



A long-term plan and ambition for the Swarm constellation

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In late 2017 the European Space Agency's Swarm constellation passed its first mission extension review and got the green light for an ambitious plan to address a refined set of research goals. While the present formal approval for budgetary reasons provides funding through 2021, already now it is clear that Swarm is targeting a long-term scenario, stretching until the next solar maximum or even longer, made possible by the excellent health and quality of all on-board systems and the available resources. Strong and vocal support from the user community has been absolutely vital in achieving this key milestone.

This contribution details the present technical and programmatic status of the mission with particular emphasis on the plans for the extended mission, in terms of constellation operations, science data products as well as broader research goals that will be actively supported by the Agency. It is also an occasion to discuss synergetic effects obtained through strategic collaboration initiatives with other sensor systems, such as (but not exclusively) the Canadian e-POP (now Swarm Echo). Other such opportunities include the Chinese CSES mission, the soon to be launched Icon and Gold, and also various ground-based sensor systems or modelling frameworks. Overall, this contribution aims to sketch the envisaged contribution of Swarm to all areas of science in which the extended mission is expected to play a significant role in the years to come.