

# TerraSAR-X Mission Remarks

- The access to TerraSAR-X data is subject to national security regulations. Restrictions might be applicable to the time of the delivery (delayed provision), special user authorization and the geographic location of the test area. Please contact the Science Coordinator (Email: [tsx.science@dlr.de](mailto:tsx.science@dlr.de)) if further clarification is needed.

## EOWEB Ordering Remarks

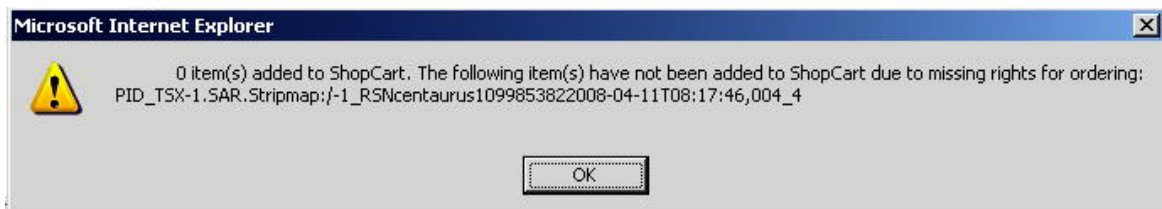
### General issues:

- Please note that **ordering of TerraSAR-X future acquisitions** is supported by the “**EOWEB® system**” only. EOWEB® Geoportal (EGP) is applicable for **catalogue data** only.
- The user password can be changed by pressing the button "Update User Data" and then "Continue". The new password is applied to your EOWEB login as well as for the download of delivery products.
- The ordering process via EOWEB® comprises the confirmation of the user license agreement.
- The contents of an order cannot be changed after order submission
- Cancellation of an order is not supported via EOWEB®. To cancel an order, send an email to: [DFD-Orderdesk@dlr.de](mailto:DFD-Orderdesk@dlr.de)  
The cancellation of Future Orders is accepted until three days before the acquisition time window opens.
- The Orderdesk cannot change parameters of accepted orders. If a user needs a change he/she must request the order to be cancelled and the order must be resubmitted.
- Please note that in the order generation step “Order Creation” the default “Order Name” is your account name. It is recommended to add a further specification to this name, but the characters to be used are restricted to the following range: A-Z, a-z, 0-9, -, \_, /  
Other characters lead to an error situation which might stop the order processing.
- In case of the initial (very first) order of each account manual interactions by the DLR order desk is needed, which can delay the order acceptance (e.g. over the weekend). First time users should therefore consider sufficient reaction time when placing orders for future acquisitions.
- If the user changes his address or email, manual verification is needed as well. This might delay the order acceptance (see above).
- All times are UTC

### TerraSAR-X related issues:

- EOWEB allows ordering of every selected acquisition. There is no plausibility or conflict check. The user is responsible for preventing conflicts between different acquisition selections. If there is a conflict between two acquisitions, only the first one will be acquired.
- It is not recommended to order different beams of the same orbit (e.g. strip\_005 and strip\_013) with the same acquisition time. This is not possible!
- It is not recommended to order different modes or polarizations (e.g. spotlight and stripmap) with the same acquisition time. This is not possible!

- In order to prevent conflicts it is recommended to query the data catalogue in advance to verify if there are existing layer stacks of other users. For conflicts with TanDEM-X acquisitions please look at the TanDEM-X timeline, which is published on the TerraSAR-X Science Service System (<http://sss.terrasar-x.dlr.de>). The document can be downloaded as excel or pdf file on the investigator's (= PI) main page after login with the investigator account. After login please press the "investigator" button in the navigation bar on the left side.
- EOWEB displays all possible acquisitions for one cycle at most, depending on the selected acquisition time frame. For acquisitions in the future the time window needs to be adapted.
- The acquisition criteria "Swath Selection" for future ScanSAR products provides the discrimination of 6-beam Wide ScanSAR and 4-beam ScanSAR in order to have a clear view on the map.
- The definition of order options allows the extension of the acquisition time window to increase the opportunity for the acquisition. The time window must not be set to a date before the actual order date. This will lead to the cancellation of the complete order, not only the affected order item!
- A new order can be created from an existing one by clicking the "Repeat Order" button on the order summary page. The following can be changed during the further submission process:
  - the Order Name can be modified
  - products can be removed from the order
  - for future products, the Temporal Selection can be shifted to the future by one or several cycles.
 All other parameters of the new order are identical to the parameters of the existing one.
- To achieve repeated acquisitions of the same scene please use the "Repeat Order" button as described above.
- Please note that partial deliveries of items contained in one order are not supported even though the selection of "Partial deliveries accepted" within the order generation steps is possible. If more than one item is added to an order, the items are only delivered together after the last item has been produced. This might not be an issue for Catalogue Orders, but can lead to considerable delays for Future Orders, if they have a wide acquisition time window. In such cases it is recommended to select only one item per order. However, it is possible to place a catalogue order for an already acquired item, even if this item is not yet delivered to the user via the original Future Order. Please contact our order desk ([DFD-Orderdesk@dlr.de](mailto:DFD-Orderdesk@dlr.de)) for adaptation of your data quota.
- Ordering of quad pol data is restricted to the AO for experimental products (DRA-2010).
- Science Users are only allowed to order TerraSAR data in right looking mode of incidence angles within the so called "full performance range", what is between 20-45°. Anyhow the query results provide all possible acquisitions. In case of moving an unauthorized product to the shop cart the following error message occurs:



## Data Download:

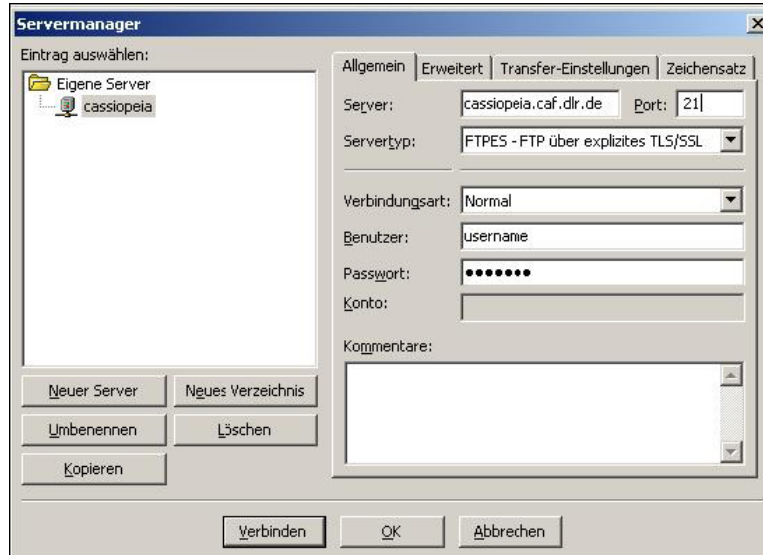
TerraSAR-X data will be provided via **FTPS**. The **FTP clients** used for downloading must support the SSL/TLS encryption. Plain FTP clients (including Internet Explorer) won't work! At least the following clients support **FTPS**:

### Windows:

- FileZilla (recommended, free, Version 3.1.3.1 or later)
- FTP Voyager Secure Version 9.0.0.7
- Smartftp 1.0.968.0
- CuteFTP Pro
- Secure FTP 1.6
- Igloo FTP Pro
- FlashFXP 2.0
- WS\_FTP Pro Version 7.5T

### Unix/Linux:

- FileZilla (recommended, free, Version 3.1.3.1 or later)
- lftp
- Secure FTP 1.6
- Curl7.15.2
- Igloo FTP Pro
- Incredible FTPS
- Kasablanca FTP



Example FileZilla configuration

The client must be set to “**passive mode**” as the ftp server assigns the ports used for the data transfer. The connection port is **21**. The range of **passive ports** is between 30000 and 30300. It must be ensured that the **firewall** settings do **not block** these ports which most firewalls do (although your firewall might allow outgoing FTP transfers, it might block FTPS because it can not decrypt the data packages which would tell it that these are FTP data connections)!

### Problem:

- **Login is not possible** even though using the correct login-id and password (550 SSL/TLS required on the control channel):  
=> *ftp client doesn't support FTPS*
- Login is not possible, client supports FTPS, **file list is not provided**:  
=> *firewall is blocking the passive ports, open the outgoing ports 30000 to 30300*
- Client supports FTPS, login is possible, connection is interrupted with the message: **“500 illegal PORT command”**  
=> *switch to “passive mode”*

## **ATTENTION:**

**Delivery products will be deleted on the FTP server after 15 days!**

## Order Status:

Order status and detailed status information are available on order level and on order item level. The following tables list all possible combinations.

