

CGMS-35, ESA-WP-03 Prepared by ESA Agenda Item: III.3 Discussed in WG3

ACCESS TO ERS AND ENVISAT DATA

CGMS is informed about the ESA Earth Observation data policy and data access, in particular in Near Real Time.



ACCESS TO ERS AND ENVISAT DATA

1. INTRODUCTION

Besides the data distribution using physical media, ESA Earth Observation data has been distributed using different electronic systems since the launch of the ERS-1 satellite in 1991. Traditionally, the Low Bit Rate (LBR) products were and are distributed using a Web ftp Server through the open Internet, or via the WMO Global Telecommunication System (GTS) to the Meteorological Centres for ERS-1, ERS-2 products. For NRT (Near Real Time) applications, other systems have been implemented, using state-of-the art technology.

2. ESA EO DATA POLICY

The ESA Earth Observation data policy was defined by the ESA Member States with the objectives to maximize the beneficial use of data and to stimulate a balanced development of science, public utility and commercial applications, consistent with the mission objectives.

The conditions attached to the distribution of data shall depend on the use of the data. The following two categories of use are defined:

- Category 1 use: Research and applications development use of data in support of the mission objectives, including research on long term issues of Earth System science, research and development in preparation for future operational use and ESA internal use. Data for Category 1 use is directly provided by ESA.
- Category 2 use: All other uses, which do not fall into Category 1, including operational and commercial use. Only SAR/ASAR data is considered within Category 2 use. Data for Category 2 use is provided by Distributing Entities appointed by ESA.

The complete text of the Data Policy can be found on the ESA Earth Observation Principal Investigator (EOP) web site http://eopi.esa.int

2.1 How to apply for Category 1 use

Application for Category 1 use data access can be submitted to ESA at any time, using the web interface available within the EOPI web site http://eopi.esa.int.

2.1.1 Application

For data *systematically* acquired, generated and disseminated on-line (e.g. MERIS Reduced Resolution data), a simplified category-1 request (registration) can be submitted. Acceptance notification takes approximately one week.

The list of products that fall under this category is available on the EOPI web site http://eopi.esa.int.



When the requested data is subject to specific acquisition or dissemination constraints (e.g. ASAR HR and MERIS FR) a category-1 proposal shall be submitted. The proposal is submitted to a peer review process by the category-1 advisory group (and takes approximately 8 weeks up to acceptance notification). Assuming a positive scientific review, the proposal is accepted once the feasibility, in terms of data and service provision, has also been confirmed. A quota of products is allocated to the project at the time, with a decision whether acquisition requests can be placed or if the quota is only for archived products.

In addition, ESA may release announcements of opportunity (AO) to stimulate research on particular topics and exploiting specific datasets. Objectives, conditions and timeframes for such AOs are specified in the documentation associated to the opportunity and available on the EOPI Web site. Data is normally provided in those cases free of charge. An ad-hoc AO for WMO members was issued in April 2003.

For information on the currently opened AOs, see the EOPI Web site.

2.1.2 Terms and Conditions

Once the Project is approved, the Principal Investigator shall sign the Terms and Conditions for the utilization of Category 1 use data, where he commits to use the data provided only for the purpose defined in the accepted project, to widely publish his results "data provided by the European Space Agency" and provide regular progress reports to ESA.

The complete text is available on the EOPI web site.

The singed document, together with the list of agreed Co-Pls, shall be sent to the Earth Observation Help and Order Desk (eohelp@esa.int) that will then provide ordering instructions or information on how to access the on-line data.

2.1.3 Project Update

Whenever the existing PI has a need for an additional quota, different product types or a different dissemination method (NRT, Rolling Archive, etc.) he shall present the justification for the new needs in a progress report. The request will be analysed by the Mission Manager and the Users Services.

2.1.4 Price List

The data is provided free of charge (in the specific case of an Announcement of Opportunity or if available systematically on-line) or at reproduction cost, within the quota defined at project acceptance, see e.g. "Envisat product prices for Category 1 use" on the EOPI web site. The invoicing is performed once a year by the Earth Observation Help and Order Desk.



2.2 How to apply for Category 2 use

There are two Distributing Entities, selected by ESA, that ensure access to Envisat data for Category 2 use (ASAR HR only).

In order to obtain Envisat ASAR HR data for commercial or operational application, please contact:

- EMMA represented by Eurimage Customer Services tel. +39 06 406 94 222 fax: +39 06 406 94 232 email: info@eurimage.com http://www.eurimage.com
- SARCOM represented by Spot Image Sales department tel: +33.562.194040 fax: +33.562.194011 email: sales@spotimage.fr or ers.envisat@spotimage.fr http://www.spotimage.com

3. STATUS

Envisat data is currently provided to over 1200 active Category 1 use projects. About half of the Category 1 use projects ask for ASAR High Bit Rate data, which are also requested for Category 2 use.

Near Real Time (NRT) and recent data can be accessed through different systems:

- Internet systems (ftp or http), allowing access to rolling archives of EO (ERS, Envisat, TPM [Third Party Missions]) products generated during the previous 7 days (15 days for ASAR Medium Resolution products). A sub-system, called Web File Server (WFS), allows, via a geographic selection, to extract and download sub-products within the rolling archive. This is suitable for users requesting small or infrequent datasets.
- Telecommunication satellite broadcast system (DDS broadcast), allowing access to Envisat data broadcast via Eutelsat satellite using a small receiving antenna. Apart from being part of the operational ground segment data flow, the DDS broadcast system, available for users in Europe and in Africa. The system is suitable for users requesting systematic and large datasets.

The "ftp-on-demand" service is being opened gradually to users. This service allows registered user to receive an e-mail after the generation of an on-demand product with the information of where to pick-up the product on Internet.



On-line access to archived data on Internet is implemented for the MERIS Reduced Resolution dataset (MERCI web interface), for Atmospheric Chemistry data, Altimetry data and in progress for AATSR (end 2007).

For further information see "Earthnet online" http://earth.esa.int/.

Archived data remains accessible on media, in particular for projects requesting large amount of data.

4. HOW TO GET HELP

The ESA's EO User Services in ESRIN, Italy is the entity ensuring a user-friendly interface between the satellite system and the data users. Services provided to users include:

- On-line information services (Earthnet online, EO Portal and Disasters Charter including documentation)
- General Help services from the EO Help Desk team
- On-line catalogue ordering via EOLI-SA
- Order Handling, inquiries and support
- Mission planning and production planning

The interfaces to the Users are presented here below.

4.1 Help Services

Information on the missions, instruments, catalogues, ordering tools, products tools, data products and how to access them is available at http://earth.esa.int/. In addition, the ESA Earth Observation Help and Order Desk ("EOHelp") is the contact point for requests of information and clarifications on ESA and Third Party Missions.

4.2 Order Handling

The EOHelp team is also responsible for the handling of on-request orders (from order validation to order closure) and is the point of contact to request clarification on an order status. The team also provides access to datasets systematically available o-line.

4.3 Documentation

Any request for documentation shall be sent to EOHelp. Full list of the documents available can be found at: http://earth.esa.int/resources/documentation/.



4.4 Contact Point

EOHelp can be reached during working hours from Monday to Thursday 8:30 to 17:15 and on Friday, from 8:30 to 16:00 (European Central Time).

tel: +39 06 941 80272 fax: +39 06 941 80777 email: eohelp@esa.int http://envisat.esa.int/helpandmail/contactus.html

5. INFORMATION

See information available through the web sites

www.esa.int http://envisat.esa.int/helpandmail/contactus.html http://earth.esa.int/missions/thirdpartymission