigator is the contact person for this EMI R&D Project
This form is available at:
<http://www.ecmwf.int/en/computing/access-computing-facilities/forms>
Mar 2026

Technical reasons and scientific justifications why additional resources are needed

Mistake We would like to apologize for a mistake in our estimate of the number of SBUs required to generate a single 20-year simulation of the Black Sea physics and biogeochemistry. In fact, producing one complete trajectory requires approximately 2.14 [MSBUs].

Additional Resources To reach our initial goal of generating 16 trajectories of 20 years, we therefore need approximately $2.14 \times 16 = 34.24$ [MSBUs]. So far, we have already used about 10.7 [MSBUs], which means we still need $34.24 - 10.7 = 23.54$ [MSBUs]. Regarding storage, we have successfully transferred the simulation data to our own storage in an online manner, **so there is no need to increase our original request of 55 [TB]**.

Safety Net As a safety margin, we would like to request the compute time corresponding to one additional trajectory in order to ensure that we can complete the project without issues. **This brings the total requested amount** to $23.54 + 2.14 = 25.68$ [MSBUs], which we round up to 26 [MSBUs].

We are truly sorry for this mistake. We would be very grateful to receive an additional 26 [MSBUs], as this would allow us to complete our project.

We wish you a lovely day.

Thank you.