### Order Level:

Order Status	Detailed Status
	Description
orderCompleted	PROCESSED
	<i>Ordered products have been delivered and order processing is finished</i>
orderBeingProcessed	IN_PROCESSING
	<i>Order processing is ongoing</i>
orderBeingCancelled	IN PROCESSING order cancelled by operator: item failed with EXPIRED, ..
	<i>The datatake couldn't be performed within the specified acquisition window due to competition with other data takes. The order was therefore cancelled by the operator.</i>
orderNotValid	Diagnostic(.., "order options not valid", order option check failed for item ..)
	<i>The order options of at least one order item do not match the order options configured at the EOWEB® data server. The order will be ignored</i>
orderBeingQuoted	
	<i>Temporary internal status before order acceptance</i>

### Order Item Level:

Order Item Status	Detailed Status
	Description
itemBeingProcessed	IN_PREPARATION
	<i>Order item is waiting to be processed</i>
itemBeingProcessed	IN_PROCESSING
	<i>Order item processing is ongoing</i>
itemBeingProcessed	PLANNED ACQSTATUS:PLANNED <acquisition time> <downlink time> <points> 0
	<i>The datatake is planned for execution at &lt;acquisition time&gt;. Downlink of the data take to the receiving station is planned for execution at &lt;downlink time&gt;. However product delivery cannot be guaranteed due to possible problems in the succeeding steps of the workflow.</i>
itemBeingProcessed	UNPLANNED ACQSTATUS:UNPLANNED 0001-01-01T00:00:00.000 _ 0
	<i>The data take is not yet planned.</i>
itemBeingProcessed	COMPLETE ACQSTATUS:COMPLETE <acquisition time> <downlink time> <points>
	<i>The datatake is commanded at the satellite. The datatake will be performed at the specified acquisition time. Downlink to the receiving station will be performed at the specified downlink time. However product delivery cannot be guaranteed due to possible problems in the succeeding steps of the workflow.</i>
itemBeingProcessed	SCREENED ACQSTATUS:SCREENED <acquisition time> <downlink time> <points>
	<i>The data take has been acquired and processed to Level 0. The processing to L1b has not yet started. This is typically the case if the orbit type Science Orbit has been requested, which is only generated some days after the acquisition.</i>
itemCompleted	DELIVERED ACQSTATUS:SAR_PROCESSED <acquisition time> <downlink time> <points>

	URLS: ftp(s)://....  <i>The datatake was acquired at the specified acquisition time. Downlink to the receiving station was performed at the specified downlink time. The order item was delivered online. The delivery package is available at the given URL</i>
itemCompleted	SAR_PROCESSED  <i>Internal status: Product waiting for delivery (see also bullet four of "TerraSAR-X Mission Remarks")</i>
itemBeingCancelled	IN PROCESSING order cancelled by operator: item failed with EXPIRED, ...  <i>The datatake couldn't be performed within the specified acquisition window due to competition with other data takes. The order item was therefore cancelled by the operator.</i>
itemBeingCancelled	SCREENED ACQSTATUS:SCREENED <acquisition time> <downlink time> <points> item failed with SCREENED, QA_FAILED, qaResult=UNPROCESSIBLE  <i>The data take couldn't be processed due to missing data quality after the data take has been screened. The order item was therefore cancelled by the operator.</i>
itemBeingCancelled	SAR_PROCESSED ACQSTATUS:SAR_PROCESSED <acquisition time> <downlink time> <points> item failed with SAR_PROCESSED, QA_FAILED, qaResult=NOT_APPROVED  <i>The order item was cancelled by the operator due to missing data quality after processing.</i>
itemBeingCancelled	FAILED ACQSTATUS:SAR_PROCESSING_FAILED <acquisition time> <downlink time> <points> item failed with FAILED, sar_processing_failed ....  <i>The datatake couldn't be processed. The order item was cancelled by the operator.</i>
itemBeingCancelled	FAILED ACQSTATUS:SCREENING_FAILED <acquisition time> <downlink time> <points> item failed with FAILED, screening_failed ....  <i>The datatake couldn't be screened. The reason can be: no acquisition, no replay, no downlink, no reception, corrupt signal, wrong keys, ... The order item was therefore cancelled by the operator.</i>
itemBeingCancelled	FAILED item failed with FAILED, failed ...  <i>The data take couldn't be planned. The order item was therefore cancelled by the operator.</i>
itemBeingCancelled	OPEN item failed with OPEN, Missing parameter ...  <i>The datatake was cancelled by the operator due to a missing parameter within the order.</i>
itemBeingCancelled	UNPLANNED ACQSTATUS:UNPLANNED <acquisition time> _ _0  <i>The datatake was cancelled on user request while in status UNPLANNED.</i>
itemBeingCancelled	IN_PREPARATION  <i>The datatake was cancelled on user request while in status IN_PREPARATION.</i>
itemNotValid	Diagnostic(.., "order options not valid", order option check failed for item ..  <i>The order options of the order item do not match the order options configured at the EOWEB® data server. The order will be ignored.</i>