

EnMAP

Announcement of Opportunity



Announcement of Opportunity for EnMAP

October 19th 2022

The main scientific goal of the hyperspectral EnMAP (Environmental Mapping and Analysis Program) mission is to study environmental changes, investigate ecosystem responses to human activities, and monitor the management of natural resources. By measuring diagnostic parameters that quantify the state and trend of environmental change, the stability of ecosystems, and the sustainability of resource use, the EnMAP mission aims to provide critical information for an improved understanding and management of the Earth System.

Pending on the successful termination of the EnMAP commissioning review in October, beginning of November 2022, the EnMAP mission will transition from commissioning to the routine operational phase. Therefore, the EnMAP Instrument Planning Portal (IPP) is foreseen to be opened on 2nd November 2022 for submission of proposals for scientific, non-profit and non-commercial use of EnMAP data. Scientific users will be able to register and submit their proposals for data requests under https://planning.enmap.org. Each proposal should be related to one project, scientific users may submit several proposals. Submitted proposals will undergo a review process.

Scientific, non-profit, non-commercial use in the sense of this EnMAP AO is the use of EnMAP data for purposes of pure and applied research including the development of new applications or pre-operational services or experimental/demonstrative activities. 'EnMAP data' here refers to any data and products that are provided to the user based on EnMAP sensor acquisitions.

For further information on the EnMAP mission, please refer to https://www.enmap.org/. Relevant information for the AO are in particular

- Information on data products and access (https://www.enmap.org/mission/dataproducts/)
- IPP User Manual and submission guidelines (available from 2nd November)
- User license (available from 2nd November)
- EnMAP science plan (an revised version of the science plan will be available from 2nd November)

Questions related to the registration process, proposal submission, evaluation, scientific use, ordering and order status etc. should be sent to enmap application sp@dlr.de.

The following two Announcement of Opportunity (AO) processes will be open to scientific users.

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AO #00001: General AO Process duration: 02.11.2022- end of mission lifetime

The General AO aims at demonstrating the usability of EnMAP data for scientific studies in various application fields as described in the EnMAP Science Plan, but not limited to these, for product and algorithm validation and data harmonization. The AO intends to foster the development of novel methodologies that improve the accuracy of currently available remote sensing information. Furthermore, it aims at advancing the generation of science-driven information products by developing new concepts and techniques for data extraction and assimilation including the exploration of synergies with other sensors, and developing new science products and new science applications for spaceborne hyperspectral imaging.

This **General AO** will be open during the whole EnMAP routine operational phase to ensure the possibility to submit proposals throughout the entire mission.

Selected proposals that include extensive in situ measurements and/or are embedded in already existing monitoring networks and larger research projects are highly welcome and can be granted a higher priority in the scheduling of observations.

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AO #00002: Special AO Process: Long-Term Ecosystem Monitoring (02.11.2022-31.01.2023)

The Special AO aims at long-term ecosystem monitoring spanning observation timescales of more than 1 year. Diagnostic geochemical, biochemical, and biophysical parameters need to be monitored using time series analyses in combination with in-situ measurements to describe the dynamics of various ecosystems in order to improve our understanding of complex environmental processes. This will significantly contribute to environmental research studies, particularly in the fields of ecosystem functions, plant traits, natural resource management, natural hazards, and Earth system modelling.

This Long-Term Ecosystem Monitoring AO will be open for the submission of proposals for three months. As the emphasis lies on time series analysis for ecosystem monitoring, observation plans are expected to be longer than one year and can extend up to the entire EnMAP mission length (up to 5 years). Observations will be granted for the first year of operations. The call will be renewed once a year in order to grant additional acquisitions for the following year and/or submission of new proposals.

Outstanding proposals that include extensive in situ measurements and/or are embedded in already existing monitoring networks and larger research projects are highly welcome and will be granted a higher priority in the scheduling of observations.

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