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 :	Germany
Principal Investigator ¹ : Affiliation:	Hendrik Elbern Rhenish Institute for Environmental Research at the University of Cologne (RIUUK)
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Other researchers:	Elmar Friese
Project title:	Copernicus Atmospheric Monitoring Service – Air Quality and Composition – Regional Component (CAMS_50)
Project account:	SPDEFRIU

Additional computer resources requested for		2020
High Performance Computing Facility	(units)	1,600,000
Data storage capacity (total)	(Gbytes)	10,000

Continue overleaf

¹ The Principal Investigator is the contact person for this Special Project Jun 2019 Page 1 of 2 The

Technical reasons and scientific justifications why additional resources are needed

With the regular update of the CAMS_50 operational service in November 2018 the horizontal resolution of the EURAD_IM regional air quality forecast as well as air quality analysis has been increased from 15 km to 9 km. More computing time than expected at the time of application for this special project is needed for the daily model simulations with increased resolution.

In the frame of CAMS_50 further computing time has been unexpectedly consumed by simulations of the impact of the COVID-19 shutdown on air quality in Europe from March to May 2020.

Additional resources are requested for the preparation of the regular update of the CAMS_50 operational service in November 2020 and for the simulation of another COVID-19 shutdown scenario. About 400,000 SBU will be needed for the operation of an e-suite prior to the regular CAMS_50 service update. About 1,200,000 SBU will be needed for the planned simulation of a COVID-19 shutdown scenario for March to May 2020.