

EnMAP - Observation Planning and Data Access for Scientific Users

N. Pinnel¹, H. Mühle¹, A. Gidofalvy¹, N. Plesia¹, R. Vignesh¹, D. Dietrich¹, E. Carmona¹, P. Schwind¹, M. Bachmann¹, M. Habermeyer¹, T. Storch¹, S. Chabrilat^{2,3}, S. Fischer⁴

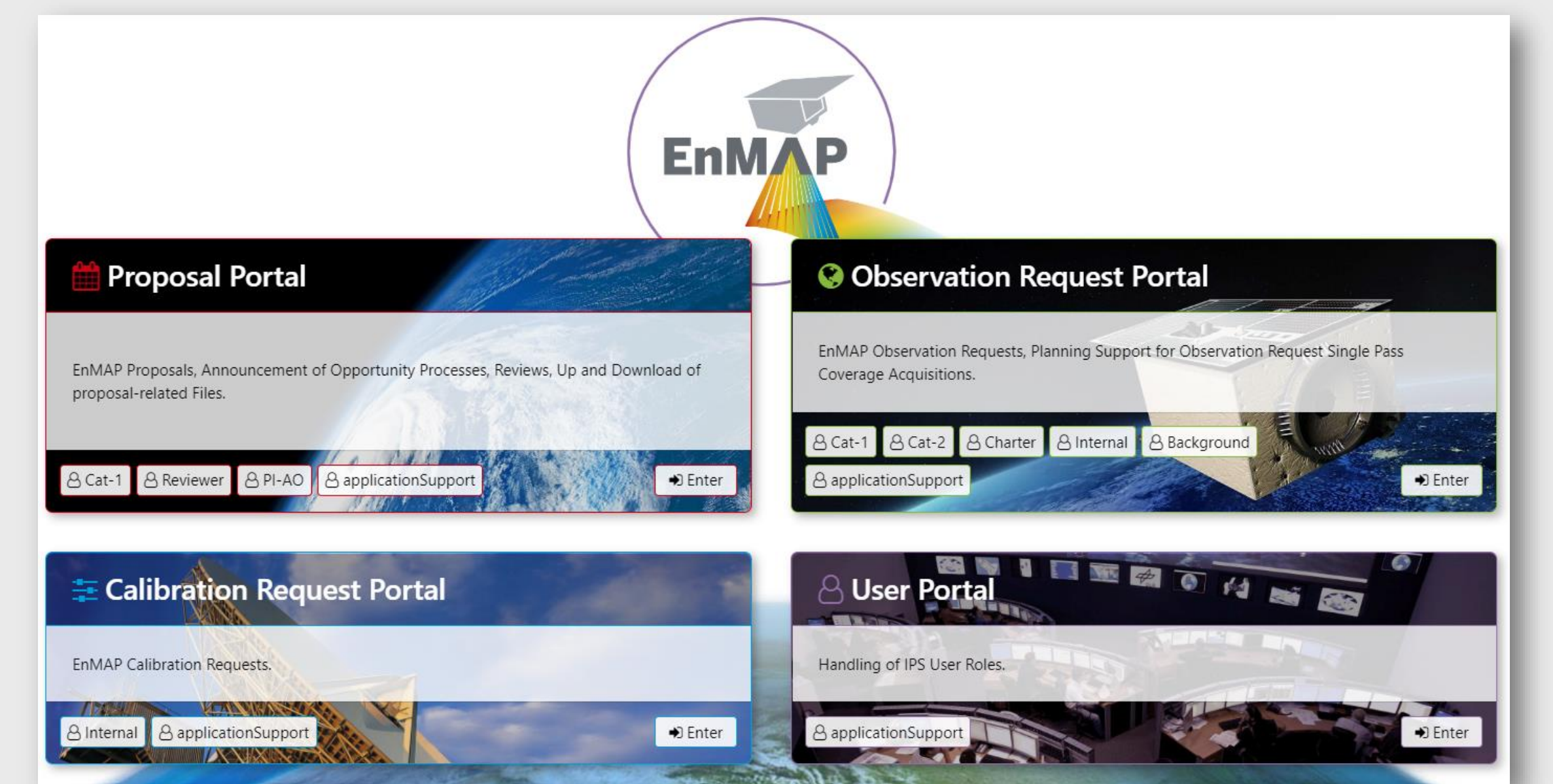
¹Earth Observation Center (EOC), German Aerospace Center (DLR), Oberpfaffenhofen, Muenchener Str. 20, 82234 Weßling, Germany

