

SPECIAL PROJECT PROGRESS REPORT

All the following mandatory information needs to be provided. The length should *reflect the complexity and duration* of the project.

Reporting year 2021

Project Title: Impact of Aeolus on the prediction of tropical dynamics

Computer Project Account: SPATSEREA

Principal Investigator(s): Dr. Stefano Serafin, Prof. Dr. Martin Weissmann

Affiliation: University of Vienna

Name of ECMWF scientist(s) collaborating to the project (if applicable)

Start date of the project: 1.1.2021

Expected end date: 31.12.2023

Computer resources allocated/used for the current year and the previous one
(if applicable)

Please answer for all project resources

		Previous year		Current year	
		Allocated	Used	Allocated	Used
High Performance Computing Facility	(units)	0	0	3000000	0
Data storage capacity	(Gbytes)	0	0	6000	0

Summary of project objectives (10 lines max)

The Aeolus satellite was launched in summer 2018 and carries on board the first UV Doppler lidar in space (ALADIN). The plan for our project was to deal in year 1 (2021) with data denial experiments (with and without the assimilation of Aeolus aerosol and wind observations) concerning the Aeolus Cal/Val campaign ASKOS, originally planned for August 2020. Additional numerical experiments were planned for years 2 and 3, dealing with yet-to-be-defined periods and designed in order to determine the impact of Aeolus observations on the IFS skill in simulating tropical dynamics (formation of propagation of African Easterly Waves, Kelvin Waves).

Summary of problems encountered (10 lines max)

The Aeolus Cal/Val campaign ASKOS was postponed to September-October 2021 due to the COVID 19 pandemic, hence the whole plan for our Special Project is shifted by about one year.

Summary of plans for the continuation of the project (10 lines max)

As in the original plan, with a delay of about one year.

List of publications/reports from the project with complete references

None so far.

Summary of results

None so far.