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WHAT IS HEMERA

Hemera is an European Infrastructure for scientific ballooning funded by the Horizon 2020 framework program of the European Union under grant agreement No. 730970. It involves space agencies and space access providers, scientific research centers, universities and industries.

GOAL OF HEMERA

HEMERA provides trans-national access to balloon flights and scientific data acquired through balloon flights, strengthens and enlarges the user community and improves ballooning technology and scientific instrumentation.

HEMERA OPPORTUNITIES

HEMERA offers FREE possibilities to scientists and users to fly small to medium scientific or technological payloads on stratospheric balloon gondolas and under sounding balloons.

Flight opportunities are selected in a competitive process including a scientific and technical review. The next call for flights in 2021 will be issued in September 2019, a decision will be made by spring 2020.

Data acquired in these flights will be made publicly accessible on the HEMERA web portal.

NEXT CALL FOR PROPOSAL
SEPTEMBER 2019

TECHNICAL INFORMATION

The launch and the gondolas will either be provided by the French space agency CNES or by the Swedish Space Corporation (SSC).

The user will be able to communicate with his payload during flight by an Ethernet (TCP/UDP) link. Total bandwidth is limited to 1.5 MBit/s. Depending on requirements battery power including remote power-control can be provided. Gondolas equipped with pointing control are optionally available. GPS information will be provided to the payloads.

More technical information can be found in the User Manual for Zero Pressure Balloons att www.hemera-h2020.eu/opportunities/call-for-proposals/

FLIGHT CHARACTERISTICS

The flights provided by HEMERA have the following characteristics:
- Flight level up to 38 km, down to 15 km (in descent)
- Total payload mass per flight 150 kg
- Multiple instruments
- Flight duration up to 40 h - depends on time of year and meteorological condition.

The balloon flights will contribute to atmospheric science, astronomy, astrophysics and solar physics.

LAUNCH BASES

HEMERA SUMMER SCHOOL

Heidelberg/Germany, September 9–13, 2019.
For Students, Scientists and Engineers, will cover:
- Early and modern balloon science and industrial opportunities, recent advances and discoveries
- Fundamental aspects of relevant atmospheric physics and meteorology
- Balloon-related technology and safety
- Scientific and industrial applications
- Future trends in the balloon systems, instruments and related science.