²German Research Center for Geosciences (GFZ), Telegrafenberg, 14473 Potsdam, Germany

³Leibniz University Hannover, Institute of Soil Science, Herrenhäuser Straße 2, 30419 Hannover, Germany

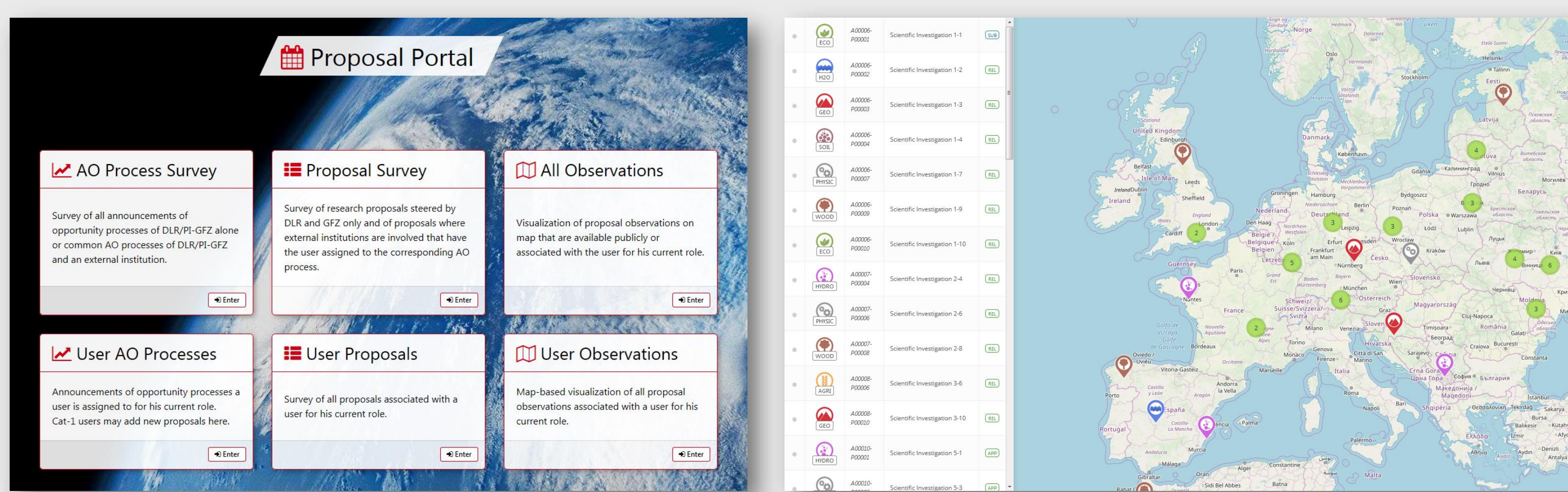
⁴Space Agency, German Aerospace Center (DLR), Königswinterer Str. 522-524, 53227 Bonn, Germany

EnMAP (Environmental Mapping and Analysis Program; www.enmap.org) is the first German imaging spectroscopy mission, which was successfully launched on 1st April 2022. After Commissioning Phase, the EnMAP mission will be available to the international user community for the data access and ordering process. EnMAP will be operated by the German Aerospace Center (DLR) covering all aspects relevant to assure successful mission operations. This comprises controlling and commanding the satellite using multi-mission infrastructures as well as observation planning, data reception, hyperspectral data processing including calibration, data archiving, data access and delivery, and providing web-interfaces to the international user community. This presentation will give an overview of EnMAP observation planning and data access concepts and outlines the data ordering workflow in particular for scientific users.



