

# ASAR on the fly FAQ

## What is the ASAR On the fly Service?

The (A)SAR data On-The-Fly (OTF) processing and dissemination system allows direct access to ESA's (A)SAR archive from ERS-1, ERS-2 and Envisat, covering the following products:

- Envisat ASAR Image Mode (from July 2016)
- Envisat ASAR Alternating Polarisation Mode (from September 2016)
- Envisat ASAR Wide Swath Mode (from December 2016)
- ERS-1 SAR Image Mode (from Q1 2017)
- ERS-2 SAR Image Mode (from Q1 2017)

The service will primarily provide (A)SAR high-resolution data as L1 standard scenes, processed on user request by the system and made available for direct download through the EOLI-SA client. In specific cases users can also be authorised by ESA to download a limited amount of L0 data segments.

## How do I access the ASAR OTF service?

(A)SAR On The Fly data products are freely available to ESA registered users via the [EOLI-SA client](#). Users can search and browse all products openly, but a registration on the ESA EO Data Portal is required to download.

Expert users can also access data via a [direct web interface](#).

Create an EO-SSO account following the [instructions](#) (for users who have not registered already).

- Apply for (A)SAR OTF Data
  - **Level 1 ([ASAR IMS](#), [ASAR IMP](#))**

Users can access (A)SAR OTF Standard Service (Level 1 Data products) by submitting a [Fast Registration](#).

Access will be automatically enabled at registration submission. Users will receive an email containing access details.
  - **Level 0 ([ASAR IM](#))**

Users can access (A)SAR OTF Level 0 Data products by submitting a [Data Service Request](#) justifying and describing the data needs.

Please note that access to Level 0 Data is not part of the standard OTF Service and it will be granted in exceptional cases. Requests will be evaluated and feedback will be provided usually within 2 weeks.

For any additional inquiries please contact EOHelp at [eohelp@esa.int](mailto:eohelp@esa.int).

**How do I find other (A)SAR products not available via OTF?**

A full list of ESA products (including SAR and ASAR), with access details, can be found [here](#).

**How do I download a product?**

Please refer to the [user manual](#).

**What are the restrictions on the number of downloaded products per day?**

Anyone can self-register to download (A)SAR products using the standard service. Standard users are given a daily quota of 5 products/day.

Advanced users (i.e. those who have a previous project proposal or a Data Service Request authorised by ESA) are allowed to download 30 products per day. However once they have reached this limit, they may continue downloading products providing that other users are not making demands on the system.

**How can I get a higher daily number of downloads?**

For an increased quota, you can submit a [data service request](#) to ESA. Once approved by the ESA mission manager, you will be assigned as an "advanced" user, allowing an increased number of downloads (as described above).

**What are the limits on the system performance?**

The major constraint on performance is the user's own internet connection, which limits the speed that a product can be downloaded. If you are experiencing issues, try reducing the number of products ordered at one time.

**Can I download L0 data using the OTF system?**

Level 0 data are available via the OTF system but are not part of the standard OTF Service. To access this data, please submit a data service request to ESA justifying the need. Requests will be evaluated by ESA and feedback will be provided usually within 2 weeks.

Level 0 data is made available only as complete data segments, not as standard scenes.

## **What do the error messages that I see mean?**

You have already downloaded your granted number of products for today:

You have reached your daily limit (see above). If you are a standard (self-registered) user, you will need to wait until the next day, while if you have "advanced" status you will be able to retry later in the same day, once the load on the system is lower.

The system is currently serving the granted requests of other users, and has reached the total number of parallel downloads

The number of concurrent users has exceeded the capacity of the system to download products. Please try resubmitting again later in the day.

Product unavailable

The system has not been able to produce the requested product due to an unexpected error, e.g. a missing AUX file. If you still require this product, please contact EOHelp directly.

Resource couldn't be accessed / Internal server error / Java exception / Operation timed out

These error messages usually mean a temporary connection error or system outage. Try resubmitting the request again after a few minutes. If it still doesn't work, please contact EOHelp.

Forbidden: Please sign the terms and conditions

You do not have access to the collection. Please submit a data service request.

There was a problem while handling your request. Please send an email to the [Administrator](#), including the following problem code: [...]

Your SSO profile is incomplete and is missing mandatory information, possibly due to your having registered a long time ago. Please contact EOHelp at [eohelp@esa.int](mailto:eohelp@esa.int) providing information about your *First name*, *Last Name*, *Institution & Country of residence*. Once this information is updated you will be able to resubmit your request.

## **What are the known issues?**

### EOLI freezes during downloads

Using a 3D map can cause EOLI to freeze during downloads. This issue will be fixed in a future EOLI release. As a workaround, change to a 2D map by going to the "GIS maps" tab of EOLI, selecting "Orthographic (classic 2D map)" and pressing "Update map".

### EOLI signs users out during downloads

Some users report that EOLI requests them to re-enter their SSO ID and password after a short time. This is related to the previous issue; try changing to a 2D map as described above.

### EOLI missing browse images

For some data products, browse images are unfortunately missing in EOLI. This will be remedied at a future date.

### Product metadata lengths have changed

Some users have noted that the metadata headers in products from OTF have a different length to those for products previously obtained by other means. For more information see the discussion at <http://earthdef.caltech.edu/boards/4/topics/1229>.

### L0 data are provided as complete striplines only

This is an intentional feature of the OTF system. Users are encouraged to use L1 products wherever possible, but can request L0 striplines where a specific need exists.

### Other issues

If you wish to raise an issue that is not covered here please contact [EOHelp@esa.int](mailto:EOHelp@esa.int).

### **What tools exist to manipulate (A)SAR data?**

ESA's Sentinel 1 toolbox includes a selection of processing tools, data product readers and writers and a display and analysis application to support the large archive of data from ESA SAR missions including SENTINEL-1, ERS-1 & 2 and ENVISAT. See <http://step.esa.int/main/toolboxes/sentinel-1-toolbox/>.

**How do I get further assistance?**

Please consult the [user manual](#). If this does not answer your question, please contact [EOHelp@esa.int](mailto:EOHelp@esa.int).