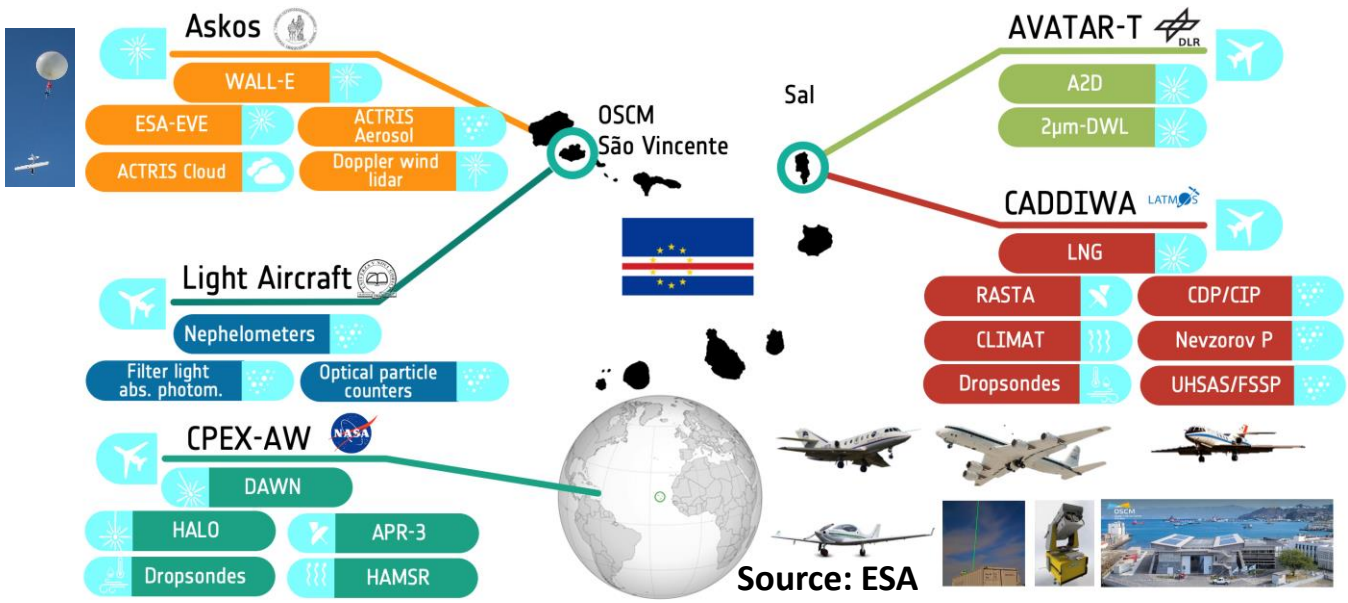
The ASKOS experiment for the validation of Aeolus L2A aerosol product

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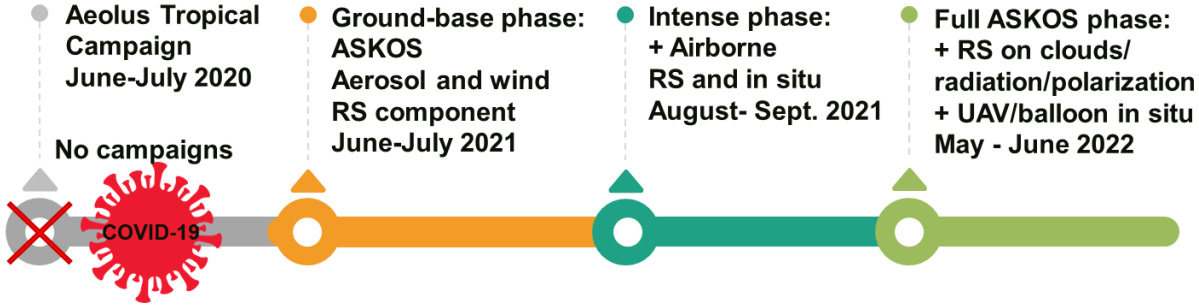
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ASKOS is the ground base component of the Aeolus Tropical campaign



Source: ESA

Aeolus Tropical Campaign June 2021 - June 2022



Phase A + B

PollyXT lidar
Cimel sunphotometer
ESA-EVE lidar (circular+ linear polarization)
Wind lidar
Microwave radiometer

Phase C

Cloud radar | Solar radiation | Polarization (Wall-E lidar, SolPol polarimeter) | Atmosphric electricity | Size distributions and concentrations (0.1 – 40 µm; OPC) | Collect particles up to 100 µm (samplers) | Backscatter sondes | in situ (ground/sea)

ASKOS Science Objectives:

-Evaluate Aeolus aerosol product for dust and marine aerosols
-Estimate the uncertainty in Aeolus backscatter caused by the undetected cross-polar signal return from non spherical particles
-Estimate the impact of particle orientation in Aeolus products for mineral particles and ice crystals
-Provide an unprecedented amount of quality assured datasets for more applications (eg. improvements in desert dust models)

More information: https://askos.space.noa.gr
Participants: https://doi.org/10.5194/egusphere-egu21-13781, 2021.