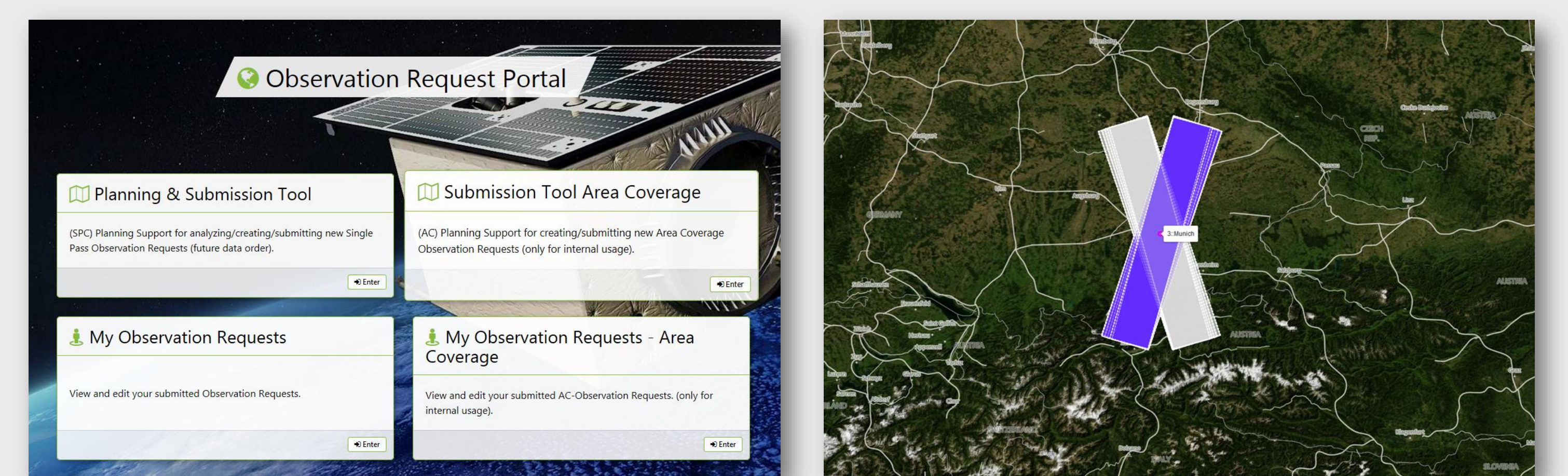
Proposal and Observation Request Portals

Proposal Portal



- Proposal submission for all users responding to a Data Announcement of Opportunity
- Reviews
- Interactive map supporting the establishment of a worldwide user network, highest transparency of the proposal-based scientific research projects and their results.

Observation Request Portal



User Roles:

