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

Please email the completed form to special_projects@ecmwf.int.

MEMBER STATE: Sweden

Principal Investigator[1]: Ulf Andrae

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Other researchers: Inger-Lise Frogner, MET Norway
Harold Mc Innes , MET Norway

Project title: Operationalization of SPP and further improvements of EDA, boundary and surface perturbation in MEPS

Project account: **SPSEANDR**

Additional computer resources requested for		**21/12/22**
High Performance Computing Facility	(units)	6.5MSBU
Data storage capacity (total)	(Gbytes)	15000

Continue overleaf

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

Technical reasons and scientific justifications why additional resources are needed

The project allocation of SBUs were reached at the end of June 2022 for jobs running on cca. As the notification of this were absent, or possibly missed, we continued to run on cca using resources from spseandr until beginning of September 2022 when all runs on cca were terminated.

The additional resources were spent on:

- Implementing and testing a solution for the dry bias caused by the surface perturbations.
- Testing the SPP scheme for additional parameters introduced recently on top of the ones described in Froger et.al. (2022)

References

Frogner, I., Andrae, U., Ollinaho, P., Hally, A., Hämäläinen, K., Kauhanen, J., Ivarsson, K., & Yazgi, D. (2022). Model Uncertainty Representation in a Convection-Permitting Ensemble—SPP and SPPT in HarmonEPS, *Monthly Weather Review*, *150*(4), 775-795. Retrieved Dec 12, 2022, from https://journals.ametsoc.org/view/journals/mwre/150/4/MWR-D-21-0099.1.xml