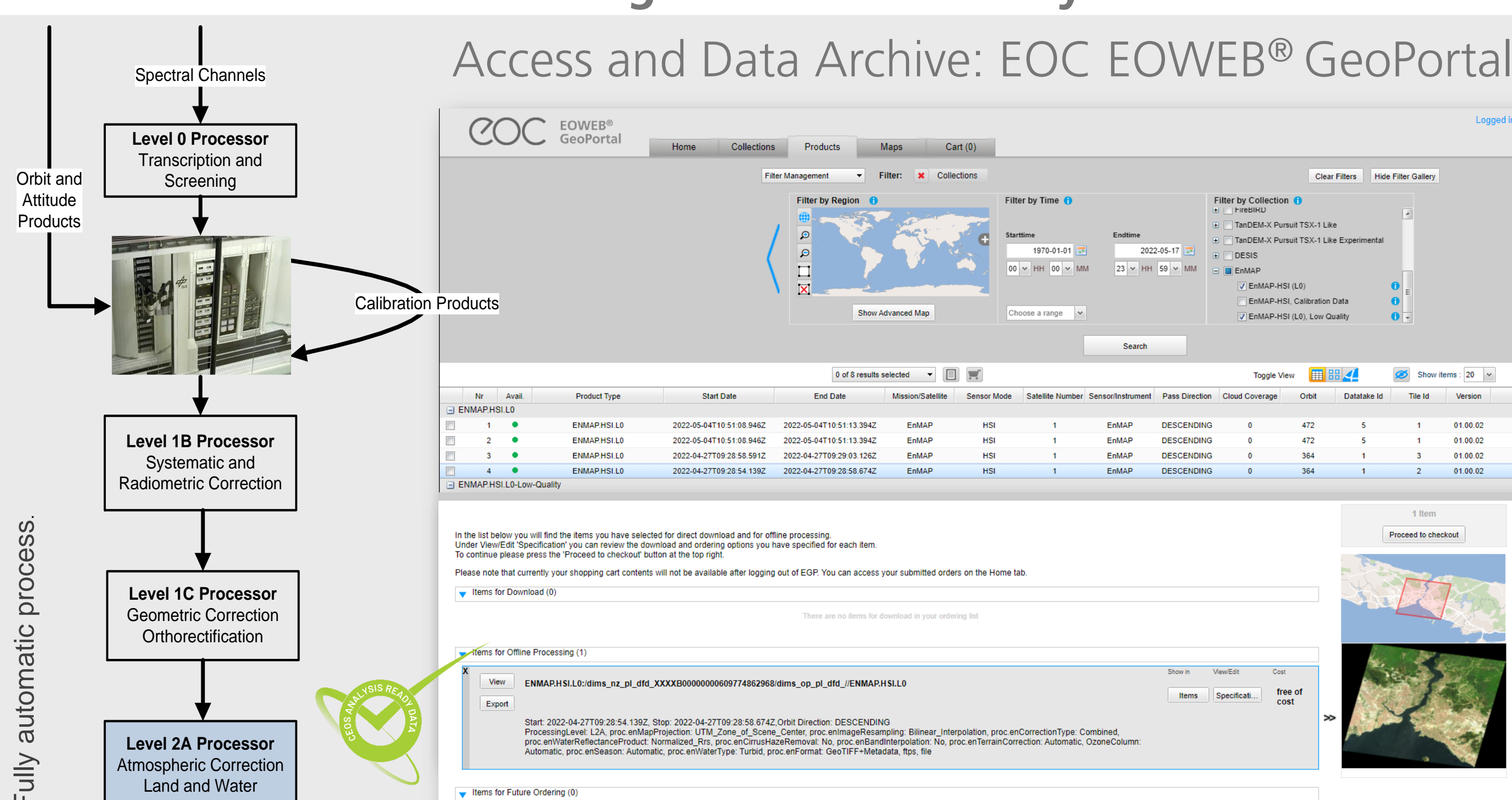
- Cat. I scientific User based on Announcement of Opportunity
- Cat. II (non-scientific)

Order Parameters e.g.:

- 74° North and 74° South
- Tilt angle 5°-30°
- Cloud coverage
- Sun glint avoidance

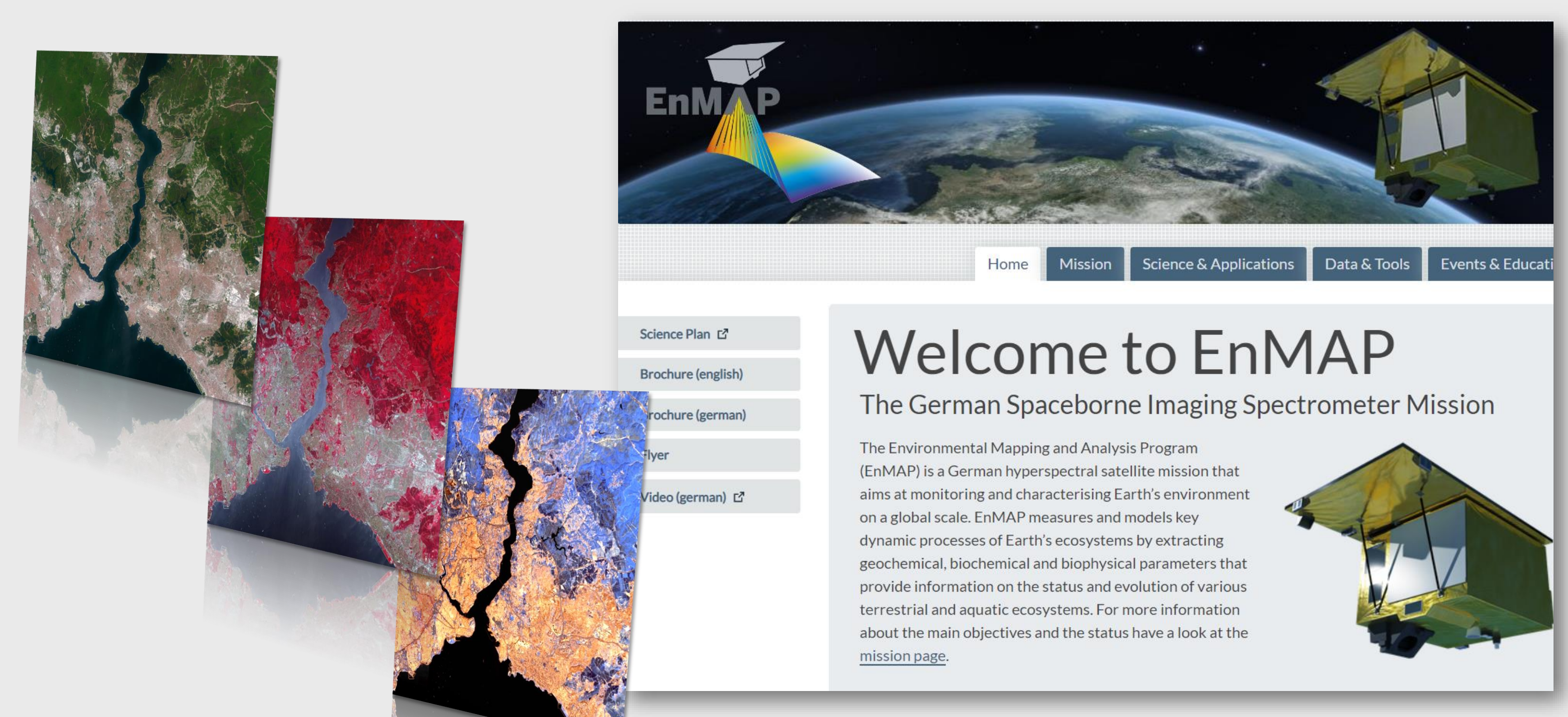
Year ops	Quota for Category I	Quota for Category II
1	80%	20%
2	70%	30%
3	70%	30%
4	60%	40%
5	60%	40%

Image Product Delivery



- Collection and Product Metadata (order): OGC CSW
- VNIR, SWIR, and Quality Quicklooks: OGC WMS
- Graphical Client to OGC CSW/WMS: EGP (EOWEB® GeoPortal)
- Product covers 30 km x 30 km and is delivered via FTPS (FTP with SSL)
- Free and open data policy

EnMAP Portal (www.enmap.org)



EnMAP Portal (www.enmap.org) provides general mission information:

- EnMAP mission, its objectives and status
- Data products and processing chains
- Ongoing scientific programs and activities.